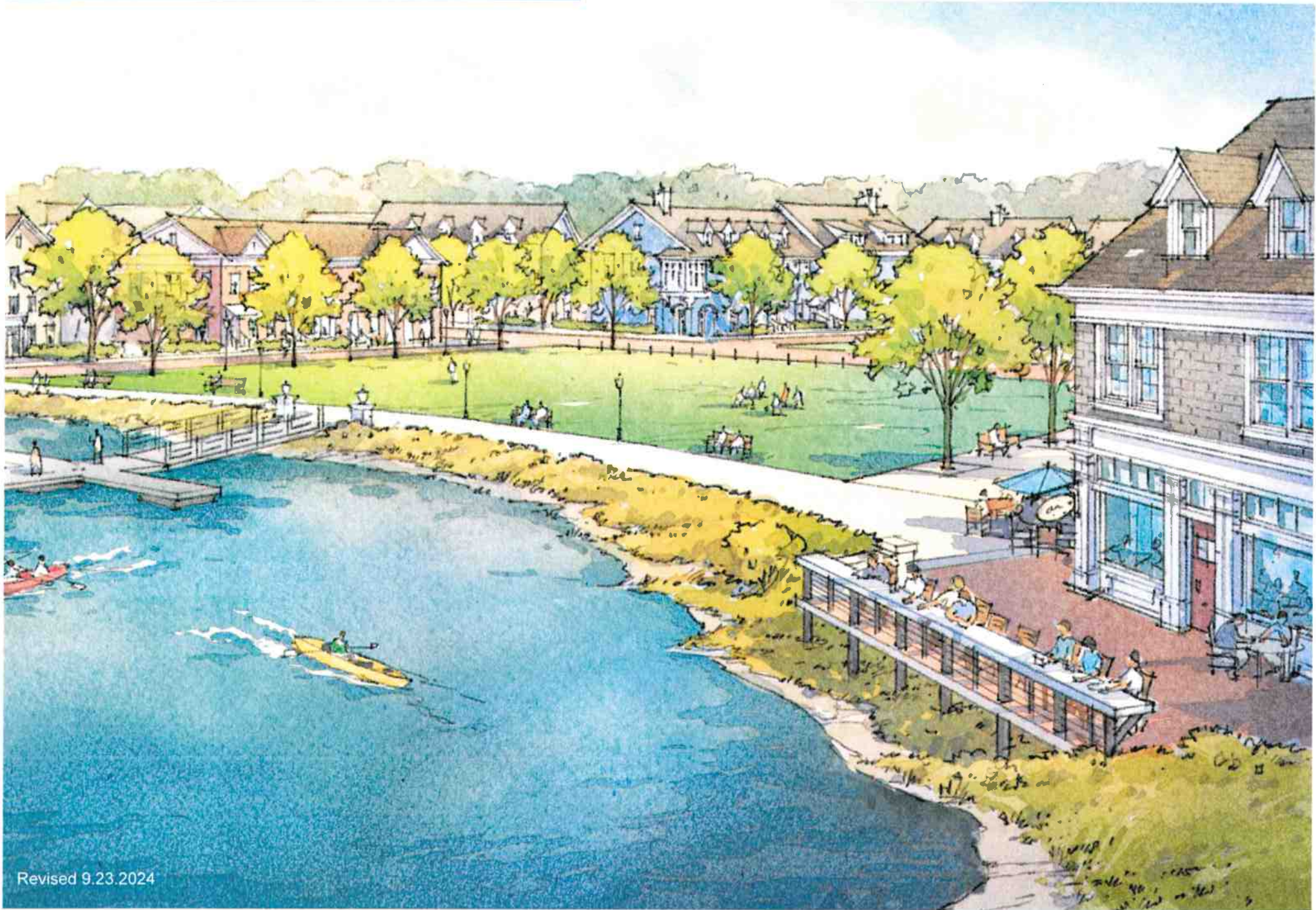


Geauga Lake Design Guidelines

BAINBRIDGE TOWNSHIP



Revised 9.23.2024

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Vision Statement

The rebirth of the former Geauga Lake and Sea World sites as a new community will incorporate best practices in **mixed-use, human-scaled, walkable, town planning and include continuous public access to Geauga Lake, while highlighting the former amusement park's rich history.**

This document is intended to provide a clear direction for the public and private redevelopment of the property with the following goals. Redevelopment shall:

1. Preserve the integrity of the adjacent neighborhoods.
2. Expanding the tax base with proven new land uses.
3. **Create a continuous and connected pedestrian friendly environment within a walkable mixed-use development that shares a sense of place.**

Individual private developments are required to highlight the character and nostalgia of the former Geauga Lake and Sea World sites through effective placemaking techniques and by leveraging the architectural design language of the former amusement park for public spaces and feature buildings.

Specific design guidelines for the public access areas and buildings adjacent to these areas are written with the goal of creating a sense of place that honors the former amusement parks. Designs that protect and **encourage passive recreational opportunities** and showcase the unique environmental features of the property are encouraged.

Additionally, new development is expected to incorporate **innovative stormwater management policies and techniques** that result in natural looking landscapes and integration into nearby park and preserve areas.

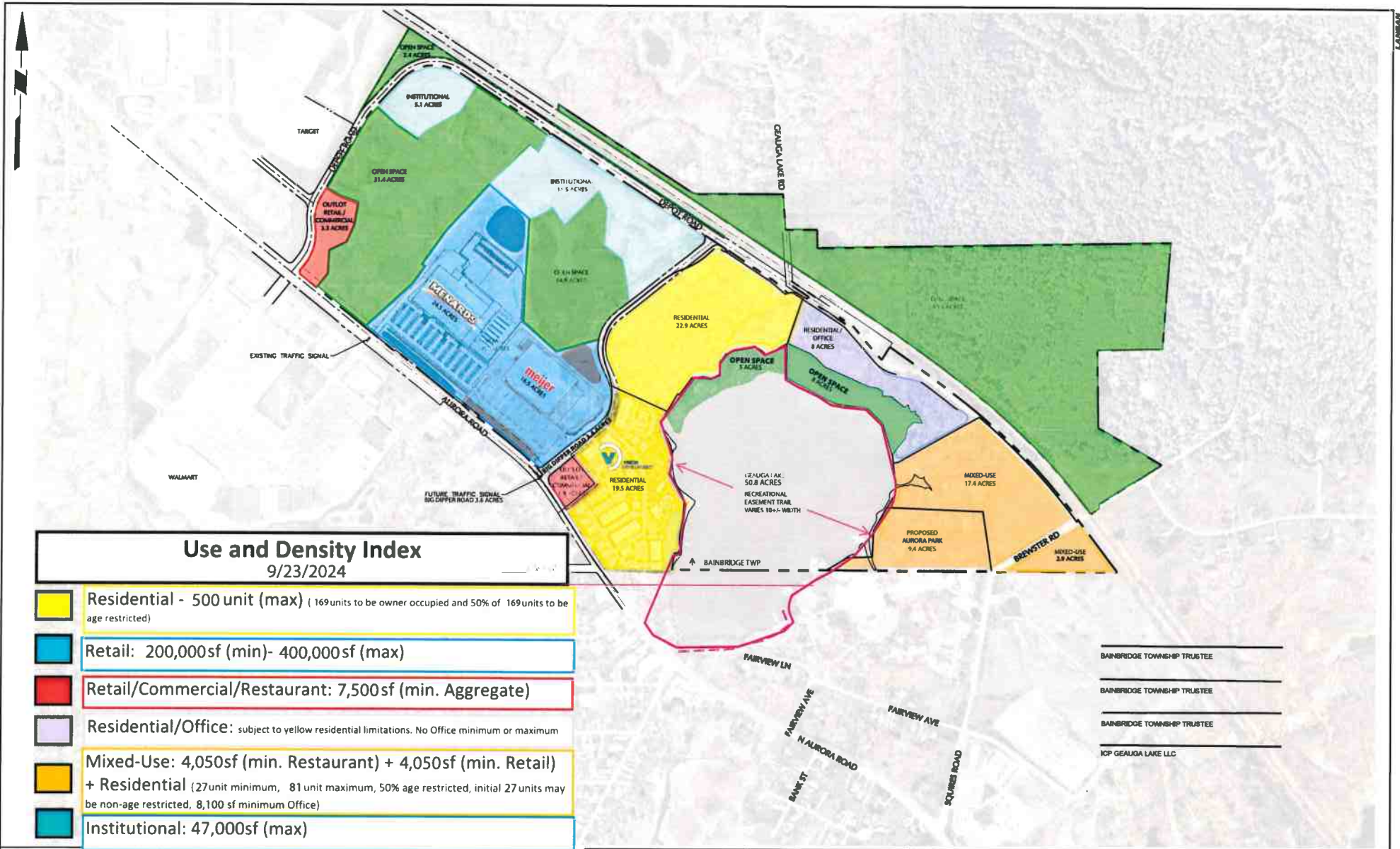
Design Guidelines and Regulations

These design guidelines and regulations are: **vision based and prescriptive**, requiring that all development work together to create the place envisioned by the community.

Design guidelines and regulations are intended to be **qualitative** in their prescriptions, meaning that the **final product should prioritize the quality of the physical built environment from the perspective of a human user walking through the space.**

The vision statement on the previous page is a statement of intent and the following design guidelines and regulations have been developed out of that vision.

GEAUGA LAKE MASTER PLAN



Use and Density Index

9/23/2024

Residential - 500 unit (max) (169 units to be owner occupied and 50% of 169 units to be age restricted)

Retail: 200,000sf (min)- 400,000sf (max)

Retail/Commercial/Restaurant: 7,500sf (min. Aggregate)

Residential/Office: subject to yellow residential limitations. No Office minimum or maximum

Mixed-Use: 4,050sf (min. Restaurant) + 4,050sf (min. Retail)
+ Residential (27unit minimum, 81 unit maximum, 50% age restricted, initial 27 units may be non-age restricted, 8,100 sf minimum Office)

Institutional: 47,000sf (max)

EXHIBIT B

*In accordance with Consent Judgement Entry dated _____

Date	Description	No.
	Revisions	

Project
**GEAUGA LAKE
 BAINBRIDGE
 TOWNSHIP**
 AURORA
 OHIO

Drawing Title
MASTER PLAN

- _____ BAINBRIDGE TOWNSHIP TRUSTEE
- _____ BAINBRIDGE TOWNSHIP TRUSTEE
- _____ BAINBRIDGE TOWNSHIP TRUSTEE
- _____ IOP GEAUGA LAKE LLC

GLOSSARY

The following words when used in these design guidelines or any supplement hereto (unless the context shall prohibit) shall have the following meaning:

- **“ACCESSORY BUILDINGS AND STRUCTURES”** shall mean attached or detached buildings and structures that support a primary use and may consist of parking, accessory dwelling units (used for additional living space or for home occupation uses), storage space, and trash receptacles.
- **“ACTIVE PROGRAMMING”** shall mean the scheduling of an event that occurs at a specific time in a specific place that is used for active public and/or publicly owned private space.
- **“ARCHITECTURAL GUIDELINES”** shall mean the written architectural standards set forth in these Design Guidelines for development of the property.
- **“ASSOCIATION”** shall mean the REA Parties formed for the Property.
- **“BOARD OF TRUSTEES”** shall mean the Bainbridge Township Board of Trustees.
- **“BUILD TO LINE”** shall mean a set building line on a lot, measured parallel from the front and/or corner side lot line or line defining two uses or building types, where the building or structure must be located. The building facade must be located at or near the build-to line as outlined on page 34 of these guidelines. Build to lines shall be used on privately owned thoroughfares only. Set back lines shall be used on those portions of land that abut public right-of-ways.
- **“CANOE”** shall mean a landscaped island, designed in plan view in the shape of a “canoe” so as to buffer a row of parking on three sides.
- **“CARTWAY”** shall mean the portion of a thoroughfare dedicated, or reserved for vehicular traffic including both automobiles and bicycles.
- **“CONSENT JUDGEMENT ENTRY” or “CJE”** shall mean to the terms and conditions for approval of the affected real property as may be amended by agreement of the Developer and the Board of Trustees and the Geauga County Court of Common Pleas.
- **“CURB EXTENSION”** shall mean a traffic calming measure which widens the sidewalk for a short distance in order to reduce the distance a pedestrian must cover to cross a cartway.
- **“DEVELOPER”** shall mean those entities proposing development plans for any lot within the Geauga Lake Development District as set forth in these Design Guidelines and the CJE.
- **“DEVELOPMENT PLAN”** shall mean the completed Final Development Plan for the affected property as approved by the Board of Trustees.
- **“DUPLEX”** shall mean single-family attached dwelling units that include two units that are attached along a common wall, or side-by-side units with a common wall that (the units may be divided into separate lots along the common lot line for individual fee-simple ownership
- **“FF&A”** shall mean furniture, fixtures and accessories such as pedestrian lighting street benches, and any other street furniture, lighting and accessories.
- **“FOLLY”** shall mean a building or other type of structure whose architecture far overshadows its purpose, is designed to enhance the landscape and reference the architecture of amusement; and thus, Geauga Lake. Follies may be used for decoration, as gateways, kiosks, landmarks, or for other imaginative purposes that enhance the user experience of the Geauga Lake District.

GLOSSARY

- **“GEAUGA LAKE DISTRICT”** shall mean the area as shown in the Master Plan.
- **“IMPERVIOUS SURFACE”** shall mean any material that substantially reduces or prevents the infiltration of storm water into previously undeveloped land. Impervious surfaces shall also mean any surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. Impervious surface shall include compacted sand, lime rock and clay as well as conventional surfaces such as asphalt and concrete driveways, parking areas, surfaced streets, roofs, sidewalks, structures and other similar surfaces.
- **“LINER BUILDING”** shall mean a retail, business or multi-story, mixed-use structure built to camouflage a more utilitarian façade/use such as a substation, or parking structure. Liner Buildings are generally narrow in depth along the street and consistent with approved uses in Mixed-Use areas.
- **“LOT”** shall mean a parcel of land of at least sufficient size to meet minimum zoning and Design Guideline requirements for use, coverage, and area and to provide such yards and other open spaces as are herein required. Such lot shall have the minimum required frontage on an improved public street, or on an approved private street, and shall consist of a single parcel of land provided that in no case of division or combination shall any residual lot or parcel be created which does not meet the requirements of these design guidelines. Each parcel of land shall be described by either metes and bounds on a document recorded at the county recorder's office or a plat recorded at the county recorder's office.
- **“MAXIMUM OCCUPIED HEIGHT”** shall mean the height limit on certain structures, as set forth herein, measured from median front exterior finished grade level to the specified height above the highest occupied floor of an enclosed structure.
- **“MAXIMUM UNOCCUPIED HEIGHT”** shall mean the height limit on certain structures, as set forth herein, measured from the average exterior finished grade level at its four corners to the highest unoccupied level of an enclosed structure.
- **“MIXED USE”** shall mean an area or structure that contains a mixture of commercial, office, retail and/or residential uses.
- **“MULTIFAMILY”** shall mean dwellings usually consisting of two or more stories, and may also be a residential component of mixed-use buildings.
- **“PRIVATELY OWNED PUBLIC SPACE” or “POPS”** shall mean any privately owned outdoor spaces provided for public enjoyment by private owners. These shall include both thoroughfares (streets and sidewalks), and civic spaces (plazas, parks and other public amenity spaces).
- **“PEDESTRIAN BUMP OUT”** see curb extension.
- **“PEDESTRIAN ORIENTED”** shall mean places that are designed to prioritize the pedestrian over all other forms of transportation.

GLOSSARY

- **“PRIMARY DEVELOPER”** shall mean INDUSTRIAL COMMERCIAL PROPERTIES LLC or ICP, an Ohio limited liability company, its successors and assigns as provided herein.
- **“PRIVATELY OWNED RIGHT-OF-WAY” or “POROW”** shall mean any privately owned thoroughfare.
- **“PUBLIC RIGHT-OF-WAY” or “ROW”** shall mean any publicly owned or dedicated thoroughfare.
- **“PUBLIC REALM”** shall mean all parts of the built environment where the public has free access. It shall also encompass privately owned thoroughfares, squares, greenspaces, and open spaces, whether predominantly in residential, commercial or civic uses.
- **“RECIPROCAL EASEMENT AGREEMENT” or “REA”** shall refer to the entity intended to operate as the association for the overall Development.
- **“SETBACKS”** shall mean designated areas adjacent to lot lines within which the construction of buildings is not permitted and shall also be defined as “build-to lines.”
- **“SIGHT DISTANCE TRIANGLE”** shall mean a standard sight distance located at an intersection. The distance is defined as a triangle, as each leg of the intersection requires sufficient sight distance to the adjacent approaches creating a triangle. See diagram on page 67.
- **“SINGLE FAMILY DWELLING ATTACHED”** shall mean attached dwelling units for one family each that includes two or more units that are attached along a common wall. The units may be divided into separate lots along the common lot line for individual fee-simple ownership
- **“SINGLE FAMILY DWELLING DETACHED”** shall mean detached residences for one family, that may include age 55 and over, that are typically located on a privately-owned lot, with private yards on each side of the unit. Single-family detached units could also be located on condominium-owned property, surrounded by limited common elements for use by residents of the single-family dwelling, which would serve the same purpose as a private yard
- **“STREET WALL EFFECT”** shall refer to the effect as of an almost continuous wall created by a series of buildings joined to one another along a thoroughfare. The effect is most strongly felt by pedestrians as a sense of being in enclosed space when the effect happens on both sides of the thoroughfare.
- **“STRUCTURE”** shall mean any improvement on the Property that is capable of occupancy or use including, but not limited to, any building, garage, fence, wall, retaining wall, sign or any other temporary or permanent man-made improvement.
- **“THOROUGHFARE”** shall mean a path for travel that includes a cartway for vehicular traffic and sidewalks for pedestrian traffic.

GLOSSARY

- **“TOWNHOUSE, STANDARD AND WEAK LINK”** shall mean single-family attached dwellings that are characterized by row arrangements with common side walls. Vehicular access to standard townhouses shall be provided at the rear of the units to the building via an alley, parking structure, or surface parking lot with one way or two way directional traffic thereby creating through access to the nearest cross streets. Vehicular access to weak-link townhouses may be provided from the street or surface parking lot.
- **“ZERO CURB”** shall mean an area where the horizontal surface of a cartway and a sidewalk are in the same plane, often separated by the use of bollards.
- **“ZONING INSPECTOR”** shall mean Bainbridge Township's staff members responsible for enforcing the township's zoning resolution and these Design Guidelines that regulates development.

Note: for additional applicable definitions, see the Bainbridge Township Zoning Resolution, Chapter 105, effective 11/25/2020.

APPLICATION + ARCHITECTURAL REVIEW GOALS AND REQUIREMENTS

OVERALL GOALS FOR THE GEAUGA LAKE DISTRICT:

The purpose of these guidelines is to provide guidance so that the overall development site becomes a walkable, integrated lake front village atmosphere including a town center with the following emphases:

- ❑ **A unified architectural design aesthetic that allows for a creative interpretation of the traditional scale and vernacular of Northeast Ohio small towns.** The potential to accommodate more contemporary design vernaculars, motifs, and building materials, is encouraged provided that the final design creates a visually complementary, integrated village environment.
- ❑ The application of architectural design, follies, historical markers, amenities and other landscape design features that recall, highlight and demonstrate **for the purpose of remembrance, Geauga Lake Amusement Park.**

OVERALL GOALS:

- ❑ A series of connected neighborhoods via a pedestrian oriented circulation network, each with activity areas, and open space(s).
- ❑ Retailing, cafés, restaurants, personal and/or business services placed and located where they can generate high pedestrian activity along ground floor locations.
- ❑ Residential areas that are built above/intermixed or adjacent within a walkable distance of new commercial and recreational uses, places of work and public open spaces and amenities.
- ❑ An emphasis on developing neighborhoods where new and existing residents and visitors can live, work and play.
- ❑ Encourage vertical mixed-use development where appropriate.

OVERALL GOALS:

- ❑ A design where open space, streetscapes with sidewalks, pathways, public and/or institutional uses, and recreational uses are interwoven to create an overall village context.

The Design Guidelines and approval requirements contained herein will be fully applicable to the initial public improvements as well as all other development of the property.

ADMINISTRATION & REVIEW PROCESS



PRE-APPLICATION MEETING - Pre-application meeting with Board of Trustees, Township Consultant and Zoning staff - introducing developers' background, track-record, and presentation of examples of similar projects. The applicant will also present their conceptual plan to the Board of Trustees and Zoning Staff at this meeting.



PRELIMINARY DEVELOPMENT PLAN (PDP) PROCESS



primary developer & township consultant work session - A series of design sessions between the applicant and the Primary Developer and Township Consultant are ongoing during this period. These meetings are intended to be a series of design charrettes where the applicant presents their designs and receive feedback prior to submission to the Township.



zoning staff & township consultant work session (minimum of one) - This meeting is intended to reflect the same process mentioned above, but includes Zoning Staff.



primary developer work session



SUBMIT APPLICATION & REVIEW FEE TO TOWNSHIP STAFF FOR REVIEW AND RECOMMENDATION



PRESENT PLAN TO BOARD OF TRUSTEES FOR REVIEW AND APPROVAL OR CONDITIONAL APPROVAL



FINAL DEVELOPMENT PLAN (FDP) PROCESS



primary developer & township consultant work session



zoning staff & township consultant work session (minimum of one)



primary developer work session



SUBMIT APPLICATION & REVIEW FEE TO TOWNSHIP STAFF FOR REVIEW AND RECOMMENDATION
(up to 30 day review timeframe)



PRESENT PLANS TO BOARD OF TRUSTEES FOR REVIEW AND APPROVAL OR CONDITIONAL APPROVAL



RECEIVE ZONING PERMIT FROM BAINBRIDGE TWP. STAFF

PROCEED TO COUNTY BUILDING DEPARTMENT AND COUNTY SOIL AND WATER CONSERVATION DISTRICT (SWCD) FOR PERMITS - all building and engineering permit plans should be simultaneously submitted to the Township.

PRELIMINARY APPLICATION + REVIEW

PRELIMINARY DEVELOPMENT PLAN (PDP) + ARCHITECTURAL REVIEW

GENERAL REQUIREMENT

PRELIMINARY DEVELOPMENT PLAN (PDP)

- **Process**
 - Primary Developer approval letter shall accompany PDP submittal. Primary Developer approval shall be given within ten (10) business days following the complete submission of Development Plans.
 - Six (6) black & white printed set of plans (24x36), along with a digital set shall be submitted to Staff for review. Staff to transmit plans to affected township, county, state departments/agencies.
 - Primary Developer's written approval of Development Plans must be granted prior to submission to the Township Zoning Department Staff.
 - Following a recommendation for approval, disapproval, or approval with conditions by the Zoning Staff, the PDP shall be submitted by Staff to the Board of Trustees for review. The Board of Trustees has the final authority to approve, conditionally approve, or deny any PDP at its sole discretion.
 - The Zoning Inspector shall collect any comments received from the affected departments or agencies, review and comment upon the PDP in accordance with the Design Guidelines, and recommend approval, disapproval, or modifications, or request additional information by providing a written report to the developer and Board of Trustees up to thirty (30) days after receipt of the PDP.
 - If modifications to the Preliminary Development Plan are required or if it is disapproved, a revised plan based on feedback shall be resubmitted and the process will continue to FDP once PDP approval is granted.
 - Submit PDP review fee and township consultant deposit per the fee schedule, completed PDP application form, and consent authorization form for representation.
- **General Requirements**
 - PDP shall be signed by the Owner of the building site or the Owner's agent.
 - PDP shall be prepared by some combination of American Institute of Certified Planners (AICP), registered landscape architects, registered architects and licensed civil engineers.
 - PDP shall be based on a boundary survey prepared by a registered surveyor.
 - PDP shall conform to and contain all the following review requirements beginning on the following two pages.
 - **Single Family Residential Process**
 - PDP single family residential approvals for architecture are reviewed by primary developer and township consultant and then proceed to township for zoning staff review and recommendations. Final review and approvals by Board of Trustees.

REVIEW

PRELIMINARY DEVELOPMENT PLAN (PDP) + ARCHITECTURAL REVIEW

GENERAL REQUIREMENTS

SUBMISSION TO PRIMARY DEVELOPER, TOWNSHIP STAFF

CHECKLIST

Overall Drawing Requirements:

- ☐ Property line definition and dimensions of the perimeter of the site with acreage/square feet.
- ☐ Proposed name of the project **approximate dimensions on preliminary plans.**
- ☐ Scaled overall site plan with adjacent context for reference. Include location plan, appropriate dimensions, and north arrow. Scale should be appropriate for the level of detail required in each stage of the approval process.
- ☐ General layout of the site indicating and illustrating property lines, building setbacks and yards, location and extent of off-street parking areas, **storm water facilities**, roads, driveways, walkways, trails, open space, green space, lot coverage, etc. with **approximate dimensions and acreage/square feet.**
- ☐ Include a conceptual plan for how to highlight the history and architecture of Geauga Lake as part of the plan for development.
- ☐ Proposed streetscape, hardscape and any privately owned public spaces (POPS) or private open space(s) shown in plan and section.
- ☐ Proposed buildings and structures shall be located, showing square footage, tenant or user types, if known, expected entrance ways and service or loading/unloading areas with dimensions.
- ☐ Proposed landscape treatment of both the site, and any streetscapes, lot edges, or buffers shown in plan and thoroughfares shown in section.
- ☐ A plan view drawn to scale:
 - The location and species of each plant.
 - The location of property lines and building footprints.

REVIEW

PRELIMINARY DEVELOPMENT PLAN (PDP) + ARCHITECTURAL REVIEW

GENERAL REQUIREMENTS

SUBMISSION TO PRIMARY DEVELOPER, TOWNSHIP STAFF AND ARC

CHECKLIST

Privately Owned Public Space (POPS)

- ☐ Schematic site plans, elevations, and sections for thoroughfares and privately owned public spaces (POPS).
- ☐ Show concepts for addressing nostalgia across the project. (Follies, architecture, public space, etc).
- ☐ Service functions - Trash locations, exterior display areas, exterior storage areas, etc. with dimensions and acreage/square feet.

Building Form and Architecture : in accordance with the design guidelines, and designed by a licensed engineer or architect.

- ☐ Scaled architecture plans depicting character, materials, and any exposed building elevation.
- ☐ Color elevations of all visible sides and rendered perspectives of proposed structures.
- ☐ Proposed architectural design character including proposed materials (cut sheets, examples, etc.)
- ☐ Proposed signage design, including placement, scale, etc.
- ☐ Exterior Lighting plan and lighting fixture selections (cut sheets).

General Notes

- ☐ Plan sheets shall be stamped, signed, and dated by the consultant responsible for preparing them.
- ☐ The Staff may require additional information in order to ensure compliance with the Design Guidelines.
- ☐ Add signature and date lines for Primary Developer, Developer, Township Trustees, and Zoning Inspector to plans.

REVIEW

FINAL DEVELOPMENT PLAN (FDP)

GENERAL REQUIREMENT

REQUIREMENTS AND PROCESS OF FDP APPROVAL

- Primary Developer approval letter shall accompany FDP submittal.
- No Structure of any kind shall be installed, erected, placed, assembled, or maintained on any Lot until and unless the proposed use and the plans and specifications for the same, showing the nature, shape, size, color, architectural design, materials, location and landscaping, paving plans, curbing, storm drainage and all other requirements as set forth herein ("Development Plans") have been submitted in writing to Staff and the Board of Trustees have approved in writing the Development Plans as conforming to the Design and Architectural Guidelines contained herein, and a zoning certificate has been issued by the Zoning Inspector.
- The Developer shall submit (or cause the applicant to submit) an application form, and consent authorization form for representation, the required review fee and township consultant deposit per the fee schedule, and six (6) 24" x 36" hardcopy sets drawn to scale plus a pdf version of the Architectural Plan and FDP to the Zoning Department Staff. The Zoning Inspector shall transmit a copy to affected Township, County or State departments or agencies.
- **Reviews of FDP with Primary Developer consultants and Staff.**

Zoning Staff shall collect any comments received from the affected departments or agencies, review and comment upon the Architectural Plan and FDP in accordance with the Design Guidelines, and recommend approval, disapproval, or modifications, or request additional information by providing a written report to the developer and Board of Trustees up to thirty (30) days after receipt of the Architectural Plan and FDP.
- **Presentation of FDP to Board of Trustees.**
- Following recommendation or recommendation with conditions by Zoning Department Staff, the Architectural Plan and FDP shall be submitted by Zoning Staff to the Board of Trustees for review. The Board of Trustees has the final authority to approve, conditionally approve, or deny any Architectural Plan and FDP at its sole discretion:-
- Approved plans must be dated and signed by the Primary Developer, the Board of Trustees, and the Zoning Inspector prior to proceeding for a zoning certificate.
- Should any submission, either in total or part, not comply with the requirements of these guidelines or the overall design intent of the Design Guidelines, the Board of Trustees retains the authority to request, in writing that the submitting entity alter and/or change the aspects of the submitted design prior to approval or Board of Trustees can reject the submittal in full. Depending on the nature and/ or scope of these requested changes, Board of Trustees may also request that the submitting entity resubmit altered plans for a subsequent review and approval in accordance with the foregoing process.
- Development Plans for alterations and/ or additions to any building or other structures or improvements on the Lots must also have recommendation from Zoning Department Staff and prior approval in writing from the Board of Trustees as complying with the Design Guidelines and shall thereafter be built and constructed in accordance with the approved Development Plans.
- FDP single family residential approvals for architecture are reviewed by primary developer and township consultant and then proceed to township for zoning staff review and recommendations. Final review and approvals by Board of Trustees.

REVIEW

FINAL DEVELOPMENT PLAN (FDP)

GENERAL REQUIREMENTS

SUBMISSION TO PRIMARY DEVELOPER, TOWNSHIP STAFF

CHECKLIST

Site Plan Requirements:

- ☐ Proposed name of the project and legal description, **and survey of the site.**
- ☐ **Scaled Overall Site Plan** with adjacent context for reference. Include location plan, appropriate dimensions, and north arrow. Scale should be appropriate for the level of detail required in each stage of the approval process. **FDP shall be based upon a boundary survey by a licensed surveyor.**
 - ☐ Site data table including **acreage**, building areas, unit totals and uses.
 - ☐ General layout of the site indicating **and illustrating** property lines, building **setbacks** and yards, **location**, and extent of **off-street parking areas**, roads, **storm water facilities**, **driveways**, **trails**, **open space**, **green space**, **lot coverage**, **etc. with dimensions and acreage/sq. ft.**
 - ☐ Proposed buildings and structures shall be located, showing square footage, tenant or user types, if known, **expected** entrance ways, floor plans, elevations, and service or loading/unloading areas with dimensions.
 - ☐ Open areas including public or private open space(s).
- ☐ **Service functions** - Trash locations, **exterior display areas**, **exterior storage areas**, **etc. with dimensions and acreage/square feet.**
- ☐ **Civil Plans** in accordance with the design guidelines, designed by a **licensed** professional engineer.
 - ☐ Street and sidewalk section details **and cross sections.**
 - ☐ Property line definition and dimensions of the perimeter of the site **and acreage/sq. ft.** based upon a survey.
 - ☐ Grades and **elevations** of property and the improvements to be placed thereon.
 - ☐ Existing and **proposed** surface drainage ways and **surface** sheet flow patterns by a registered engineer. Location and dimensions of storm water facilities. **Final stormwater plans to be approved by SWCD as part of FDP approval.**
 - ☐ Existing and proposed easements on the site with notations as to their type, dimensions, extent, and nature. **All utility lines shall be installed underground.**
 - ☐ The location and dimensions of existing and **proposed** utilities on and adjacent to the site, including tie-in **locations.**

REVIEW

FINAL DEVELOPMENT PLAN (FDP)

GENERAL REQUIREMENTS

SUBMISSION TO PRIMARY DEVELOPER, TOWNSHIP STAFF

CHECKLIST

Landscape Plan Requirements:

- **Landscape plan and treatment**, in accordance with the design guidelines, and designed by a registered landscape architect.
 - A plan view drawn to scale
 - The location and species of each plant showing the anticipated canopy or spread of the plant 5 years after installation.
 - The general layout of irrigation systems (if included).
 - The location of property lines and building footprints, roads, utility easements, and power lines.
 - Tabular Information
 - The landscape surface area available for planting.
 - The number of, and species of, large trees, evergreen trees, small trees, and shrubs, perennials, or ornamental grasses/sedges and other groundcover that are required in each area.
 - Percentage and area of land uses defined as "usable greenspace".
 - List of hardscaping material palette.
 - All landscape features including but not limited to pavilions, playgrounds, mail boxes, kiosks, follies, gateways, artifacts. Drawings and specifications must be provided.
 - Plant lists and quantities.

REVIEW

FINAL DEVELOPMENT PLAN (FDP)

GENERAL REQUIREMENTS

SUBMISSION TO PRIMARY DEVELOPER, TOWNSHIP STAFF

CHECKLIST

Lighting Plan Requirements:

- **Exterior lighting plan and design** in accordance with the design guidelines, and designed by a licensed engineer or architect.
 - **A plan view drawn to scale**
 - Shows the location and mounting height above grade of light fixtures including building mounted fixtures.
 - Shows the location of all buildings, parking spaces, parking aisles, walkways and if applicable any areas dedicated to the outdoor storage or display areas on the lot or parcel; and
 - Denotes the type of each light fixture, keyed to a light fixture schedule and picture, cutsheets or line drawings of the proposed light fixtures.
 - **Identifies overall design approach with temperature and/or color value of light, light throws and light fixture function category.**
 - Photometric plan showing:
 - Initial horizontal illuminance (maintenance factor = 1.0) calculated at grade using a grid of points no more than 10 feet apart and covering the entire site (excluding buildings) and extending a minimum of 10 feet beyond the lot or parcel property line.
 - The maximum and minimum illuminance values within each specific use area (i.e., outdoor storage or display of merchandise, parking areas, walkways, etc.) shall be clearly distinguished.
 - Statistics for uniformity for each specific use area shall be included on the plan.
 - Photometric plans for sites with existing pole mounted lighting within 50 feet of the property line shall include this existing lighting in the calculation. When photometric data for the existing fixtures is not available photometry for a similar fixture may be used. The fixture(s) used to represent existing lighting shall be included on the lighting fixture schedule and designated as existing.
 - **Light fixture schedule** - A light fixture schedule indicating fixture type keyed to the plan, the quantity and type of lamp to be used in each fixture along with the rated lumen output of the lamp, the shielding category in which the light fixture belongs (unshielded, shielded, fully shielded, or full cut-off), and a description of the fixture.
 - Cutsheets, pictures or line drawings of each light fixture keyed to the lighting plan.

REVIEW

FINAL DEVELOPMENT PLAN (FDP)

GENERAL REQUIREMENTS

SUBMISSION TO PRIMARY DEVELOPER AND TOWNSHIP STAFF

CHECKLIST

Privately Owned Public Space (POPS) Requirements:

- ☐ Scaled detailed site plans, elevations, sections for roads, off-street parking areas, walkways, trails, and privately owned public spaces (POPS), with area in acres/square feet, and a legal description as part of a survey prepared by a licensed professional surveyor.
- ☐ Plans and sections of all primary and secondary thoroughfare general conditions.
- ☐ Plans and rendered perspective of any privately owned public spaces.
- ☐ All FF&E with locations shown in plan. Lighting for these areas should be shown in lighting plan and signage should be included in the architectural drawings.
- ☐ Show all folly structures, mural details and other references to Geauga Lake

Architecture Drawing Requirements:

- ☐ Scaled architectural floor plans for each building and structure prepared by a licensed architect.
- ☐ Final color elevations for each building and structure depicting character and materials, for all facades.
Provide final material selections and provide samples on a material board.
- ☐ Signage design including placement on buildings and structures with setbacks, dimensions, scale and fabrication details, or signage, 'zones' for multi-tenant structures where potential tenant signage might be placed.
- ☐ Perspective renderings illustrating architecture and key public spaces (shown together when possible to illustrate their connectivity).

General Notes

- ☐ Plan sheets shall be stamped, signed, and dated by the consultant responsible for preparing them.
- ☐ The Zoning Staff may require additional information in order to ensure compliance with the Design Guidelines.
- ☐ Add signature and date lines for Primary Developer, Developer, Township Trustees, and Zoning Inspector to plans.
- ☐ FDP applicants will be added to Commercial or Lakefront REAs upon transfer of ownership. Thereafter, copy of REA to be provided to Township Zoning Staff.
- ☐ Should any aspects of the project change as a result of technical reviews with the County, Building Department and any other technical review agencies, the applicant shall return to the committee and Staff for a review of changes. Zoning Staff to determine if project changes merit additional review and approval by Board of Trustees.
- ☐ Final plans shall be stamped by a professional engineer and/or architect and the final landscaping plan stamped by a registered landscape architect.

QUALITATIVE DESIGN PROCESS GUIDELINES

GOAL:

- The purpose of these design process guidelines is to illustrate the way in which the qualitative design process should be approached and will be reviewed by the Zoning Department Staff and the Board of Trustees.

REQUIREMENTS:

- ❑ **Development teams are expected to show and review their design process with The Zoning Department Staff and Board of Trustees step by step exactly as it is illustrated on the following pages.**
 - ❑ Define the property.
 - ❑ Layout blocks and thoroughfares.
 - Identify and describe primary and
 - ❑ secondary thoroughfares.
 - Identify and describe views, vistas
 - ❑ and gateways.
 - ❑ Identify land uses.
 - Define individual building placement,
 - ❑ massing and relation to the public realm (thoroughfares and privately
 - ❑ owned public spaces (POPS)).
 - Define the architecture of individual
 - ❑ buildings.

DESCRIPTIONS:

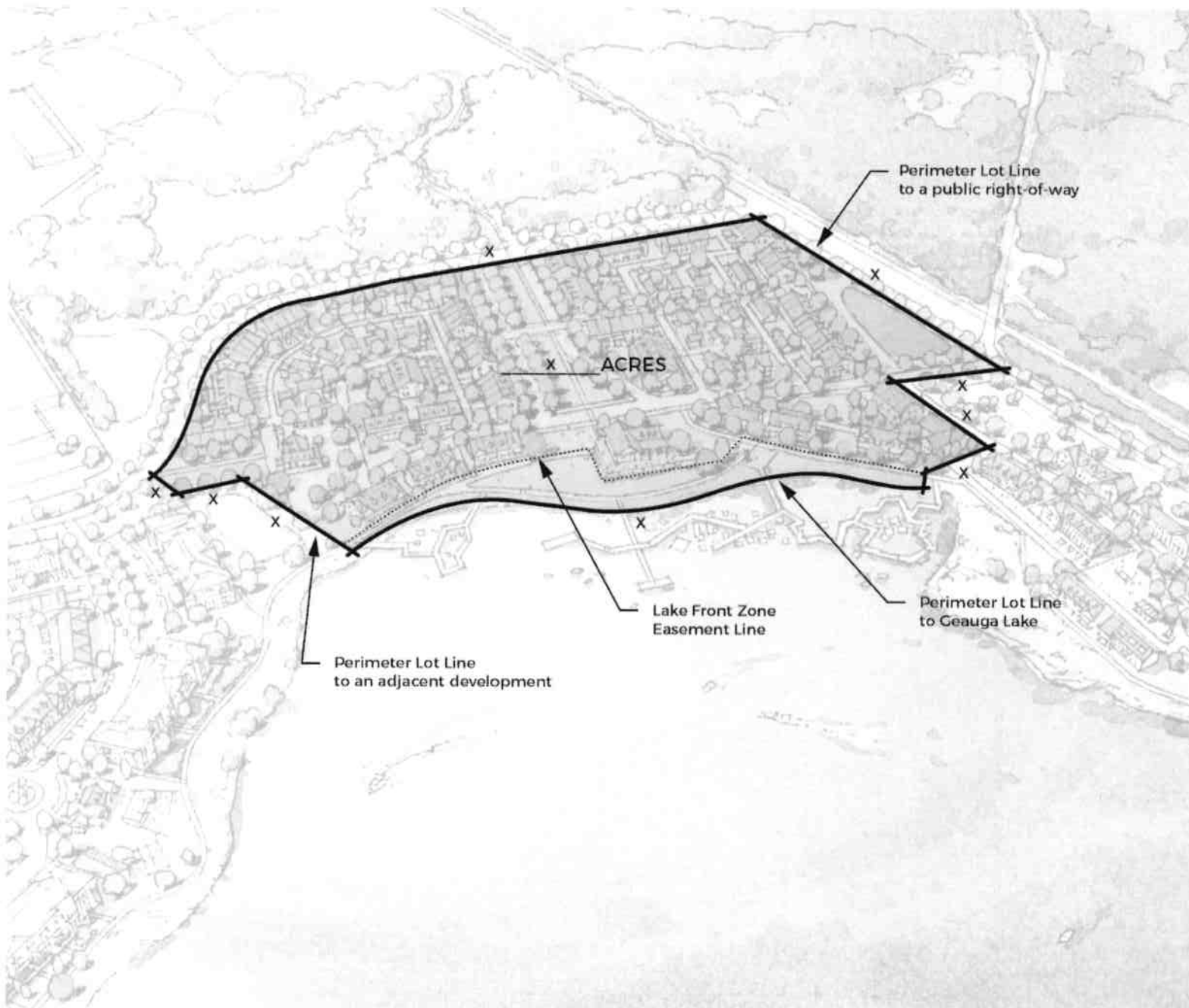
- The qualitative design process puts emphasis on the "public realm" as perceived by a person in the space and should be viewed through this lens.
- The general anthropomorphic dimensions of human beings as well as the senses used for experiencing the environment are the foundation for all levels and scales of design in the Geauga Lake District.
- This process is designed to start from a bird's eye plan view and move in closer with each step, breaking down space, defining space and refining detail to the scale of a human.
- The final step of the process should be for the design team to "see" and "experience" the space from that last step of the process looking back towards the beginning. All elements at every step of this design process should produce a seamless, human scaled environment that serves the human user, functions at a human scale and to gives delight to the senses.

STEP 1

PLANNING SITE DRAWING

Survey the site:

- Site Acreage
- Overall Property Line definition and dimensions of the perimeter of the site.
- Identify the Lake Front Easement Line.



Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

STEP 2

PLANNING SITE DRAWING

Lay out the BLOCKS and THOROUGHFARES.

General layout of the site indicating and illustrating:

- Block Dimensions
- Build-to lines and rights-of-way (ROW). See the "General Thoroughfare Diagram" page 49.

Note:

Lines identifying subdivision of blocks for individual lots within the Development and not bordering a public right-of-way, whether they be retained by the owner or sold off shall be known as "interior lot lines".

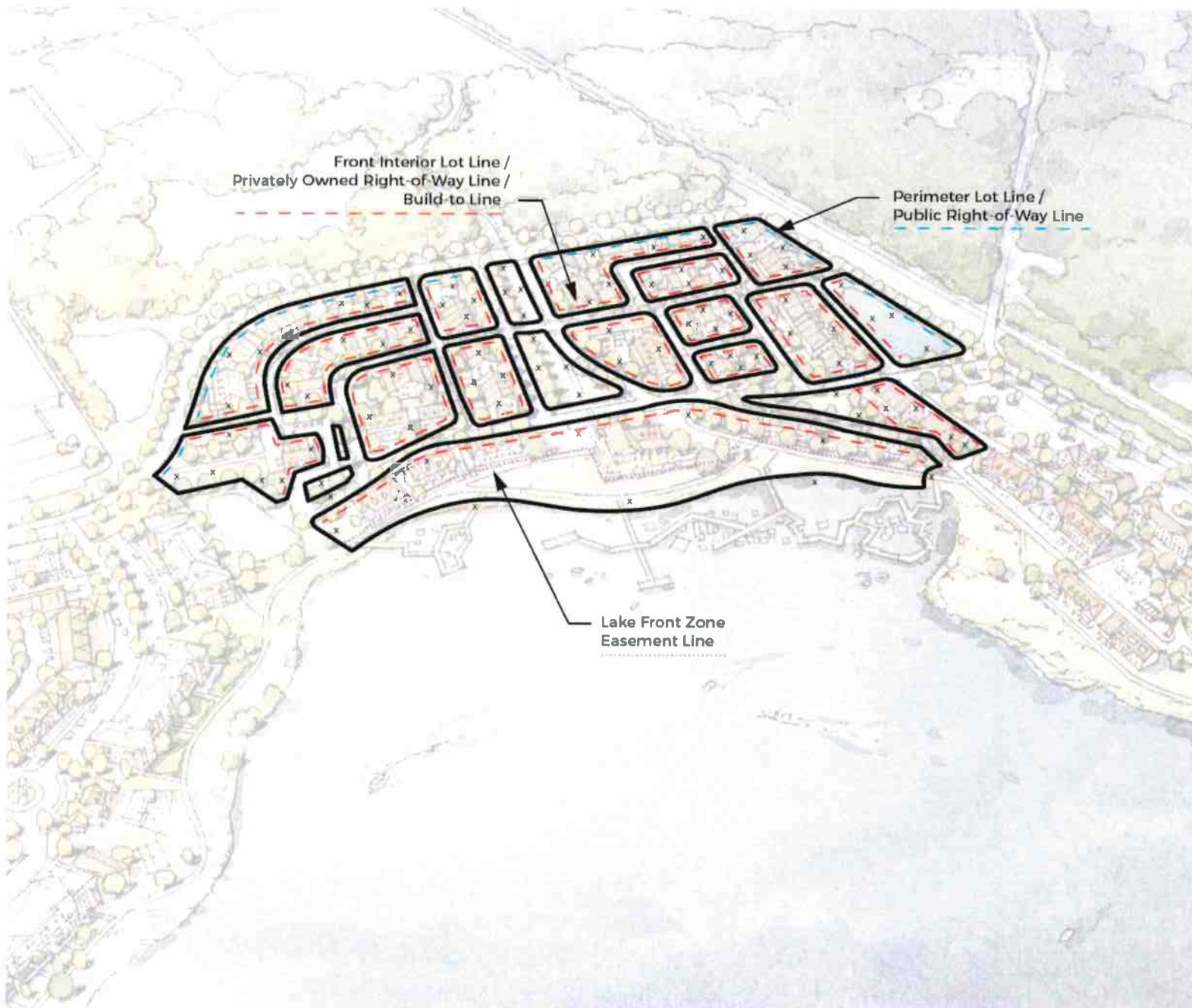
When an interior lot line defines a lot where the **Developer retains ownership** and fronts a privately owned thoroughfare, it may also be called a "build-to line" and also serve as the "privately owned right-of-way line".

When an interior lot line defines a lot where the **Developer has sold off the lot** to, for example, a private homeowner, and it fronts a privately owned thoroughfare, it may also be referred to as a "property line" and a "build-to line" depending upon context.

See the following sections for design guidance:

PLANNING,
DESIGN ELEMENTS | BLOCKS
on Pages 39-40.

PLANNING,
DESIGN ELEMENTS |
STREET ENCLOSURE
on Pages 41-42.



Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

STEP 3

PLANNING SITE DRAWING

Clearly identify PRIMARY THOROUGHFARES, SECONDARY THOROUGHFARES, ALLEYS, and PEDESTRIAN PATHWAYS in plan..

Refine the THOROUGHFARES and ALLEYS and delineate the RIGHT-OF-WAY as separate from developable lots in plan.

URBAN DESIGN SITE AND SECTION DRAWINGS

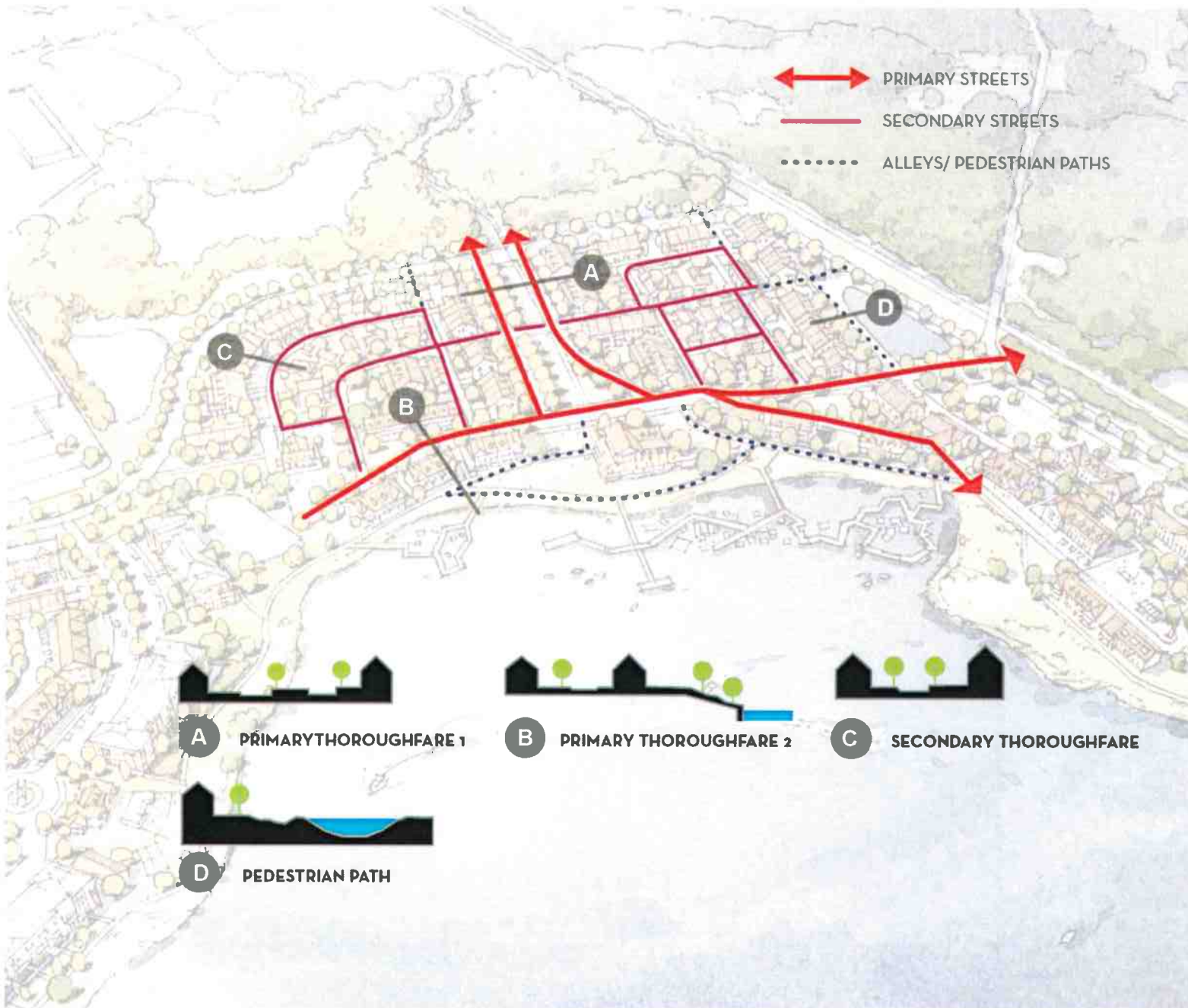
General layout of the site indicating and illustrating:

- Further define thoroughfare dimensions and uses shown in plan and section.
- Roadway dimensions and uses.
- Sidewalk zones dimensions and uses.
- Show public greenspace opportunities with proposed landscape and hardscape materials and Fixtures, Furnishings, and Equipment (FF&E) for greenspaces and roadways and sidewalks incorporated into plan and section views.

See the following sections for design guidance:

PLANNING,
DESIGN ELEMENTS |
GREENSPACE REQUIREMENTS
on Pages 45-48.

URBAN DESIGN
DESIGN ELEMENTS OVERVIEW |
THOROUGHFARES,
INTERSECTIONS, SIDEWALKS,
MATERIALITY, UTILITIES &
EQUIPMENT
on Pages 49-75 and page 92.



Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

STEP 4

PLANNING SITE DRAWING

Identify VIEWS, VISTAS and GATEWAYS. Define GATEWAYS.

Identify opportunities in the landscape to highlight the history of Geauga Lake in potential art installations, signage and wayfinding opportunities, follies, murals, architectural interpretations, etc.

General layout of the site indicating and illustrating:

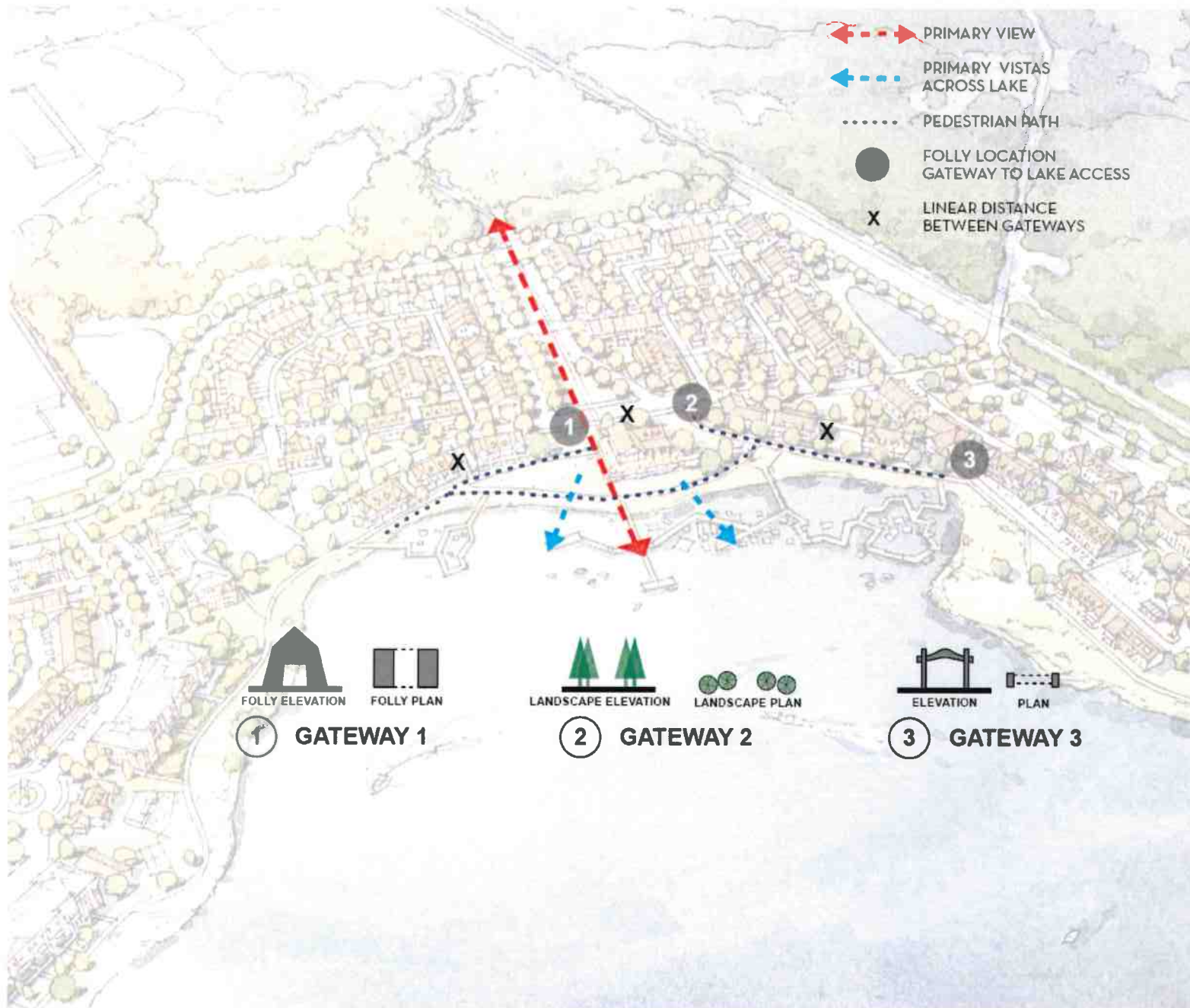
- Primary Views
- Primary Vistas
- Pedestrian pathways (as separate from street sidewalks).
- Locations of gateway access points to waterfront. Identify Folly structure placements at gateways.
- Location of Amenities and Follies.
- Distance between Gateways/ access points to waterfront.

Proposed Folly designs in plan and elevation.

See the following sections for design guidance:

PLANNING
DESIGN ELEMENTS |
VIEWS & VISTAS
on Pages 43-44.

URBAN DESIGN
DESIGN ELEMENTS OVERVIEW |
FOLLIES
on Pages 90-91.

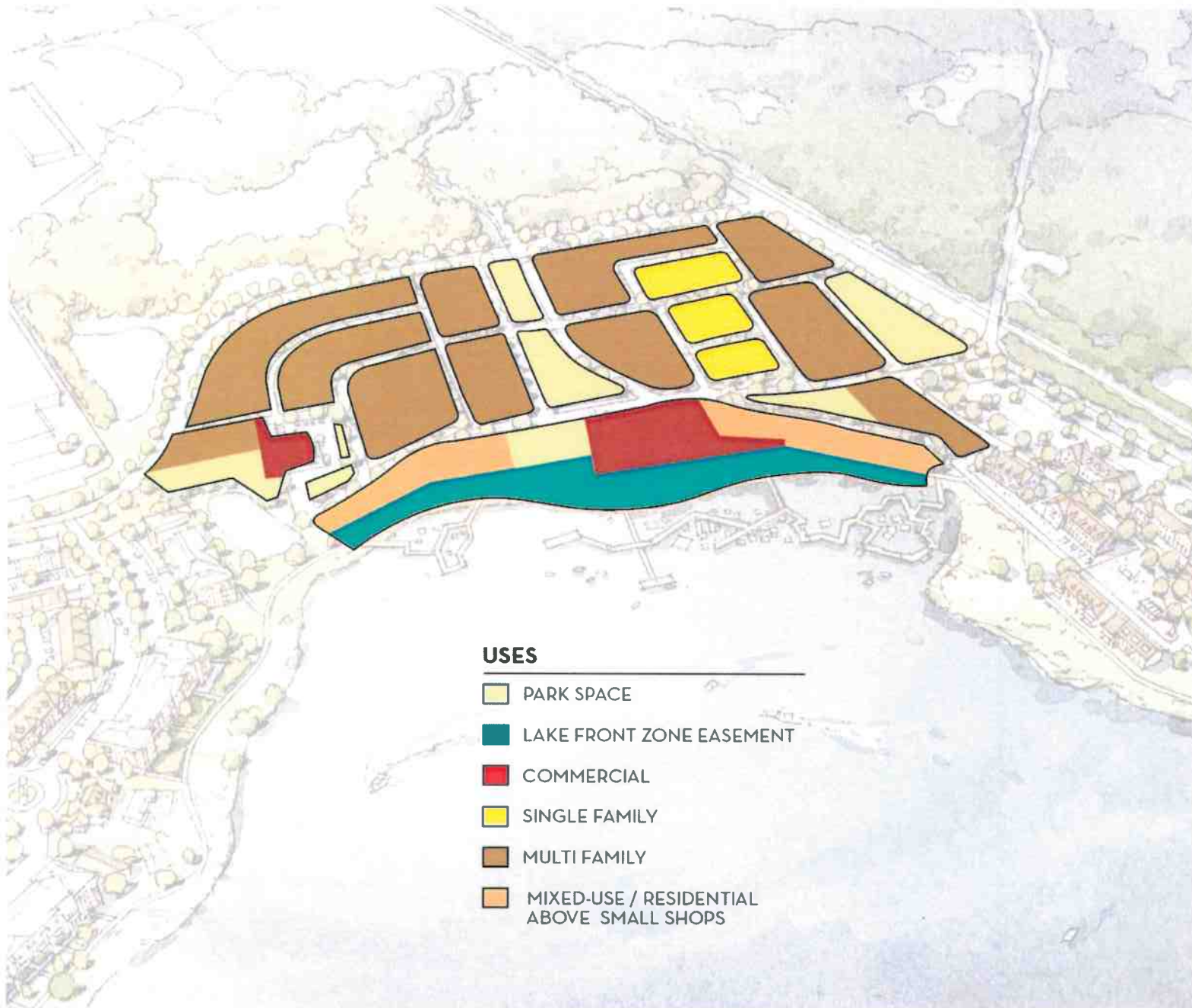


Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

STEP 5

PLANNING SITE DRAWING

- Identify LAND USES for Blocks.



See the following sections for design guidance:

PLANNING
USE REGULATIONS |
REGULATING PLAN • USE TYPES
AND REQUIREMENTS
on Pages 32-37.

Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

STEP 6

URBAN DESIGN BUILDING FORM

(Preliminary Architectural Review)

Property line definition and dimensions of the perimeter of each individual building site.

General layout of the site indicating and illustrating:

- Property lines,
- Build to lines and yards,
- Location and extent of major off-street parking areas, etc.

Proposed structure shall be located, showing:

- Square footage,
- Tenant or user types, if known
- Expected entrance ways and service or loading areas.

Proposed streetscape, hardscape and any public or private open space(s).

Proposed landscape treatment of both the site, and any streetscapes, lot edges, or buffers.

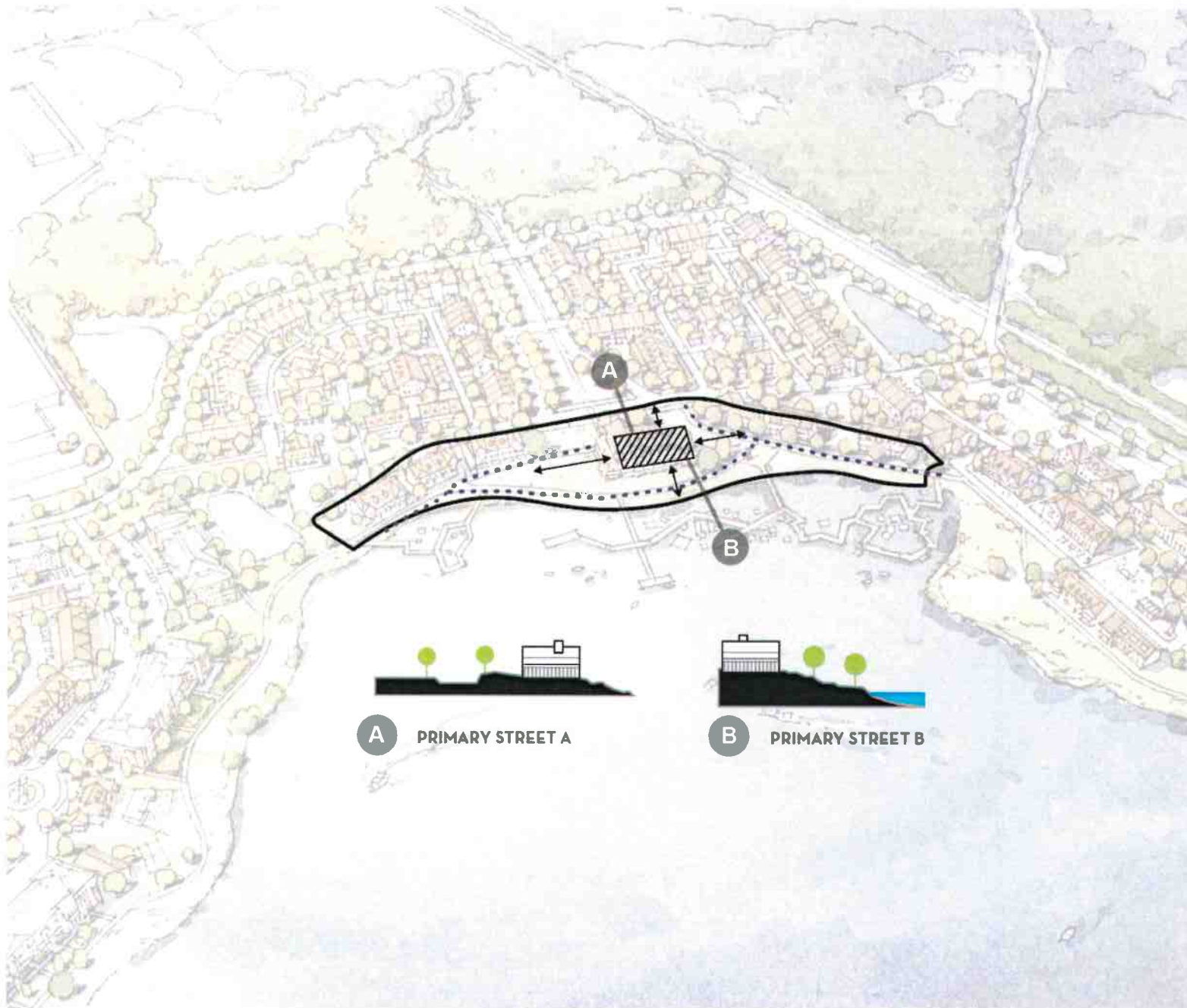
See the following sections for design guidance:

**URBAN DESIGN
DESIGN ELEMENTS OVERVIEW |
SIDEWALKS, MATERIALITY**
on Pages 69-75.

**ARCHITECTURE
DESIGN ELEMENTS |
BUILDING FORM STANDARDS,
FRONTAGE TYPES**
on Pages 104-112.

**LANDSCAPE ARCHITECTURE
DESIGN ELEMENTS | (SMT),
PLANT MATERIALS, UTILITIES &
EQUIPMENT**
on Pages 117-138.

**LIGHTING
DESIGN ELEMENTS |
PEDESTRIAN LIGHTING**
on Pages 145-149.



Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

STEP 7

ARCHITECTURE

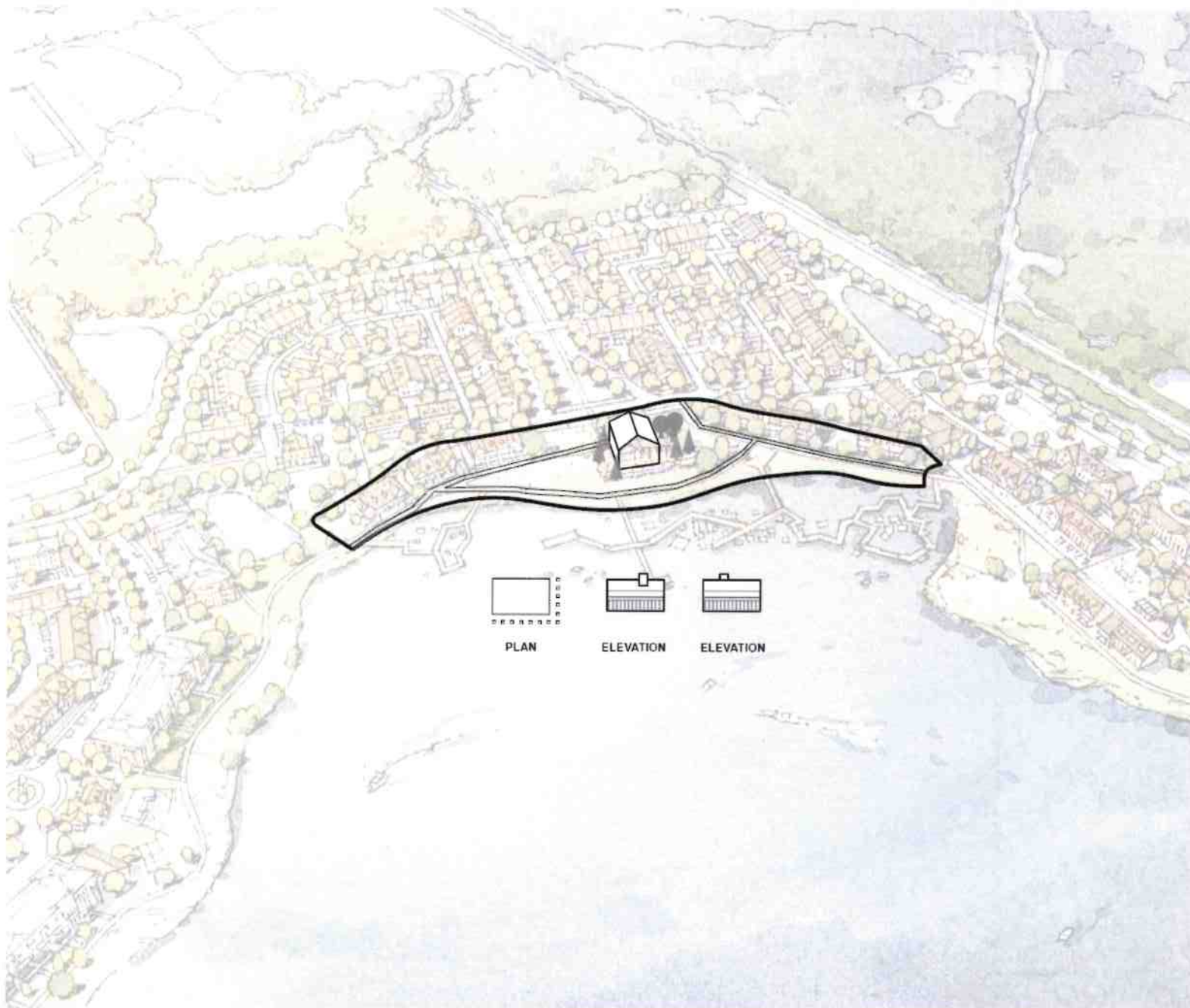
(Preliminary Architectural Review)

Color elevations of all visible sides of proposed structures.

Floor plans for reference to exterior conditions.

Proposed architectural design character including:

- material samples either scaled material board, or in the same instance of larger structure(s), the Staff may request full-sized material sample
- Proposed signage design, including placement, scale and fabrication attachment details



See the following sections for design guidance:

**ARCHITECTURE
HISTORICAL PRECEDENTS,
DESIGN ELEMENTS OVERVIEW |
THE ARCHITECTURE OF
AMUSEMENT**
on Pages 93-98.

**ARCHITECTURE
HISTORICAL PRECEDENTS,
DESIGN ELEMENTS OVERVIEW |
THE ARCHITECTURE OF
NORTHEAST OHIO**
on Pages 99-103.

**SIGNAGE DESIGN,
DESIGN ELEMENTS OVERVIEW |**
on Pages 154-164.

Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

Illustrative renderings as needed to convey design concept throughout the process



Note: The above illustration is for example purposes only and does not relate to any Master Plan. It is intended as a graphic example of the design process executed per these design guidelines.

CONSTRUCTION ADMINISTRATION

GOAL:

- The designs are executed as illustrated and approved.

REQUIREMENTS:

- **Certification by civil engineer for roads and parking lots**
- **Certification back to Primary Developer and Zoning Staff that street and parking lot lighting have been executed as illustrated.**

Certification back to Primary Developer and Zoning Staff that all approved designs have been executed as illustrated.

- landscape
- urban design
- signage and wayfinding

See pages 176-177

USE TYPES AND REQUIREMENTS

GOAL:

- To create an unified, walkable village atmosphere surrounding Geauga Lake with a mix of complementary uses scattered throughout the Geauga Lake District. A broad mix of uses scattered throughout the District will encourage movement around the lake throughout the day and evening as people move between different uses, (places of residence, institutions, privately owned public places (POPS), places of work and places of recreation, retail and entertainment spaces). Uses should be placed to encourage movement throughout all hours of the day and evening.
- A vertical mix of uses are encouraged at important nodes of activity and where appropriate to create a small town "downtown" feel.
- All buildings widths, parcel densities, and build-to-line dimensions are designed to add to the human scaled, physically connected pedestrian nature of the thoroughfares they abut. Wide building frontages that are not architecturally articulated are prohibited.

REQUIREMENTS:

- Developers shall outline the area intended for development, identify uses and submit to the regulating committees described herein for approval. Once approved, the plan and its uses shall be incorporated into the regulating plan and the plan updated to reflect the new conditions.
- Developed lots shall connect to each other around the entirety of Geauga Lake to reinforce the village feel and connectivity goals stated herein.

DESCRIPTIONS:

- **REGULATING PLAN** - The map of the regulated area shown on the following page that designates the locations where different building form standards apply, based on clear community intentions regarding the physical character of the Geauga Lake District.
- These Design Guidelines set out which land uses are allowed by right (Permitted), allowed subject to use-specific standards (Permitted with Regulations), and not allowed (Prohibited) in the Geauga Lake District.

USE TYPES AND REQUIREMENTS

GOALS:

- To foster and create a series of traditionally inspired, small town-scaled, pedestrian oriented, walkable streetscape environments, within an integrated mixed-use, urban village district.

REQUIREMENTS:

STRUCTURAL HEIGHT

Without modifying the more specific limitations set forth in the Table on the previous page:

- Buildings that are used for commercial/non-residential purposes shall not exceed forty eight feet (48') in Maximum Occupied Height measured from front exterior grade level to eight feet (8') above the highest occupied floor; and
- Residential buildings, including all attached, multi and/or single family units, including assisted or independent living units, shall not exceed forty eight feet (48') in Maximum Occupied Height measured from front exterior grade level to eight feet (8') above the highest occupied floor.

REQUIREMENTS:

STRUCTURE SETBACKS

- No more than 50% of any building or structure shall be set further back than the build-to line zone that fronts on a pedestrian walk area.
- Where setbacks do occur, they should be utilized to create visual interest, break down scale and massing, and should not form a large break in the street wall effect, except to create a pocket for entries, arrivals, small public or semi-public gathering spaces, or to work around a service or operational requirement.

USE TYPES LOT REQUIREMENTS

- Lot requirements are defined in the table shown here based upon the usage classification indicated. The definitions for each classification appear on the following page. If there is a question as to the appropriate usage classification for a user, Staff will determine any exceedances at its discretion.
- The building form standards here are intended to allow flexibility in execution with the primary goal of creating human scaled environments. For example, in most cases, buildings closer to the sidewalk and street are more friendly to pedestrians. Building placement is therefore designated as a "build-to" line rather than a "setback line". Moving the building back from the street needs to be explained for good reason; that reason being a human use such as a stoop, a porch, a patio, etc. Building widths greater than 50 feet are discouraged because they are not human scaled dimensions and create long, boring stretches for pedestrians. Additionally, "open space requirements" are defined in the planning section as usable human space such as parks, plazas and squares, instead of empty nonusable spaces such as islands in parking lots.
- Note:** The chart to the right does not apply to the Rt. 43 commercial area. See pages 167-175 for setbacks from Aurora Road, Big Dipper Road, and Depot Road.

USAGE	BUILDING FORM STANDARDS				OPEN SPACE**
	Maximum Building Width*/Density	Setback*****	Maximum Occupied Height****	Ground-Floor Finish Level Height	Open Space Requirement
Freestanding, Single Use Retail/Commercial Services	50'	0'-10'	2 stories/48'	6" max.	NA
Mixed-Use Retail/Commercial Services *****	50'	0'-10'	5 stories/48'	6" max.	NA
Office	50'	0'-10'	5 stories/48'	6" max.	NA
Hospitality*****	50'	0'-10'	5 stories/48'	6" max.	NA
Multi-Family Residential Areas *****	50'	0'-20'	5 stories/48'	18" min.	NA
Single Family Detached #					
Single Family Attached	6-8 upa***	0'-20'	4 stories/48'	18" min.	15%
Multifamily Attached	8-20 upa***	0'-20'	5 stories/48'	18" min.	15%
Accessory Structures	NA	NA	2 stories/25'	NA	NA

* It is understood that certain building types' street frontage may be wider than 50'. When that is the case, the architecture should be employed to break up the building so that no section of the building is greater than 50' in length as it fronts the thoroughfare. See **ARCHITECTURE, DESIGN ELEMENTS | BUILDING FORM STANDARDS** on Pages 105-108. Emphasis on page 107.

** Open space requirements for all uses except single family detached, single family attached, and multifamily attached to be met in the public realm as detailed in **PLANNING, DESIGN ELEMENTS | GREENSPACE REQUIREMENTS** on Pages 46-49.

*** units per acre

**** structures above (4) stories are required to have elevators. Maximum unoccupied building height is set at 60'-0".

***** buildings need to be of fire-resistant construction, alarmed, fully sprinkled per NFPA 13, and equipped with standpipes.

***** setbacks are dimensioned from inner edge of sidewalk/street row.

- "Single Family Detached standards to be approved by Bainbridge on a case-by-case basis"

USE TYPES DESCRIPTIONS

FREESTANDING, SINGLE USE RETAIL/ COMMERCIAL SERVICES:

(In 'pad' or 'lot' locations.) These uses include non-specialty retail, medium/large format 'anchors', commercial businesses, personal care services, pet care or veterinarian services, financial services, restaurants/bars, cafés or specialty foods, educational services, child daycare centers and other township regulated uses located on individual lots. This freestanding use should be used along public right-of-ways and sparingly within the Geauga Lake District as for example a freestanding specialty restaurant or entertainment use on the lakeshore.

OFFICE:

Primary uses include professional offices and services, medical offices and/or laboratories, essential services including walk-in medical and/or pet care, and educational uses. Secondary uses may include live/work residential per the discretion of the Zoning Staff.

SINGLE FAMILY DETACHED:

Area includes single-family detached dwellings targeted to 55+ communities, and can include accessory units with live/work conditions and/or guest house conditions for use by primary owner. Units should have generous outdoor living spaces along streetscapes to foster a lively pedestrian atmosphere with garages and garage entry located to the rear with access of an alley when possible.

MULTI-FAMILY RESIDENTIAL AREA:

Area includes single-family attached dwellings, such as town houses or duplex units, multi-family attached dwellings, apartments and condominiums, and live/work hybrid residential units.

Maximum Occupied Height is set forth separately for Single Family Attached and Multi-Family Attached units.

Senior (55+) housing, and/or any other age restricted product conditionally approved shall conform to Multi-Family Residential Area Standards.

HOSPITALITY

Area includes any form of short term residential facilities that may or may not have commercial uses integrated into them such as restaurants, shops and entertainment facilities. Hotels, motels, cottage rentals and other short term residential facilities may fall in this use category.

INSTITUTIONAL

Area includes schools, government buildings, cultural amenities such as museums, religious uses, and non profit entities such as hospitals.

MIXED-USE TOWN CENTER: RETAIL / COMMERCIAL SERVICES / MULTIFAMILY

Primary ground floor uses include specialty retail, apparel and/or accessories, home goods, gifts, medium or larger format general merchandise retailers including department stores, restaurants/bars, specialty foods, entertainment facilities, public services, retail service businesses, business and personal services, personal care services pet care or veterinarian services, small professional offices and/ or financial services, and educational services, to be built along a streetscape orientation that fosters a lively pedestrian atmosphere. Upper floors can be office, hospitality and/or multifamily when mixed vertically. This use category can indicate a horizontal mix of uses along a pedestrian oriented shopping street. The darker color should be used to indicate a vertical mix of uses and can be used in combination with multifamily, hospitality and office uses.

USE TYPES DESCRIPTIONS

PARK SPACE:

Area includes all usable, passively and actively programmed greenspace. Specific uses as listed in the *POPS Greenspace Requirements* section of these Design Guidelines include pocket parks, squares, greens and parks.

STORMWATER:

Area includes all areas set aside for storm water management, but not passively or actively programmed and usable for human recreation.

RECREATIONAL EASEMENT

Area includes all land dedicated to the lake for recreational easement and serves the use of regional park as listed in the *POPS Greenspace Requirements* section of these Design Guidelines

USE TYPES

PROHIBITED USES

- The following uses are specifically prohibited in addition to any use not specifically listed as Permitted, Permitted with Regulations or Permitted Conditionally.
- | | |
|---|--|
| 1. Adult-Oriented Businesses | 23. Small Wind Farms |
| 2. Adult Assisted Living Facilities (Memory Care) | 24. Storage Yards |
| 3. Animal Veterinary Services, Large Animals | 25. Tattoo Parlor |
| 4. Asphalt / Concrete Batch Processing Plants | 26. Vehicle Rentals and Sales |
| 5. Cemeteries | 27. Warehousing and Logistics |
| 6. Commercial Recycling Centers | 28. Waste Transfer Stations |
| 7. Commercial Truck Terminals | 29. Chemical Storage |
| 8. Disposal of Radioactive Wastes | 30. Landscapers |
| 9. Farm Supplies and Services | 31. Retail Sales of Fireworks |
| 10. Funeral Homes | 32. Nursing Home Facilities |
| 11. Fuel & Service Stations | 33. Rehabilitation Facilities |
| 12. Group Homes | 34. Residential Mental Health Facilities |
| 13. Golf Course / Driving Range / Club | 35. Group Homes |
| 14. Heavy Industry | 36. Pain Clinics |
| 15. Internet Cafes / Sweepstakes | 37. Jails/Prisons |
| 16. Casino | 38. Detention Centers |
| 17. Light Industry and Wholesale | 39. Crematoriums |
| 18. Manufactured home park | 40. Petroleum Storage (Bulk tank farms) |
| 19. Pawn Shop | 41. Storage, Disposal or processing of Hazardous Material or Waste |
| 20. Post Office | 42. Landfills |
| 21. Rendering Plants | |
| 22. Shooting / Archery Range, Indoor and outdoor | See chapter 177 of Bainbridge Twp Zoning Resolution |

DESIGN ELEMENTS OVERVIEW

GOALS:

Thoroughfare locations, width and type, block sizes, building massing and placement, and the definition of open space shall all work together to create a human scaled environment that fosters lively streets and "public" spaces, connectivity and community.



DESIGN ELEMENTS | BLOCKS

GOALS:

- To use block structure to create places where people choose to walk instead of drive.
- To create multiple path options for pedestrians and to limit building widths to human scaled conditions.

REQUIREMENTS:

- No matter their geometry it is recommended that no one side of any block should exceed 600 feet in length.

DESCRIPTORS:

- Walkability and access to neighborhood amenities is impacted by the size of blocks.
- Large blocks limit opportunities for direct walking routes and create large segments of roadway that can be difficult to cross for pedestrians.

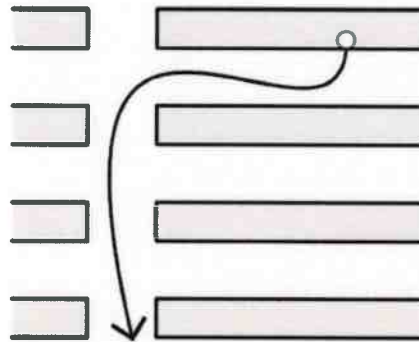
DESIGN ELEMENTS

BLOCKS

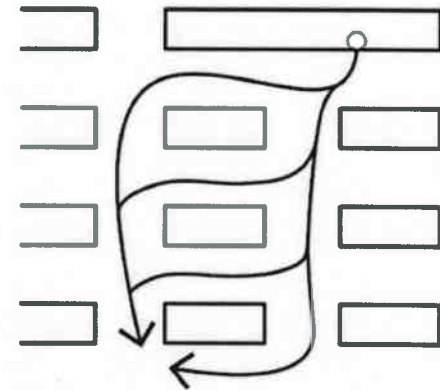
Walkability and access to neighborhood amenities is impacted by the size of blocks.

- Ideal blocks for creating pedestrian connectivity and a human scaled environment are 200 feet x 200 feet although blocks up to 600 feet are acceptable.
- 200 feet is an ideal guideline when understanding that **the main purpose is to create multiple path options for pedestrians and to limit building widths to human scaled conditions.**
- Multiple pathing options make an environment more interesting, create opportunities for discovery and increase community as it is likely that people's paths will cross.
- It is understood that blocks will not always be perfect squares or rectangles. No matter their geometry it is recommended that no one side of any block should exceed 600 feet in length when possible.
- Exceptions are made for blocks adjacent to barriers such as water or an auto-oriented public right-of-way. In those cases, other treatments such as walking paths may be implemented to provide for continuation of the pedestrian network.

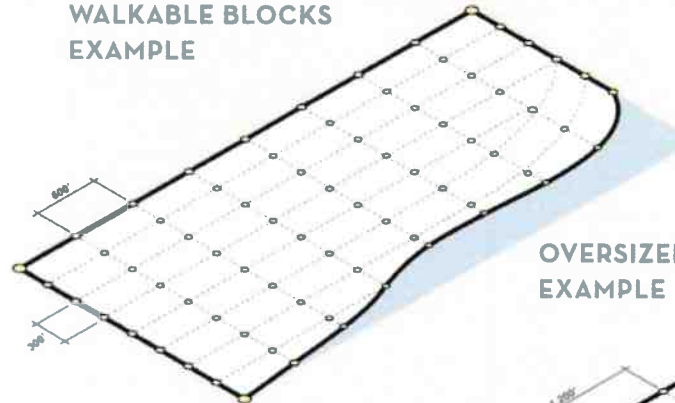
LONG BLOCKS INHIBIT MOVEMENT



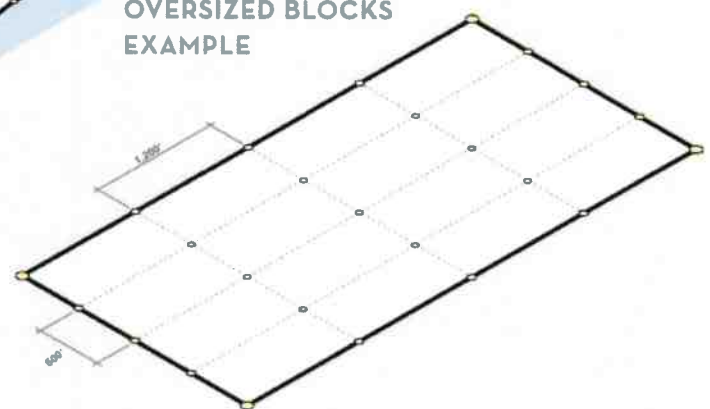
SHORT BLOCKS CREATE CONNECTIONS



WALKABLE BLOCKS EXAMPLE



OVERSIZED BLOCKS EXAMPLE



1 Jacobs, Jane, The Death and Life of Great American Cities. New York: Random House, 1961. Print.

Figure 02

DESIGN ELEMENTS | STREET ENCLOSURE

GOALS:

- That buildings will be arranged in concert with blocks, and given structure by the street grid to define and enclose human scaled space, a critical component in creating walkable neighborhoods with vibrancy.

REQUIREMENTS:

- Mixed-use buildings with shops on the first floor should sit on the build-to line on primary thoroughfares. Any set back from the build-to line needs to be justified with appropriate frontage zone uses (dining patios, courtyards, etc.).
- Commercial, mixed-use, office, hospitality and multifamily buildings should be designed to be built on or within 10 feet of the build-to line on primary thoroughfares. Any set back from the build-to line needs to be justified with appropriate frontage zone uses (entry courtyards, terraces, porches, balconies, etc.).
- Multifamily buildings, townhouses, and other residential structures are to be located on or within 20 feet of the build-to line. On primary streets it is appropriate that they should be closer to the build-to line with higher finished first floors the closer they are to the sidewalk. On secondary streets it is appropriate for them to be further from the build-to line with the space between the building and the build-to line used for semiprivate uses (front porches, terraces, etc. combined with lawns and landscaping).

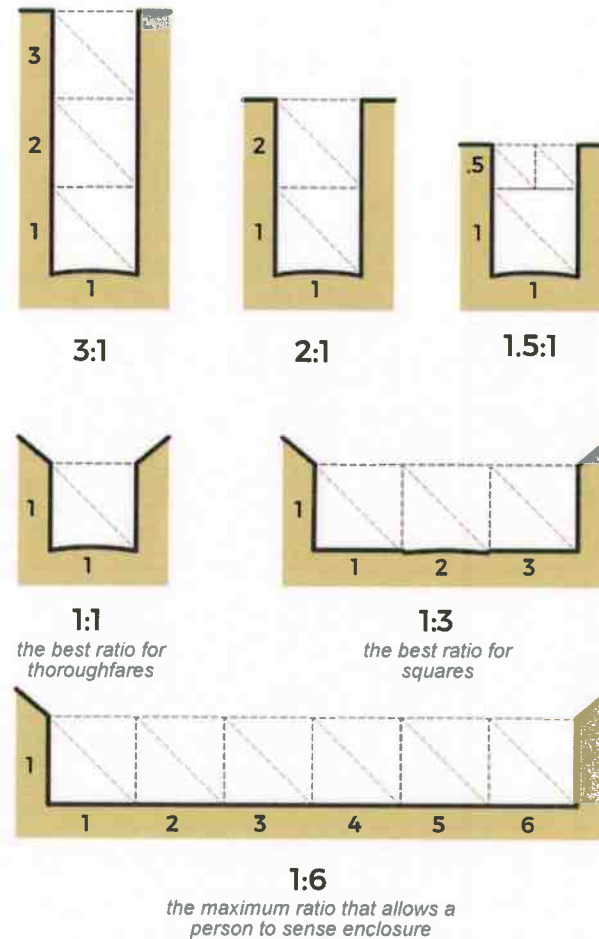
DESIGN ELEMENTS STREET ENCLOSURE

Buildings arranged in concert with blocks, and given structure by the street grid, define and enclose human scaled space, a critical component in creating walkable neighborhoods with vibrancy.

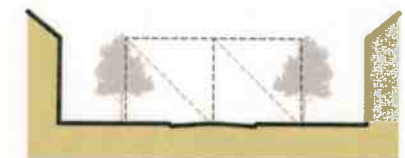
The overarching goals of building placement are to define thoroughfares and public spaces and create a sense of enclosure.

- The maximum height to width ratio to create enclosure is 1:6.
- Any smaller ratio than 1:6 naturally creates the sense of enclosure, any larger and the sense of enclosure dissipates.

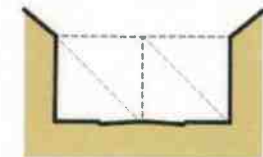
SPATIAL DEFINITION BY HEIGHT-TO-WIDTH RATIO



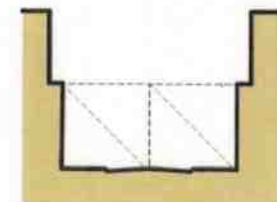
SPATIAL DEFINITION IN SECTION



trees can be used to create a sense of enclosure



A: primary facades with pitched roofs



B: primary facades with recess lines and setbacks

A+B: the primary facades of buildings fronting the thoroughfare creates enclosure

Figure 03

DESIGN ELEMENTS | VIEWS & VISTAS

GOALS:

- The layout of any individual development within Geauga Lake should take into consideration views of the Lake from interior portions of developed land.
- To identify existing views and vistas and to create new ones with the primary focus of the views and vistas being Geauga Lake.
- To protect and improve views and vistas of significant landmarks and features.

REQUIREMENTS:

- At least one view to Geauga Lake shall be included in every Development. The lake should be visible as a focal point of at least one street corridor, linear park space or other public space.
- Vistas across Geauga Lake shall be maximized for the greatest number of people in every Development.
- Blocking views of the lake with large buildings should be avoided.

DESCRIPTORS:

- Views shall mean a focal point and/or landmark as seen when looking down a street or other lined and enclosed corridor.
- Vista shall mean broad sweeping views that take in the breadth of a landscape.

DESIGN ELEMENTS VIEWS & VISTAS

IDENTIFY AND DEVELOP VIEWS AND VISTAS WHICH:

- Contribute to the image of Geauga Lake.
- Provide orientation for residents and visitors.
- Foster a sense of anticipation and arrival.

VIEW DIAGRAM



VISTA DIAGRAM



Figure 04

DESIGN ELEMENTS | GREENSPACE

GOAL:

All greenspace counted for these purposes shall be able to be used by people. Parking lot islands and similar areas of "green space" do not count. Usable space is defined as that space which serves the active and passive programmatic needs of users of Geauga Lake. See the **URBAN DESIGN, DESIGN ELEMENTS OVERVIEW | SIDEWALKS** on pages 70-74, and **URBAN DESIGN, DESIGN ELEMENTS OVERVIEW | PUBLIC SPACE PROGRAMMING** on pages 77-90.

REQUIREMENTS:

- ❑ 10% of the total land area of a development shall consist of usable Greenspace. The Lake Front easement shall be included in this total area. However, Developers are encouraged to add additional Places, Passages, Pocket Parks, Squares, Greens and other outdoor living areas as suits a human scaled, walkable district with places designed to encourage people to gather.
- ❑ Passive and active programming shall be designed into all greenspace.

REQUIREMENTS (CONT):

- ❑ No building entry shall be further than a 1/4 mile walk from greenspace.
- ❑ Each Development shall set aside land for a trailhead with direct access in the form of a trail to the Lake Front for the general public. This shall be a space for visitors to Geauga Lake to pull off of a public right-of-way, park, and walk down to the lake, similar to the experience of visiting a metropark.
- ❑ The trailhead shall include:
 - ❑ 1 parking space per acre as the total Development is defined.
 - ❑ signage from the nearest public right-of-way where direct automobile access is provided
 - ❑ bike parking
 - ❑ garbage cans
 - ❑ a seating area with 2 picnic tables.
 - ❑ a public restroom.
 - ❑ the primary trail within the Lake Front easement shall be a minimum of 8 feet wide.

DESCRIPTIONS:

- Greenspace shall be defined as any of the following:
 - **Places, Pocket Parks & Passages** - the smallest of green spaces that sometimes provide linkages between streets.
 - **Squares & Plazas** - a major center of public events and activity.
 - **Green** - a grassy open space that may be used passively or actively
 - **Park** - meets community based recreation needs as well as preserving unique landscapes and open spaces.
 - **Regional Park** - serve a broader purpose on meeting community based recreational needs as well as preserving unique landscapes and open spaces. The Lake Front easement serves this purpose.

DESIGN ELEMENTS**GREENSPACE | PLACES, POCKET PARKS & PASSAGES**

Places (or “pocket parks”) and passages are the smallest of places.

- They can occur midblock or at contiguous corners where pedestrian movement patterns require a linkage between two major streets or activity areas.

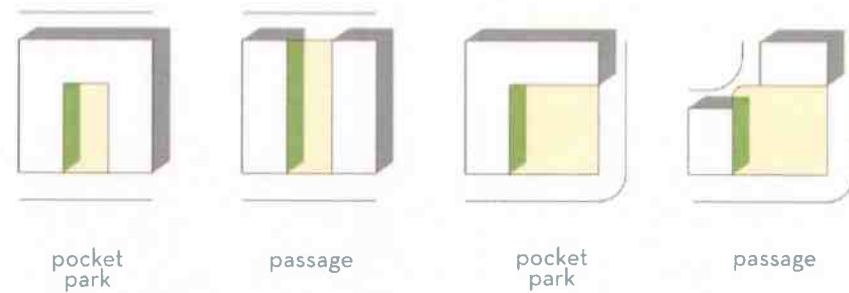
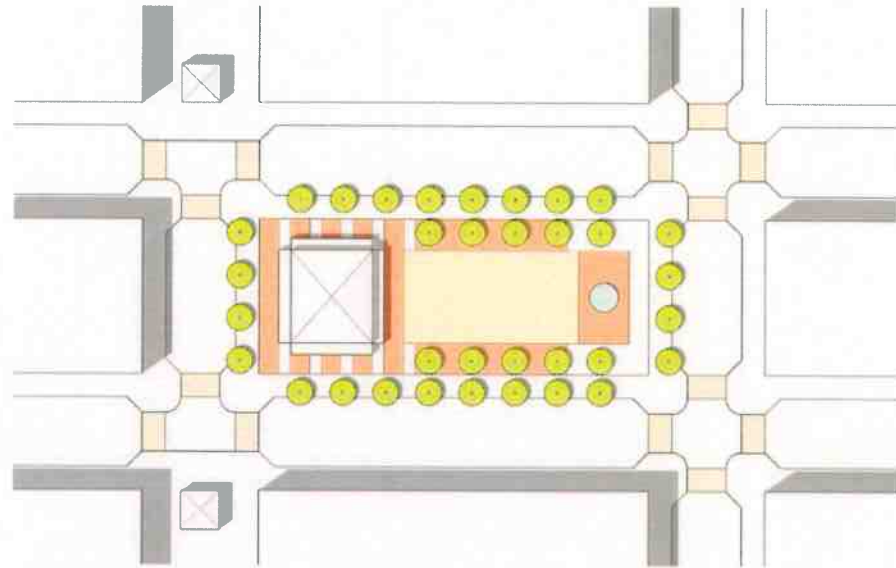
PLACE, POCKET PARK & PASSAGE CONFIGURATION DIAGRAMS**POCKET PARK EXAMPLE**

Figure 05

DESIGN ELEMENTS GREENSPACE | SQUARES & PLAZAS

- Squares and Plazas help define an entire neighborhood community if they are a center of public events and activity.
- Squares and Plazas are most successful when they combine amenities such as:
 - a variety of seating
 - public artwork
 - a central activity space
 - wayfinding
 - restrooms
- Squares and Plazas are best located at a primary intersection in the center of a development.

SQUARE DIAGRAM



SQUARE EXAMPLE

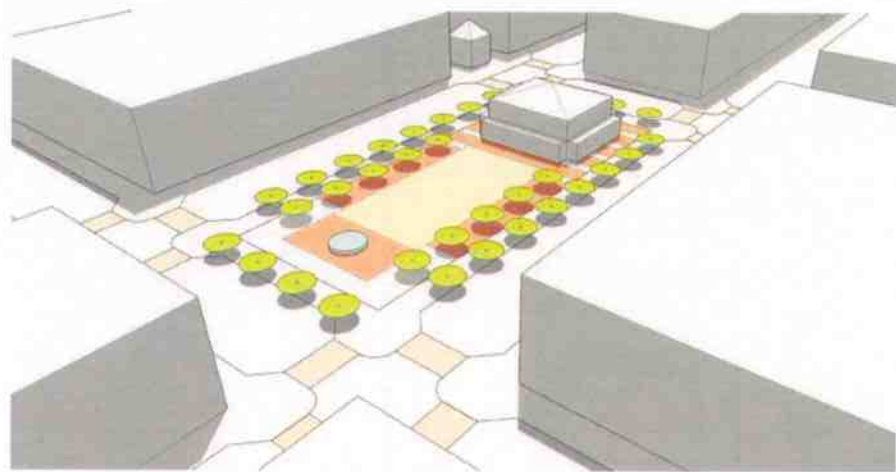
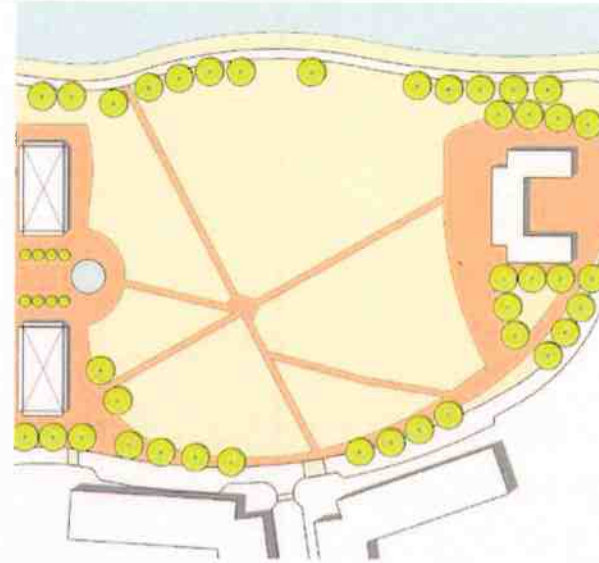


Figure 06

DESIGN ELEMENTS GREENSPACE | GREENS

- Greens are grassy open spaces that may be used passively or actively.
- Greens accommodate both unstructured play and programmed events..
- Important community buildings and other “special” buildings are often incorporated within or adjacent to Greens.
- Greens often **weave** recreational and cultural amenities into the village fabric.
- Green's passive and active programmatic elements should complement rather than compete with the daily functions of Squares and Plazas.
- Greens, being bigger, usually have primary and secondary points of entry and a hierarchy of spaces composed of a central, open gathering area and smaller spaces surrounding it.
- Pathways through the green should be important pedestrian connections between important places.

GREEN DIAGRAM



GREEN EXAMPLE

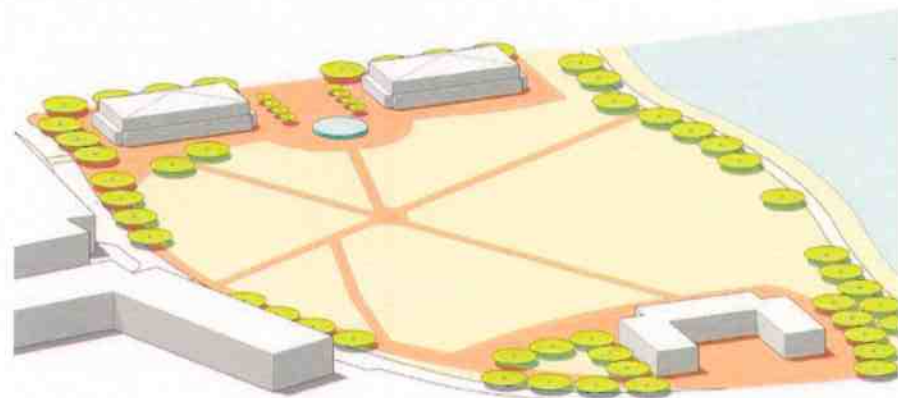


Figure 07

DESIGN ELEMENTS OVERVIEW

GOALS:

- The Privately Owned Public Space (POPS) standards are intended as objectively measured guidelines to assist designers in creating an engaging "public realm" for Geauga Lake. Spaces should be designed to foster a robust sense of community.
- Thoroughfares and "public spaces" shall facilitate the presence of people throughout the day. They shall be places people choose to hang out in because they are comfortable, beautiful, interesting, and provide an array of passive programmatic elements and opportunities for active programmatic elements (see the section on active and passive programming in the following pages).
- The privately owned public spaces at the Geauga Lake District should become the "outdoor living rooms" for people who live, work and play here.

DESCRIPTIONS:

POPS

- Privately Owned Public Spaces, also known by the acronym POPS, are spaces dedicated to public use and enjoyment and which are owned and maintained by private property owners.
- POPS provide people with opportunities to sit, relax, people watch, eat, meet others.
- POPS come in many shapes and sizes, both outdoor and indoor, and offer a variety of amenities. For the purposes of these Design Guidelines, primary and secondary thoroughfares are included in this category.

URBAN DESIGN

PRIVATELY OWNED PUBLIC SPACE (POPS)

DESIGN ELEMENTS | THOROUGHFARES

GOALS:

- All initial development will front on a first- phase series of thoroughfares (primary thoroughfares) that will become the primary access points into and through the development from public rights-of-way (Big Dipper, Aurora Road, Squires Road and Brewster Road). Secondary thoroughfares will serve to connect spaces within each individual development.
- These roadways within the Property will vary in design depending on service level for that thoroughfare or access way, service drive or entry.
- THERE ARE FIVE PRIVATELY OWNED RIGHT-OF-WAY (POROW) WIDTHS:
 1. An internal multi-lane, divided boulevard.
 2. Internal streets with two lanes and parallel parking.
 3. Internal streets that accommodate a center turn lane and parallel parking.
 4. One-way street, with parallel parking.
 5. One-way service alleys.

Note: bicycle lanes may be added to any POROW.

REQUIREMENTS:

- Travel lanes of ten feet (10'), twenty feet (20') (face of curb to face of curb) two-lane roadways, and three-lane roadways that include a center turn lane (add (9.5') for turn lanes).
- Travel lanes of fifteen feet (15') one-way road lanes.
- Parallel parking spaces at eight feet (8') wide minimum and nine feet (9') maximum (face of curb to edge of pavement).
- Sidewalk / landscape area on each side of each thoroughfare no less than twelve feet (12') featuring:
 - A sidewalk pedestrian throughway zone of no less than six feet (6') on each side for residential frontages.
 - A sidewalk pedestrian throughway zone of no less than eight feet (8') wide for commercial and mixed-use frontages.
 - The remaining areas on each side of the pedestrian throughway to be landscape buffer, up to either a building, build-to line, landscape area, cartway or adjacent building or property line.

REQUIREMENTS:

- To add angled-in parking on any one side, add an additional eighteen feet (18') for angled parking and fifteen feet (15') for one-way drive aisles. (Angled parking is discouraged).
- The primary landscaped median areas in the center of two-way boulevard entrances roadways shall be no less than eight feet (8') face of curb to face of curb.
- For specific site development enhancements that do not fall within these basic guidelines, such as roundabouts, arrival courts, and streetscape features (such as street furniture, water features, sculpture, hardscape / landscape features) and/ or in combination with on-street parking, deviation from these requirements may be permitted, with the approval of the Staff . This will be assessed in context with a specific development's design intent, in context with any existing adjacent development, especially if any such deviation adds to the pedestrian experience of the Property.

PUBLIC SPACE ELEMENTS THOROUGHFARES

Thoroughfares carry vehicular, bicycle and pedestrian traffic while also serving many public space. They may be thought of as divided up in two overall ways:

1. "PUBLIC AREAS" AND "PRIVATE AREAS":

The property / parcel line / build to line is the primary divider between the "public space" that is the **privately owned "public" right-of-way** and "private property".

2. PEDESTRIAN AREAS AND AUTOMOBILE AREAS

The **sidewalk zone** is in service to the needs of the pedestrian while the **roadway zone** is dedicated to automotive use.

GENERAL THOROUGHFARE DIAGRAM

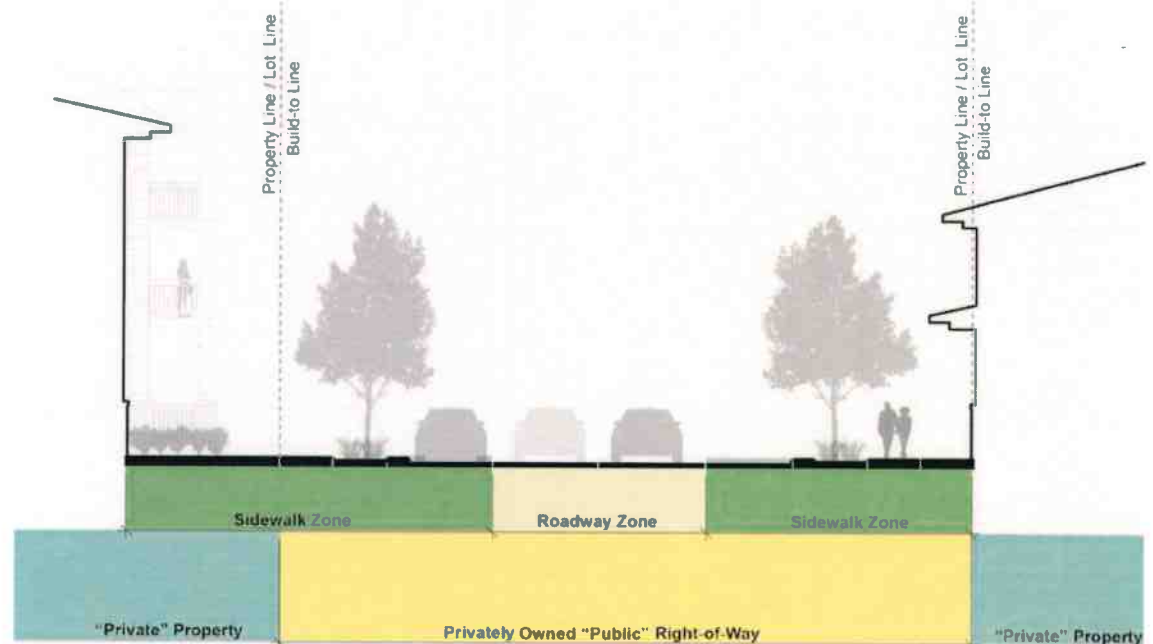


Figure 08

PUBLIC SPACE ELEMENTS

PRIMARY THOROUGHFARES

Primary thoroughfares are the main streets of the Geauga Lake District where uses are more varied, density is higher, and pedestrian and automotive traffic levels are higher. Primary thoroughfares allow for connection to public rights-of-way and for circulation between developments in the Geauga Lake District.

PRIMARY THOROUGHFARE DIAGRAM

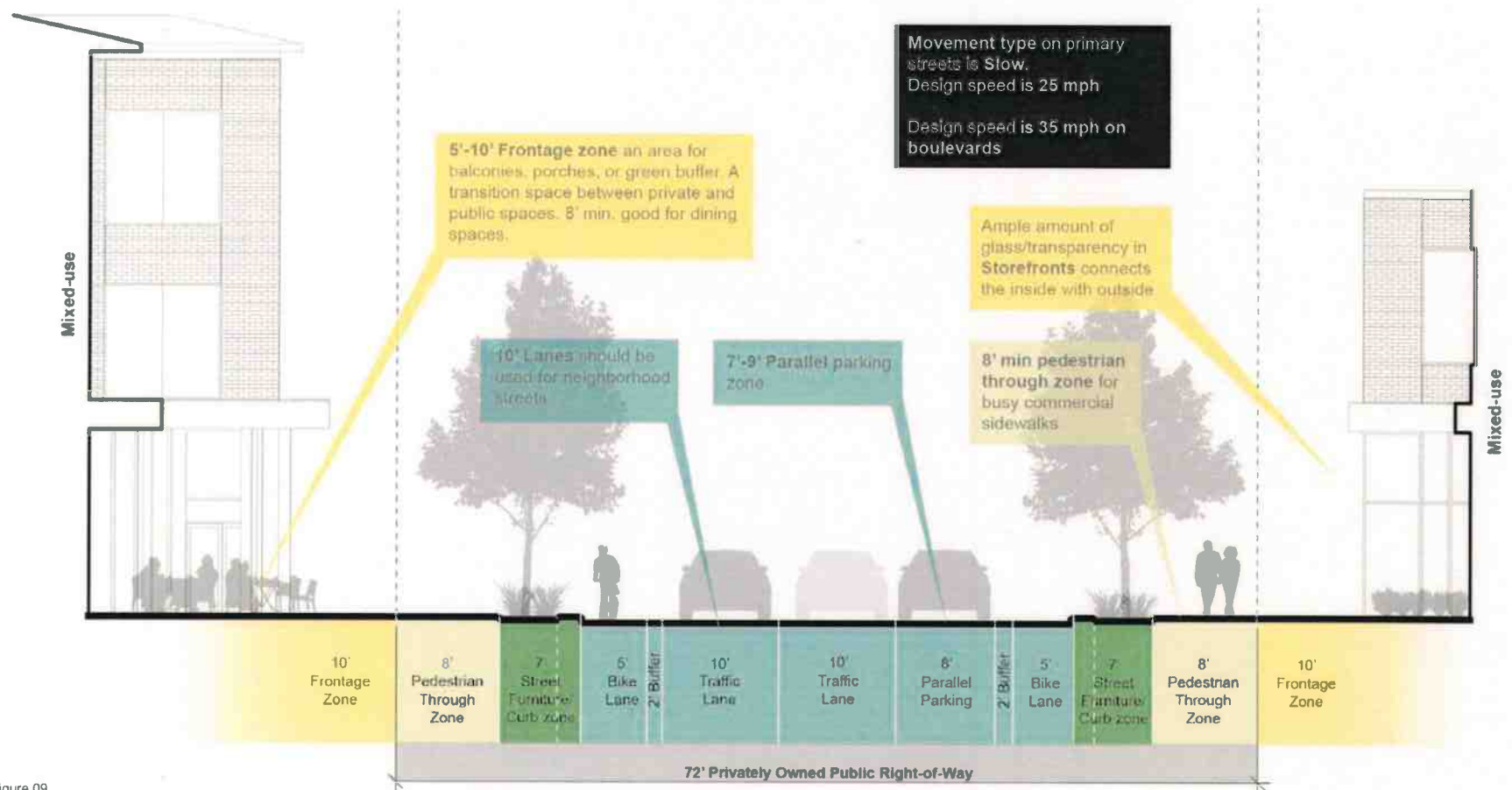


Figure 09

PUBLIC SPACE ELEMENTS

PRIMARY THOROUGHFARES

Primary thoroughfares are the main streets of the Geauga Lake District where uses are more varied, density is higher, and pedestrian and automotive traffic levels are higher. Primary thoroughfares allow for connection to public rights-of-way and for circulation between developments in the Geauga Lake District.

PRIMARY THOROUGHFARE EXAMPLE - ENTRY BOULEVARD FROM PUBLIC RIGHT-OF-WAY

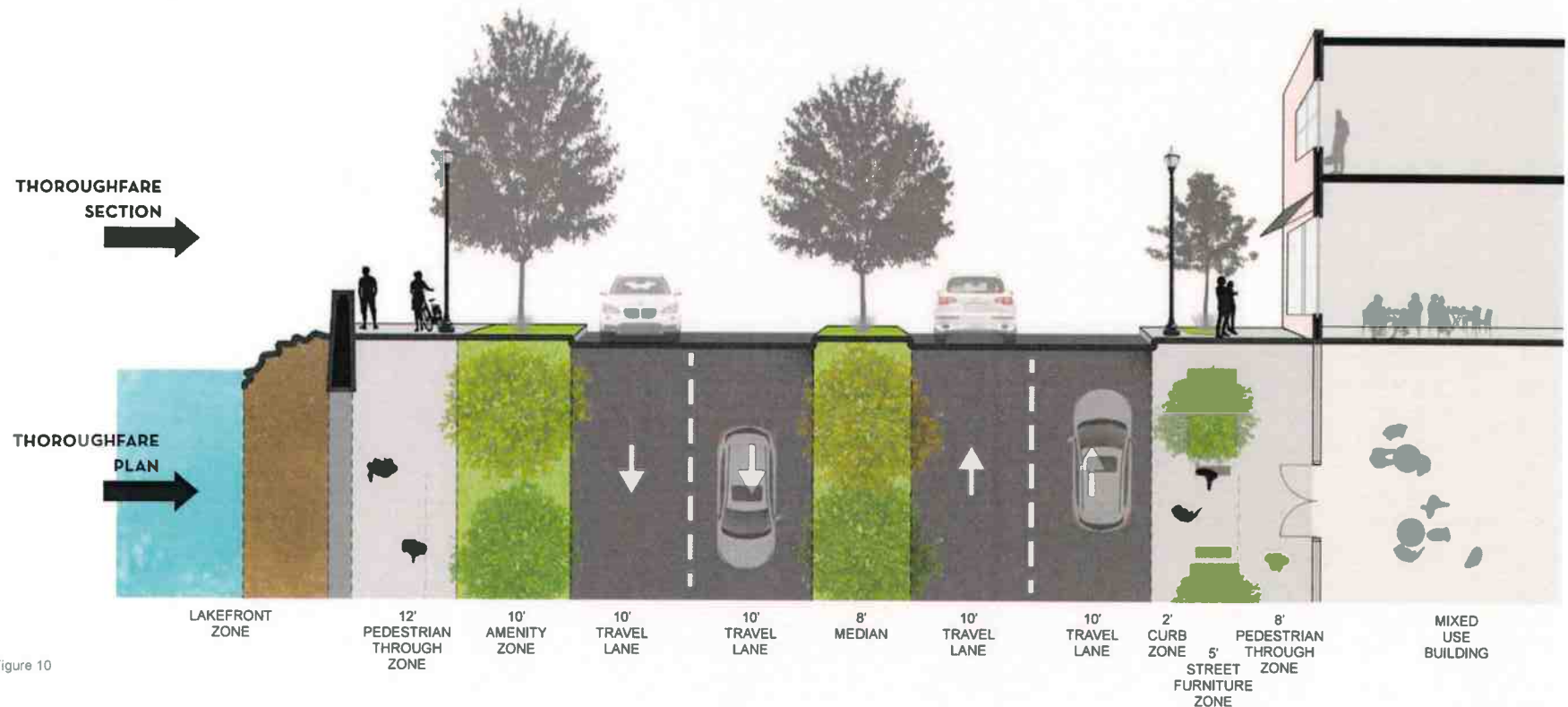


Figure 10

PUBLIC SPACE ELEMENTS PRIMARY THOROUGHFARES

Primary thoroughfares are the main streets of the Geauga Lake District where uses are more varied, density is higher, and pedestrian and automotive traffic levels are higher. Primary thoroughfares allow for connection to public rights-of-way and for circulation between developments in the Geauga Lake District.

PRIMARY THOROUGHFARE EXAMPLE - MAIN STREET



Figure 11

PUBLIC SPACE ELEMENTS SECONDARY THOROUGHFARES

Secondary thoroughfares are the neighborhood streets of the Gauga Lake District where density may be lower, traffic volumes are lower and where residential and interior block parking uses predominate. Secondary thoroughfares are primarily for intra-development circulation.

SECONDARY THOROUGHFARE DIAGRAM

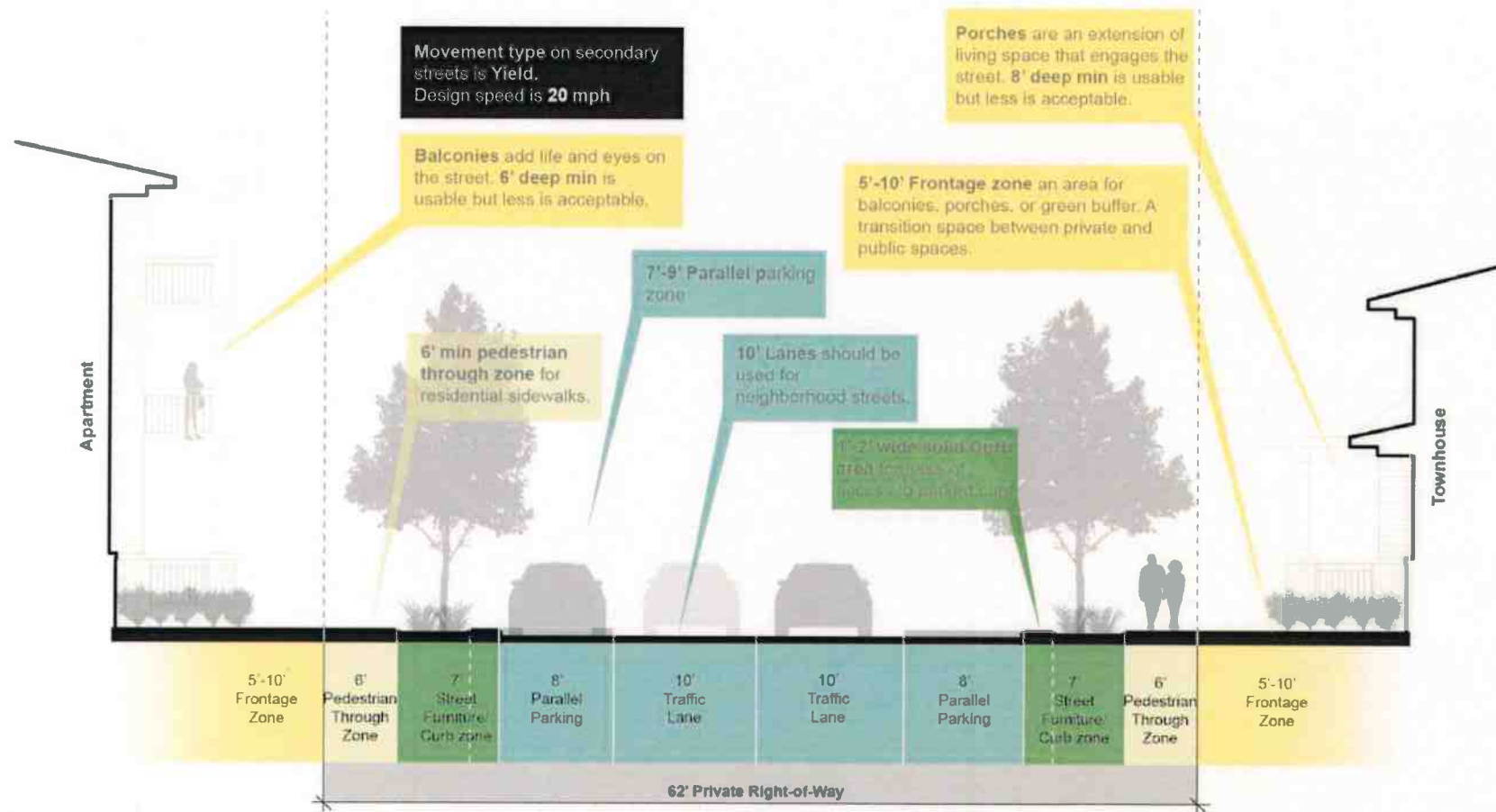


Figure 12

PUBLIC SPACE ELEMENTS SECONDARY THOROUGHFARES

Secondary thoroughfares are the neighborhood streets of the Geauga Lake District where density may be lower, traffic volumes are lower and where residential and interior block parking uses predominate. Secondary thoroughfares are primarily for intra-development circulation.

SECONDARY THOROUGHFARE EXAMPLE - NEIGHBORHOOD STREET



Figure 13

PUBLIC SPACE ELEMENTS

SECONDARY THOROUGHFARES

Secondary thoroughfares are the neighborhood streets of the Geauga Lake District where density may be lower, traffic volumes are lower and where residential and interior block parking uses predominate. Secondary thoroughfares are primarily for intra-development circulation.

SECONDARY THOROUGHFARE EXAMPLE - PARKING STREET

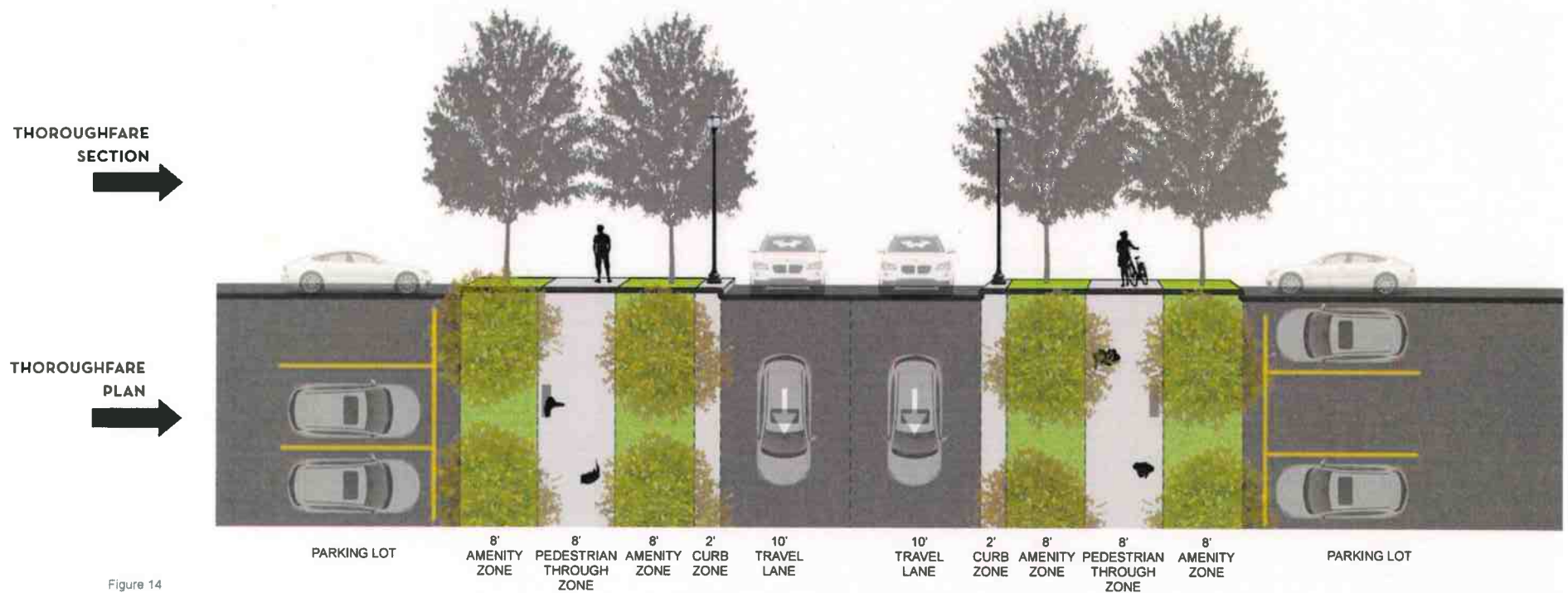


Figure 14

PUBLIC SPACE ELEMENTS

ALLEY THOROUGHFARES

Alley thoroughfares are the neighborhood streets of the Geauga Lake District where density may be lower, traffic volumes are lowest and where residential access and service uses predominate. Alley thoroughfares are primarily for intra-development circulation.

ALLEY THOROUGHFARE DIAGRAM

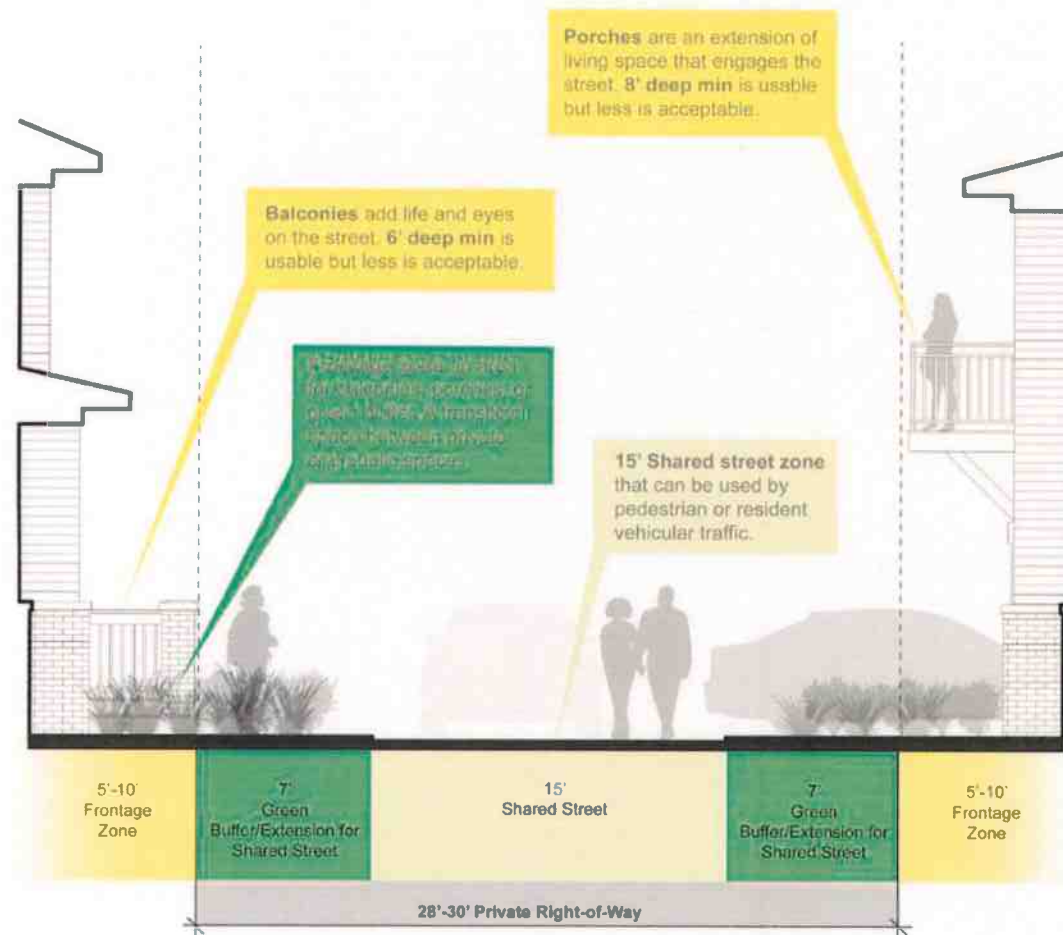


Figure 15

PUBLIC SPACE ELEMENTS

ALLEY THOROUGHFARES

Alley thoroughfares are the neighborhood streets of the Geauga Lake District where density may be lower, traffic volumes are lowest and where residential access and service uses predominate. Alley thoroughfares are primarily for intra-development circulation.

ALLEY THOROUGHFARE EXAMPLE

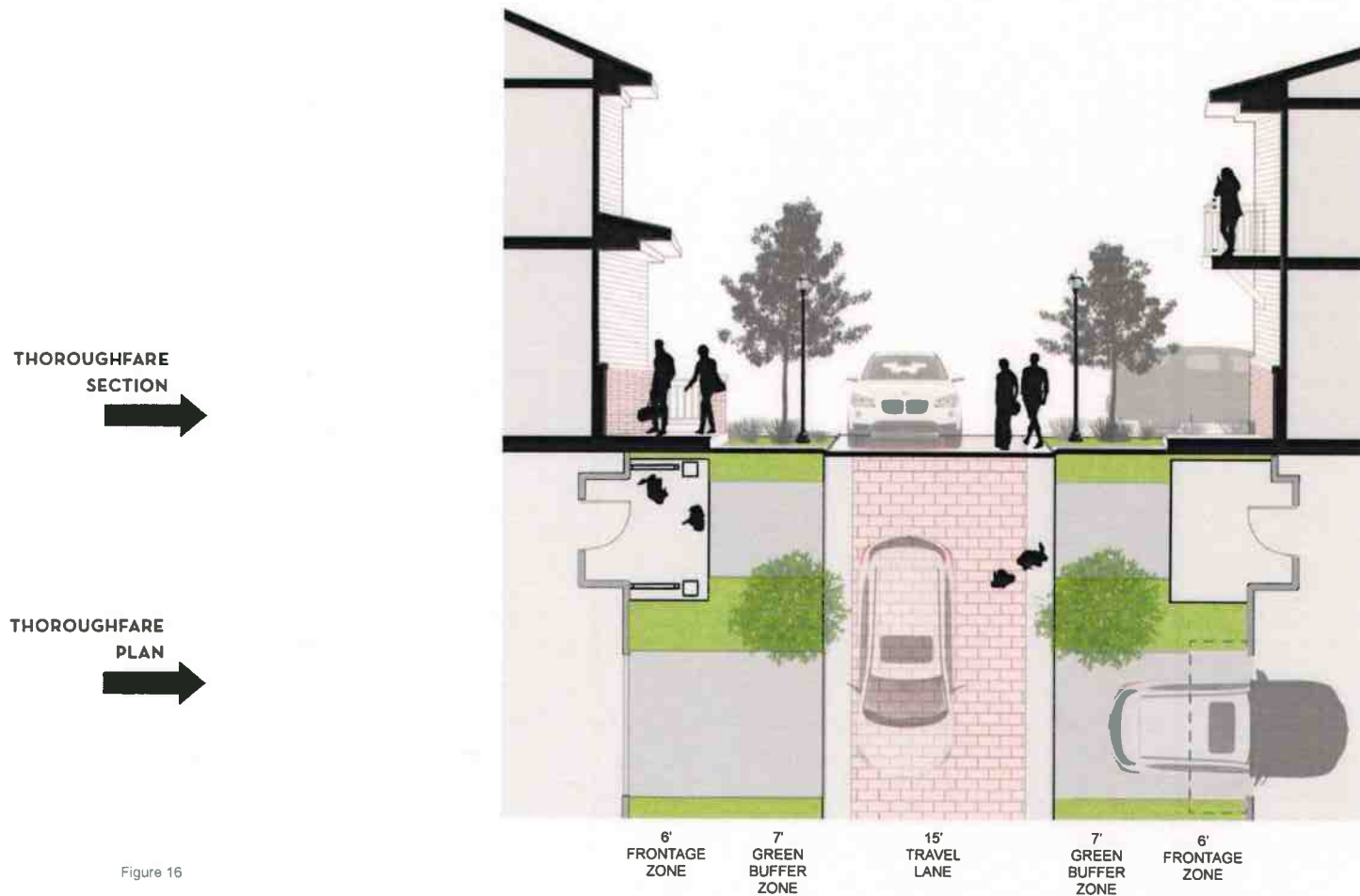


Figure 16

PUBLIC SPACE ELEMENTS
THOROUGHFARES - ROADWAY SECTIONS

MINIMUM ROADWAY SPECIFICATIONS

ROAD CLASSIFICATION	PAVEMENT WIDTH		PAVEMENT THICKNESS									
	CURBS (FEET)	NO CURBS (FEET)	REINFORCED CONCRETE			FULL DEPTH ASPHALT					AGGREGATE SHOULDER	
			206*	451	304	206*	301	441(448)	441(448)	304**	304	411
			CEMENT STABILIZED SUBGRADE (MINIMUM) (INCHES)	CONCRETE PAVEMENT (INCHES)	AGGREGATE BASE DRAINAGE LAYER (INCHES)	CEMENT STABILIZED SUBGRADE (MINIMUM) (INCHES)	ASPHALT CONCRETE BASE (INCHES)	ASPHALT CONCRETE SURFACE COURSE, TYPE 2 (INCHES)	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (INCHES)	AGGREGATE BASE DRAINAGE LAYER (INCHES)	AGGREGATE BASE (INCHES)	STABILIZED CRUSHED AGGREGATE, LIMESTONE (INCHES)
RESIDENTIAL	10	10	N/A	N/A	N/A	12	6	2	1.5	4	8	1.5
COMMERCIAL/INDUSTRIAL PARK/ COLLECTOR	10	10	12	10	4	12	6	2	1.5	4	8	1.5

* SUBGRADE TO BE PROOF ROLLED PRIOR TO CEMENT STABILIZATION

** CURBED PAVEMENT SECTION ONLY

- COMMERCIAL AND INDUSTRIAL PARK ROADS ARE ROADS IN SUBDIVISIONS HAVING COMMERCIAL AND/OR INDUSTRIAL ENTERPRISES SERVED BY TRUCKS.
- NO ACBF (AIR COOLED BLAST FURNACE SLAG), GS (GRANULATED SLAG), ON (OPEN HEARTH SLAG), EAF (ELECTRIC ARC FURNACE SLAG), BOF (BASIC OXYGEN FURNACE SLAG), OR RPCC (RECYCLED PORTLAND CEMENT CONCRETE) MATERIALS WILL BE PERMITTED.

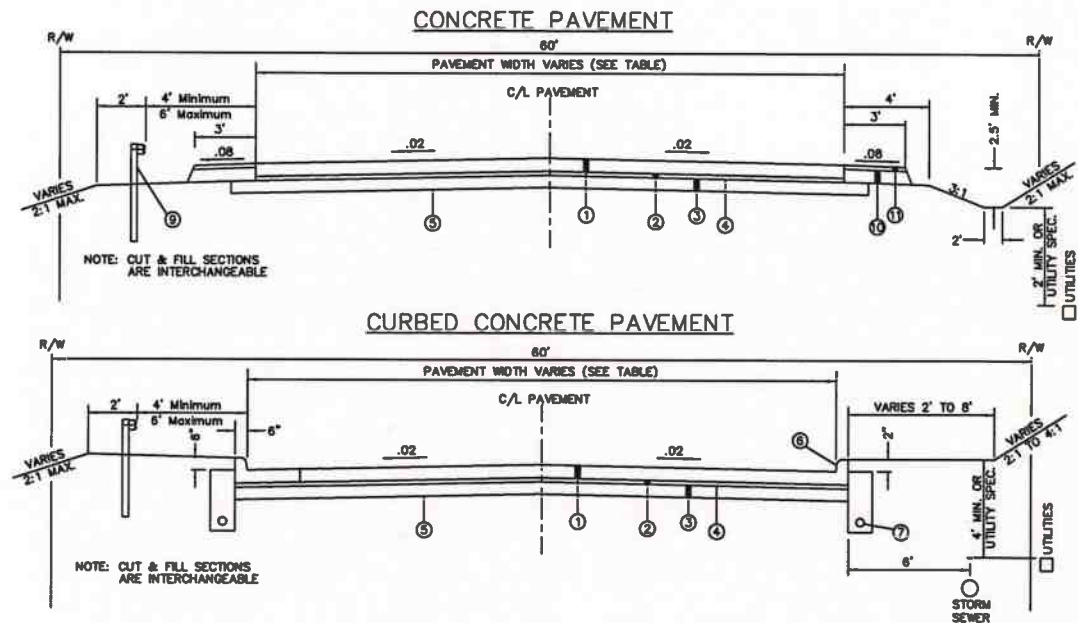
Figure 17

PUBLIC SPACE ELEMENTS

THOROUGHFARES - ROADWAY SECTIONS

- The illustration to the right is a starting point. The actual configuration is dependent upon the geotechnical reports and recommendations.

TYPICAL CONCRETE ROADWAY SECTION



LEGEND

- ① ITEM 451 - REINFORCED CONCRETE PAVEMENT
- ② ITEM 304 - AGGREGATE BASE
- ③ ITEM 206 - CEMENT STABILIZED SUBGRADE (12" DEPTH MINIMUM)
- ④ ITEM 204 - SUBGRADE COMPACTION
- ⑤ ITEM 203 - ROADWAY EXCAVATION AND EMBANKMENT
- ⑥ ITEM 608 - CONCRETE CURB, TYPE 2-A
- ⑦ ITEM 605 - 4" SHALLOW PIPE UNDERDRAIN, 707.4S, PERFORATED (SOR-3S)
- ⑧ NOT USED
- ⑨ ITEM 606 - GUARDRAIL, TYPE MGS (TYPE T ANCHOR ASSEMBLY W/ ROUNDED ENDS)
- ⑩ ITEM 304 - AGGREGATE BASE
- ⑪ ITEM 411 - STABILIZED CRUSHED AGGREGATE, LIMESTONE

• NOTE: A LARGER PERCENTAGE OF CEMENT AT GREATER DEPTHS MAY BE REQUIRED IN UNSUITABLE SUBGRADE LOCATIONS. SEE THE CURRENT EDITION OF THE MODIFICATIONS TO THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR GEauga COUNTY.

• NOTE: A) COARSE AGGREGATE FOR CONCRETE SHALL BE LIMESTONE.
B) FIBER MESH REINFORCEMENT SHALL BE ADDED TO THE CONCRETE.
C) USE BASKETS WITH EPOXY DOWELS AT TRANSVERSE JOINTS.

Figure 18

PUBLIC SPACE ELEMENTS

THOROUGHFARES - ROADWAY SECTIONS

- The illustration to the right is a starting point. The actual configuration is dependent upon the geotechnical reports and recommendations.

TYPICAL ASPHALT ROADWAY SECTION

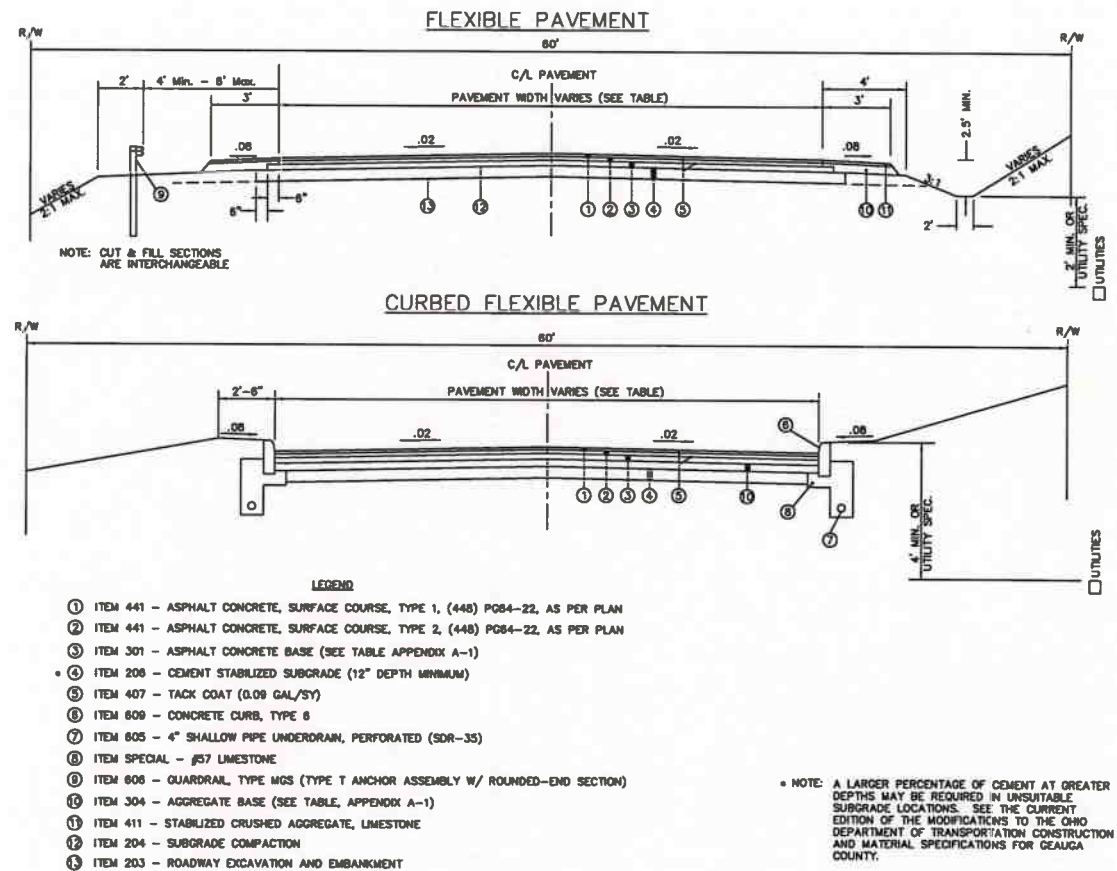


Figure 19

PUBLIC SPACE ELEMENTS
THOROUGHFARES - PARKING LOT SECTIONS

- The illustration to the right is a starting point. The actual configuration is dependent upon the geotechnical reports and recommendations.

TYPICAL ASPHALT PARKING LOT SECTION

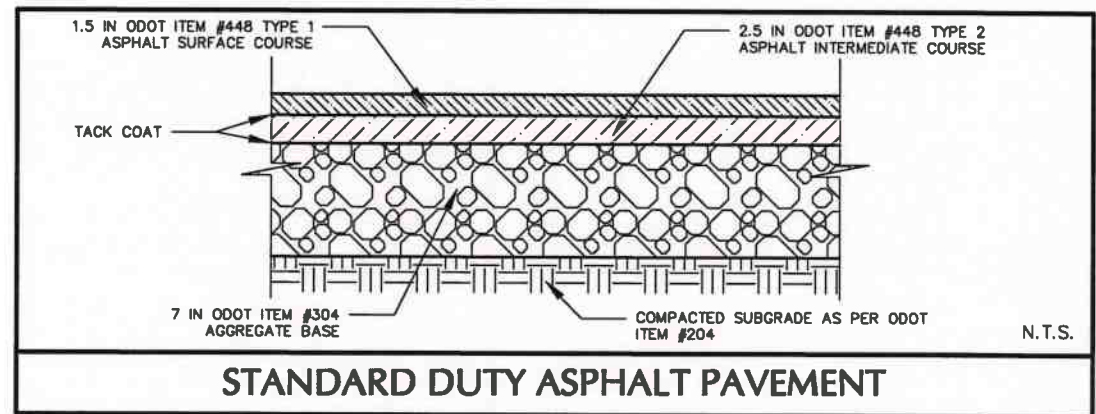


Figure 20

PUBLIC SPACE ELEMENTS THOROUGHFARES - PARKING LOT SECTIONS

- The illustration to the right is a starting point. The actual configuration is dependent upon the geotechnical reports and recommendations.

TYPICAL CONCRETE PARKING LOT SECTION

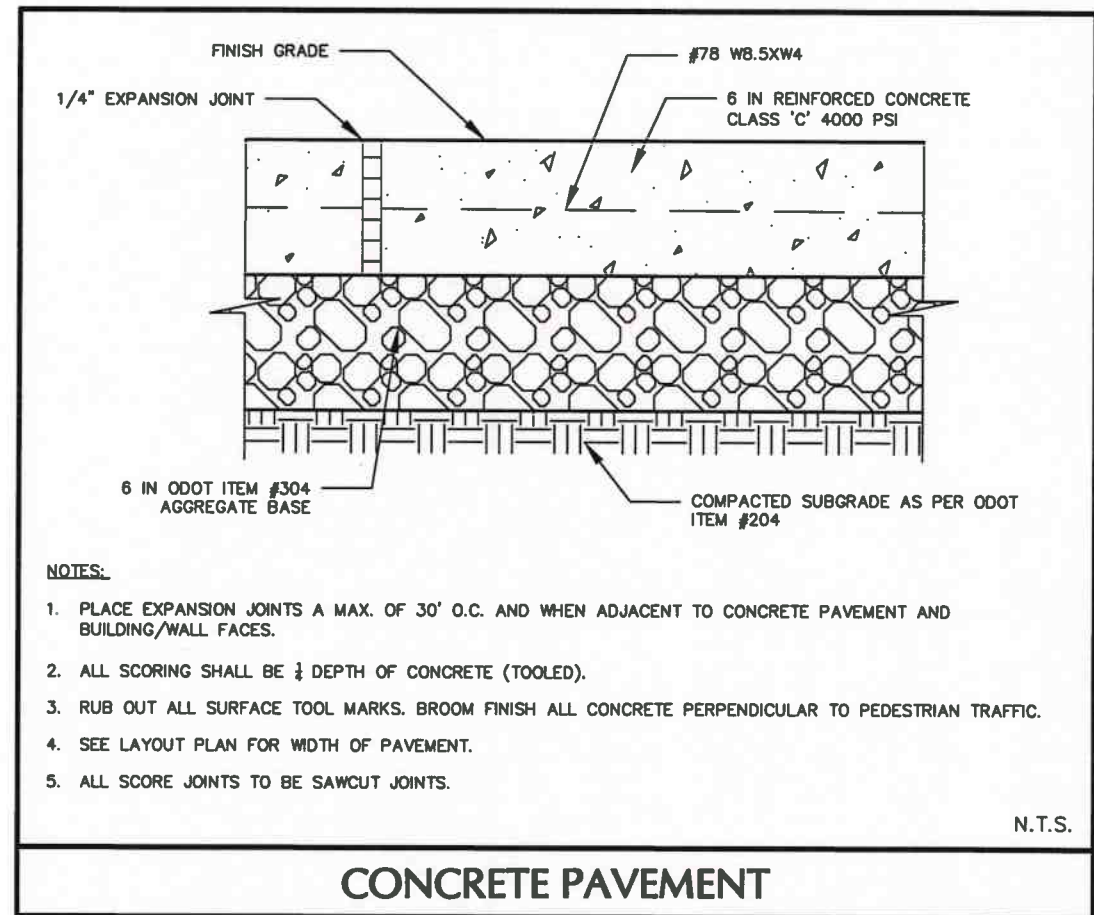


Figure 21

DESIGN ELEMENTS | INTERSECTIONS

GOALS:

- The goal of intersection design is not strictly to reduce the number of conflicts for a given user at a select location, but to create a space in which users are mutually aware of one another and visible and predictable in their actions to reduce the overall rate and severity of crashes. Intersection design shall be dictated by pedestrian behaviors and design lines.
- Intersections should be designed to:
 - reduce pedestrian exposure
 - slow traffic near conflict points
 - increase visibility for all users
- Visibility can be achieved through a variety of design strategies, including intersection "daylighting," design for low-speed intersection approaches, and the addition of traffic controls that remove trees or amenities that impede standard approach, departure, and height sight distances. Sight line standards for intersections should be determined using target speeds, rather than 85th-percentile design speeds. This prevents wide setbacks and designs that increase speeds and endanger pedestrians.

REQUIREMENTS:

THOROUGHFARE RADII AND CLEAR ZONES

- Corner curb radii shall be between eight feet (8') and twenty-five feet (25') as determined by the intended use:
 - Residential areas up to fifteen feet (15'), and
 - Mixed use areas up to twenty-five feet (25') is allowable but less is encouraged. Walkability and pedestrian scale is the primary goal.
- Traffic control devices must be unobstructed in the intersection, and shall be free of tree cover or visual clutter.
- Where truck deliveries are required, sites shall be designed to minimize or eliminate their negative impact on the pedestrian infrastructure.
- Daylight intersections by removing parking within 20-25 feet of the intersection.
- Fire truck and commercial truck turn studies shall be completed and submitted and reviewed by the fire chief.

DESIGN ELEMENTS INTERSECTIONS

- The size of the corner relates directly to the length of the crosswalk. Longer crosswalks take more time to cross, increasing pedestrian exposure risk and diminishing safety.
- A smaller curb radius expands the pedestrian area, allowing for better pedestrian ramp alignment.

CURB RADII DIAGRAM

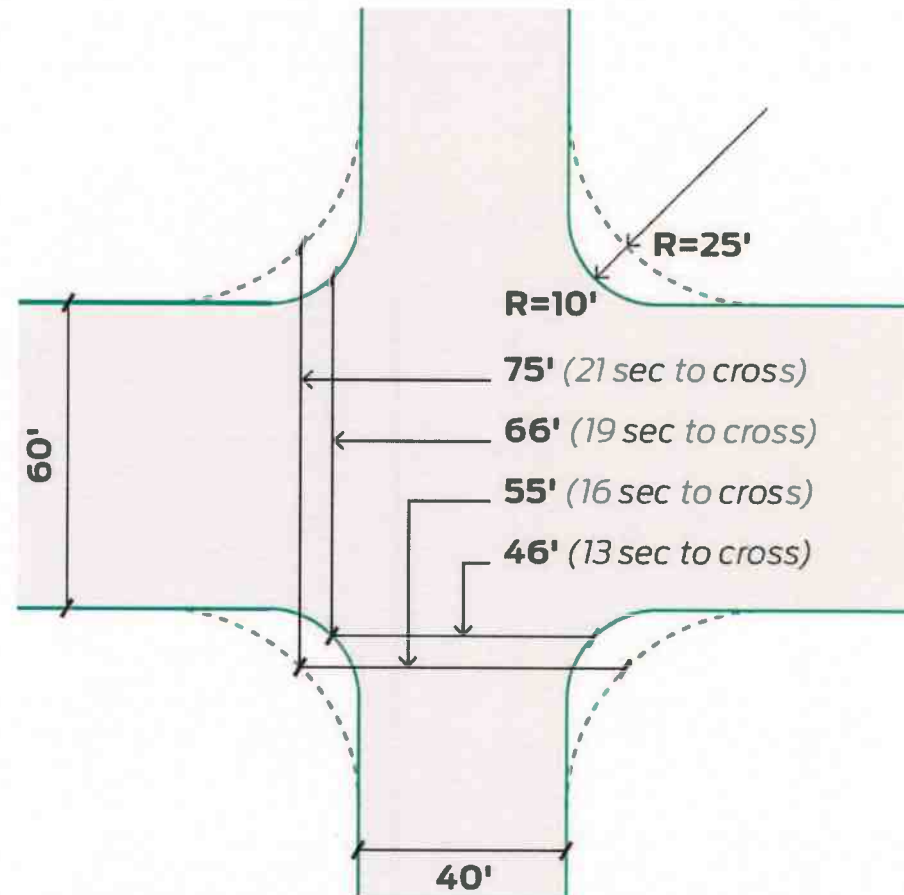


Figure 22

Note: The above illustration is for example purposes only. It is intended as a graphic example that expresses the design concepts discussed here.

DESIGN ELEMENTS

INTERSECTIONS

- Where larger curb radii are designed into intersections to accommodate large vehicles with large turning radii that cannot be accommodated within the lanes in the intersection; design strategies that minimize the impact on pedestrian shall be employed. Minimize the impact of large vehicles by employing one or more of the following techniques. Note, this list is not exhaustive.
- Mountable curbs
 - Pedestrian bumpouts
 - Textured ground plane in intersection
- Minimize effective turning radius where possible by employing one or more of the following techniques:
 - Select the smallest possible design vehicle.
 - Accommodate trucks on designated truck and bus routes.
 - Restrict right turns on red so there is no expectation of turning into the nearest receiving lane.
 - Require larger vehicles to employ on-roadway personnel to "spot" vehicles through difficult turns.
 - Design so that emergency vehicles may utilize the full area of the intersection for making turns.¹
- The Bainbridge Township Fire Department vehicle and all its aerial components is 47'-7". The turning radius to accommodate the fire department truck is 49'-7".

LARGE VEHICLE TURNING DIAGRAM

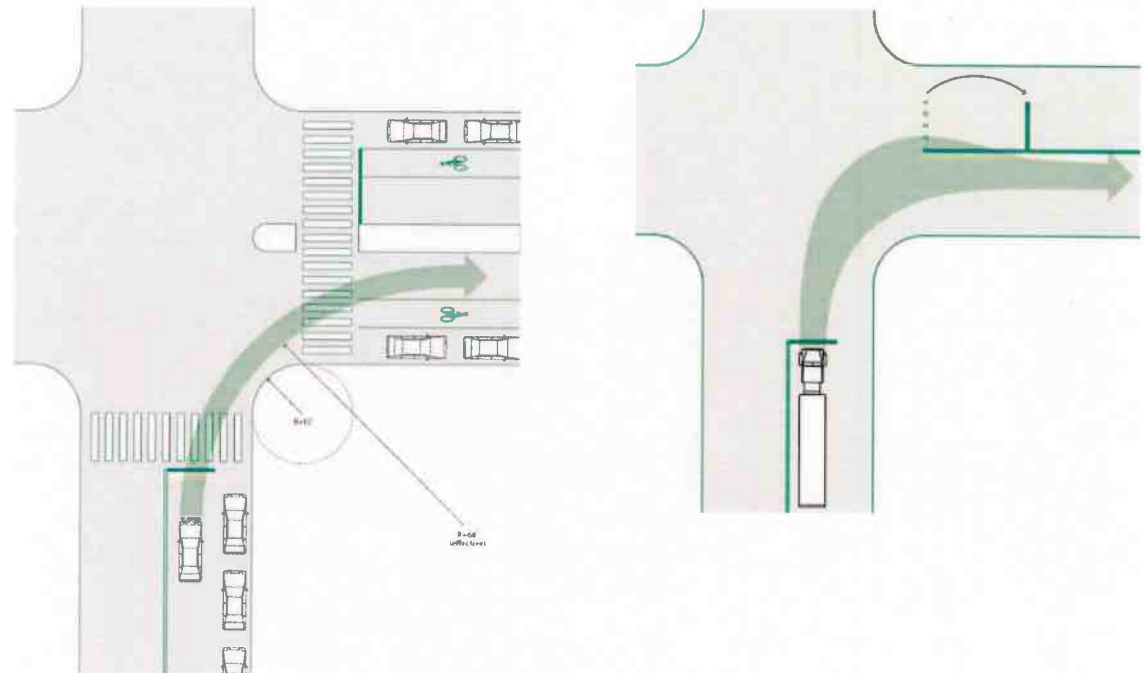


Figure 23

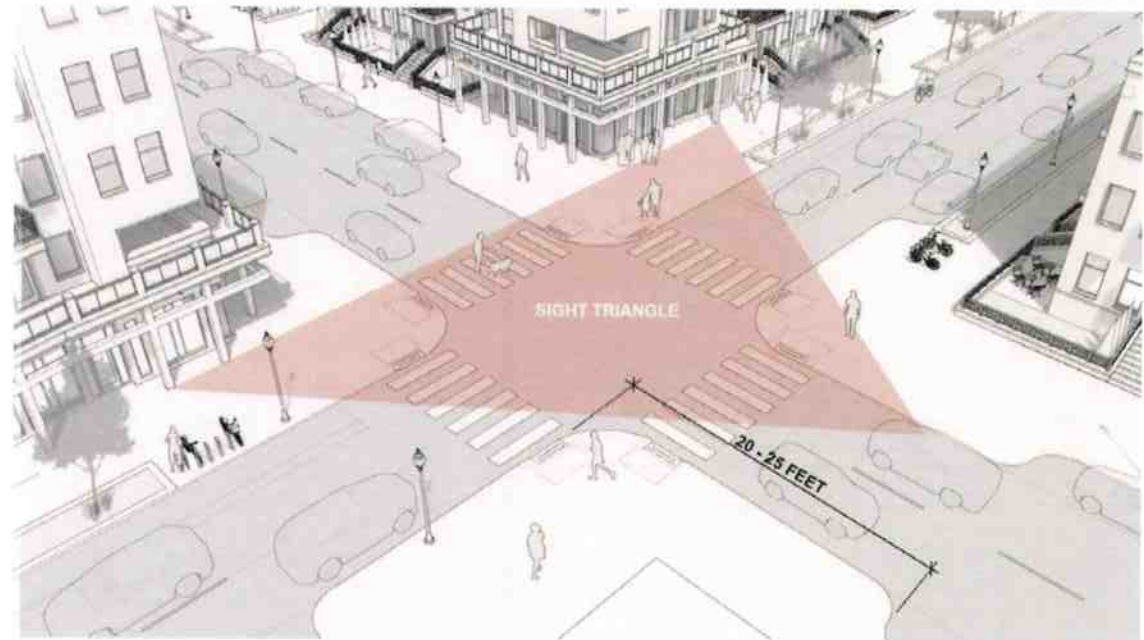
Note: The above illustration is for example purposes only. It is intended as a graphic example that expresses the design concepts discussed here.

DESIGN ELEMENTS

INTERSECTIONS

- Corners frequently act as a gathering place for people and businesses, as well as the locations of bus stops, bicycle parking, and other elements. Design should facilitate eye contact between these users, rather than focus on the creation of clear sightlines for moving traffic only.*
- Wide corners with large sight distance triangles may create visibility, but in turn may cause cars to speed through the intersection, losing the peripheral vision they might have retained at a slower and more cautious speed.*
- Fixed objects, such as trees, buildings, signs, and street furniture, deemed to inhibit the visibility of a given intersection and create safety concerns, should not be removed without the prior consideration of alternative safety-mitigation measures, including a reduction in traffic speeds, an increase in visibility through curb extensions or geometric design, or the addition of supplementary warning signs.*
- Site street trees at a 5-foot minimum from the intersection, aligning the street tree on the near side of the intersection with the adjacent building corner. Street trees should be sited 3 feet from the curb return and 5 feet from the nearest stop sign.*

VISIBILITY / SIGHT DISTANCE



- Lighting is crucial to the visibility of pedestrians, bicyclists, and approaching vehicles. Major intersections and pedestrian safety islands should be adequately lit with pedestrian-scaled lights to ensure visibility.

Figure 24

URBAN DESIGN

PRIVATELY OWNED PUBLIC SPACE (POPS)

DESIGN ELEMENTS | SIDEWALKS

GOALS:

- To use block structure to create places where people choose to walk instead of drive.
- To create multiple path options for pedestrians and to limit building widths to human scaled conditions.
- Trees are the most important design element on sidewalks. Their use should be employed for the benefit of human users of the sidewalk to provide, beauty, shade, and to assist in creating a sense of enclosure.
- Pedestrian lighting shall be employed and thought of as separate from but complementary to street lighting intended to light the roadway for vehicles. Pedestrian lighting shall light the sidewalk and be of a warmer color temperature than lighting intended for the roadway. Street lighting fixtures should be beautiful and contribute to the overall design aesthetic and character of the built environment.
- Street furniture such as benches shall be used to enhance the treatment of the sidewalk as place to be in as opposed to a space to only move through. Other types of street furniture and art are encouraged.

REQUIREMENTS:

- The use of shoulders as walking paths is not permitted.
- Primary thoroughfares should have 8 foot minimum widths for pedestrian through zones.
- Secondary thoroughfares should have sidewalks with 6 foot minimum widths for pedestrian through zones.
- Pedestrian through zones shall remain free of obstruction. Balconies, blade signs, and any other projections from buildings are acceptable and should meet all accessibility code requirements. In general they should be a minimum of 8 feet above grade.

DESCRIPTORS:

The sidewalk is the area where people meet and interact with one another and with businesses and other amenities a place may offer.

Within a neighborhood, different sidewalk conditions work together to create a comprehensive pedestrian network, with paths and routes connecting different destinations.

The pedestrian network is the foundation of all other networks in the neighborhood (public transit, bike and automobile).

PUBLIC SPACE ELEMENTS

SIDEWALKS

Sidewalks are a critical component of thoroughfares and must be thought of specifically in terms of zones of use and within the context of human scale.

CRITICAL DIMENSIONS & SCALE:

- Sidewalks have a desired minimum pedestrian through zone of 6 feet.
- Where a sidewalk is directly adjacent to moving traffic, the desired minimum is 8 feet, providing a minimum 2-foot buffer for street furniture and utilities.
- Sidewalk design should go beyond the bare minimums in both width and amenities. Pedestrians and businesses thrive where sidewalks have been designed at an appropriate scale, with sufficient lighting, shade, and street-level activity. These considerations are especially important for streets with higher traffic speeds and volumes, where pedestrians may otherwise feel unsafe and avoid walking.
- Relocation of fixed objects, such as utility poles, light fixtures, and other street furniture should not impinge on or restrict the adjacent walkway. Walkways must be clear of fixed objects in coordination with ADA accessibility guidelines.

GENERAL SIDEWALK ZONE DIAGRAM



Figure 25

THE FRONTAGE ZONE

The frontage zone describes the section of the sidewalk that functions as an extension of the building, whether through entryways and doors or sidewalk cafes and sandwich boards. The frontage zone consists of both the structure and the facade of the building fronting the street, as well as the space immediately adjacent to the building.

PEDESTRIAN THROUGH ZONE

The pedestrian through zone is the primary, accessible pathway that runs parallel to the street. The through zone ensures that pedestrians have a safe and adequate place to walk and should be a minimum of 6 feet wide in residential settings and 8–12 feet wide in downtown or commercial areas.

STREET FURNITURE / CURB ZONE

The street furniture zone is defined as the section of the sidewalk between the curb and the through zone in which street furniture and amenities, such as lighting, benches, newspaper kiosks, utility poles, trees in grates or tree lawns, and bicycle parking are provided. The curb should include 12–18 inches of solid surface for exit from parallel parked cars.

ENHANCEMENT / BUFFER ZONE

The enhancement / buffer zone is the space immediately next to the sidewalk that may consist of a variety of different elements. These include curb extensions, parklets, storm water management features, parking, bike racks, bike share stations, and curb-side bike lanes or cycle tracks.

PUBLIC SPACE ELEMENTS SIDEWALKS

- The concrete should be air-entrained to resist freeze damage.
- Reinforcing to keep adjacent panels in alignment over time, and to eliminate trip hazards.
- Finishes may vary depending upon use area but in general, sidewalks should be exposed or washed finish types to provide a high traction surface.
- The section to the right is for illustration purposes only. The design pavement section to be per geotechnical recommendations.

TYPICAL SIDEWALK SECTION *(Section below is for guidance only.)*

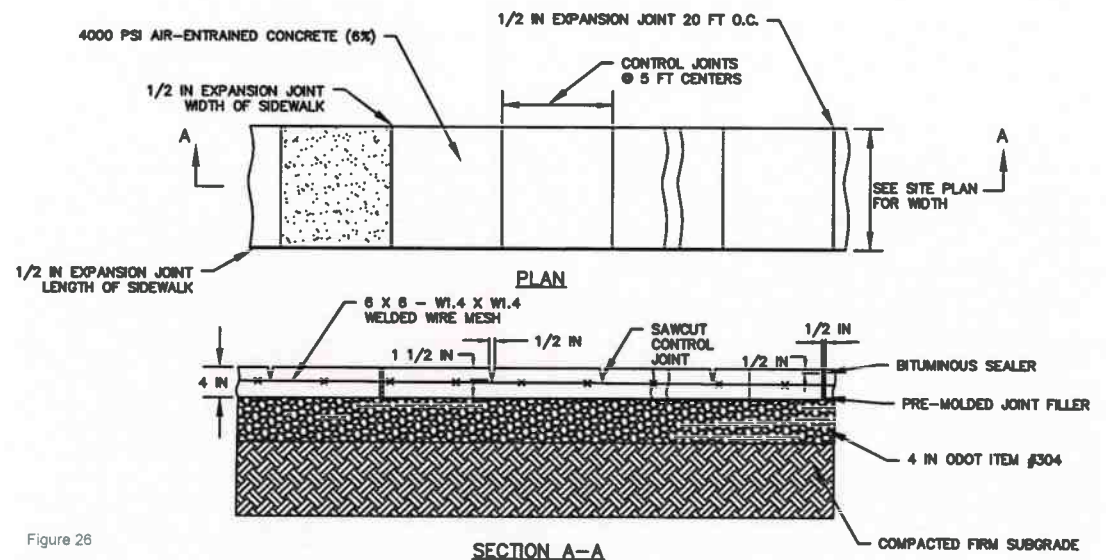


Figure 26

TYPICAL SIDEWALK PATTERN INTENT



Figure 27

PUBLIC SPACE ELEMENTS SIDEWALKS

- The example to the right shows how the sidewalk zones can be used on a multifamily residential street.

TOWNHOUSE RESIDENTIAL SIDEWALK DIAGRAM



Figure 28

PUBLIC SPACE ELEMENTS SIDEWALKS

- The example to the right shows how the sidewalk zones can be used on single family home residential street.

SINGLE FAMILY RESIDENTIAL SIDEWALK DIAGRAM

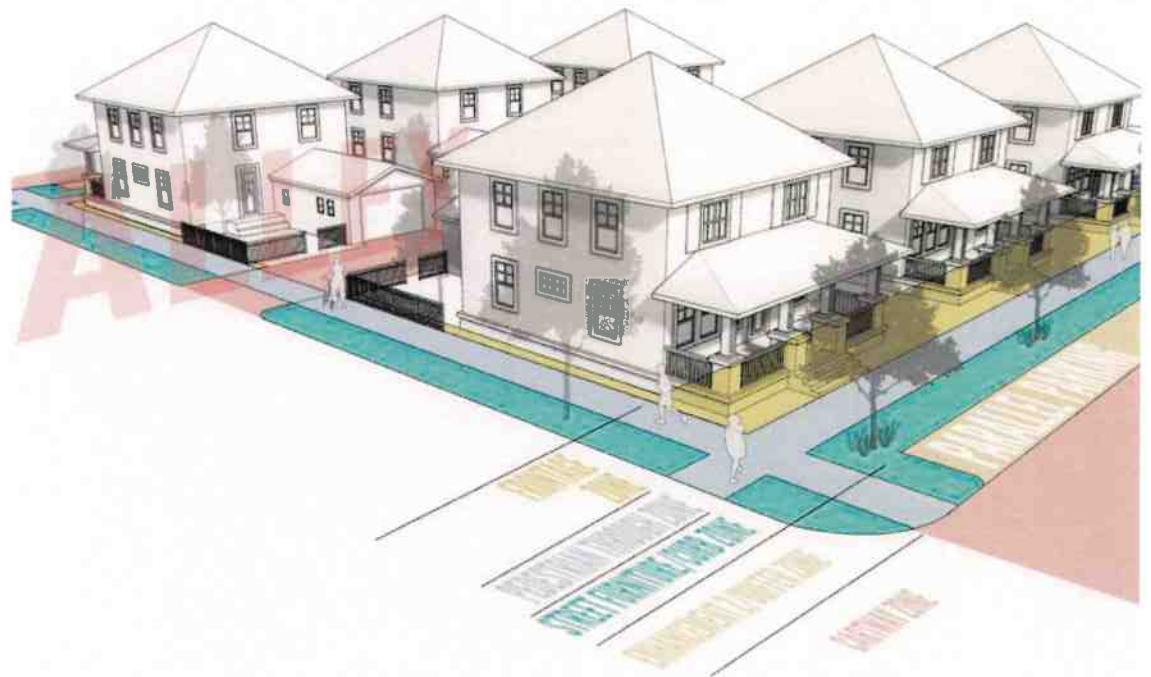


Figure 29

DESIGN ELEMENTS | MATERIALITY

GOALS:

- Materials should be employed that enhance the experience of living working or playing at The Geauga Lake District by engaging and delighting the senses. Color, texture, and pattern shall be taken into consideration.

REQUIREMENTS:

- Material selections should fit within the overall Northeast Ohio small town aesthetic. They should be sympathetic to the historic built environment, be practical, and should reflect our local culture. Material selections should be guided and influenced by materials that were and are available locally.
- Materials should be used as part of an overall strategy to visually break down space to a human scale. For example, brick pavers or similar patterns in stamped concrete, help human beings understand the scale of a space. The scale of an expanse of concrete is more difficult to understand without additional context.

PUBLIC SPACE ELEMENTS

MATERIALITY

- Beyond the likely predominant use of either conventional standard asphalt or concrete, Geauga Lake Design Guidelines strongly encourage incorporating differing specialty paving materials such as brick, cobblestone, pavers (including permeable), colored or infused concrete, stamped and colored asphalt pavement and/or other pavement products, to demarcate special pedestrian walk and/or activity zones, dual pedestrian/vehicular crossing areas, feature street surfaces, crosswalks, pathways, unique 'arrival' zones, plazas and entries.
- Where viable, such areas should be made 'zero curb' elevation zones to facilitate ease of pedestrian use, and as a visual cue for traffic calming in these specific areas.
- Such zones or feature streets can have vehicular and pedestrian areas segregated by use of either fixed or removable bollards that can be change/removed for programmed or promotional events. For specific site development areas within public roadways, pavement and substrate design must be based on calculations that anticipate future traffic conditions and must be submitted to and approved by the Zoning Department Staff. Creation of roadways featuring landscaped islands, boulevards, arrival courts and roundabouts are also encouraged where feasible.

STAMPED CONCRETE AND PAVER EXAMPLES



Figure 30

DESIGN ELEMENTS | PUBLIC SPACE PROGRAMMING

GOALS:

- The Geauga Lake District shall provide a variety of privately owned public spaces that utilize good design principles, and active and passive programmatic elements to foster a lively atmosphere, create community and assist in developing a distinct sense of place.
- References to the history of Geauga Lake shall be included in designs in creative and innovative ways.

REQUIREMENTS:

THE MAJOR ELEMENTS OF PUBLIC SPACE

- ☐ Seating
- ☐ Sun
- ☐ Water
- ☐ Trees
- ☐ Food
- ☐ Triangulation

IMPORTANT VARIABLES

- ☐ Relationship to the Street
- ☐ Enclosure
- ☐ Scale

DESCRIPTIONS:

- Privately owned public spaces are spaces dedicated to public use and enjoyment and which are owned and maintained by private property owners. They provide a myriad of opportunities to sit, relax, people watch, eat, meet others – in other words, to partake and enjoy in public life. They come in many shapes and sizes, both outdoor and indoor, and offer a variety of amenities.
- Urban plaza spaces are dense, highly programmed and offer different types of activities, both passive and active, than park spaces allow for.

PUBLIC SPACE ELEMENTS

ACTIVE PROGRAMMING

Active Programming includes scheduled events that someone attends in a public space at a specific time like a yoga class. Open greenspace, hardscaped plaza spaces, amphitheaters and other types of designed spaces are required to accommodate active programming. Temporary design elements like tents, utility connections, and additional seating are sometimes needed for the events.

ACTIVE PROGRAMMING EXAMPLES

bulb /plant events



egg hunt



outdoor movie showings



food trucks



PUBLIC SPACE ELEMENTS

ACTIVE PROGRAMMING

Active Programming includes scheduled events that someone attends in a public space at a specific time like a yoga class. Open greenspace, hardscaped plaza spaces, amphitheaters and other types of designed spaces are required to accommodate active programming. Temporary design elements like tents, utility connections, and additional seating are sometimes needed for the events.

ACTIVE PROGRAMMING EXAMPLES

concerts /live music



yoga, tai chi, races



art fest



board and lawn game gatherings



farmer's market



PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

Passive Programming includes things someone chooses to do on their own time in a public space. Fixed design elements like seating, tables, food kiosks and options for sitting in the sun or the shade assist the user in their everyday activities.

PASSIVE PROGRAMMING EXAMPLES

wall seating



sun + shade



intimate seating



bench seating

open green space



people watching



moveable seating



landscaping



PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

Passive Programming includes things someone chooses to do on their own time in a public space. Fixed design elements like seating, tables, food kiosks and options for sitting in the sun or the shade assist the user in their everyday activities.

PASSIVE PROGRAMMING EXAMPLES

fountain



water feature



public /interactive art



varied seating options



shade structures



PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

Passive Programming includes things someone chooses to do on their own time in a public space. Fixed design elements like seating, tables, food kiosks and options for sitting in the sun or the shade assist the user in their everyday activities.

PASSIVE PROGRAMMING EXAMPLES

book box / library



reading /writing /sketching



jewel boxes



grab and go food /beverage



PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

HARDSCAPE, SOFTSCAPE

- A town square and plaza space requires significant hardscape to function properly. In this example, opportunities for softscape have been integrated throughout the plaza to maintain a park-like reference.



WATER

- Water provides sound. White noise masks traffic and the sounds of other people's conversations. People enjoy the look and feel of water and interact with it.
- The plaza offers 2 unique water features:
 - The splash pad which serves an aesthetic function in the center of the space and can be used for play by children.
 - The waterwall is designed to be an experiential feature providing background noise, air temperature regulation, visual delight, and to encourage people to touch.

¹ The Social Life of Small Urban Spaces.
Dir. William H. Whyte. Web.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN

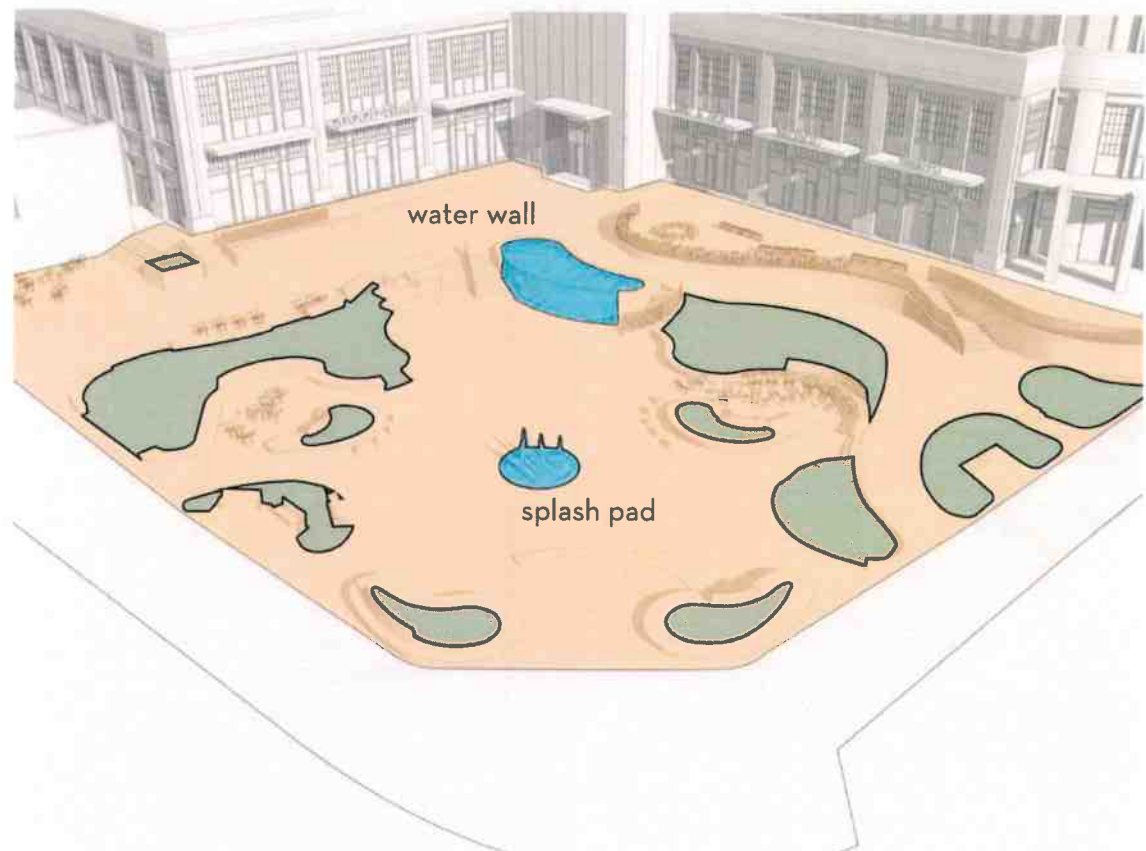


Figure 31
Graphic by RDL

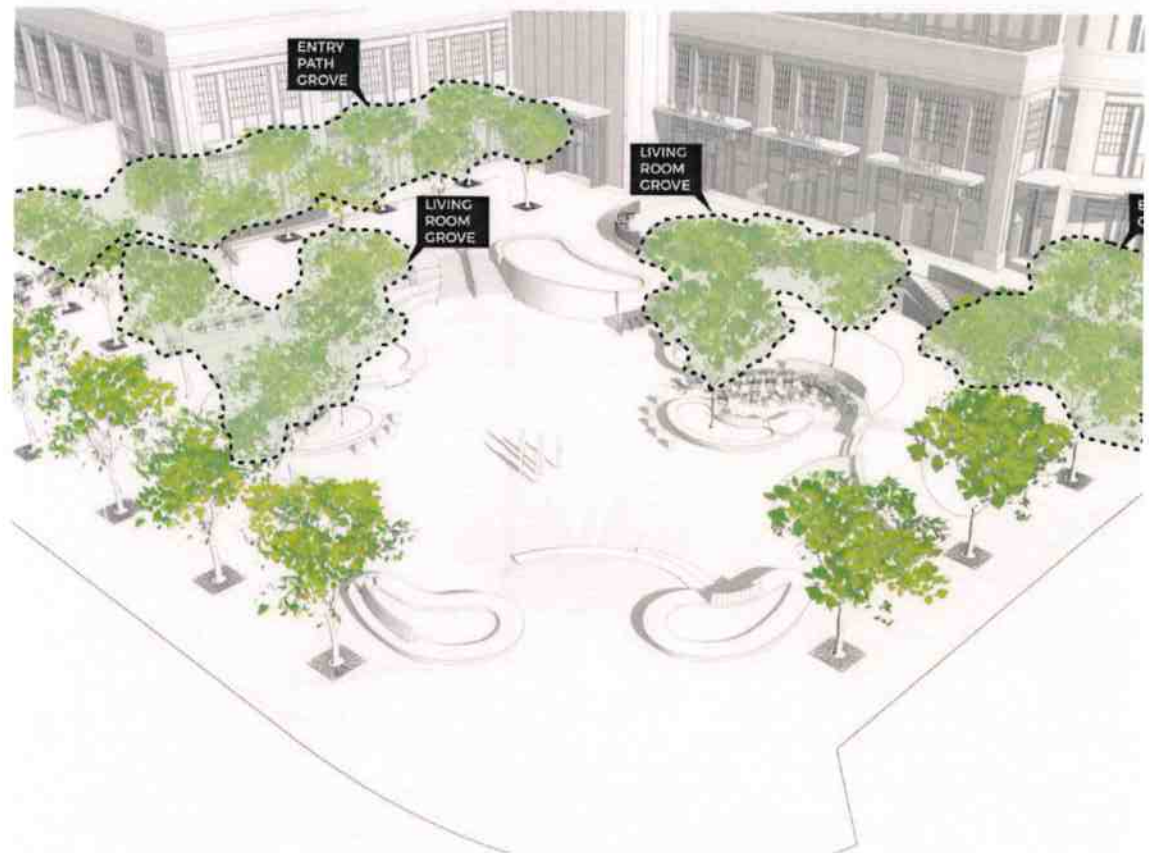
PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

TREES

- Trees provide micro-climates, shade, softness and transpiration to a space.
- Where possible, trees should be planted in groves. People like to sit in spaces that feel enclosed and protected but provide the ability to look out on the action.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



¹ The Social Life of Small Urban Spaces.
Dir. William H. Whyte. Web.

Figure 32
Graphic by RDL

PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

TREES

- Trees can also help define space without interrupting the flow of people through space. The trees lining the plaza act as a transitional and defining element between the plaza and the street. The trees lining the space will also mitigate wind on days when it would be uncomfortable.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



¹ The Social Life of Small Urban Spaces.
Dir. William H. Whyte. Web.

Figure 33

PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

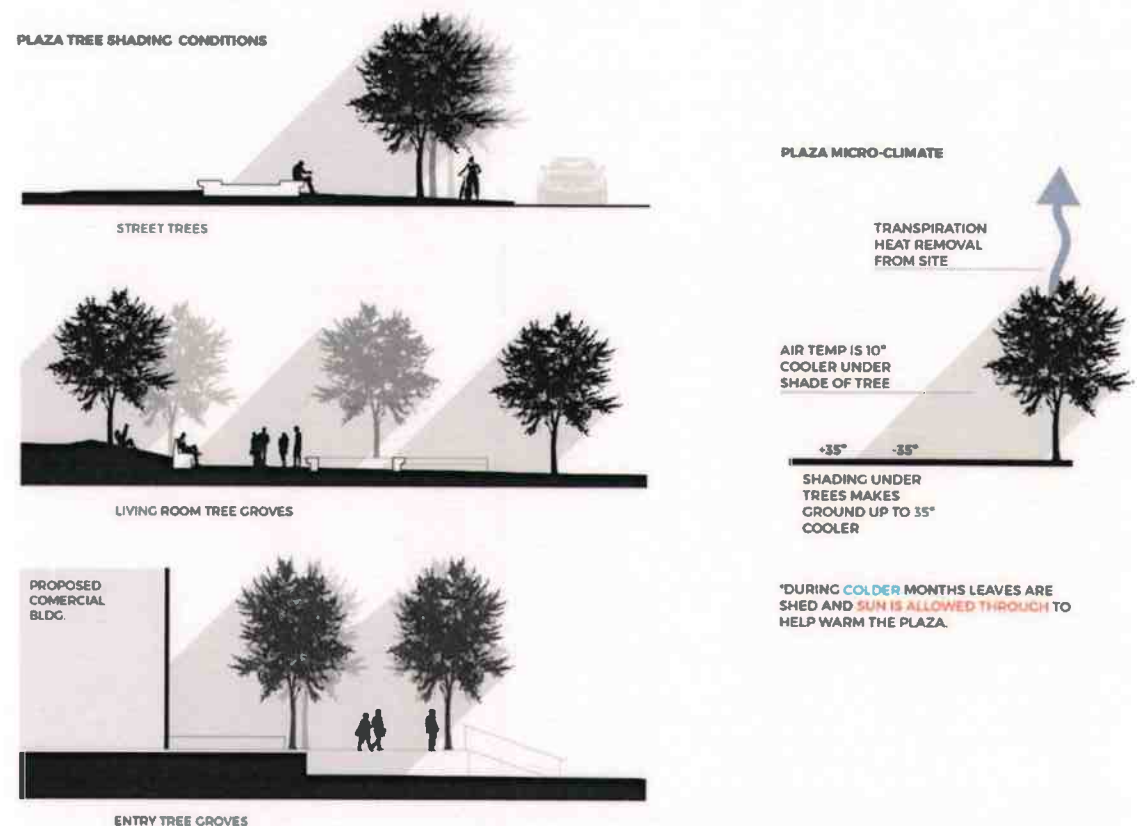
TREES

- Trees allow the greatest flexibility for providing micro-climates and change with the seasons.
- Trees also mitigate wind which is important for comfort.

SUN

- Light is one of the most important elements in a public space. For northern exposures, reflective light off of nearby buildings is a good source of indirect light.
- People will tend to sit in the sun on chilly days, but tend to sit anywhere from June through August.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

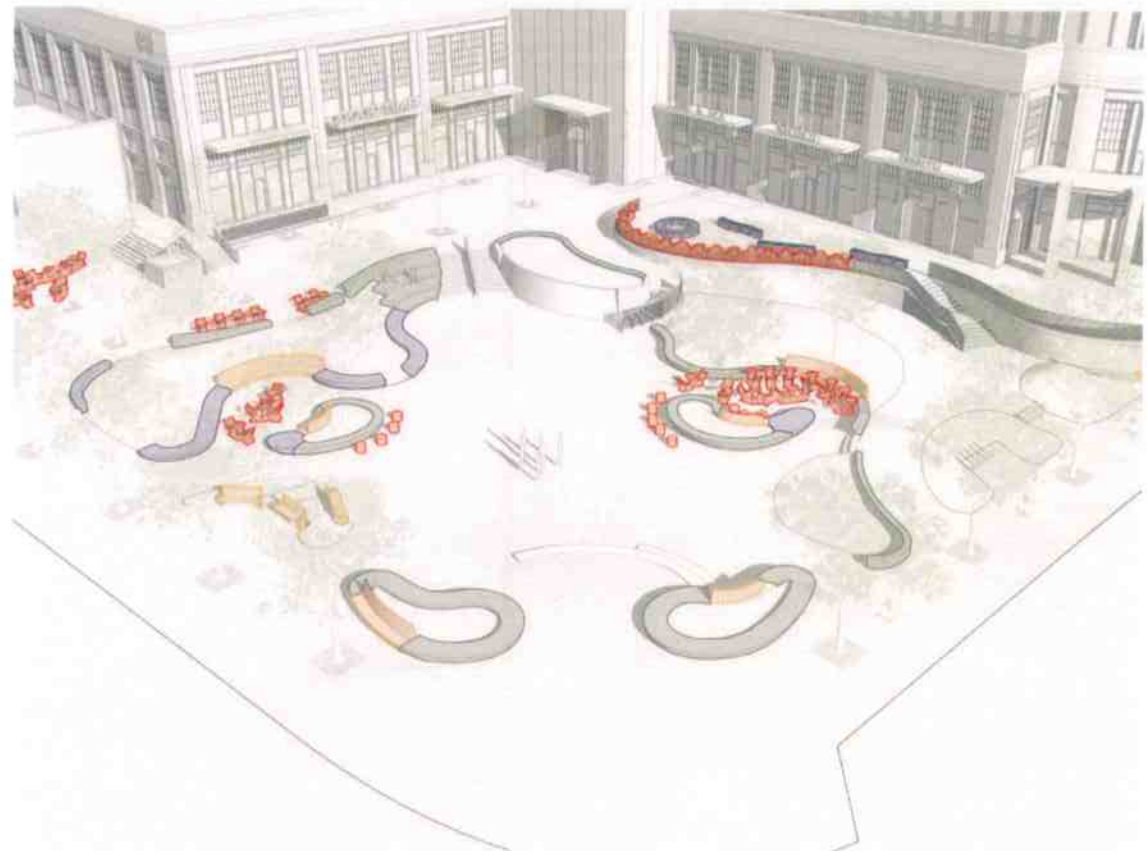
SEATING

GENERAL RULES FOR SEATING

- 1 linear foot of seating for every 30sqft of public space.
- 10% minimum should have backs

- MOVABLE
- SEATING WITH BACKS
- DOUBLE LOADED
- LEDGES

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

RELATIONSHIP TO THE STREET

- Sightlines should be open and consistent throughout the site. The street is where the action is and a close relationship with the street is important.
- Open sightlines also keep eyes on the space and provide safety.
- A change in height from the sidewalk to a plaza or square can heighten the sense of entry but should be no more than 3 feet.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



1 The Social Life of Small Urban Spaces.
Dir. William H. Whyte. Web.

Figure 36

PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

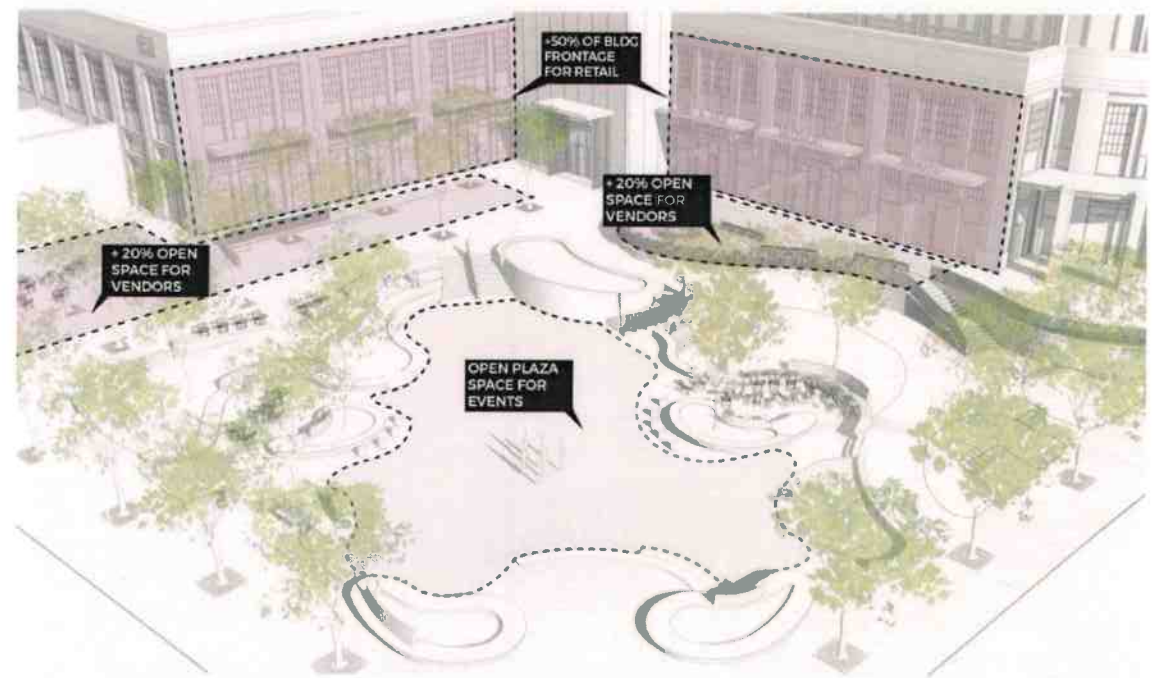
FOOD

- Food seeds a place with activity.
- Food carts, food trucks, coffee shops become places for people to chat and people watch. The people who work in these places often become “mayors” of the space and hold knowledge other people are seeking.
- Up to 20% of space in a plaza should be for outdoor cafe settings.
- Compressed arrangements of chairs and tables foster greater activity.

RETAIL WALLS / ACTIVE GROUND FLOOR

- Retail walls are a form of passive programming. They should make up at least 50% of the walls defining a space.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



1 The Social Life of Small Urban Spaces.
Dir. William H. Whyte. Web.

Figure 37

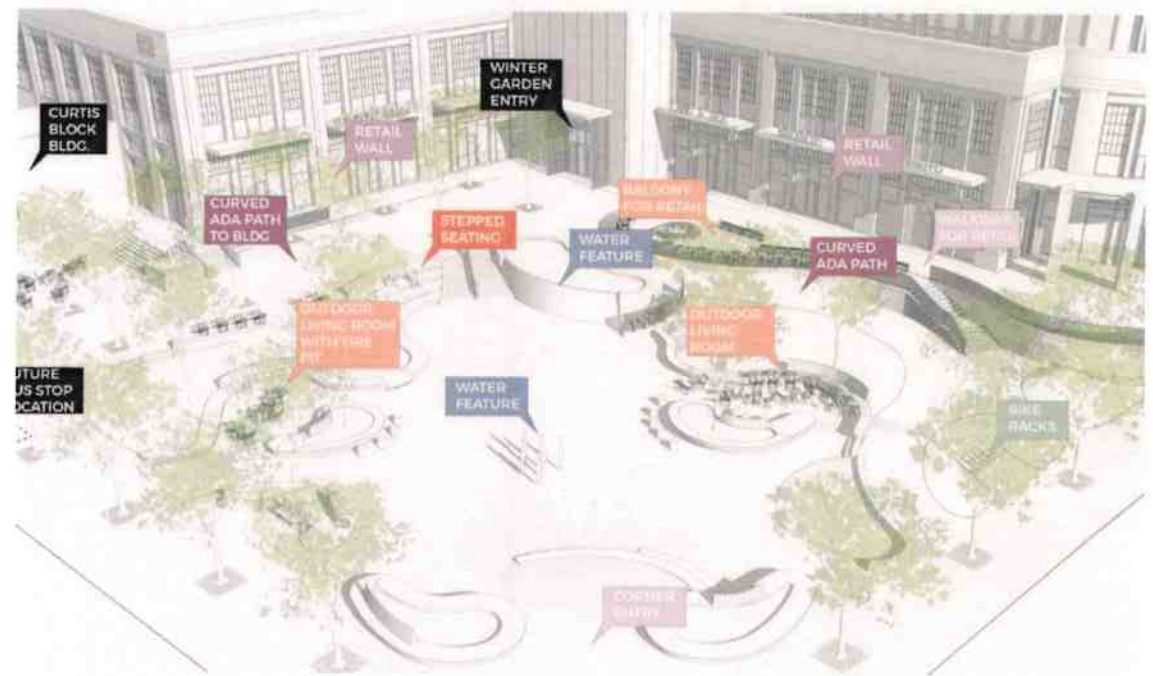
PUBLIC SPACE ELEMENTS

PASSIVE PROGRAMMING

TRIANGULATION

- Exterior stimuli that encourage interaction, conversation, and draw people to places.
 - water features
 - food and retail
 - public art
 - public entertainers
 - people watching opportunities
- Triangulation programmatic elements offer opportunities for references to Geauga Lake Amusement Park and shall be employed as such when appropriate to the overall design of place.

PLAZA EXAMPLE - PASSIVE PROGRAMMING DESIGN



URBAN DESIGN

PRIVATELY OWNED PUBLIC SPACE (POPS)

DESIGN ELEMENTS | FOLLIES

GOALS:

- Follies shall be used to highlight transitions between differing spaces, as gateways, as landmarks, and as elements that highlight the history of Geauga Lake Park.

REQUIREMENTS:

- Follies shall be used at primary gateways from private Developments to the Lakefront Zone.

DESCRIPTIONS:

- "FOLLY" shall mean a building or other type of structure whose architecture far overshadows its purpose, is designed to enhance the landscape and reference the architecture of amusement; and thus, Geauga Lake.
- Follies may be used for decoration, as gateways, kiosks, landmarks, or for other imaginative purposes that enhance the user experience of the Geauga Lake District.

PUBLIC SPACE ELEMENTS

FOLLIES

POINTS OF ACCESS

- Access to the lake shall be designed into the pedestrian network for each Development.
- Points of Access to the Lake shall be highlighted with landscaping, architectural gateways and follies.
- A point of access to the lake shall occur on average every 300 to 600 feet for each Developed lot. This standard is based on the ideal block structure and pedestrian path options as is defined in **PLANNING, DESIGN ELEMENTS | BLOCKS** on Pages 40-41.

EXAMPLES OF FOLLIES



Figure 39

DESIGN ELEMENTS | UTILITIES AND EQUIPMENT

GOALS:

- Equipment associated with utilities and meant for public viewing and use shall be thought of as design elements, be used as such to help define space, and be aesthetically beautiful.
- The design and selection of equipment meant for public use and view such as pedestrian lighting, street lighting, signage and wayfinding, traffic controls, etc., shall fit within the overall design aesthetic of the Geauga Lake District.
- Equipment meant for public use and view shall be differentiated from equipment associated with the operation of said equipment.
- Operational equipment not meant for public view such as distribution lines, utility access boxes, power supplies, utility vaults and transformers, etc., shall be hidden from view.

REQUIREMENTS:

UTILITY EASEMENTS

- All public street utility easements shall fit within planned street ROW's or in dedicated service lanes where possible, and are to be located under pavement, landscape and sidewalk areas as necessary. Deviation from this requirement will be considered by the Primary Developer and Zoning Staff only for specific site development areas that prove a variation is necessary.

UTILITY AND EQUIPMENT LOCATION

- All utility, telecommunication and landscape irrigation distribution lines shall be located underground preferably within rights-of-way, with all visible, in-ground utility access boxes placed as to not interfere with building pads, sidewalks, pathways and other pedestrian zones, light poles, way-finding, directional or other street signage, parking areas, landscaping other than trees.
- Cell Towers and other utility infrastructure will not be permitted within view of the lake. Structures shall be out of view or shielded from view when on or walking near the lake.

REQUIREMENTS:

UTILITY AND EQUIPMENT LOCATION

- Wherever such utility vaults, transformers or other apparatus are needed or are required to be above grade, at the earliest instance those need to be identified, scaled and placed in coordination with the Primary Developer. This would also include the judicious placement of all required transformers, traffic control equipment, telecommunication pedestals, electrical cabinets, metering, exposed pipes and/or valves, and any other mechanical equipment that requires above-ground placement, in areas away from the primary pedestrian and vehicular zones, preferably in parking area landscape beds, and/or landscape buffer areas. Underground and/or completely hidden locations are strongly encouraged.
- When electrical boxes are above ground they shall be completely hidden within follies or other structures or by appropriate landscaping for the context.

RESTRICTED EQUIPMENT

- Sattelite dishes shall not be permitted.

ARCHITECTURE HISTORICAL PRECEDENTS

DESIGN ELEMENTS OVERVIEW

GOALS:

- The following architectural design guidelines are meant to achieve the establishment of a consistent high-quality design and construction that works with the public space standards and establishes overall district 'neighborhood' design and planning goals.
- The architecture of buildings and structures in The Geauga Lake District shall be used to reinforce a Northeast Ohio small town aesthetic and directly relate to our architectural history as it has developed over time.
- While the primary suggested architectural styles for development within Geauga Lake are styles that are commonly found in Northeast Ohio, amusement park inspired architecture is suggested for special buildings and elements typically found in public spaces and used as focal points and landmarks.

DESCRIPTIONS:

OBJECT BUILDINGS VS ICON BUILDINGS

Object Buildings - The Architecture of Northeast Ohio

- The majority of buildings at The Geauga Lake District should be thought of as 'object buildings' that are good neighbors and whose primary goal outside of their use is to define public space. They line thoroughfares and public spaces and should be of sound architectural design.

Icon Buildings - Civic Architecture and The Architecture of Amusement

- A much smaller percentage of the buildings at The Geauga Lake District should be "icon buildings" meaning that they are focal points and are meant to stand out. In their placement and architecture they compel people's attention. Their uses tend to be of civic, institutional, and entertainment uses. They are often closely associated with public spaces.

DESIGN ELEMENTS | THE ARCHITECTURE OF AMUSEMENT

DESCRIPTIONS:

- An amusement park is defined as a park that offers visitors various attractions such as rides, games, shows, or other forms of entertainment.
- Theme parks can offer all the things that amusement parks offer, but the differentiating factor is theme parks base all of their assets (attractions) around a central, well defined unifying theme that can have multiple sub-themes underneath the guiding principle or 'theme' of the park.
- While amusement parks may have notions of underlying themes or stories that drive their design, and can be located in beautiful settings, theme parks take those design principles to the extreme where the visitor or guest is immersed into a unifying 'theme'.
- One common element found in amusement parks and theme parks, however, is the range of attractions or offerings they provide that are suitable for multiple age groups.

DESCRIPTIONS:

- Amusement parks have been around much longer than theme parks. Amusement parks evolved in part out of European pleasure gardens, picnic areas, traveling carnivals and fairs dating back as early as the 12th Century Middle Ages in Europe.
- The growth of the amusement park in America was also influenced directly by the concept of the "midway", an area of a fair set aside for sideshows and other amusements.

DESCRIPTIONS:

- Geauga Lake's development mirrors the evolution of amusement parks but does contain some thematic elements within it. Some of the areas with themes were:
 - WESTERN VILLAGE (old west theme)
 - LIGHTHOUSE LANDING (nautical theme)
 - BOARDWALK SHORES (east coast beach theme)
 - CAPTAINS GALLEY (pirate theme)
 - RAINBOW ISLAND
 - MAIN GATE (Victorian era main street theme - Americana)

DESIGN ELEMENTS THE ARCHITECTURE OF AMUSEMENT

GEAUGA LAKE THE POND PICNIC AREA ERA

The land on which Geauga Lake would be built was originally just that, land. It was owned by a man named Sullivan Giles, who built his home on the property. As Giles watched the transportation industry change and adapt in the late 1800s, he noticed that a newly constructed train route passed right by his property. He decided to take advantage of the opportunity and established picnic grounds on the property so that train travelers could take a break and enjoy time at the park, located next to the beautiful Giles Pond. As more and more travelers visited the property, Giles built a dance hall on the grounds so that visitors have something to do other than just admire the view or swim in the pond.

Eventually, the area became so popular that the train added a stop right on the property. The picnic grounds and dance hall with the beautiful pond backdrop behind them soon became one of the most popular stops on the rail line, giving people a scenic and relaxing day in northeast Ohio. A steamboat could also be seen that rode around the lake, with a dance floor attached to the back of the boat.

GEAUGA LAKE CLASSIC AMUSEMENT PARK ERA

In 1887, Geauga Lake Park was officially established. The next year, Major League Baseball games were played at the park and a hotel was built nearby, drawing in more crowds to the area. The park officially became known as an amusement park when a steam-powered carousel was added in 1889.

In 1925, the park cemented its place in amusement park history when the Big Dipper roller coaster was built. At the time, it was the largest coaster ever built, with a height of 65 feet and a length of 2,800 feet. Even for today's standards, those are impressive stats, and this ride was built nearly a century ago. The coaster was designed by John A. Miller and cost around \$50,000 to build. To compare, Mystic Timbers, the GCI wooden coaster at Kings Island built in 2017, cost 15 million dollars. Mystic Timbers is about 50 feet higher and 1,000 feet longer than Big Dipper, but still, that goes to show the vast difference in price. The next year, in 1926, an Olympic size swimming pool was built. Shortly after, Tarzan movie star Johnny Weissmuller broke the 220-yard freestyle record, while being watched by 3,000 spectators.

GEAUGA LAKE FUN TIME ERA

In 1969, Geauga Lake Park was acquired by Funtime Incorporated, a major amusement park manager at the time. Funtime didn't change much in terms of the park itself, they mainly kept the focus on swimming and recreation at the time. Then, in 1970, SeaWorld Ohio opened across the lake from the park. The parks were actually friendly neighbors, Funtime was actually the one that convinced SeaWorld to build their parks so close together. After SeaWorld was built, Geauga Lake started to focus more on their attractions. Some of the rides Geauga Lake added around this time included a log flume and a 200-foot observation tower, proving that the park was moving more towards what amusement parks of today look like. The park also built a few steel roller coasters during this time, including the Ron Toomer designed Double Loop from Arrow and Wildcat/Cyclone, a Pinfari Zyklon.

Also during this time, the park switched from free entry to a pay-per-ride system, adjusting for the increased attendance and costlier thrill rides. In 1978, the park added Corkscrew, another Arrow coaster, to the park, making Geauga Lake the first amusement park in Ohio (but certainly not the last) to have two looping roller coasters. In 1983, the park added the beginnings of their water park, calling it Boardwalk Shores. Geauga Lake celebrated its centennial in 1988, and along with some celebrations, the park opened the Raging Wolf Bobs, a bobsled style coaster that cost the park \$2 million dollars.

DESIGN ELEMENTS THE ARCHITECTURE OF AMUSEMENT

- The evolution and history of each entertainment arena is complex and not necessarily linear as both pleasure gardens and amusement parks have their roots in the network of leisure patterns that existed in pre-industrial Europe, when pleasure gardens began to spring up on the outskirts of many major European cities. However, in origin and architectural conception the amusement park was truly developed in America with the European model of the pleasure garden occupying a separate but parallel history with greater overlaps by the 1920s onwards.

VAUXHALL GARDENS - THE PLEASURE GARDENS OF EUROPE



Figure 40

DESIGN ELEMENTS THE ARCHITECTURE OF AMUSEMENT

- Early architecture of amusement examples at Geauga Lake shown to the right.

EARLY 20TH CENTURY GEAUGA LAKE ARCHITECTURE



Figure 41

DESIGN ELEMENTS THE ARCHITECTURE OF AMUSEMENT

- Thematic architecture examples shown to the right.

MID TO LATE 20TH CENTURY GEauga LAKE ARCHITECTURE EXAMPLES

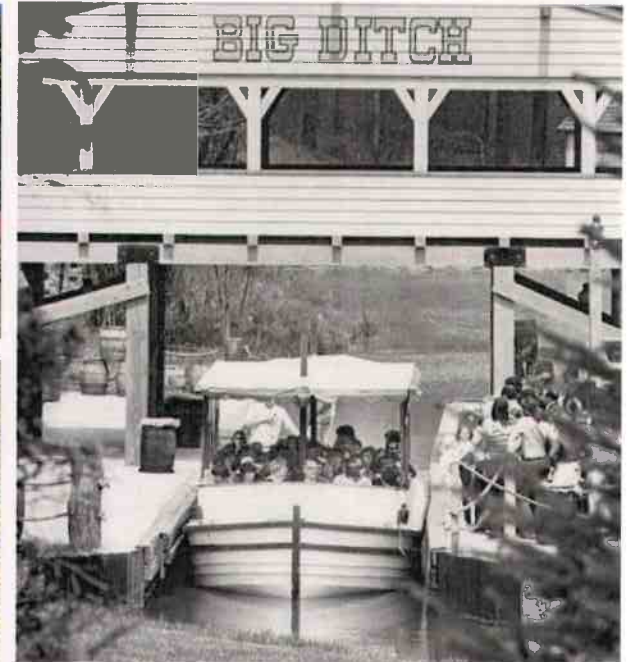


Figure 42

DESIGN ELEMENTS | THE ARCHITECTURE OF NORTHEAST OHIO

GOALS:

- The following architectural design guidelines are meant to achieve the establishment of a consistent high-quality design and construction that works with the public space standards and establishes overall district 'neighborhood' design and planning goals.
- In general, the high quality architecture of Northeast Ohio should be used as a "go-to" for the character of buildings at Geauga Lake.

REQUIREMENTS:

- ☐ High architectural character
- ☐ Four sided consistency

DESIGN ELEMENTS
THE ARCHITECTURE OF NORTHEAST OHIO

CHARACTER IMAGES



Figure 43

DESIGN ELEMENTS
THE ARCHITECTURE OF NORTHEAST OHIO

CHARACTER IMAGES



Figure 44

DESIGN ELEMENTS
THE ARCHITECTURE OF NORTHEAST OHIO

CHARACTER IMAGES

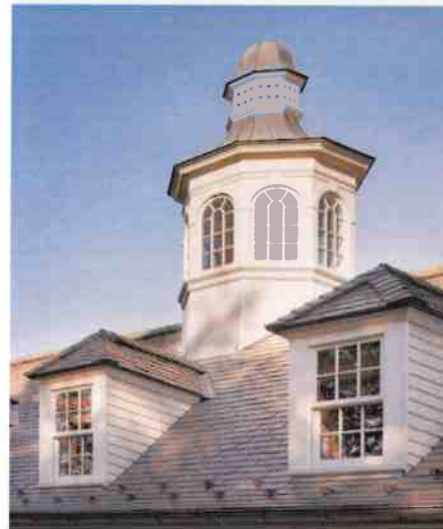


Figure 45

DESIGN ELEMENTS
THE ARCHITECTURE OF NORTHEAST OHIO

CHARACTER IMAGES

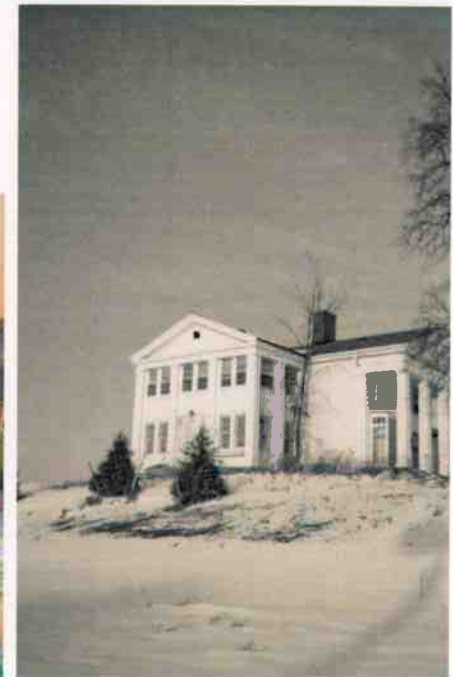
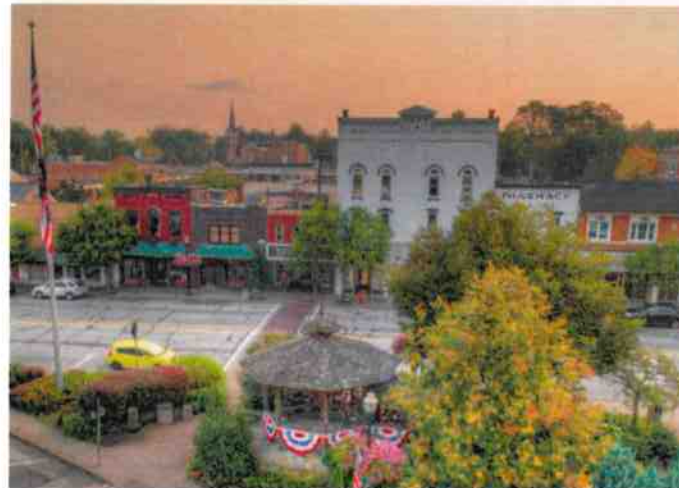


Figure 46

DESIGN ELEMENTS | BUILDING FORM STANDARDS

GOALS:

- Building placement guidelines are intended to create an edge to define a well proportioned and comfortable, pedestrian oriented streetscape.
- A relatively consistent plane of building facades along thoroughfares should be maintained to create a sense of enclosure.
- Building form guidelines are intended to ensure that building heights work in coordination with street widths to give the correct proportion to public spaces (thoroughfares, squares, plazas, etc.)
- Floor height minimums and maximums assist in defining the separation of public, semi-public and private spaces.
- Parking lots and garages should be hidden from view with buildings along primary thoroughfares and buffered along secondary thoroughfares with landscaping. Entries to parking shall be located along secondary thoroughfares whenever possible. Goal is not to detract from the pedestrian experience.

REQUIREMENTS:

- ❑ Building Placement - All buildings shall be placed within 0'-20' of the build-to line (see use regulations on page 35 for placement by use type).
- ❑ Building heights shall comply with use regulations on page 35 and give proper proportion to thoroughfares and other public spaces as is outlined on page 43.
- ❑ Residential ground floor heights shall be a minimum of 18' above grade. The closer to the "public" sidewalk the greater the separation from the ground plane should be.
- ❑ All other floor heights shall be a maximum of 6" above grade.
- ❑ Parking lots are hidden from view along primary thoroughfares.

DESCRIPTIONS:

- The Building Form Standards in these Design Guidelines are intended to assist architects and designers in defining the physical form of the built environment at The Geauga Lake District.
- The standards are:
 - Buildings Placement
 - Building Form
 - Parking

DESIGN ELEMENTS

BUILDING FORM STANDARDS - ORIENTATION TO THE STREET

- Buildings shall be oriented along the immediate adjacent street to create a 'street wall' effect, with the main/primary entrance(s) located, facing the street, public right-of-way or courtyard, or passage.
- For larger-format users over ten thousand square feet (10,000 sf), a secondary entry may face onto a relevant-sized surface parking area, unless deviation is deemed appropriate, per the discretion of the Staff.
- In cases where there is an anti-access easement or access is not permitted from a particular road or public right-of-way, the building shall not be required to face the subject road or right-of-way.¹

BUILDING FORM EXAMPLE - MULTIFAMILY RESIDENTIAL



Figure 47

¹ National Association of City Transportation Officials. Urban Street Design Guide. Island Press /Center for Resource Economics, 2013. Print.

DESIGN ELEMENTS

BUILDING FORM STANDARDS - THE THREE ASPECTS OF THE HORIZONTAL DIMENSION

- **The scale of the street :** 330 feet is often considered the farthest distance that the human eye can see people or objects in motion. At this scale, people see landmarks in the distance, constructed view corridors, or vanishing points.
- **The scale of the building:** 60 to 70 feet is the distance at which the human eye can begin to read facial expressions. It is the mid-scale of rhythm often demonstrated when there are a series of different buildings, and therefore vertical distinctions between them, on the same block. When a single building extends the full length of a block, it can quickly become monotonous and repetitive for the person walking next to it. In these cases, variety is encouraged through the use of different materials, window patterns, cornice lines, and other architectural articulations.
- **The scale of the unit :** The smallest scale of pedestrian experience occurs within the closest 25 feet of the viewer. This is the scale at which the senses are most engaged with the complexities of façade articulation, active entries, transparency, textures, awnings, signage, and architectural details.

Figure 48

THE HORIZONTAL DIMENSION



DESIGN ELEMENTS

BUILDING FORM STANDARDS - THE VERTICAL DIMENSION

- Sidewalks can be bordered by tall or short buildings, or by no buildings at all.
- The pedestrian's experience is strongly influenced by the vertical height of the building wall plane.
- The human eye typically perceives the space within the angles of 50–55 degrees above and 70–80 degrees below a direct horizontal line.
- If we assume the average eye height of someone walking down the street, the diagram reveals that the vertical height most intensely experienced by the pedestrian is the lower one to two floors of a building (or in this case the lowest 17'9" of the building).
- This lower portion of the building wall plane is most successful when it contains a sufficient level of detail and articulation, where it is more closely readable to the human eye, and renders the sidewalk experience interesting and engaging for the walker.

THE VERTICAL DIMENSION

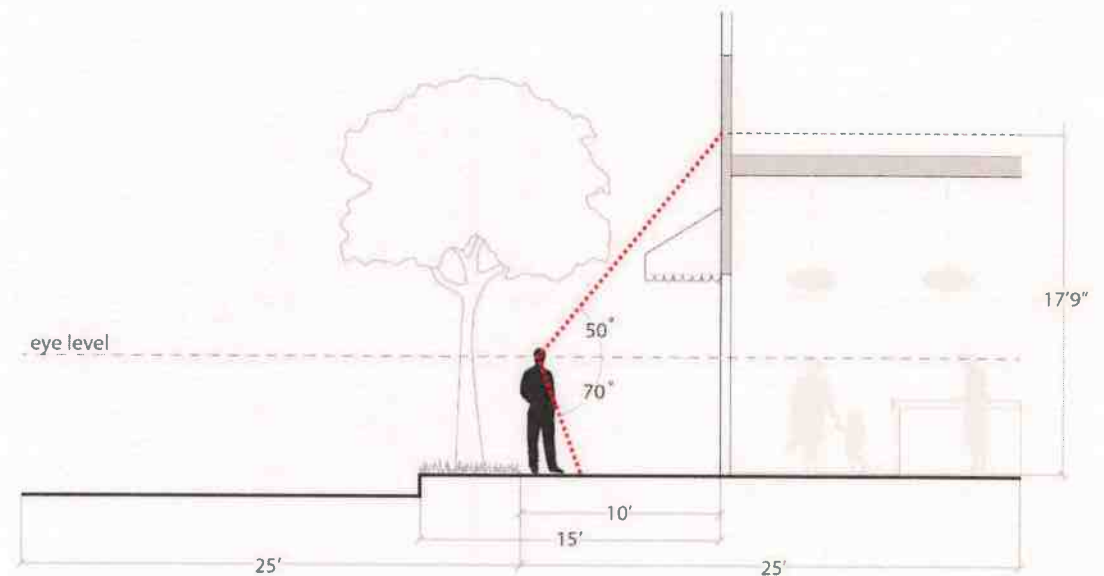


Figure 49

DESIGN ELEMENTS | FRONTAGE TYPE STANDARDS

GOALS:

- Building **facades** should appropriately **front the public realm**.
- **There are eight (8)** frontage types that **define how a building interacts** with the **public realm around it.** *(see the following page)*
- In general, building **facades** should **be welcoming and engage the** public realm with:
 - **clearly visible and highlighted entries,**
 - **an appropriate** proportion of **glazing and solid wall** based **on** the building's **use type, the frontage type, and the type of thoroughfare,**
 - **a clear definition between public and private spaces,**
 - **the inclusion of semi private spaces** connecting **the public and private realms such as** porches, **balconies, terraces, etc**

REQUIREMENTS:

- ❑ **Entries shall be** highlighted **as a focal point** of buildings.
- ❑ 8-foot-minimum **clear** depth for porches.
- ❑ 6-foot-minimum **clear** depth for stoops.
- ❑ **6-foot** minimum depth for **balconies.**
- ❑ Awning **encroachment** of **10 foot maximum** for buildings built **on the build-to line.** Awnings **are** encouraged but should not conflict **with street** trees, lighting **and the flow** of pedestrian traffic in the pedestrian through **zone.**
- ❑ A minimum of **40% glazing** required on commercial building frontages.
- ❑ Entry **doors** to **commercial uses** to be **set back a** minimum of **three feet** from **the** building facade to prevent interruption to the flow of pedestrian **traffic** when open.

DESIGN ELEMENTS

BUILDING FORM STANDARDS - THE EIGHT (8) FRONTAGE TYPES

1. **COMMON YARD:** a frontage wherein the facade is set back substantially from the frontage / build-to line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape.
2. **PORCH & FENCE:** a frontage wherein the facade is set back from the frontage / build-to line with an attached porch permitted to encroaching. A fence at the build-to line (optional) maintains the demarcation of the yard. The porches shall be no less than 8 feet deep.
3. **TERRACE OR LIGHT COURT:** a frontage wherein the facade is set back from the frontage / build-to line by an elevated terrace or a sunken light court. This type buffers residential use from sidewalks and removes the private yard from public encroachment. The terrace is suitable for conversion to outdoor cafes in commercial uses.
4. **FORECOURT:** a frontage wherein a portion of the facade is close to the frontage / build-to line and the central portion is set back. the forecourt created is suitable for vehicular drop-offs. This type should be allocated in conjunction with other frontage types. Large trees within the forecourts may overhang the sidewalks.¹

FRONTAGE TYPES

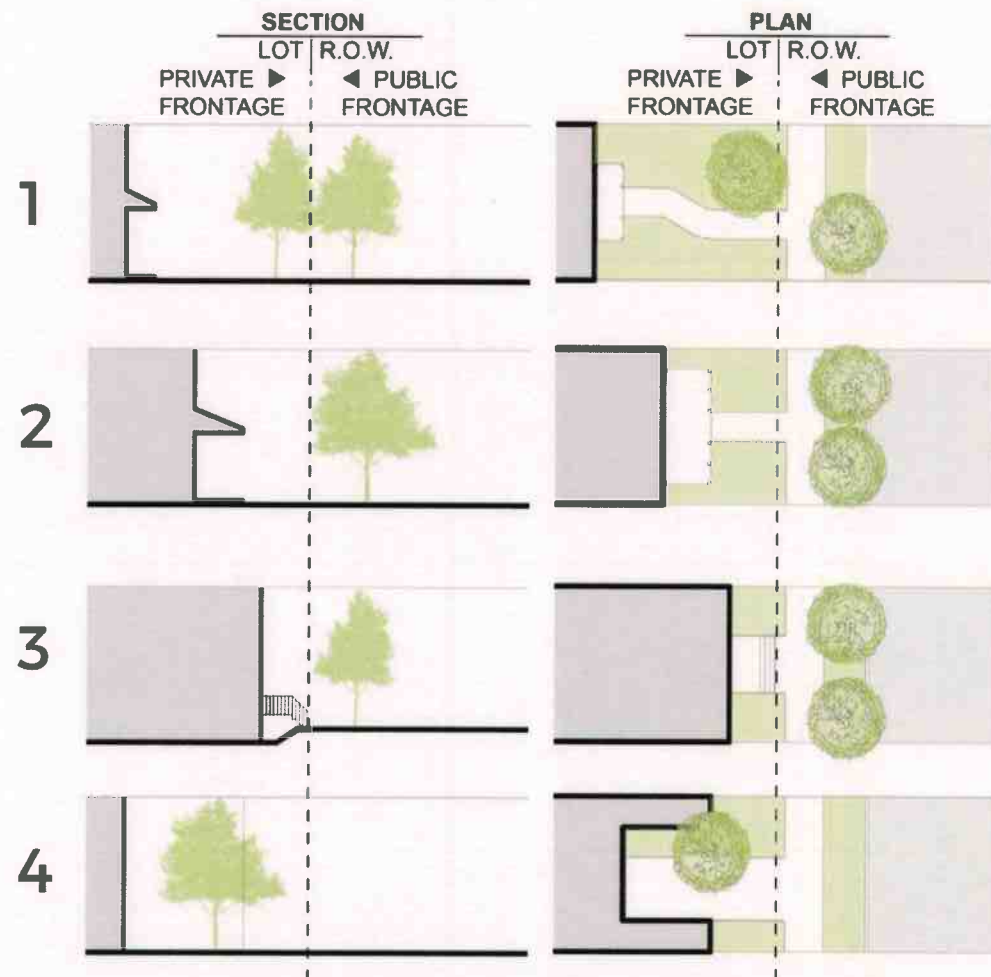


Figure 50

¹ Parolek, Daniel G., and Karen Parolek. Form-based Codes: A Guide for Planners, Urban Designers, Municipalities, and Developers. Hoboken, NJ: John Wiley & Sons, 2015. Print.

DESIGN ELEMENTS

BUILDING FORM STANDARDS - THE EIGHT (8) FRONTAGE TYPES

5. **STOOP:** a frontage wherein the facade is aligned close to the frontage / build-to line with the first story elevated from the sidewalk sufficiently to secure privacy for the windows. The entrance is usually an exterior stair and landing. This type is recommended for ground floor residential use.
6. **SHOPFRONT & AWNING:** a frontage wherein the facade is aligned close to the frontage / build-to line with the building entrance at sidewalk grade. This type is conventional for retail use. It has a substantial glazing on the sidewalk level and an awning that may overlap the sidewalk to the maximum extent possible.
7. **GALLERY:** a frontage wherein the facade is aligned close to the frontage line with an attached cantilevered shed or a lightweight colonnade overlapping the sidewalk. This type is conventional for retail use. The gallery shall be no less than ten (10) feet wide and may overlap the whole width of the sidewalk to within 2 feet of the curb.
8. **ARCADE:** a frontage wherein the facade is a colonnade that overlaps the sidewalk, while the facade at sidewalk level remains at the frontage / build-to line. This type is conventional for retail use. The arcade shall be no less than twelve (12) feet wide and may overlap the whole width of the sidewalk to within 2 feet of the curb.¹

FRONTAGE TYPES

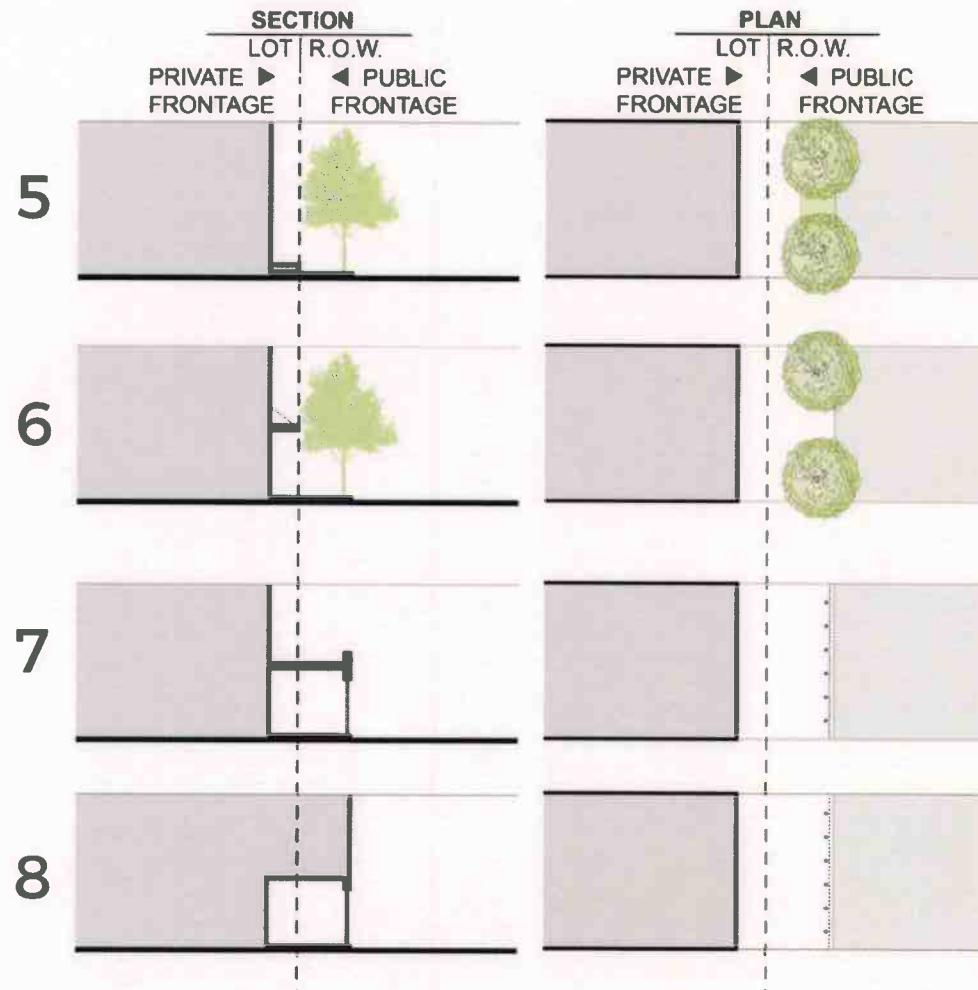


Figure 51

¹ Parolek, Daniel G., and Karen Parolek. Form-based Codes: A Guide for Planners, Urban Designers, Municipalities, and Developers. Hoboken, NJ: John Wiley & Sons, 2015. Print.

DESIGN ELEMENTS

BUILDING FORM STANDARDS - ORIENTATION OF WINDOWS AND DOORS

- All windows and doors, openings or frame fenestrations located within an opening shall be 'vertical' in orientation, meaning the primary frame character is more top to bottom, as with traditional storefronts and window proportions.
- Traditional window motifs and features including transoms, divided lights, and sidelights are encouraged, along with storefronts, doors and framing components, which follow vertical enhancing design elements.
- Sliding commercial-grade glass doors, folding glass windows and butt-jointed glazing may also be allowed, per the discretion of the Zoning Staff. Any sliding doors must pocket out of view, and all folding windows should not encroach into an exterior walk or public area beyond a tenant storefront closure line, unless that line is part of the tenant lease area, as in an exterior patio or display space.
- Uninterrupted linear strip windows or strip mall style store storefront is discouraged. Bay windows, setback windows, recessed or pocket entries to encourage variety and shadow-lines to buildings elevation are encouraged. The Staff/ARC may consider specific exceptions, primarily related to functional use, provided that the overall public facing building design is in keeping with the goals of the district.

BUILDING FORM EXAMPLE - MULTIFAMILY RESIDENTIAL



Figure 52

DESIGN ELEMENTS

BUILDING FORM STANDARDS - ROOFLINES

- Flat roofs are permitted; however, the overall massing and elevations should showcase a variety in height of parapets, or the underside of roof eaves should showcase some form of cornice or similar design element, masonry and/or brick trim and/or patterning, decorative blocks/brackets, moldings or some form of architectural emphasis along the roof line to 'tie' that element to the building massing below. Where an adjacent building's façade, which adjoins it, has a similar roofline height, a variation of the parapet or roofline is required.
- NOTE: All rooflines must be able to fully screen any and all HVAC/utility or functional apparatus from public view from a distance equivalent to the parallel height of that roofline as viewed downhill from any distance into the project. If that proves difficult, a subsequent parapet screen may be installed on roof to provide additional screening.

BUILDING FORM EXAMPLE - MULTIFAMILY RESIDENTIAL



Figure 53

DESIGN ELEMENTS | MATERIALITY

GOALS:

- Materials should be employed that enhance the experience of living working or playing at The Geauga Lake District by engaging and delighting the senses. Color, texture, and pattern shall be taken into consideration.

REQUIREMENTS:

- Material selections should fit within the overall Northeast Ohio small town aesthetic. They should be sympathetic to the historic built environment, be practical, and should reflect our local culture. Material selections should be guided and influenced by materials that were and are available locally.
- Materials should be used as part of an overall strategy to visually break down space to a human scale. For example, brick pavers or similar patterns in stamped concrete, help human beings understand the scale of a space. The scale of an expanse of concrete is more difficult to understand without additional context.

DESIGN ELEMENTS

BUILDING FORM STANDARDS - BUILDING MATERIALS

- Building materials shall be commercial grade, and applied in a variety of stylish, creative and clever applications across the expanse of all visible public-facing elevations.
- **Use of materials shall be true to their historic applications.**
- Acceptable materials include:
 - pre-cast masonry,
 - brick,
 - decorative block,
 - cementitious siding,
 - wood (both new and reclaimed in specific applications),
 - stone,
 - high quality vinyl siding,
 - exposed metal structure and/or architectural details and/ or surfaces where viable,
 - stucco,
 - EIFS
 - or materials of equal appearance consistent with the acceptable architectural character outlined in these Architectural Guidelines.
- Metal roofing is suggested at primary entry points, and other points of interest.
- Plywood, corrugated siding, and plastic panels are prohibited from use in publicly visible locations.

MATERIAL USE EXAMPLE



Figure 54

DESIGN ELEMENTS

BUILDING FORM STANDARDS - GLASS MATERIALS

- Clear or colored glass, translucent, sandblasted and/or decorative pattern glass that can emit light through is encouraged.
- Retail and or commercial storefronts should be predominantly clear glass at any street level opening. Where a clear window opening is desired, but for functional reasons is not viable, an internally backlit shallow display box-out is desired.
- Translucent, patterned or colored glass panel will be allowed in all other applications.
- Other options, including back painted, fritted, sandblasted, color or non-illuminated translucent glass may be acceptable where structural elements or back-of-house functions or unoccupied space would be visible behind.
- Black, opaque, spandrel and reflective glass materials are discouraged except in façade areas where its placement is a key part of a final design aesthetic.

MATERIAL USE EXAMPLE



Figure 55
Graphic by RDL

DESIGN ELEMENTS | UTILITIES AND EQUIPMENT

REQUIRED:

- ❑ All exposed structures requiring open-air locations, particularly rooftop mechanical/HVAC equipment, utility and/or other functional hardware, whether located atop, attached, or separated from the building it services, shall be adequately screened from public view.
- ❑ If atop a structure, these features shall be screened behind parapets, decorative roof elements, or screen enclosure walls for a distance of three hundred feet (300') beyond any one building elevation that can be viewed by the general public.
- ❑ Screen devices shall be fabricated to match or enhance the overall architectural massing, with materials and colors that complement the overall building(s) or block where applicable.

REQUIRED:

- ❑ All such devices are approved at the discretion of the Primary Developer and the Zoning Staff. Where possible, such elements as generators, electrical and telecommunication cabinets should be set into lower grade areas, or within the building walls either open air or within a separated utility room or service area. Such features shall also be adequately screened by either screen walls or dense landscaping if they are in open area settings.
- ❑ Satellite dishes shall not be permitted.

DESIGN ELEMENTS OVERVIEW

GOALS:

- Landscape designs at The Geauga Lake District shall nurture the built and natural environments and **serve** to improve human and environmental health.*
- Landscape designs shall be beautiful and shall engage and delight the senses. Color, texture, and pattern shall be taken into consideration.
- Landscape designs shall assist in the physical definition of space, and add to the character of each specific place in the District.

REQUIRED:

- ❑ Each applicant shall utilize a registered landscape architect who shall work with the Primary Developer on all landscape design, landscape plans and/or alterations.
- ❑ Plant materials shall be chosen which are indigenous, moderately fast growing and require low maintenance. Natural plant selections should be used to eliminate invasives and control their spread.
- ❑ All formal planted surfaces, whether in ground or in raised landscape beds shall be fully irrigated and maintained in good working order.
- ❑ The landscape design shall incorporate the total development site, be in context with adjacent users, and consist of a palette of plants with year-round appeal which might include various grasses, sedges, forbs, perennials, shrubs and trees.

DESCRIPTIONS:

- Landscape design at The Geauga Lake District shall be clearly used in two (2) ways depending on the context.
 1. In **naturalized settings** where landscape design is used to mimic nature such **as** park like settings, the Lakefront Zone, and in greens.
 2. In **urbanized settings** such as thoroughfares, squares, plazas, and greens. In urbanized settings the following should be taken into consideration:
 - **Types of plants** -street trees, shrubs and perennials that can handle high traffic and closer proximity to human use.
 - **Maintained** in a clean formal manner so that plants do not interrupt space intended for other human uses, do not collect trash, etc..

DESIGN ELEMENTS | STORMWATER MANAGEMENT TECHNIQUES (SMT)

GOAL:

- **Stormwater** Management Techniques (SMT) also known as Low Impact Development (LID) shall mimic the natural environment and be seamlessly integrated into the overall landscape design so as to reduce dependence upon infiltration ponds.
- The landscape vision of the designer should acknowledge that plant material is installed for the long term yet must invoke instant appeal. Negative perceptions of sustainable or naturalized landscapes, such as being uninteresting and weedy, can be quickly overcome with attractive visual images. Instead of advocating for individual stormwater management practices, the focus should be on a complete landscape aesthetic. The final result shall be well designed, colorful, beautiful, lush, visually pleasing and functional.

REQUIREMENTS:

- SMT shall be included in both naturalized and urban settings, but shall be aesthetically executed in ways appropriate to each. (see the following requirement as an example)
- Bioswales or tree pits used in the overall design of a thoroughfare shall not reduce the required sidewalk width.

DESCRIPTIONS:

- **Recommended** SMT/LID shall be defined as, but are not limited to, any of the following:

BEST FOR URBANIZED SETTINGS

- **Green Roofs** - are covered with vegetation to enable rainfall infiltration and evapotranspiration of stored water.
- **Rain Barrels and Cisterns** - harvest rainwater primarily from rooftops for reuse.
- **Permeable Pavements** - allow stormwater to infiltrate through porous surfaces into the soil and groundwater. Pervious concrete, porous asphalt, pervious interlocking concrete pavers or grid pavers may be used.
- **Curb Cuts** - Curbs and gutters collect and transport runoff quickly to a stormwater drain, without allowing for infiltration or pollutant removal. Adding curb cuts allows runoff to be directed into pervious areas and filtered through LID features.

DESIGN ELEMENTS | STORMWATER MANAGEMENT TECHNIQUES (SMT)

DESCRIPTIONS:

- **Recommended SMT/LID** shall be defined as any of the following:

BEST FOR NATURALIZED SETTINGS

- **Vegetated Swales/Dry Swales** - drainage paths **or** vegetated channels used to transport **water**. They **can** be used in **small drainage areas** with low runoff instead of underground **storm sewers** or concrete open channels. **Swales** help slow runoff, **facilitate** infiltration and filter pollutants **as** runoff flows through **the** system.
- **Bioretention Areas** - Bioretention **areas are** shallow, landscaped depressions that allow runoff to pond in a designated area, then filter through soil **and** vegetation. Small **scale** bioretention areas **are** also known **as** rain gardens.

DESCRIPTIONS:

- **Vegetated Filter Strips** - Vegetated filter strips **are** bands of dense **vegetation through** which runoff **is directed**. They **are** best for gently sloping areas, where **channelized** flow **is** not likely. Filter strips may treat runoff from roads and highways, roof downspouts, very small parking lots **and** impervious surfaces.
- **Sand and Organic Filters** - Runoff directed to these filters infiltrates through **a** sand bed to **remove** floatables, particulate metals **and** pollutants. They **are** typically used **as a** component of **a** treatment train to **remove** pollution from stormwater before discharge to receiving **waters, to groundwater or for reuse, Constructed Wetlands**.
- **Constructed Wetlands** - Constructed wetlands mimic natural wetlands. They capture and filter stormwater and create diverse wildlife habitat. They **are** designed to contain standing water on the surface or water saturated just below the soil surface.

DESCRIPTIONS:

BEST FOR NATURALIZED SETTINGS THE LAKE FRONT ZONE

- **Riparian Buffers** - A riparian buffer **is an area** along a shoreline, wetland or stream where development **is** restricted **or** prohibited. The primary function **is** to physically separate **and** protect the aquatic area from future disturbance **or** encroachment. A properly designed buffer **can** act **as a** right-of-way during floods, sustaining the integrity of aquatic ecosystems **and** habitats.
- The Lake Front Zone should **be** thought of **as** one continuous riparian buffer to Geauga Lake.

DESIGN ELEMENTS | PLANT MATERIALS

GOALS:

- Street trees **are** the most important element on the sidewalk and shall be selected and employed to serve people first.
- Street trees shall be planted in **a** way that creates elegant streetscapes. Shape, color, spring blossoming, autumn **color**, and other physical characteristics shall be taken into consideration.
- Place trees close enough together to create **a** strong tree canopy along all pedestrian sidewalks and passages when considering the tree species characteristics.
- Street trees' use should be employed for the benefit of human users of the sidewalk to provide, beauty, shade, and to assist in creating **a** sense of enclosure.

REQUIRED:

- ▣ All streets shall be planted with regularly spaced deciduous shade trees, with a minimum 3" caliper.
- ▣ Street trees shall be a mixture of species in order to protect against diseases and invasive species events.
- ▣ Sight Distance Triangles. Street trees shall not be installed in locations where there is a substantial likelihood that the mature form of the tree would have to be materially compromised in order to maintain sight distance triangles. Speed reduction techniques such as the use of curb extensions, on street parallel parking, textured paving at crosswalks, and narrow lanes should be used to minimize the need for large sight distance triangles. In general **a** triangular area at the corner, twenty (20) to twenty-five (25) feet on each side, shall be included in the right-of-way.
- ▣ Street trees shall be planted no further than forty-five (45) feet from each other.

DESCRIPTIONS:

- The following guidelines are intended to provide direction but **are** not exhaustive. Plant materials not listed here may be used as long **as** they meet the other criteria in the guidelines and are native species.
- In general, plant species that are normally found to grow in Plant Hardiness Zone 6a as defined by the United States Department of Agriculture (USDA) should be used.
- Additionally, plants may be used in ways that are atypical of use descriptions that follow. Their **use** should however, be explained **as** part of the overall design aesthetic. An example would be for a tree that is typically used to define three-dimensional space, but is being used in a more strictly sculptural and decorative way.

DESIGN ELEMENTS

DESIGN - STREET TREE PLANTING TABLE

- There are two ways to provide adequate soil volume for tree roots in urban conditions. Structural supports such as silva cell (as shown in this example) or equivalent products or structural soils (bear in mind that stone used in structural soil will effect soil PH and should be taken into account when selecting trees/stone type).

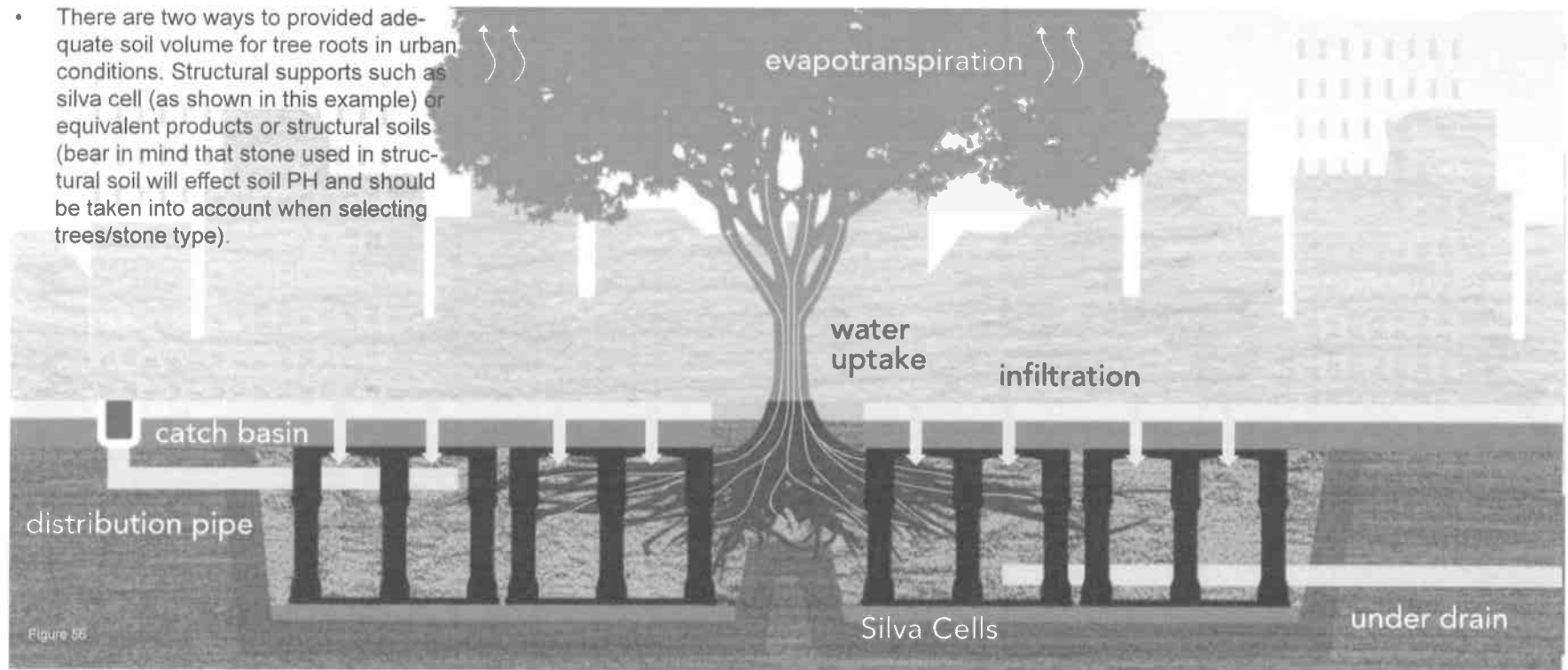


Figure 56

STREET TREE PLANTING TABLE

STREET TREE SIZE	TREES IN TREE LAWNS		TREES IN AMENITY STRIP				
	SPACING	DISTANCE FROM CURB/WALK MINIMUM	SPACING	TREE PIT OPENING MINIMUM	PERVIOUS PAVEMENT PERCENTAGE OVER SOIL VOLUME MINIMUM	SOIL VOLUME PER TREE, INDIVIDUALLY MINIMUM (MAX DEPTH 43")	SOIL VOLUME PER TREE, WHEN VOLUMES ARE LINKED MINIMUM (MAX DEPTH 43")
LARGE (45'+)	40'-50'	42"	40'-50'	72 S.F.	50%	2000 C.F.	1500 C.F.
MEDIUM (30'-45')	30'-40'	30"	30'-40'	50 S.F.	40%	1000 C.F.	700 C.F.
SMALL (15'-30')	20'-30'	26"	20'-30'	40 S.F.	30%	800 C.F.	550 C.F.

DESIGN ELEMENTS

DESIGN - THE USE OF TREES (TREE SHAPES & FLOWERING TREES)

- General note: All trees are to be used to add softness, color, texture and beauty to space. Spatially trees shall be used to create repetition and/or rhythm along thoroughfares and to define space, and create focal points in public spaces.

TREE SHAPES

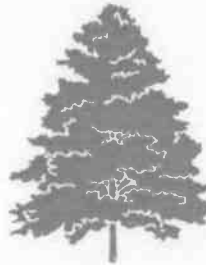
- Tree shapes shall be thought of as in three broad categories for use:
 1. More geometrically shaped wide trees that are used to fill space and create shade for people.
 2. More geometrically shaped narrow trees that are used to help define three-dimensional space.
 3. More organically shaped sculptural trees which are used for more specific decorative uses, (although they may fulfill functional uses as well).

ORNAMENTAL & FLOWERING TREES

- Ornamental trees may be considered so for a number of reasons including:
 - outstanding flowers and fragrance
 - an interesting shape,
 - colorful or unusual bark,
 - excellent fall color,
 - or a combination of these and other features.

TREE SHAPE EXAMPLES

GEOMETRICALLY SHAPED WIDE TREES



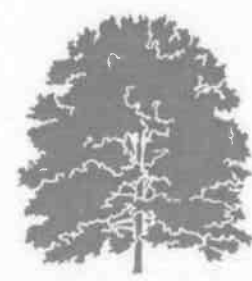
Broad Triangle

For larger open spaces to create shade. These trees can be limbed up for use on thoroughfares for greater visibility of buildings and signage while still creating shade on sidewalks.



Round

For larger open spaces they spread out and create shade sidewalks.



Mound

For larger open spaces to create shade. These trees can be limbed up for use on thoroughfares for greater visibility of buildings and signage while still creating shade on sidewalks.

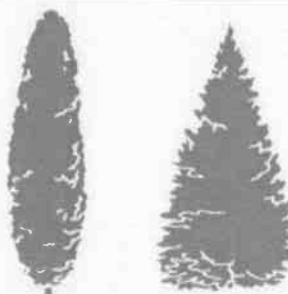
ORGANICALLY SHAPED SCULPTURAL TREES



Ornamental/Picturesque

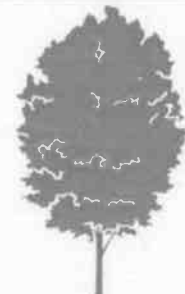
Weeping shaped trees (as is shown above) are for use when highlighting the naturalization of space and near water bodies.

GEOMETRICALLY SHAPED NARROW TREES



Columnar / Narrow Upright & Narrow Triangle

For use in defining three-dimensional space and in places where it is important to not obstruct views of buildings and/or signage. Narrow triangles may be used on narrow thoroughfares.



Upright Oval

For use on narrow thoroughfares and sidewalk conditions and when it is important not to obstruct views of buildings and signage.

Figure 57

DESIGN ELEMENTS

PLANT MATERIALS - STREET TREES FOR TREE LAWNS

- Street trees for tree lawns are useful on lower traffic secondary thoroughfares with primarily residential uses.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Large (45'+ tall)

Common Name

Scientific Name

● Armstrong Maple	Acer x freemanii 'Armstrong'
● Autumn Blaze Maple	Acer x freemanii 'Autumn Blaze'
● Autumn Fantasy Maple	Acer x freemanii 'Autumn Fantasy'
● Celebration Maple	Acer x freemanii 'Celebration'
● Sugar Maple	Acer saccharum
● Green Mountain Sugar Maple	Acer saccharum 'Green Mountain'
★ ● Horsechestnut	Aesculus hippocastanum
● Turkish Filbert	Corylus colurna
● Ginkgo (males only)	Ginkgo biloba
● Honeylocust (thornless)	Gleditsia triacanthos var. inermis
● Cucumber Magnolia	Magnolia acuminata
● Dawn Redwood	Metasequoia glyptostroboides
● London Planetree	Platanus x acerifolia
● White Oak	Quercus alba
● Swamp White Oak	Quercus bicolor
● Shingle Oak	Quercus imbricaria
● Bur Oak	Quercus macrocarpa
● Chinkapin Oak	Quercus muehlenbergii
● Pin Oak	Quercus palustris
● Chestnut Oak	Quercus prinus
● English Oak	Quercus robur
● Red Oak	Quercus rubra
● Shumard Oak	Quercus shumardii
● Black Oak	Quercus velutina
● Baldcypress	Taxodium distichum
● American Linden	Tilia americana
● Littleleaf Linden	Tilia cordata
● Canadian Linden	Tilia x euchlora
● Silver Linden	Tilia tomentosa
● Jefferson American Elm	Ulmus americana 'Jefferson'
● New Harmony American Elm	Ulmus americana 'New Harmony'
● Princeton American Elm	Ulmus americana 'Princeton'
● Valley Forge American Elm	Ulmus americana 'Valley Forge'

DESIGN ELEMENTS

PLANT MATERIALS - STREET TREES FOR TREE LAWNS

- Street trees for tree lawns are useful on lower traffic secondary thoroughfares with primarily residential uses.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Medium (30' - 45' tall)

Common Name

Scientific Name

Hedge Maple	Acer campestre
Miyabe Maple	Acer miyabei
Sycamore Maple	Acer pseudoplatanus
Red Maple	Acer rubrum
Bowhall Red Maple	Acer rubrum 'Bowhall'
Brandywine Red Maple	Acer rubrum 'Brandywine'
New World Red Maple	Acer rubrum 'New World'
Redpointe Maple	Acer rubrum 'Redpointe'
Red Horsechestnut	Aesculus x carnea
River Birch	Betula nigra
Dura Heat River Birch	Betula nigra 'Dura Heat'
Heritage River Birch	Betula nigra 'Heritage'
European Hornbeam	Carpinus betulua
American Yellowwood	Cladrastis kentukea
Hardy Rubber Tree	Eucommia ulmoides
Goldenraintree	Koelreuteria paniculata
Black Gum	Nyssa sylvatica
Wildfire Black Gum	Nyssa sylvatica 'Wildfire'
American Hophornbeam	Ostrya virginiana
Frontier Elm	Ulmus x 'Frontier'

Small (15' - 30' tall)

Common Name

Scientific Name

Kousa Dogwood	Cornus kousa
Redbud	Cercis canadensis
Autumn Brilliance Serviceberry (Tree Form)	Amelanchier x grandiflora 'Autumn Brilliance'
Flowering Cherry Varieties	Prunus Ssp.

DESIGN ELEMENTS

PLANT MATERIALS - STREET TREES FOR AMENITY STRIPS

- Street trees for amenity strips are useful on higher traffic primary thoroughfares and areas with primarily commercial uses. They may be used with permeable pavers or with tree grates. Priority should be given to the use of the sidewalk by people.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Large (45'+ tall)

Common Name

Scientific Name

● Armstrong Maple	Acer x freemanii 'Armstrong'
● Autumn Blaze Maple	Acer x freemanii 'Autumn Blaze'
● Autumn Fantasy Maple	Acer x freemanii 'Autumn Fantasy'
● Celebration Maple	Acer x freemanii 'Celebration'
● Ginkgo (males only)	Ginkgo biloba
● Honeylocust (thornless)	Gleditsia triacanthos var. inermis
● Dawn Redwood	Metasequoia glyptostroboides
● London Planetree	Platanus x acerifolia
● Swamp White Oak	Quercus bicolor
● Red Oak	Quercus rubra
● Shumard Oak	Quercus shumardii
● Baldcypress	Taxodium distichum
● American Linden	Tilia americana
● Littleleaf Linden	Tilia cordata
● Crimean Linden	Tilia x euchlora
● Silver Linden	Tilia tomentosa
● Jefferson American Elm	Ulmus americana 'Jefferson'
● New Harmony American Elm	Ulmus americana 'New Harmony'
● Princeton American Elm	Ulmus americana 'Princeton'
● Valley Forge American Elm	Ulmus americana 'Valley Forge'

DESIGN ELEMENTS

PLANT MATERIALS - STREET TREES FOR AMENITY STRIPS

- Street trees for amenity strips are useful on higher traffic primary thoroughfares and areas with primarily commercial uses. They may be used with permeable pavers or with tree grates. Priority should be given to the use of the sidewalk by people.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Medium (30' - 45' tall)

Common Name

Scientific Name

Hedge Maple	<i>Acer campestre</i>
~~Miyabe Maple~~	<i>Acer miyabei</i>
Sycamore Maple	<i>Acer pseudoplatanus</i>
Red horsechestnut	<i>Aesculus x carnea</i>
River Birch	<i>Betula nigra</i>
Dura Heat River Birch	<i>Betula nigra 'Dura Heat'</i>
Heritage River Birch	<i>Betula nigra 'Heritage'</i>
European Hornbeam	<i>Carpinus betulua</i>
American Yellowwood	<i>Cladrastis kentukea</i>
Hardy Rubber Tree	<i>Eucommia ulmoides</i>
Black Gum	<i>Nyssa sylvatica</i>
Wildfire Black Gum	<i>Nyssa sylvatica 'Wildfire'</i>
Frontier Elm	<i>Ulmus x 'Frontier'</i>

Small (15' - 30' tall)

Common Name

Scientific Name

Kousa Dogwood	<i>Cornus kousa</i>
Redbud	<i>Cercis canadensis</i>
Autumn Brilliance Serviceberry (Tree Form)	<i>Amelanchier x grandiflora 'Autumn Brilliance'</i>
Flowering Cherry Varieties	<i>Prunus Ssp.</i>

DESIGN ELEMENTS

PLANT MATERIALS - PARK & YARD TREES

- Park & yard trees are meant for use in more naturalistic settings such as back yards, in less highly organized greens and in more natural park settings.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Large (45' + tall)

Common Name

Scientific Name

● Armstrong Maple	Acer x freemanii 'Armstrong'
● Autumn Blaze Maple	Acer x freemanii 'Autumn Blaze'
● Autumn Fantasy Maple	Acer x freemanii 'Autumn Fantasy'
● Celebration Maple	Acer x freemanii 'Celebration'
● Sugar Maple	Acer saccharum
● Green Mountain Sugar Maple	Acer saccharum 'Green Mountain'
● Yellow Buckeye	Aesculus octandra
● Black Alder	Alnus glutinosa
● Bitternut Hickory	Carya cordiformis
● Pignut Hickory	Carya glabra
● Hardy Pecan	Carya illinoensis
● Shagbark Hickory	Carya laciniata
● Shagbark Hickory	Carya ovata
● Mockernut Hickory	Carya tomentosa
● Hackberry	Celtis occidentalis
● Tuckermast	Corylus cornuta
● Ginkgo (males only)	Ginkgo biloba
● Honeylocust (thornless)	Gleditsia triacanthos var. inermis
● Kentucky Coffeetree	Gymnocladus dioica
● Black Walnut	Juglans nigra
● Sweet Gum	Liquidambar styraciflua
● Tulip Tree	Liriodendron tulipifera
● Cucumber Magnolia	Magnolia acuminata
● Dawn Redwood	Metasequoia glyptostroboides
● London Planetree	Platanus x acerifolia
● Sycamore	Platanus occidentalis
● White Oak	Quercus alba
● Swamp White Oak	Quercus bicolor
● Shingle Oak	Quercus imbricaria
● Bur Oak	Quercus macrocarpa
● Chinkapin Oak	Quercus muehlenbergii
● Pin Oak	Quercus palustris
● Chestnut Oak	Quercus prinus
● English Oak	Quercus robur
● Red Oak	Quercus rubra
● Shumard Oak	Quercus shumardii
● Black Oak	Quercus velutina
● Baldcypress	Taxodium distichum

DESIGN ELEMENTS

PLANT MATERIALS - PARK & YARD TREES

- Park & yard trees are meant for use in more naturalistic settings such as back yards, in less highly organized greens and in more natural park settings.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Large (45'+ tall)

Common Name

Scientific Name

American Linden	Tilia americana
Littleleaf Linden	Tilia cordata
Crimean Linden	Tilia x euchlora
Silver Linden	Tilia tomentosa
Jefferson American Elm	Ulmus americana 'Jefferson'
New Harmony American Elm	Ulmus americana 'New Harmony'
Princeton American Elm	Ulmus americana 'Princeton'
Valley Forge American Elm	Ulmus americana 'Valley Forge'

Large Evergreens

Common Name

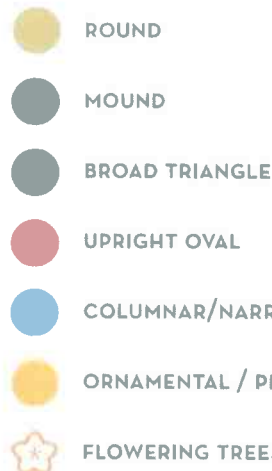
Scientific Name

Norway Spruce	Picea abies
White Spruce	Picea glauca
Colorado Spruce	Picea pungens
Colorado Blue Spruce	Picea pungens 'Glaucia'
Eastern White Pine	Pinus strobus
Scotch Pine	Pinus sylvestris
Douglas Fir	Pseudotsuga menziesii
Canadian Hemlock	Tsuga canadensis

DESIGN ELEMENTS

PLANT MATERIALS - PARK & YARD TREES

- Park & yard trees are meant for use in more naturalistic settings such as back yards, in less highly organized greens and in more natural park settings.



Medium (30' - 45' tall)

Common Name	Scientific Name
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Hedge Maple	Acer campestre
Miyabe Maple	Acer miyabei
Sycamore Maple	Acer pseudoplatanus
Red Maple	Acer rubrum
Bowhall Red Maple	Acer rubrum 'Bowhall'
Brandywine Red Maple	Acer rubrum 'Brandywine'
New World Red Maple	Acer rubrum 'New World'
Redpointe Maple	Acer rubrum 'Redpointe'
Red Horsechestnut	Aesculus x carnea
River Birch	Betula nigra
Dura Heat River Birch	Betula nigra 'Dura Heat'
Heritage River Birch	Betula nigra 'Heritage'
European Hornbeam	Carpinus betulua
American Yellowwood	Cladrastis kentukea
Hardy Rubber Tree	Eucommia ulmoides
Goldenrain Tree	Koelreuteria paniculata
Black Gum	Nyssa sylvatica
Wildfire Black Gum	Nyssa sylvatica 'Wildfire'
American Hophornbeam	Ostrya virginiana
Frontier Elm	Ulmus x 'Frontier'

Medium Evergreens

Common Name	Scientific Name
-------------	-----------------

White Fir	Abies concolor
Eastern Red Cedar	Juniperus virginiana
Fat Albert Blue Spruce	Picea pungens 'Fat Albert'
Hoops Blue Spruce	Picea pungens 'Hoopsii'
Austrian Pine	Pinus nigra
Border Pine	Pinus strobiformis

DESIGN ELEMENTS

PLANT MATERIALS - PARK & YARD TREES

- Park & yard trees are meant for use in more naturalistic settings such as back yards, in less highly organized greens and in more natural park settings.



ROUND



MOUND



BROAD TRIANGLE



UPRIGHT OVAL



COLUMNAR/NARROW UPRIGHT



ORNAMENTAL / PICTURESQUE



FLOWERING TREES

Small (15' - 30' tall)

Common Name	Scientific Name
Trident Maple	Acer buergerianum
Red Buckeye	Aesculus pavia
Autumn Brilliance Serviceberry (Tree Form)	Amelanchier x grandiflora 'Autumn Brilliance'
Ballerina Serviceberry (Tree Form)	Amelanchier x grandiflora 'Ballerina'
Redbud	Cercis canadensis
American Hornbeam	Carpinus caroliniana
Flowering Dogwood	Cornus florida
Cherokee Brave Dogwood	Cornus florida 'Cherokee Brave'
Cherokee Princess Dogwood	Cornus florida 'Cherokee Princess'
Kousa Dogwood	Cornus Kousa
Cornelian Dogwood	Cornus mas
Thornless Cockspur Hawthorn	Crataegus crus-galli var. inermis
Sweetbay Magnolia (Tree Form)	Magnolia virginiana
Royal Star Magnolia	Magnolia stellata 'Royal Star'

Small Evergreens

Common Name	Scientific Name
Golden Variegated Nootka False Cypress	Chamaecyparis nootkatensis 'Aurea Variegata'
Blue Nootka False Cypress	Chamaecyparis nootkatensis 'Glaucia'
Weeping Nootka False Cypress	Chamaecyparis nootkatensis 'Pendula'
Weeping Nootka False Cypress	Chamaecyparis nootkatensis 'Pendula Dense'
Blue Weeping Nootka False Cypress	Chamaecyparis nootkatensis 'Pendula Glaucia'
Dwarf Alberta Spruce	Picea glauca 'Conica'
Baby Blue Eyes Blue Spruce	Picea pungens 'Baby Blue Eyes'
Swiss Stone Pine	Pinus cembra

DESIGN ELEMENTS

PLANT MATERIALS - SHRUBS

Large (12' - 20' tall)

Common Name	Scientific Name
Serviceberry	Amelanchier arborea
Serviceberry	Amelanchier laevis
Paw-paw	Asimina triloba
Alternate-leaf dogwood	Cornus alternifolia
Giant Gray Dogwood	Cornus drummondii
Grey dogwood	Cornus racemosa
American hazelnut	Corylus americana
Eastern Wahoo	Euonymus atropurpureus
Witch-Hazel	Hamamelis virginiana
American plum	Prunus americana
Chokeberry	prunus virginiana
Nannyberry	Viburnum lentago
Blackhaw	Viburnum prunifolium

Medium (5' - 12' tall)

Common Name	Scientific Name
False indigo	Amorpha fruticosa
Carolina allspice	Calycanthus floridus
Buttonbush	Cephalanthus occidentalis
Buttonbush	Clethra alnifolia
Silky dogwood	Cornus amomum
Red osier dogwood	Cornus sericea
Inkberry	Ilex glabra
Winterberry	Ilex verticillata
Spicebush	Lindera benzoin
Ninebark	Physocarpus opulifolius
Carolina buckthorn	Rhamnus caroliniana
Winged sumac	Rhus copallina
Prairie Rose	Rosa setigera
Common Elderberry	Sambucus canadensis
Bladder Nut	Staphylea trifolia
Highbush Blueberry	Vaccinium corymbosum
Deerberry	Vaccinium stamineum
Arrowwood Viburnum	Viburnum dentatum
Withe-rod	Viburnum nudum var. cassinoides

DESIGN ELEMENTS

PLANT MATERIALS - SHRUBS

Small (2' - 5' tall)

Common Name	Scientific Name
Chokeberry	<i>Aronia melanocarpa</i>
Running Strawberry Bush	<i>Euonymus obovatus</i>
Strawberry Bush	<i>Euonymus americanus</i>
Wild Hydrangea	<i>Hydrangea arborescens</i>
Shrubby Cinquefoil	<i>Potentilla fruticosa</i>
fragrant sumac	<i>Rhus aromatica</i>
Pasture Rose	<i>Rosa carolina</i>
Steeple-bush	<i>Spiraea tomentosa</i>
Meadowsweet	<i>Spiraea alba</i>
Maple-leaf Viburnum	<i>Viburnum acerifolium</i>

DESIGN ELEMENTS

PLANT MATERIALS - VINES & GROUNDCOVER

Vines

Common Name	Scientific Name
Heartleaf ampelopsis	Ampelopsis cordata
Virgin's bower	Clematis virginiana
Trumpet honeysuckle	Lonicera sempervirens
Virginia creeper	Parthenocissus quinquefolia

Groundcover

Common Name	Scientific Name
Wild Ginger	Asarum canadensis
~~Muskingum Sedge~~	~~Carex musking~~
Pennsylvania Sedge	Carex pensylvanica
~~Strawberry Bush~~	~~Euonymus obovatus~~
St. Andrew's Cross	Hypericum hypericoides
Great St. John's Wort	Hypericum pyramidatum
Partridgeberry	Mitchella repens
Missouri primrose	Oenothera missouriensis
Creeping Phlox	Phlox stolonifera
Moss-Pink	~~Phlox~~ subulata
Fragrant Sumac	Rhus aromatica
Wild Stonecrop	Sedum ternatum
Golden Fleece	Solidago sphacelata
Common Wa	Viola sororia
Creamy Violet	Viola striata

DESIGN ELEMENTS

PLANT MATERIALS - GRASSES / SEDGES & FERNS

Grasses / Sedges

Common Name	Scientific Name
June Grass	Koeleria pyramidata
Bluejoint Grass	Calamagrostis canadensis
Sand Dropseed	Sporobolus cryptandrus
~~Panicum capillare~~	Ergrostis spectabilis
Sideoats Grama Grass	Boutelousa curtipendula
~~Virginia Wild-Rye~~	Elymus virginicus
Little Blue Stem	Schizachyrium scoparium
Bottlebrush Grass	Elymus hystrix
American Beak Grass	Diarrhena americana
Switch Grass	Panicum virgatum
Wool-Grass	Scirpus cyperinus
Indian Grass	~~Sorghastrum~~ nutans
Canada Wild-Rye	Elymus canadensis
Wild River Oats	Casmanthium latifolium
Big Bluestem	Andropogon gerardii
Blue Wood Sedge	Carex galucodea
Broad-Leaved Wood Sedge	Carex platphylla
Truted-Fescue Sedge	Carex brevior
Pennsylvania Sedge	Carex pensylvanica
~~Fox Sedge~~	Carex vulpinoidea
Gray's Sedge	Carex grayi
~~Plantain Sedge~~	Carex plantaginea
Radiate Sedge	Carex radiata
Large Straw Sedge	Carex ~~rostrata~~
Common Three-square	Schoenoplectus pungens

Ferns

Common Name
Thelypteris palustris
Onoclea sensibilis
Pteridium aquilinum
Athyrium filix-femina
Adiantum pedatum
Dryopteris marginalis
Polystichum acrostichoides
Matteuccia struthiopteris
Dennstaedtia punctilobula
~~Osmunda~~ cinnamomea

DESIGN ELEMENTS

PLANT MATERIALS - PERENNIALS

Perennials

Common Name	Scientific Name
Pale Blue-Eyed Grass	Sisyrinchium albidum
Downy Phlox	Phlox pilosa
Wild Strawberry	Fragaria virginiana
Stout Blue-Eyed Grass	Sisyrinchium angustifolium
Partridge-Berry	Mitchella repens
Golden Kriess	Chrysogonum virginianum
Wild Ginger	Asarum canadense
Canada Anemone	Anemone canadensis
Wild Ginger	Geranium maculatum
Spring Beauty	Calytonia virginica
Virginia Waterleaf	Hydrophyllum virginianum
Dutchman's Breeches	Dicentra cucullaria
Hoary Vervain	Verbena stricta
Orange Spiderwort	Tradescantia ohiensis
Butterfly weed	Asclepias tuberosa
Purple Coneflower	Echinacea purpurea
Black-Eyed Susan	Rudbeckia hirta
Wild Lupine	Lupinus rennis
Great Blue Lobelia	Lobelia siphilitica
Flat-Topped Goldenrod	Euthamia graminifolia
Virginia Mountain Mint	Pycnanthemum virginianum
Sullivant's Milkweed	Asclepias sullivantii
Western Sunflower	Helianthus occidentalis
Shaw's Goldenrod	Solidago speciosa
Hairy Bush-Clover	Lespedeza hirta
Golden Monarda	Monarda
Bee Balm	Monarda didyma
Wild Bergamont	Monarda fistulosa
Wild Columbine	Aquilegia canadensis
Goat's Rue	Tephrosia virginiana
Cardinal Flower	Lobelia cardinalis
Elm-Leaved Goldenrod	Solidago ulmifolia
Spotted Joe-Pye Weed	Eupatorium maculatum
New England Aster	Aster novae-angliae
Canada Tick-Trefoil	Desmodium canadense
Sun Goldenrod	Solidago rigida
New York Ironweed	Vernonia noveboracensis
Gray-Headed Coneflower	Ratibida pinnata

DESIGN ELEMENTS

PLANT MATERIALS - PERENNIALS

Perennials (cont.)

Common Name	Scientific Name
Smooth Oxeye	Heliopsis helianthoides
Blue Vervain	Veronica hastata
Spiked Blazing Star	Liatris spicata
Northern Wild Senna	Senna hebecarpa
White False Indigo	Baptisia lactea
False Aster	Boltonia asteroides
Culver's Root	Veronicastrum virginicum
Tall Meadow-Rue	Thalictrum pubescens
Queen of the Prairie	Filipendula rubra
Goat's beard	Aruncus dioicus
Three-lobed Coneflower	Rudbeckia triloba
Great-Headed Coneflower	Rudbeckia laciniata
Obedient Plant	Physostegia virginiana
Tall Bellflower	Campanula americana

DESIGN ELEMENTS

PLANT MATERIALS - STORM WATER BASIN PLANTS

Grasses / Sedges

Common Name	Scientific Name
River Bulrush	<i>Bolboschoenus fluviatilis</i>
~~Crested Oval Sedge~~	<i>Carex cristatella</i>
Bottlebrush Sedge	<i>Carex lurida</i>
Brown Fox Sedge	<i>Carex vulpinoidea</i>
Virginia Wild Grass	<i>Elymus virginicus</i>
Fowl Manna Grass	<i>Glyceria striata</i>
Common Rush	<i>Juncus effusus</i>
Rice Cut Grass	<i>Leersia oryzoides</i>
Switch Grass	<i>Panicum virgatum</i>
Softstem Bulrush	<i>Schoenoplectus tabernaemontani</i>
Dark Green Rush	<i>Scirpus atrovirens</i>
Wool Grass	<i>Scirpus cyperinu</i>

Forbes

Common Name	Scientific Name
Water Plantain	<i>Alisma</i> spp.
Swamp Milkweed	<i>Asclepias incarnata</i>
Bidens	<i>Bidens</i> spp.
Sneezeweed	<i>Helenium autumnale</i>
Blue Flag Iris	<i>Iris virginica</i>
Common Water Horehound	<i>Lycopus americanus</i>
Monkey Flower	<i>Mimulus ringens</i>
Riddell's Goldenrod	<i>Oligoneuron riddellii</i>
Dutch Stonecrop	<i>Pentstemon sedoides</i>
~~Pinkweed~~	<i>Polygonum</i> spp.
Sweet Black-Eyed Susan	<i>Rudbeckia subtomentosa</i>
~~Brown-Eyed Susan~~	<i>Rudbeckia triloba</i>
Common Arrowhead	<i>Sagittaria latifolia</i>
Wild Senna	<i>Senna ~~habeocarpa~~</i>
New England Aster	<i>Symphyotrichum novae-angliae</i>
Purple Meadow Rue	<i>Thalictrum dasycarpum</i>

DESIGN ELEMENTS | UTILITIES AND EQUIPMENT

GOALS:

- Landscape shall not interfere with utility infrastructure, and should be used to hide said infrastructure when it cannot be buried underground.

REQUIRED:

- No trees, except tree species that are approved by the Township, shall be planted over or within five lateral feet of any underground water line, sewer line, transmission line, or other utility line, or as required by the owner of the utility or the requirements of the specific easement.

DESIGN ELEMENTS OVERVIEW

GOALS:

- Lighting shall be considered as an integral part of the overall design for The Geauga Lake District, in the style of luminaires, in its functional application, and in its artistic use of light.
- Lighting should be used to highlight paths, create focal points, add to the mood of spaces, and highlight architecture.
- In general, the color temperatures for light shall be cooler (4000 Kelvin) for roadways and parking lots and warmer (3000 Kelvin) for areas dedicated to pedestrian use along sidewalks and in gathering areas such as patios, squares, plazas, etc.

REQUIRED:

- All decorative accent/architectural lighting, meant to illuminate a building feature or surface(s), as well as any surface mounted, non-illuminated signage that is a permanent feature of the overall building or site design, shall also be submitted to the Primary Developer for review and approval.

REQUIRED:

- No freestanding light fixture shall be greater than 30 feet in height.
- Lighting shall be applied separately and in two distinct ways with regards to sidewalks and roadways.
- All lighting fixtures that are mounted within 15 feet of a residential property line or public right-of-way boundary shall be classified as IES Type III or Type F (asymmetric forward throw). These fixtures shall direct glare toward the principal building and parking area on the lot.
- A thoroughfare/pedestrian lighting plan, showcasing a fixture schedule, light levels, and placement on any site within the Property, shall be submitted to the Primary Developer for approval.

DESCRIPTIONS:

TYPES OF OUTDOOR LIGHTING

- **Task Lighting:** illuminates pathways and entrances. Task lighting is paramount when performing specific tasks. This type of outdoor lighting can be achieved by using sidewalk and pathway lights, lights for patios, plaza spaces and other outdoor gathering areas, and outdoor step lights.
- **Ambient Lighting:** provides an area with overall outdoor lighting. A bulb that uses a lower wattage or has a lower lumens output is generally adequate in the dark. Usually, these are outdoor wall lights or post lights. Ambient lighting is also known as general lighting, which radiates a comfortable level of brightness without glare and allows you to see and walk safely. Lighting should be warmer in temperature.
- **Accent Lighting:** adds drama to an outdoor space by creating visual interest. Focus lighting for particular features: walkways, the doorway, landscaping, highlight trees, planting areas and architectural details. This type of lighting is usually provided by spotlights. Up lighting can be used to create drama with a taller structure or tree.

DESIGN ELEMENTS OVERVIEW

REQUIRED:

- All outdoor lighting of buildings, surface parking areas, service zones, or any non-illuminated, surface mounted project signage or tenant identity signage, shall be directed so as to prevent glare on adjacent properties and streets and to shield the lighting from residences, to the extent feasible.
- All fixtures shall be LED or similar product, and their placement, along with all support posts/poles and brackets, shall be consistent in fabrication quality, and selected to enhance the overall design character of the Northeast Ohio small town theme.

DESIGN ELEMENTS

LIGHTING - FUNCTIONAL FIXTURE TYPE

- Generally, light fixtures shall be of two varieties with regards to functional use:
- 1. "roadway" fixtures that:
 - teardrop style as specified.
 - limit lighting that is visible or measurable at the property line;
 - of constant intensity;
 - reflected or shielded so as not to be of excessive brightness or cause glare hazardous to pedestrians or drivers, create a nuisance, or unreasonably interfere with a neighboring property owner's right to enjoy his property.
- 2. "pedestrian" fixtures may be used only for decorative purposes, provided:
 - They have post-top luminaries that produce less than 2,500 lumens (approximately equal to a 150W incandescent bulb);
 - They have a maximum height of 15 feet; and
 - They use energy-efficient bulbs, light-emitting diode (LED).

FUNCTIONAL TYPES OF LIGHT FIXTURES

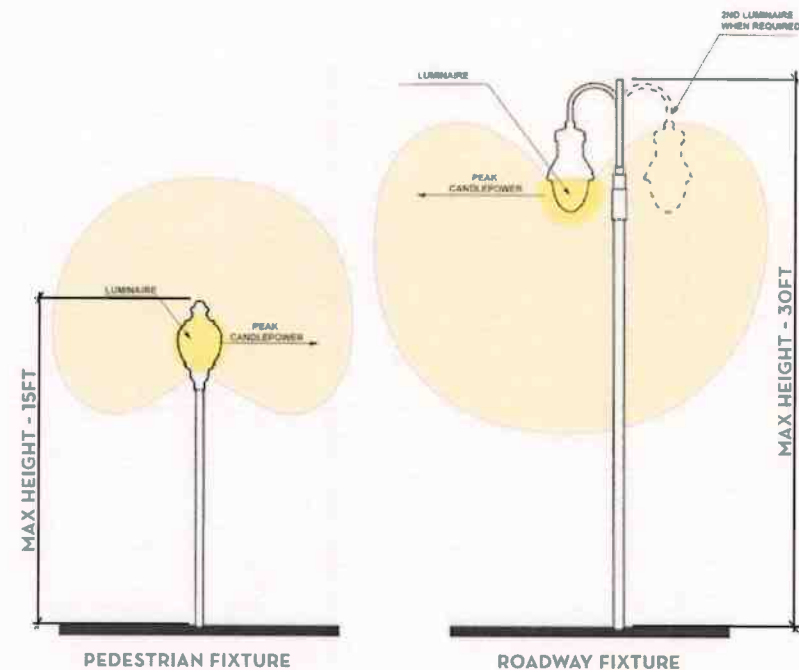


Figure 58

DESIGN ELEMENTS

LIGHTING - CUT-OFF REQUIREMENTS

- Except as otherwise allowed for in this section, all lighting (including, but not limited to street, parking lot, security, walkway and building) shall conform with the Illuminating Engineering Society of North America (IES) criteria for full cut-off light fixtures, which is 100 percent of light output below 90 degrees, and 90 percent of light output below 80 degrees from a vertical line through the fixture.
- When used for security purposes or to illuminate pedestrian walkways, driveways, equipment and storage areas, product display areas, streets, parking lots, or signage, only full cut-off light fixtures shall be used.
- All lighting fixtures that are mounted within 15 feet of a residential property line or public right-of-way boundary shall be classified as IES Type II or III or Type F (asymmetric forward throw).
- Light fixtures used to illuminate flags, statues, or any other objects mounted on a pole, pedestal, or platform shall use a narrow cone beam of light that will not extend beyond the illuminated object. No more than 1,800 lumens shall be used for each flag, statue, or other object illuminated.
- For upward-directed architectural, landscape, and decorative lighting, direct light emissions shall not be visible above the principal building roofline.

DESIGN ELEMENTS

LIGHTING - MAXIMUM ILLUMINATION, LIGHTING TYPES STANDARDS & PROHIBITED LIGHTING

MAXIMUM ILLUMINATION

- Outdoor lighting shall be deflected, shaded, and focused away from adjacent properties when appropriate and shall not be a nuisance to such properties, nor hazardous to motor vehicles on abutting rights-of-way;
- The maximum illumination at a perimeter property line abutting or directly across a road from residential zoning districts or residential uses shall be two-tenths foot-candles. On abutting nonresidential properties, zoning districts, or public roads, the maximum illumination at the property line shall be one (1) foot-candle in parking lots, and one-half (0.5) foot candle in landscape areas. This lighting condition should be achieved with lighting distributions whenever possible. The use of house side shields are discouraged but may be used when necessary.
- If additional light is necessary (e.g., for vehicle rental or sales uses or others who believe they need more illumination), it shall be provided within an enclosed structure.

LIGHTING TYPES STANDARDS

- **Canopy Lighting:** Canopy lighting for uses that have sheltered outside work or service areas, such as gas or fuel stations, shall meet the standards of this Section. All light fixtures shall be recessed into the canopy so that they cannot be viewed off-site from an eye height of four feet (to protect automobile drivers from glare).
- **Outside Wall-Mounted Lighting:** Outside wall-mounted lighting shall also comply with the standards of this Section, except that lighting that is required by the Federal Aviation Administration shall comply with Federal standards.

PROHIBITED LIGHTING

- **Generally.** No outdoor lighting may be used in any manner that is likely to interfere with the safe movement of motor vehicles on public rights-of-ways.
- **Prohibitions. The following are prohibited:**
 - Any fixed light not designed for street illumination that produces incident or reflected light that could impair the operator of a motor vehicle.
 - The installation, use, or maintenance of beacons or searchlights;
 - **Exposed** strip lighting or neon tubing used to illuminate building facades or outline buildings or windows or flickering or flashing lights installed in like fashion, except for temporary decorative seasonal lighting.

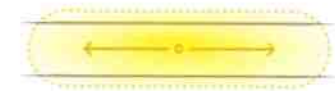
DESIGN ELEMENTS

LIGHTING - LIGHT DISTRIBUTION: CLASSIFIED BY IESNA

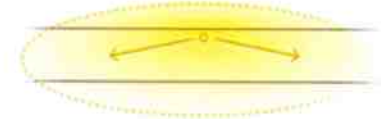
DISTRIBUTION TYPES

- **Type I** distributes a very lineal shape. It is the optimal choice for applications such as one or two-lane roadways, walkways, paths or sidewalks. With a preferred lateral width of 15 degrees, it is suitable for lighting streets or pathways that have a width of up to 2 times the mounting height.
- **Type II**, the shape is still linear but is wider in the front. With a lateral width of 25 degrees, it is the ideal choice for wider walkways, entrance roadways, on-ramps, four-lane roadways or any area requiring long, narrow lighting. When considering area width, Type II is best for illuminating areas with a width that are no more than 1.75 times the height the fixtures will be mounted.
- **Type III** distribution is commonly known as a “bat-wing”. This distribution type is used to provide a larger area of lighting from a position along the perimeter of where lighting is required. At a lateral width of 40 degrees, light will project outward and is optimal for lighting areas with a width no more than 2.75 times the mounting height. It is typically used for driveways, garages, and even sports fields.
- **Type IV** has a lateral width of 60 degrees and is known as a “forward throw” distribution. It is the distribution type to choose if you are looking to illuminate sides of building façades, walls or parking areas. Much like Type III, it is best for areas up to 2.75 times the mounting height in width.
- **Type V** distributes a circular pattern (there is also a Type VS that produces a square distribution with a more defined angle). Having the same distribution at all lateral angles, it is perfect for general area lighting—the ideal choice if you are looking to do parking lots or intersections.

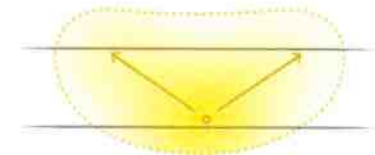
TYPE I



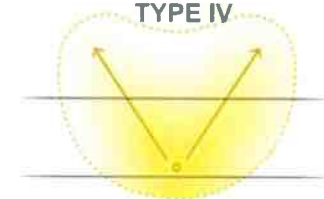
TYPE II



TYPE III



TYPE IV



TYPE V

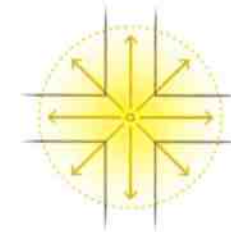


Figure 59

DESIGN ELEMENTS | PEDESTRIAN & ROADWAY LIGHTING

GOALS:

- Street lighting shall be scaled to the pedestrian, and located throughout The Geauga Lake District to ensure comfort, safety and delight in all seasons and at all hours.

REQUIRED:

- Consistent and commercial grade fixtures for street and pedestrian lighting shall be provided on all streets, sidewalks and pedestrian pathways, including public gathering/event spaces, both public and private within the Property.
- Street light fixtures shall be painted or powder coated metal, with a matte finish, consistent in color and style on both sides of any street and chosen in consultation with the Master Developer and the Staff.
- Pedestrian light poles are to be featured within all community gathering space areas, and shall feature exterior outlets in the base for seasonal and functional needs.
- An alternative for public spaces, gathering areas, and pedestrian pathways are low-profile LED, internally lit bollards, placed at intervals to fully illuminate all pedestrian surfaces, or concealed, under-mount lighting that surface illuminates or 'washes' pedestrian walk or gathering areas. Illuminated bollard lights shall mimic the character and style of any pedestrian poles.

REQUIRED:

- Street and pedestrian poles shall be located at all intersections and along sidewalks at intervals consistent with the Northeast Ohio small town design character.
 - Sidewalk lighting shall be scaled to the pedestrian, with decorative support posts no less than 12' high to luminous center of the actual fixture, which shall be the recommended minimum height, including 30" minimum bases and tapered support posts of no less than 6" diameter at the base.
- Roadway lighting decorative support posts shall be no less than 10' high to underside of actual fixture, which shall be the recommended minimum height, including 9" minimum bases and tapered support posts of no less than 12" diameter at the base.

DESIGN ELEMENTS

LIGHTING - PEDESTRIAN LIGHTING

- Street lighting shall be of two Victorian Era inspired acorn varieties that were common to the Geauga Lake amusement park;
 - post top 'globe' luminaire
 - post top 'capped' luminaire
- Street lighting fixtures shall in general be:
 - #GNGTX Color Green

ALLEY ROADWAY AND PEDESTRIAN LIGHT FIXTURE FAMILY



PEDESTRIAN POST TOP GLOBE LUMENAIRE

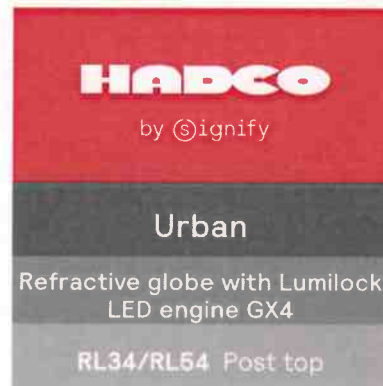


ALLEY POST TOP CAPPED LUMENAIRE

Figure 60

DESIGN ELEMENTS
LIGHTING - PEDESTRIAN LIGHTING

ALLEY STREET LIGHT - ACORN GLOBE OPTION - LUMENAIRE SPECIFICATIONS



Ordering guide

example: RL34 A B A 1 A S N R7 W A 3 N N N N SP1

Series	Pod	Roof	Cage	Finial	Fastener	Finish	Optic	Pod Photo Control (location inside of pod)
RL34	B	C	B	G	1	J	W	N
RL34 Wide Body Type 3	A Octagonal style B Round fitter with scalloped petals	A Victorian B Acorn	B ¹ Cage for wide body globe E Band for wide body globe	A B	1 Hex head	A Black B White	S Short W Wide	E 120 VAC Button Eye
RL54 Wide Body Type 5	H Round contemporary L Round fluted long T Decorative leaf with scalloped petals	C Tall D Short G Adams	F Band for wide body globe G ¹ Cage for wide body globe I ¹ Cage for wide body globe J ¹ Cage for wide body globe N None	C ² D ² E ² F G H N None	2 Allen head	G Verde H Bronze J Green		H 208/240/277 Button Eye R ³ 3 Pin Receptacle N None

Optional programs

Future Proof Photo Control	Color Temp	Voltage	Drive Current	Integral Control Options	Option 1	Option 2	Option 3	Surge Protection
R7	N	A		N	N	N	N	SP1
R5 ^{1,4} 5 pin receptacle on the engine	W 3000K N 4000K	A 120-277 VAC B 347-480 VAC	2 ¹ 200mA 3 350mA 4 450mA 5 ¹ 530mA	Dynadimmer ^{5,6} DA 4 Hrs 25% Reduction DB 4 Hrs 50% Reduction DC 4 Hrs 75% Reduction DD 6 Hrs 25% Reduction DE 6 Hrs 50% Reduction DF 6 Hrs 75% Reduction DG 8 Hrs 25% Reduction DH 8 Hrs 50% Reduction DJ 8 Hrs 75% Reduction DL ⁵ DALI S ⁹ FAWS Switch N None	AST ⁵ Adjustable start up time N None	CLO ⁵ Constant light output N None	OTL ⁵ Over the life N None	SP1 10kV/10kA Surge Protector SP2 ⁶ 20kV/20kA Surge Protector
R7 ^{1,4} 7 pin receptacle on the engine								
N None								

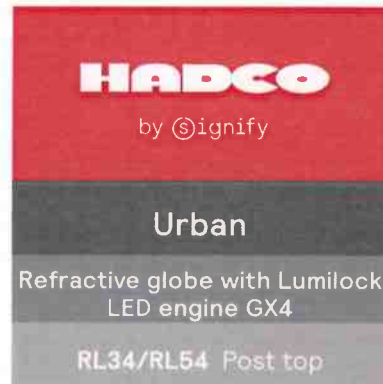
- Not available with A pod.
- Not available with B Roof.
- Use of photoelectric cell (pod photo control (R) only) or shorting cap is required to ensure proper illumination. When R, R5, R7 options are selected, product will ship with shorting cap(s) installed.
- Only available with A & B clear roof options. Not available with drive currents 4 or 5. RL 34 or 54 with S optic only available with A roof.
- Optional Dynadimmer dimming schedules, DALI, AST, CLO, and OTL not available with 347-480 VAC.

- When SP2 option is selected, luminaire will be fitted with SP2 instead of SP1.
- Not available with B 347-480 voltage.
- Not available with R5 or R7.
- FAWS not available with CLO.



DESIGN ELEMENTS
LIGHTING - PEDESTRIAN LIGHTING

PRIMARY AND SECONDARY PEDESTRIAN STREET LIGHT -
ACORN GLOBE OPTION - LUMENAIRE SPECIFICATIONS



LED

Ordering guide

example: RL34 A A B A 1 A S N R7 W A 3 N N N N SP1

Series	Pod	Roof	Cage	Finial	Fastener	Finish	Optic	Pod Photo Control (location inside of pod)
RL34	B	A	N	G	1	J	W	N
RL34 Wide Body Type 3	A Octagonal style B Round fitter with scalloped petals	A Victorian B Acorn	B ¹ Cage for wide body globe E Band for wide body globe	A B	1 Hex head	A Black B White	S Short W Wide	E 120 VAC Button Eye
RL54 Wide Body Type 5	H Round contemporary L Round fluted long T Decorative leaf with scalloped petals	C Tall D Short G Adams	F Band for wide body globe G ¹ Cage for wide body globe I ¹ Cage for wide body globe J ¹ Cage for wide body globe N None	C ² D ² E ² F G H N None	2 Allen head	G Verde H Bronze J Green		H 208/240/277 Button Eye R ³ 3 Pin Receptacle N None

Optional programs

Future Proof Photo Control	Color Temp	Voltage	Drive Current	Integral Control Options	Option 1	Option 2	Option 3	Surge Protection
R7	N	A		N	N	N	N	SP1
R5 ^{1,4} 5 pin receptacle on the engine	W 3000K N 4000K	A 120-277 VAC B 347-480 VAC	2 ¹ 200mA 3 350mA 4 450mA 5 ¹ 530mA	Dynadimmer ^{5,6} DA 4 Hrs 25% Reduction DB 4 Hrs 50% Reduction DC 4 Hrs 75% Reduction DD 6 Hrs 25% Reduction DE 6 Hrs 50% Reduction DF 6 Hrs 75% Reduction DG 8 Hrs 25% Reduction DH 8 Hrs 50% Reduction DJ 8 Hrs 75% Reduction DL ⁵ DALI S ⁵ FAWS Switch N None	AST ⁵ Adjustable start up time N None	CLO ⁵ Constant light output N None	OTL ⁵ Over the life N None	SP1 10kV/10kA Surge Protector SP2 ⁶ 20kV/20kA Surge Protector
R7 ^{1,4} 7 pin receptacle on the engine								
N None								

- Not available with A pod.
- Not available with B Roof.
- Use of photoelectric cell (pod photo control (R) only) or shorting cap is required to ensure proper illumination. When R, R5, R7 options are selected, product will ship with shorting cap(s) installed.
- Only available with A & B clear roof options. Not available with drive currents 4 or 5. RL 34 or 54 with S optic only available with A roof.
- Optional Dynadimmer dimming schedules, DALI, AST, CLO, and OTL not available with 347-480 VAC.

- When SP2 option is selected, luminaire will be fitted with SP2 instead of SP1.
- Not available with B 347-480 voltage.
- Not available with R5 or R7.
- FAWS not available with CLO.



DESIGN ELEMENTS
LIGHTING - PEDESTRIAN LIGHTING

ALLEY STREET LIGHT AND PEDESTRIAN STREET LIGHT POLE SPECIFICATIONS



4"
Straight
Fluted w/3"
tenon

Order guide

example: P2560.10 A T D

Product Code	Pole Height	Finish	Outlet Location	Outlet Options
P2560	10'	J		
P2560	10' 12' 14' 16'	A Black B White G Verde H Bronze J Green	T 12" Down from Top - Aligned with House Side B 4" Up from Top of Base - Aligned with House Side	D Standard Duplex G GFI Duplex

EPA values based on destructive break testing. For AASHTO ratings, contact factory.

Pole Data

Pole Model	Pole Shape	Pole Type	Shaft Dimension	Pole Fluted	Anchor Base Shape	Bolt Circle	Base Dim (in)	Hand Hole Dim (in)
P2560	Round	Straight	4	Fluted	square	11 to 14	12.75 x 43.75	4.375 x 5.75

Pole Family	Catalog Number	Nominal Height (ft)	Tenon Section (in)	Wall Thickness (in)	EPA Rating 80 MPH (sq. ft)	EPA Rating 100 MPH (sq. ft)	Anchor Bolts (in)
P2560	P2560-10	10	3	0.125	13.78	8.34	3/4-19 bs
P2560	P2560-12	12	3	0.125	11.22	6.60	3/4-19 bs
P2560	P2560-14	14	3	0.125	6.97	3.77	3/4-19 bs
P2560	P2560-16	16	3	0.125	5.54	2.72	3/4-19 bs

Specifications

HOUSING:

356 HM high-strength, low-copper, proprietary cast aluminum alloy. 319 Permanent mold aluminum. 6005-T5 extruded aluminum. Anchor rods are hot dipped galvanized steel. Tenon is 356 HM sand cast aluminum.

FINISH:

A durable polyurethane enamel finish is applied after assemblies are shot blasted to create a surface profile which allows for the highest level of paint adhesion. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B-117-64 and ANSI/ASTM G53-77 specifications. For larger projects where a custom color is required, contact the factory for more information.

WARRANTY:

Please visit www.signify.com/warranties for more details on structural and finish warranty.

OUTLET:

Standard Duplex Outlet has universal metal weatherproof cover. Weatherproof while in use. Heavy-duty all-metal construction. Lockable security cover. Meets NEC 406.9 (B). Weather resistant. GFI Duplex Outlet has dual-function indicator light, universal metal weatherproof cover. Weatherproof while in use. Heavy-duty all-metal construction. Lockable security cover. Meets NEC 406.9 (B). Weather resistant.

DESIGN ELEMENTS

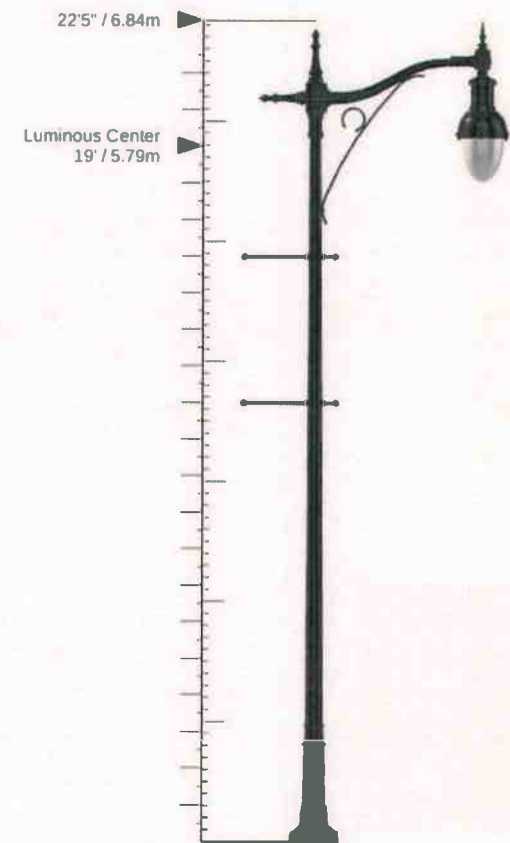
LIGHTING - ROADWAY LIGHTING

- Roadway lighting shall be a Victorian Era inspired teardrop fixture that may be applied in one of three ways:
 - an arm of a length suited to the thoroughfare conditions.
 - a gooseneck variety on narrow thoroughfares and in special Greens, Squares and Plazas.
 - A double arm variety.
- Street lighting fixtures shall in general be:
 - #NGTX Color Green

ROADWAY LIGHT FIXTURE FAMILY



NARROW ROADWAY TEAR DROP LUMENAIRE



WIDE ROADWAY TEAR DROP LUMENAIRE

Figure 61

DESIGN ELEMENTS
LIGHTING - PEDESTRIAN LIGHTING

PRIMARY AND SECONDARY ROADWAY FIXTURES - LUMENAIRE SPECIFICATIONS



Ordering guide: Luminaire

Example: RN20-90W80LED4K-T-ACDR-LE3R-120-DMG-SMA-RC-PH8-BKTX

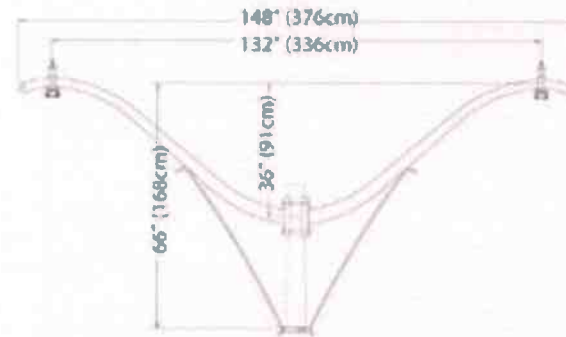
Series	LED module	Lamp type	Globe material	Optical system	Voltage	Driver options
RN30	XXWXXLED4K	G3	ACDR	LE4R	UNV	DMG
RN20 RN30	4000K 35W32LED4K 55W32LED4K 55W48LED4K 70W64LED4K 72W32LED4K 80W48LED4K 90W80LED4K 108W48LED4K 110W64LED4K 135W80LED4K 145W64LED4K 180W80LED4K 3000K 35W32LED3K 55W32LED3K 55W48LED3K 70W64LED3K 72W32LED3K 80W48LED3K 90W80LED3K 108W48LED3K 110W64LED3K 135W80LED3K 145W64LED3K 180W80LED3K	G3	ACDR Acrylic globe GL Glass globe	Globe LE2R⁷ Type II (ASYM) with globe LE3R⁷ Type III (ASYM) with globe LE4R⁷ Type IV (ASYM) with globe LE5R¹⁷ Type V (SYMM) with globe Sag lens LE2S Type II (ASYM) Sag glass lens LE3S Type III (ASYM) Sag glass lens LE4S Type IV (ASYM) Sag glass lens LE5S¹ Type V (SYMM) Sag glass lens Flat lens LE2F Type II (ASYM) Flat glass lens LE3F Type III (ASYM) Flat glass lens LE4F Type IV (ASYM) Flat glass lens LE5F¹ Type V (SYMM) Flat glass lens	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	AST ³ Pre-set, progressive start-up CLO ³ Pre-set, manage lumen depreciation DALI ³ Pre-set, compatible with the DALI control system OTL ³ Pre-set to signal end of life of the lamp DMG 0-10V CDMGE25 ³ 8 hrs. 25% reduction CDMGE50 ³ 8 hrs. 50% reduction CDMGE75 ³ 8 hrs. 75% reduction CDMGM25 ³ 6 hrs. 25% reduction CDMGM50 ³ 6 hrs. 50% reduction CDMGM75 ³ 6 hrs. 75% reduction CDMGS25 ³ 4 hrs. 25% reduction CDMGS50 ³ 4 hrs. 50% reduction CDMGS75 ³ 4 hrs. 75% reduction SRD ³ Sensor ready driver, standard configuration SRD1 ³ Sensor ready driver, alternate configuration

Ordering guide (continued)

Adaptors	Luminaire options	Poles & Brackets	Finish
SMA	SP2		GN6TX
MA1 1 1/4" NPT threaded hole adaptor MA2 1 1/2" NPT threaded hole adaptor SMA ⁶ Decorative retro side-mounted cast-aluminum, accepts tubes from 1 5/8" to 2 3/8" SMB Decorative contemporary side-mounted cast-aluminum, accepts tubes from 1 5/8" to 2 3/8"	BO ⁶ Bridge and Overpass DE1 Decorative deflector HS House Side Shield PH7 Photoelectric cell, bottom type PH8 ^{2,4} Photoelectric cell, extended life PH9 ^{2,4} Shorting cap PHXL ^{2,4} Photoelectric cell, extended life RC ^{2,5} Receptacle 3 pins RCD ^{2,5} Receptacle 5 pins RCD7 ^{2,5} Receptacle 7 pins SP2 Surge protector	Consult signify.com/ outdoorluminaires for details and the complete line of Signify poles and brackets.	BE2TX Textured midnight blue BE6TX Textured ocean blue BE8TX Textured royal blue BG2TX Textured Sandstone BKTX Textured black BRTX Textured bronze GN4TX Textured blue green GN6TX Textured forest green GN8TX Textured Dk forest green GNTX Textured green GR Gray sandtex GY3TX Textured medium grey NP Natural aluminum RD2TX Textured burgundy RD4TX Textured scarlet TG Hammetone gold WHTX Textured white

DESIGN ELEMENTS
LIGHTING - PEDESTRIAN LIGHTING

PRIMARY AND SECONDARY ROADWAY FIXTURES - SPECIFICATIONS



Ordering Guide

Example: HFP1420 P4 B F PM

Product Code	HFP1420	Double
Post diameter	P4 P5 P6	4" Post Mount 5" Post Mount 6" Post Mount
Finish	B H G J A	White Bronze Verde Green Black
Arm Accessory	F R N	Finial Twistlock Receptacle None
Post Machining	PM	Post Machining

Specifications

HOUSING:

6063-T6 Extruded aluminum .

FINISH:

Thermoset polyester powdercoat is electrostatically applied after a five-stage conversion cleaning process and bonded by heat fusion thermosetting. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B117 specifications. Polymer has molded-in color and texture for color fastness and durability. For larger projects where a custom color is required, contact the factory for more information.

CERTIFICATIONS:

Manufactured to ISO 9001:2008 Standards.

WARRANTY:

Three-year limited warranty.

Height :

66" (168cm)

Length:

132" (336cm)

Overall Length:

148" (376cm)

EPA:

5.00 sq. ft.

DESIGN ELEMENTS

LIGHTING - BOLLARD LIGHTING

- Bollards shall be as shown to the right.
- Bollard lighting fixtures shall in general be:
 - #GNGTX Color Green

BOLLARD FIXTURE



Figure 62



DESIGN ELEMENTS OVERVIEW

GOALS:

- The objective of the Design Guidelines is to provide a rich, vibrant, varied vision for Geauga Lake inspired by a blend of the *architecture of amusement* and *traditional small town* design aesthetics; and offer a series of design intentions meant to broaden and expand the possible design outcomes.
- Goals of these guidelines include:
 - Clearly expressed wayfinding signage that contributes to the character of this specific place.
 - Commercial signage that gives prominence to the building base.
 - Wayfinding and commercial signage that activates the sidewalk, and
 - forms a contiguous sequence of activity,
 - encourages pedestrian flow,
 - attracts visitors, and
 - creates a well-connected dynamic atmosphere.

GOALS:

- Signage will be divided into 2 overall categories:
 1. **Wayfinding Signage** - Wayfinding signage will consist of two related styles of signs in sign families relating to scale of use.
 - **Town Signage** - In general, the small town design aesthetic will govern overall sign usage in live/work areas, and
 - **Park Signage** - the architecture of amusement aesthetic will be reserved for play areas that involve references to Geauga Lake and in parks spaces, special entertainment and amenity uses.
 2. **Commercial Signage** - Commercial signage for businesses and retail establishments shall follow the guidelines listed in the pages following Town and Park sign options.

GOALS:

- Wayfinding signage must be a part of the Geauga Lake comprehensive design strategy and shall be reflected in a sign plan submitted for approval.
- Developers are expected to explore the variety of wayfinding signage types, sizes and styles with the objective of integrating the design into the *Small Town* and *Architecture of Amusement* aesthetic as expressed in the following pages.
- This variety is necessary to highlight the diversity of uses, and to support the unique character that defines this overall development.
- For commercial signage, the goal is to distinguish the development's identity and to integrate signage with architecture. Commercial establishments are therefore encouraged to take maximum advantage of logos, specialty letter styles, materials and graphics.
- Wayfinding and commercial sign packages will be evaluated by the landlord on the basis of how well they integrate into the overall design aesthetic concepts and the architectural elements to form an attractive composition.

DESIGN ELEMENTS OVERVIEW

GOALS:

- For commercial signs affixed to buildings, proportion of sign to building facades shall utilize the formulas contained within. Signs must be proportional to the overall height, width and geometric shape of the façade they are contained within and will be judged as such at the discretion of the Primary Developer and the Staff.
- The following signage Commercial Design Guidelines are intended to provide guidance for tenants as they begin to design for signage. The Design Guidelines are not intended to be unwavering requirements, but standards and principles that should be studied and followed.
- Exceptions to the Commercial Design Guidelines will be considered on an individual basis, but only if the design as proposed meets or exceeds the design intent of these Design Guidelines.

REQUIRED:

- All signs to be permitted.

DESIGN ELEMENTS
SIGNAGE INSPIRATION

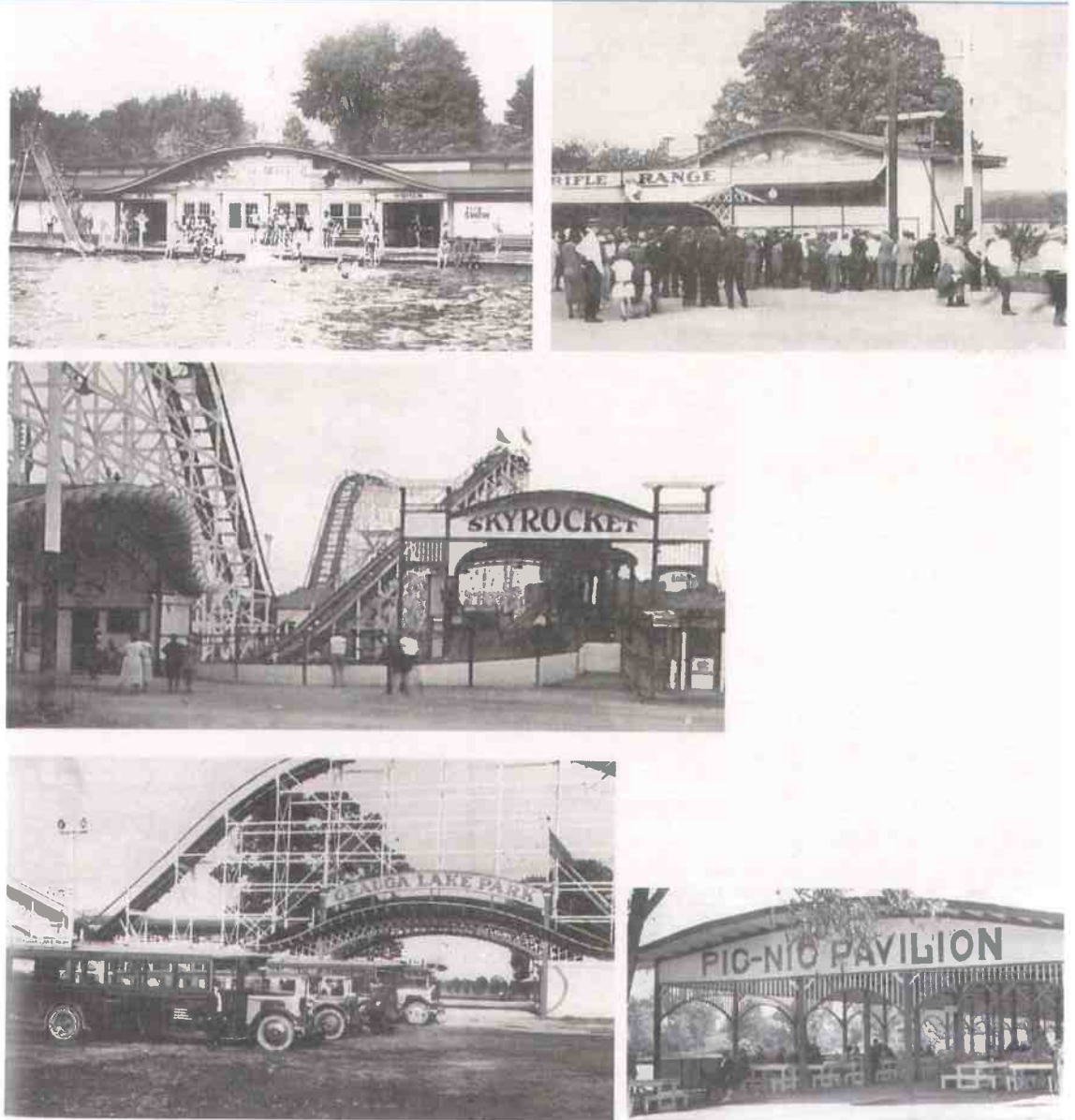
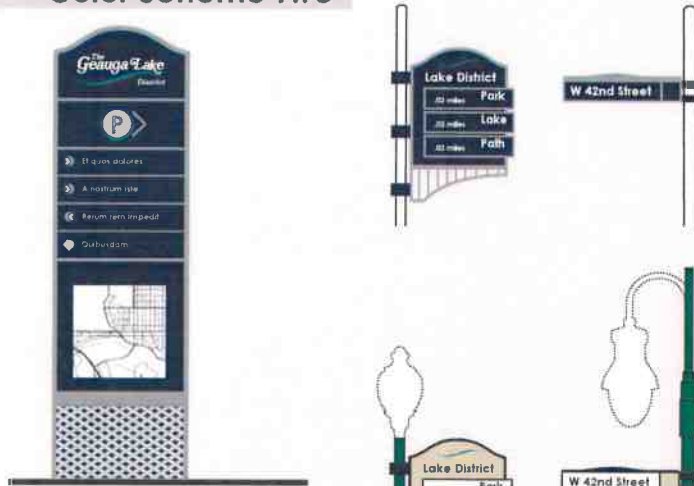


Figure 63
Graphic by RDL

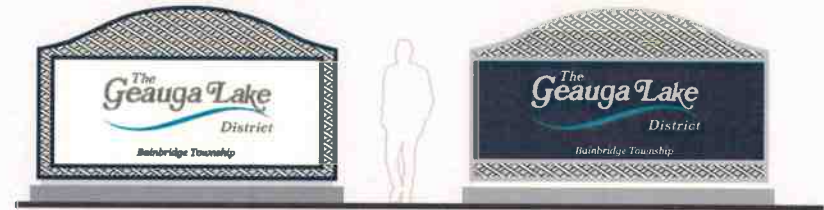
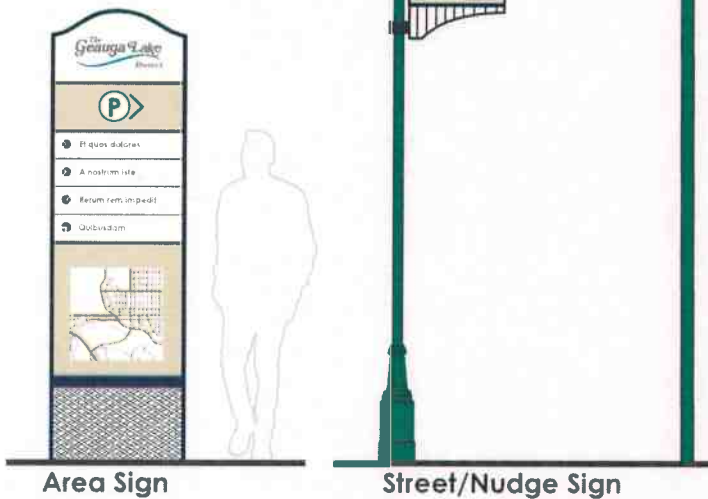
DESIGN ELEMENTS

PARK & TRAILHEAD WAYFINDING SIGNAGE FAMILY

Color Scheme Two

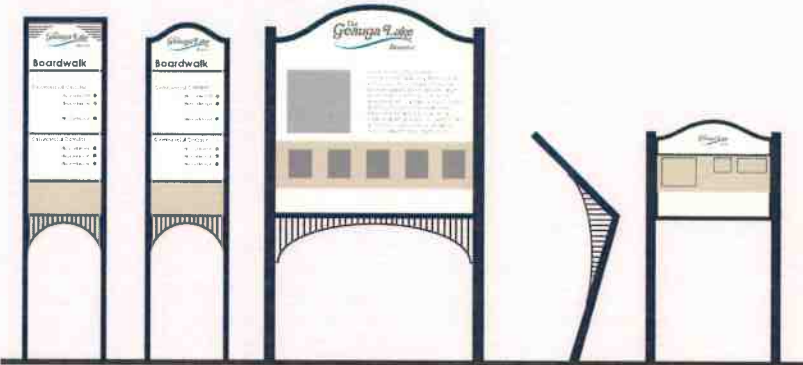
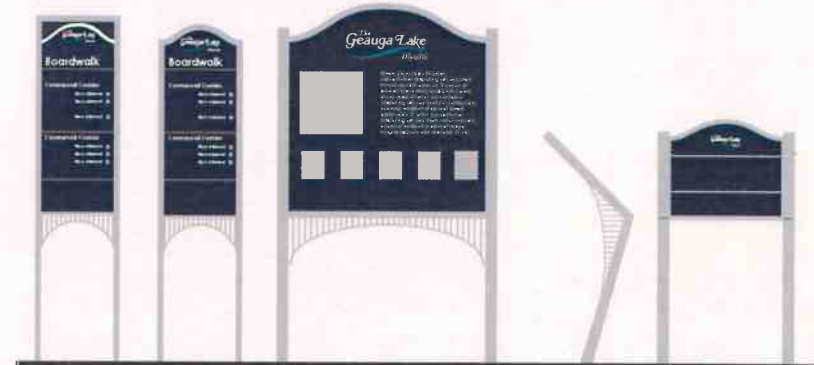


Color Scheme One



Entrance Sign - opt 1

Entrance Sign - opt 2



Linear
Sign

Site Specific
Sign

Interpretive
Sign

Figure 64
Graphic by RDL

DESIGN ELEMENTS

TOWN SIGNAGE - WAYFINDING BLADE SIGNAGE

ROUTE MARKER SIGNS

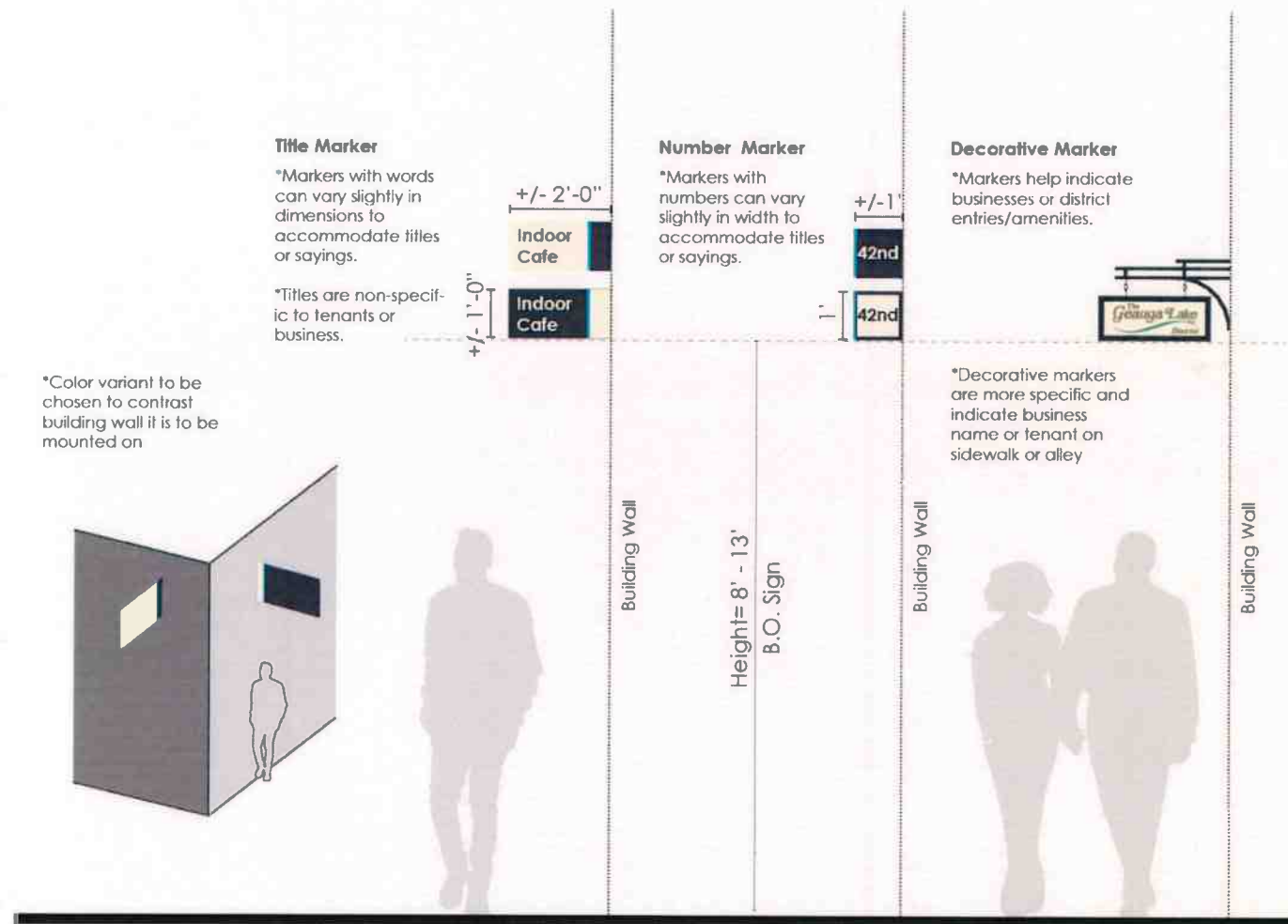


Figure 65
Graphic by RDL

DESIGN ELEMENTS

TOWN SIGNAGE - INTERPRETIVE SIGNAGE

SITE IDENTIFICATION

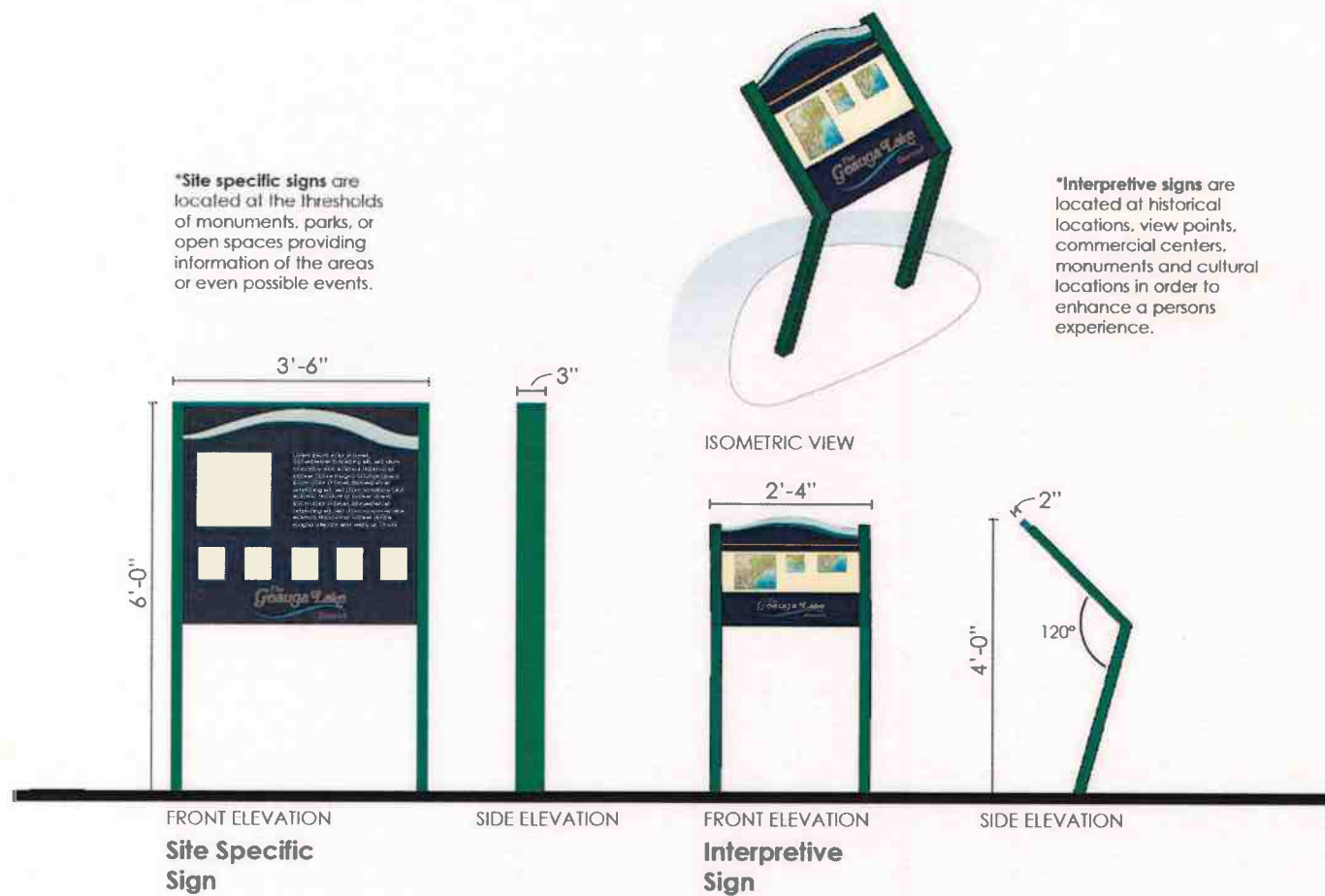


Figure 66
Graphic by RDL

DESIGN ELEMENTS

TOWN SIGNAGE - WAYFINDING TRAFFIC SIGNAGE

TRAFFIC SIGNAGE

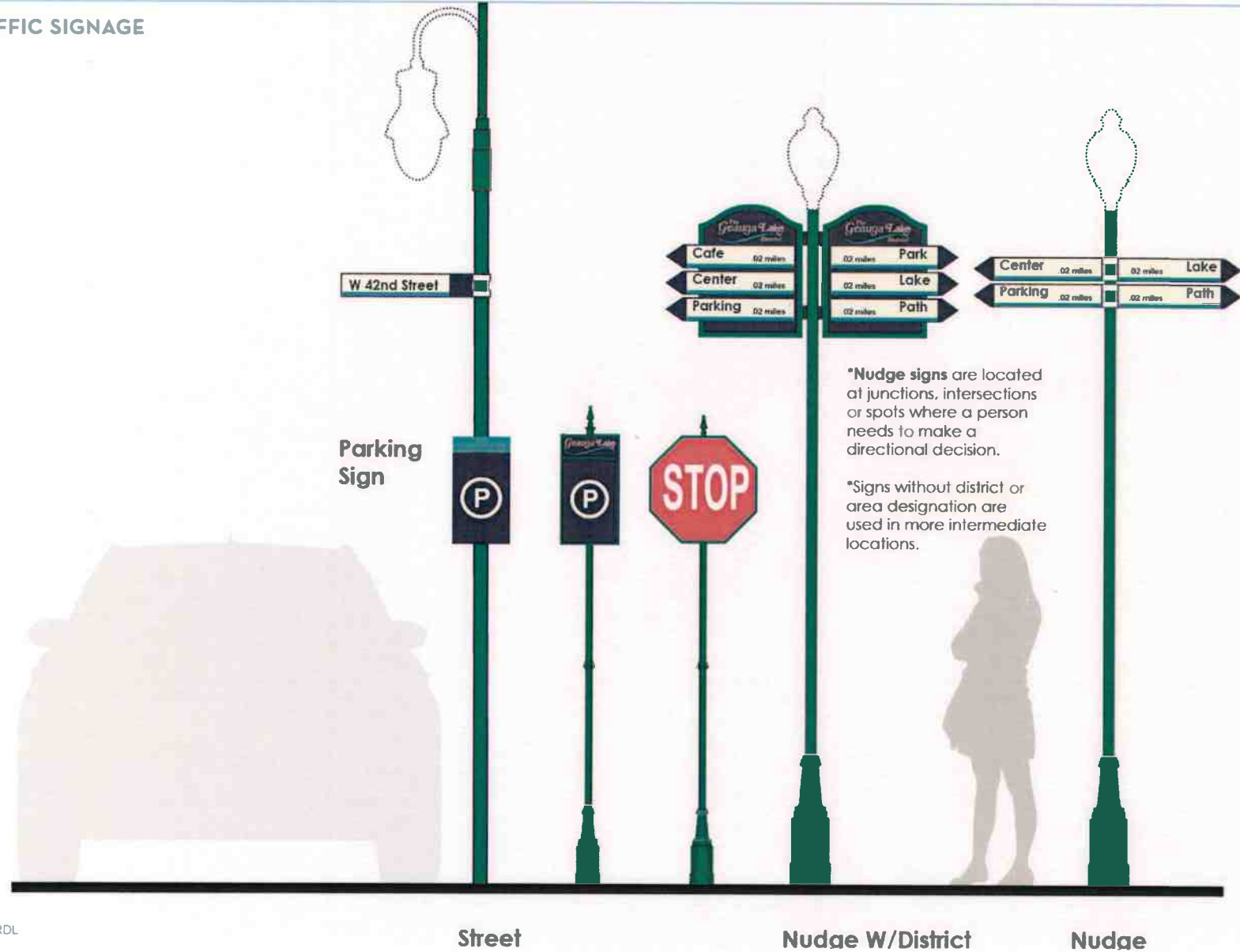


Figure 67
Graphic by RDL

DESIGN ELEMENTS

COMMERCIAL SIGNAGE - TEMPORARY SIGNS

- **Temporary signs may include:**
 - Signs associated with projects under construction and opening soon and shall be affixed to a construction barricade, fencing, or existing building.
 - Project related graphics and text by the landlord that are affixed to a construction barricade, fencing, or existing building.
 - Signs for an operational tenant or development only when the permanent signage is being fabricated or updated, or for promotional events.
 - Temporary signs attached to construction barricade, fencing, or existing building may include the name and logo of the development/er, information regarding the opening timeline of the development as well as additional text describing the tenant's brand and product.
 - Temporary signs installed by landlord may include general information and graphics associated with the overall project.
- Temporary signs attached to construction barricade, fencing, or existing building must follow the square footage maximum of .25sf/linear foot of frontage on any facing thoroughfare and may be installed for the duration of construction.
- Temporary signs may be of a material appropriate for temporary installations, excluding paper-based materials, and must be replaced at the first sign of wear, fading or damage.

DESIGN ELEMENTS

COMMERCIAL SIGNAGE - TEMPORARY SIGNS

- **Prohibited Sign Types**

- The following retail sign types are prohibited:
- Styrofoam, cardboard, paper or injected molded plastic.
- Freestanding or A-Frame Chalkboard signs in sidewalk space
- Luminous vacuum formed plastic letters.
- Credit card decals, stickers and/or trademarks. Animated, moving, chaser, flashing, smoke, audible or odor-emitting signs.
- Signs which are constructed of a material that is deemed unsuitable by the primary developer.
- Any sign which, by reason of its size, location, content, coloring or manner of illumination, constitutes a traffic hazard or a detriment to traffic safety in the opinion of the Building Commissioner by obstructing the vision of drivers, or detracting from the visibility of any traffic sign or control device on public streets and roads.
- Any sign which obstructs free ingress to or egress from a required door, window, fire escape or other required exit way or which obstructs a window, door or other opening for providing light or air or interferes with proper function of the building.
- Spinners, streamers, inflatables or costumed employees holding signs
- Any sign now or hereafter existing which no longer advertises a bonafide business conducted or product sold. Such signs shall be removed at owner's expense.
- Any sign affixed to a fence, utility pole or structure, or tree, shrub, rock or other natural objects.
- Scrolling message signs, television monitor signs or electronic signs with changing messages and/or images with the exception of cinema marquees.
- Moveable, internally illuminated box signs (signage not permanently fastened to a building face or to the ground plane).

DESIGN ELEMENTS

COMMERCIAL SIGNAGE - ALLOWED SIGNS

- **Allowed signage types can include but are not limited to:**
 - Street signs
 - Traffic Signs
 - Directional Signage
 - Historical Markers
 - Monument Signs
 - Wall Mounted Signs
 - Awning Signs
 - Canopy Signs
 - Blade Signs
 - Flags & Banners
 - Nameplate Signs
 - Restaurant Menu Signs
 - Restaurant Pick-up Window/Carry-out Signs, Menu Boards
 - Window Signs
 - Entry Embeds
 - Sidewalk Signs
 - Window Display Area Signs
 - Temporary Signs

DESIGN ELEMENTS

COMMERCIAL SIGNAGE - TEMPORARY SIGNS

• Sign Requirements

- Note: All signs must conform to where the design guidelines are not clear the applicable provision of the township Zoning Resolution
- Signage may be of any durable material with similar quality characteristics of storefront materials and should maintain a high level of craftsmanship.
- Developers must maintain all tenant signs in good condition. At the primary developer's and/or Staff's discretion, it may maintain and repair any tenant sign not being maintained in a good condition by the tenant. Developers must reimburse the Primary Developer for total cost of such maintenance/repairs.
- Emphasis should be on durable materials and quality manufacturing.
- Materials may include but are not limited to cast, polished or painted metal; painted, stained or natural wood; glazed or ceramic tile; etched, cut, edge-lit, or stained-glass; cast resin or polymer that is plated, painted or integrally colored.
- Developers should strive for creativity, uniqueness and high quality graphics for the signs.

• Sign Requirements

- Colors are not restricted but must be applied in an aesthetically tasteful and pleasing manner.
- **Sign Illumination**
 - All wall mounted and blade signs may be illuminated by continuous light.
 - Signs may be internally illuminated to create a halo effect for individually pin mounted letters.
 - Signs associated with canopies or awnings are to be illuminated from above.
 - Free standing individual letters, associated with fixed canopies, may be lit from above or directly below with attractive, high-quality fixtures that match existing architecture in material and style. Fixtures may also be hidden from view.
 - Neither sign wiring nor conduit should be exposed or visible.
 - Sign lighting may not be 'out' or non-operational for more than 24 hours.

• Murals

- Mural installation should complement the building and enhance the façade.
- Mural should not obscure or detract from architectural features.
- Architecture shall not be altered to accommodate the mural.
- The scale should be appropriate to the building and the site.
- Artwork must not overwhelm the streetscape or become a visual distraction, especially with consideration to vehicular traffic.
- Paint should be of superior quality and intended for exterior use only. Colors may be vibrant, but must be complimentary and harmonious with the exterior colors of the building.
- Reflective, neon and fluorescent paints shall not be used.
- Mural should be protected with a waterproof seal coating.
- Mural imagery and messaging must be approved by Primary Developer and Staff

DESIGN ELEMENTS OVERVIEW

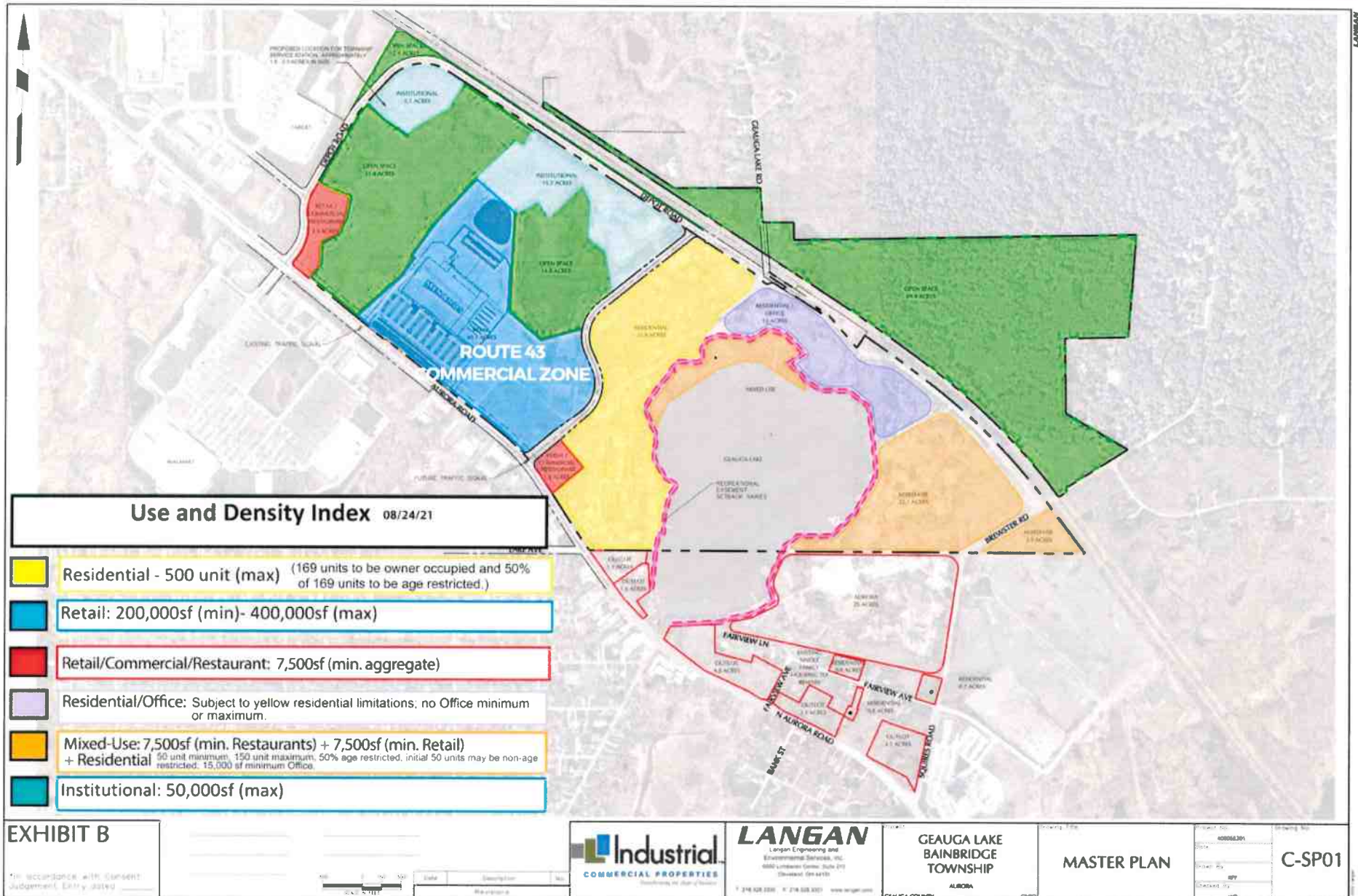
GOALS:

- 'Street furniture/furnishings' are key features of public spaces that **can** greatly **facilitate** in creating vibrant pedestrian **spaces**, open **spaces** and connecting **outdoor areas**. These **features** include **such basic items as** benches, trash **re-**ceptacles, bollards, drinking fountains, wayfinding **and street** signs.
- **Other elements include** game **areas** and surfaces, movable tables, chairs, outdoor **lounge** seating groupings, picnic **benches and** tables, market umbrellas, outdoor fireplaces, **water** features, children's play **areas**, **fixed heat** lamps, sculpture and other **durable, exterior** public art.

GOALS:

- ▣ Street furniture shall be chosen and placed in consultation with the Primary Developer and the Staff, and shall be located within agreed **zones** to maintain a clear pedestrian path.
- ▣ **Street** furniture shall be commercial grade, and made of materials consistent with extended outdoor public **use**. These materials include painted or powder-coated **metal** with a matte finish; wood **in** either **a** stained, painted or treated finish; outdoor grade fabrics **and canvas**, and in certain instances, high-impact, composite or **resin-based** materials that **mimic** natural finishes that **are** weather and **fade** resistant.
- ▣ All street furniture and public features shall always be maintained in good working order and appearance by their respective owner(s), and repaired or replaced in a timely manner, as necessary.
- ▣ Street furniture shall be consistent in material, color and style along both sides of any roadway. All street furniture elements, either **new** or replacements, that vary in color, material, number, placement **or size** from prior approved plan(s) **are** subject to Primary Developer and Staff review and approval.

RT 43 COMMERCIAL



BUFFER ZONEs

GENERAL REQUIREMENTS

GENERAL BUFFER INFORMATION:

DIMENSION

Big Dipper Road and Depot Road buffers and building setbacks are to be a 30' minimum setback.

RT 43 BUFFER ZONE

GENERAL REQUIREMENTS

GENERAL BUFFER INFORMATION:

DIMENSION

The Rt 43 buffer and building setback are to be a 50' minimum setback. The buffer zone occurs between the property line/public right-of-way and the parking lot.

LANDSCAPING

A landscape mound will occur within the buffer zone. The mound will be a minimum height of 3'-0" - and a maximum height of 8'-0" and include a combination of shrubs and colorful, flowering perennials that present to Route 43 year round. Trees and additional decorative ground cover will be located between the mound and the parking lot.

DRAINAGE & STORM WATER

A water feature will be located along the edge of the mound, between the mound and the property line. The water feature is intended to be both an aesthetic design feature and provide area for storm water drainage. The pond shall be designed so the permanent water level will be 4'-0" deep. Any area above the permanent water level designed to handle excess capacity shall be landscaped in an aesthetically pleasing way with rocks, plants, etc.

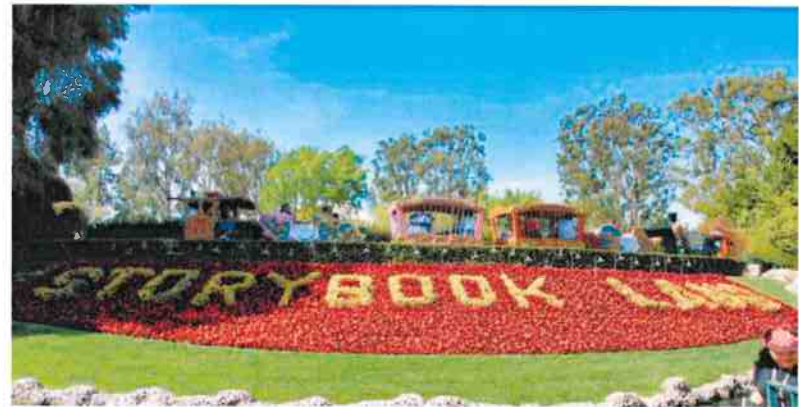
LIGHTING

Decorative pole lighting will be located between the mound and the parking lot. The lighting will be located every 20'-40', alternating with the trees.

SIGNAGE

A Store's monument sign shall be designed to coordinate architecturally with the signage design guidelines section of these design guidelines. This shall apply to signs on both Route 43 and Big Dipper Road.

Example Images



RT 43 BUFFER ZONE LANDSCAPING REQUIREMENTS

LANDSCAPING INFORMATION

The landscape mound should include a combination of trees, shrubs and colorful , ornamental grasses, flowering perennials. The “front” of the mound is considered the side of the mound fronting Rt 43.

TREE TYPE, SIZE & LOCATION:

Trees to be located along the rear of the mound, furthest from Rt 43. A combination of two to three deciduous trees and ornamental trees should be utilized.

When planted, trees should be a minimum 3-inch caliper. Trees should be spaced at a maximum 30' - 40' apart.

The aesthetic result of tree planting is a rhythm and/or repetition along Route 43.

Acceptable trees include: Sweetgum, Black tupelo, Yellow birch, Serviceberry, Crabapple, Fringetree, Pear trees or equivalent tree (salt spray and deer resistant). See the landscape section of these design guidelines for a full list.

SHRUB TYPE, SIZE & LOCATION:

Shrubs should be located between and in front of the trees.

Acceptable ground cover include: Switchgrass, Blackeyed Susans, Winterberry, Indiangrass, Inkberry, Sweetpepper bush, Burning bush hedge, Bayberry, Purple diamond semi dwarf loropetalum, or equivalent shrub. (salt spray and deer resistant). See the landscape section of these design guidelines for a full list.

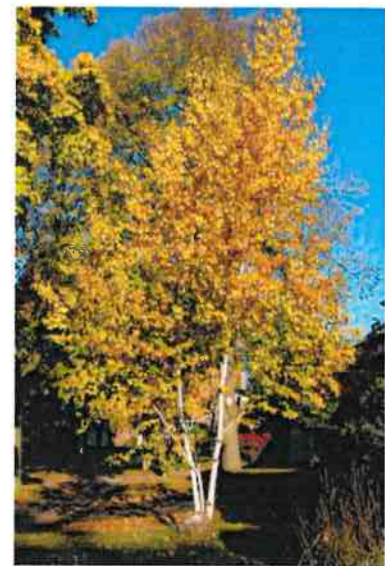
FLOWER TYPE, SIZE & LOCATION:

Flowering perennials to be located at the front of the mound, closest to Rt 43. Annual flowers can be included as needed.

GROUND COVER:

Lawn or mulch, stone or plant material.

Example Images



RT 43 BUFFER ZONE LIGHTING REQUIREMENTS

LIGHTING INFORMATION:

Lighting should help to enhance the aesthetic and safety of the development. Lighting will be located between the mound and the parking lot, every 20'-40', alternating with the trees.

GLARE:

Site and building lighting must be controlled to prevent glare and nuisance problems to adjacent land uses and light pollution.

ACCEPTABLE STREETSCAPE LIGHTING:

See Lighting section.

COLOR:

Black or Green

LIGHT COLOR TEMPERATURE:

4,000K

LIGHT DISTRIBUTION:

Type 2 Light

ENVIRONMENTAL:

Dark Sky Compliant

POLE HEIGHT:

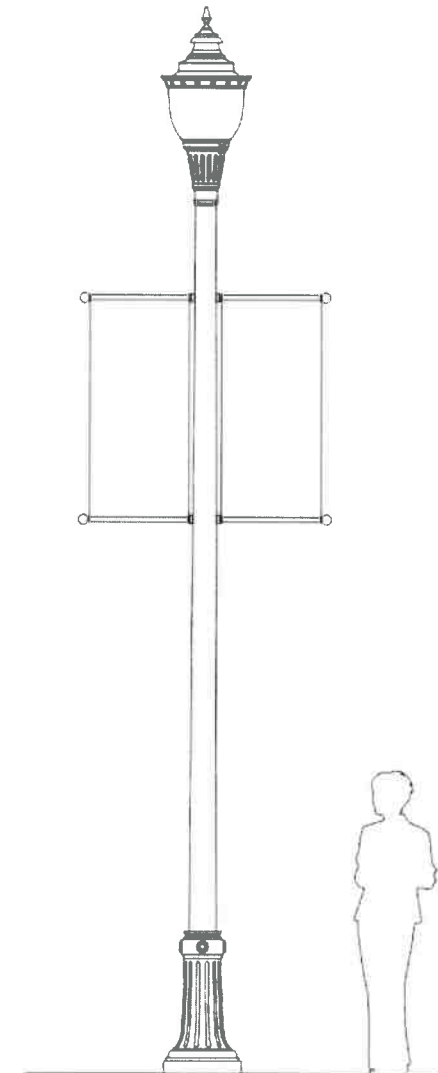
No freestanding light fixture shall be greater than 30'-0" in height.



Lumeck by Signify



Hadco by Signify



RT 43 BUFFER ZONE SIGNAGE REQUIREMENTS

SIGNAGE INFORMATION:

MONUMENT SIGN

A Store's monument sign shall be designed to coordinate architecturally with the signage guidelines outlined in these design guidelines. See the example below.



FLAG & BANNER SIGNAGE

Pole mounted banner sign. See figure one to the right and page 175.

Example Images



Design Aesthetic Example: The Fun Times Era Geauga Lake Entry Gate

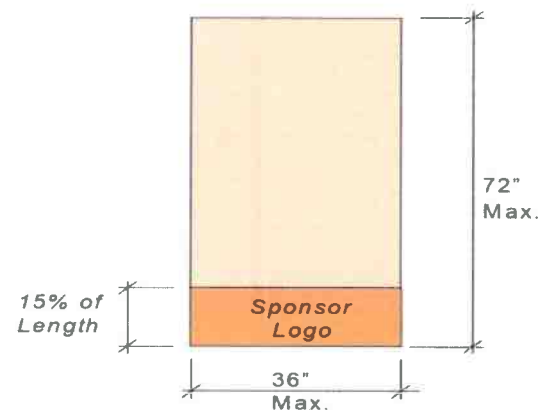


Figure One: Standard Dimensions

COMMERCIAL USE DISTRICT

GENERAL REQUIREMENTS

GENERAL INFORMATION:

HARD SURFACE

Parking lot zones shall be set back a minimum of 50' from the property line on Route 43. Stall sizes and circulation routes shall be designed to existing municipal standards.

LANDSCAPING

Landscaping shall occur at all ends of each row of parking and shall be of a minimum area equivalent to the adjacent parking space. Trees and appropriate groundcover required.

DRAINAGE & STORM WATER

Designed per existing Geauga Soil and Water District Regulations and the CJE.

LIGHTING

Parking lighting to coordinate with decorative pedestrian fixtures along Route 43 and may accomodate flags and banners.

SIGNAGE

See the previous page for monument and flags and banners signage guidance. For all other signage guidance refer to the signage section of these design guidelines.

RT 43 RETAIL BUILDING DESIGN

GENERAL REQUIREMENTS

DESIGN STYLE

THE RT 43 DESIGN STYLE DOES NOT ADHERE TO A SPECIFIC STYLE REQUIREMENT. THE FOLLOWING SHOULD BE TAKEN INTO CONSIDERATION:

- All four (4) sides of the building shall have architectural features.
- In no case will monolithic facades be accepted.
- Storefront components shall comprise a cohesive design and be addressed in detail. Components include: Windows & Glazing, Entries & Doors, Pop-Outs & Recesses, Canopies & Awnings, Materials, Lighting, and Signage.

BUILDING MASSING

MASSING ELEMENTS ARE ENCOURAGED TO HELP ADD DIMENSION AND SCALE TO LARGE BUILDINGS. THE FOLLOWING CRITERIA MUST BE FOLLOWED:

- No building wall shall have an uninterrupted horizontal dimension of more than 80'-0".
- Building walls must include clearly pronounced projections or recesses of a least 4'-0".
- Projections or recesses shall have a horizontal dimension parallel to the building wall from which they are offset for 20'-0" or 20% of the building facade, whichever is less.

MATERIALS

MATERIAL SELECTION SHOULD BE HIGH QUALITY AND DURABLE. A MIX OF COLORS & MATERIALS SHOULD BE INCLUDED TO REINFORCE THE MASSING. THE FOLLOWING SHOULD BE TAKEN INTO CONSIDERATION:

- Materials must be **durable** and should stand up to day-to-day abuse, especially at the pedestrian level.
- All elements of the local climate and environments should be taken into consideration.
- When materials show wear, they must be replaced or repaired by the tenant.
- All exposed faces of materials must be finished.
- Material to material connections should be **seamless**, aligned and without gaps.
- Storefronts must be detailed to be watertight and not allow water to penetrate into the interior.
- All material selections should be made to avoid color fade.
- Glazing should maximize the ability to see into the store.

ACCEPTABLE MATERIALS INCLUDE:

- | | |
|---------------------------|--|
| • Brick | • Gypsum Fiber Reinforced Concrete (GFRC) |
| • Cast Stone | • Architectural Pre-Cast Concrete |
| • Stone or Cultured Stone | • CMU (split face or smooth face & polished) |
| • Cement Board | • Wood or Faux Wood |
| • Stucco | |
| • Eifs | |
| • Rain Screen | |
| • Metal | |

RT 43 RETAIL BUILDING DESIGN

GENERAL REQUIREMENTS

BUILDING HEIGHT

BUILDING HEIGHT NOT TO EXCEED 40'-0" FROM THE AVERAGE GRADE AT THE FRONT OF THE BUILDING TO THE TOP OF THE PARAPET. EXCEPTIONS INCLUDE DECORATIVE ARCHITECTURAL ELEMENTS RELATING TO THE AMUSMENT PARK THEME OR SCREENING STRUCTURES.

BUILDING LENGTH

BUILDINGS MAY NOT EXCEED 250'-0" IN LENGTH

AWNINGS & CANOPIES

- Canopies and Awnings must be located a minimum of 10'-0" above the finished sidewalk.
- Materials must be durable, fire resistant and resistant to fading.
- Allowable materials include woven fabric, canvas, metal and glass. Materials not allowed include translucent, acrylic, and plastic.

ROOFING

- Acceptable roofing material includes standing seam metal roof, or flat roofs.

ENTRIES & DOORS

THE PLACEMENT OF DOORS AND THEIR DESIGNS ARE AN INTEGRAL PART OF THE STOREFRONT AND ESTABLISH A CLEAR POINT OF ENTRY TO THE STORE.

- Entryways shall project not less than 4'-0" from the front facade.
- Tenants are encouraged to use transparent doors. However, if solid doors are used, the door must abut glazing on at least one side.
- Roll down or sliding security grates are prohibited.

GLAZING & STOREFRONT

GLAZING ALONG THE FRONT FACADE OF THE BUILDING HELPS TO CREATE A STRONG CONNECTION BETWEEN THE INTERIOR AND EXTERIOR ENVIRONMENTS.

- Storefronts should have a heirarchy of mullions of varying thickness and depth.
- Glass panels in the lower portion of the storefront may be square or vertical in proportion. Glass panels in the upper portion of the storefront may be horizontal, square, or vertical.
- Glazing should be clear to allow an unobstructed view into the store. Spandrel glass may be used to obscure mechanical or structural components within the store.

RT 43 RETAIL BUILDING DESIGN

GENERAL REQUIREMENTS

FLAGS & BANNERS

- The common area manager may allow various flags and banners and will review all requests on a case-by-case basis.
- Flags or banners on retail buildings shall be hung perpendicular to the building face and from poles.
- Flags and banners should be strategically located on light poles. The flags and banners should help to identify and reinforce the district identity.

LIGHTING

BUILDING MOUNTED & DECORATIVE LIGHTING SHOULD HELP TO ILLUMINATE AND ENHANCE THE EXTERIOR OF THE BUILDING.

- Use low intensity, high quality light to provide a good, uniform visibility while avoiding light pollution.
- Buildings should use lighting to enhance exteriors and landscaping.

UTILITY SCREENING

A SCREENING STRUCTURE MUST BE INCORPORATED FOR ROOF TOP EQUIPMENT & WALL MOUNTED EQUIPMENT. THE PARAPET IS AN ACCEPTABLE MEANS OF SCREENING EQUIPMENT. GROUND EQUIPMENT MUST BE SCREENED BY A STRUCTURE, FENCING OR LANDSCAPING.

LOADING & SERVICE AREAS

- Loading areas shall not be located on the front of a building.
- Loading areas on the side of a building shall be screened from the public view by the greatest extent possible.
- When loading areas are screened by a building, additional screening is not required.

CONSTRUCTION ADMINISTRATION REVIEW PROCESS

OVERVIEW

GOALS:

- All submitted designs shall be constructed as approved by the Primary Developer, Zoning Staff, and the Board of Trustees.
- Written verification from the affected consultant, date, signature, and seal and developer that all buildings, structures, landscaping, lighting, etc. have been built in accord with approved plans shall be submitted to Zoning Staff, and the Board of Trustees for final review and approval.

REVIEW FINAL INSTALLATION REVIEW

GENERAL REQUIREMENTS

Written verification from all affected consultants and developers shall be submitted to Township Staff that all buildings, structures, landscaping, lighting, and other infrastructure have been built in accordance with all approved final development plans.

CHECKLIST

Site:

- **Plan** - the following items to be reviewed by staff for consistency with the approved plans.
 - Site acreage, building areas, unit totals and uses.
 - General layout of the site - property lines, building setbacks and yards, location and extent of off-street parking areas, roads, driveways, trails, open space, green space, lot coverage, etc.
 - Proposed buildings and structures - square footage, tenant or user types, expected entrance ways, floor plans, elevations, and service or loading/unloading areas.
 - Open areas including public or private open space(s).
- **Civil** - the following items to be reviewed by staff for consistency with the approved plans.
 - Street and sidewalk locations and construction.
 - Location and dimensions of stormwater facilities.
- **Landscape** - the following items to be reviewed by staff for consistency with the approved plans.
 - Species types, quantities and locations of trees and plants in accordance with approved plan.
 - All landscape features including but not limited to pavilions, playgrounds, mail boxes, kiosks, follies, gateways, artifacts
- **Exterior lighting** - the following items to be reviewed by staff for consistency with the approved plans.
 - Location , type and quantity of each fixture type.
 - Photometric measurements