



**PLANNING COMMISSION
MEETING AGENDA
SPECIAL/STUDY MEETING**

500 W. Big Beaver
Troy, MI 48084
(248) 524-3364
www.troymi.gov
planning@troymi.gov

Michael W. Hutson, Chair, and Mark Maxwell, Vice Chair
Donald Edmunds, Philip Sanzica, Robert Schultz, Thomas Strat
John J. Tagle, Lon M. Ullmann and Mark J. Vleck

August 24, 2010

7:30 P.M.

Council Board Room

1. ROLL CALL
2. APPROVAL OF AGENDA
3. APPROVAL OF MINUTES – August 10, 2010
4. PUBLIC COMMENTS – For Items Not on the Agenda
5. BOARD OF ZONING APPEALS (BZA) REPORT
6. DOWNTOWN DEVELOPMENT AUTHORITY (DDA) REPORT
7. PLANNING AND ZONING REPORT

PRELIMINARY SITE PLAN REVIEWS

8. PUBLIC HEARING – SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW (File Number SU 382) – Proposed The Barkshire, North of Maple, West of Crooks (1501 Temple City Drive), Section 29, Currently Zoned M-1 (Light Industrial) District

STUDY ITEMS

9. COMPREHENSIVE ZONING ORDINANCE REWRITE (ZOTA 236) – Discussion with Representatives from Carlisle/Wortman Associates, Inc.

OTHER BUSINESS

10. PUBLIC COMMENTS – Items on Current Agenda
11. PLANNING COMMISSION COMMENTS

ADJOURN

NOTICE: People with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk by e-mail at clerk@troymi.gov or by calling (248) 524-3317 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.

The Regular Meeting of the Troy City Planning Commission was called to order by Chair Hutson at 7:30 p.m. on August 10, 2010, in the Council Chamber of the Troy City Hall.

1. ROLL CALL

Present:

Donald Edmunds
 Michael W. Hutson
 Mark Maxwell
 Philip Sanzica
 Robert Schultz
 Thomas Strat
 John J. Tagle
 Lon M. Ullmann

Absent:

Mark J. Vleck

Also Present:

R. Brent Savidant, Acting Planning Director
 Allan Motzny, Assistant City Attorney
 Zachary Branigan, Carlisle/Wortman Associates, Inc.
 Wanda Norman, Planning Department Intern
 Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

Resolution # PC-2010-08-054

Moved by: Schultz
 Seconded by: Edmunds

RESOLVED, To approve the Agenda, as prepared.

Yes: All present (8)
 Absent: Vleck

MOTION CARRIED

3. MINUTES

Resolution # PC-2010-08-055

Moved by: Tagle
 Seconded by: Sanzica

RESOLVED, To approve the minutes of the July 13, 2010 Regular meeting as prepared.

Yes: All present (8)
 Absent: Vleck

MOTION CARRIED

4. PUBLIC COMMENTS – Items not on the Agenda

There was no one present who wished to speak.

PRELIMINARY SITE PLAN REVIEWS

5. PRELIMINARY SITE PLAN REVIEW (File Number SP 862 A) – Proposed Weston Downs, Southeast Corner of Wattles and Finch Road, Section 21, Currently Zoned R-1T (One Family Attached Residential) District

Mr. Branigan presented a summary of the preliminary site plan application. He addressed the required setbacks with respect to the proposed change in site layout. Mr. Branigan indicated no action is required at tonight's meeting because the petitioner must apply for and potentially receive a variance from the Board of Zoning Appeals.

The petitioner, Joe Maniaci of Mondrian Properties, 50215 Schoenherr, Shelby Township, was present. Mr. Maniaci said the intent of the proposed change in site layout is to better market the remaining units. He said the proposal is a viable option within the Master Deed and site alterations are allowed with the approval of the City. Mr. Maniaci said the density would remain the same, and the reduction of each unit footprint would create additional open space. Mr. Maniaci briefly addressed the ownership of a detached site condominium.

6. PRELIMINARY SITE PLAN REVIEW (File Number SP 068 A) – Proposed Bethany Villa Housing Association, West of John R Road and South of E. Big Beaver (1680 Jackson), Section 26, Currently Zoned RM-1 (Multiple Family Residential) District

Mr. Branigan presented a summary of the proposed Preliminary Site Plan application. He addressed the required setbacks between buildings in an RM-1 zoning district, and the formula established by Section 31.30.00.C. Mr. Branigan is confident the proposed community building location exceeds the minimum setback requirement.

Mr. Branigan further addressed parking with respect to a possible parking reduction and/or shared parking with the adjacent church.

Michael Houseman, construction manager, of Wolverine North America, 4045 Barden, Grand Rapids, was present. Mr. Houseman said the purpose of the community building is to house the offices of the housing association, as well as provide a facility for crafts, Meals on Wheels and similar functions. He addressed the potential to reduce parking on site and/or reach a shared parking agreement with the adjacent church. Mr. Houseman indicated the association board is agreeable to working with the City on a parking reduction.

Mr. Savidant said the Planning Department is comfortable in going forward with the preliminary site plan as submitted, noting a parking reduction, landbanking of parking and/or a shared parking agreement with the church could be approved administratively at the time of final site plan submission.

Mr. Edmunds said the open space is wonderful, and a community building would be an asset. He would be amenable to shared parking.

Resolution # PC-2010-08-056

Moved by: Schultz

Seconded by: Maxwell

RESOLVED, That Preliminary Site Plan Approval for the proposed Bethany Villa Housing Association Community Building, located West of John R Road and South of E. Big Beaver, Section 26, within the RM-1 zoning district, be granted, subject to the following conditions:

1. Parking reductions to Zoning Ordinance required levels and/or landbanking of parking may be granted administratively by staff.
2. If additional permanent parking reductions are requested, such action shall be brought back to the Planning Commission.

Discussion on the motion on the floor.

Mr. Savidant asked for clarification on the motion. It is understood that the petitioner would landbank up to 50 spaces. Should the petitioner not construct any parking spaces and a shared parking arrangement is agreed to by the church located to the north, the landbanked parking will remain until such time that the spaces are needed. Further, should the petitioner decide to eliminate and not landbank the parking spaces, the petitioner must come back to the Planning Commission.

There was discussion on the provision of handicapped parking spaces.

- Motion amenable to allow handicapped spaces on site.
- Petitioner to create handicapped spaces as well as employee spaces on site.

Vote on the motion on the floor.

Yes: All present (8)

Absent: Vleck

MOTION CARRIED

SPECIAL USE REQUEST

8. **PUBLIC HEARING – SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW (File Number SU 382)** – Proposed The Barkshire, North of Maple, West of Crooks (1501 Temple City Drive), Section 29, Currently Zoned M-1 (Light Industrial) District

Mr. Branigan presented a summary of the Planning Consultant report on the proposed Preliminary Site Plan application. The outstanding items Mr. Branigan addressed were:

- Corrections to site data on site plan sheets.
- Removal of five (5) parallel parking spaces to the east.
- Alternative parking proposal; reduction of parking.
- Fencing details.

Mr. Branigan expressed support of the application conditioned on acceptable solutions to the deficiencies noted, and the applicant submitting a revised set of plans reflecting the elimination of the five (5) parallel parking spaces and proposed parking solution.

Planning Commission members discussed the following:

- Five (5) parallel parking spaces on the east.
- Noise concerns; communications received by Planning Department.
- Surrounding tenants/uses.

Mark Farlow of Victor Saroki & Associates, 430 N. Old Woodward, Birmingham, was present.

Also present were Rita Dunker, property owner, and Steven Sorensen of Professional Engineering Associates, 2430 Rochester Court, Troy.

Mr. Farlow indicated they met with City staff to discuss the proposed plan. He said Ms. Dunker, as a good neighbor, made contact with those who voiced concerns in writing to the Planning Department. Mr. Farlow addressed noise concerns, fencing material, the design layout (geothermal technology, floor plan, play areas, kennels), and daily operations of the facility.

Ms. Dunker discussed her management experience with this type of facility.

Mr. Sorensen indicated it was understood from their discussions with the City's Engineering Department that they are supportive of the proposed pet waste elimination method.

Items discussed at length were:

- Fencing material (opaque).
- Insulation (interior and exterior walls, windows, doors, sound continuation).
- Artificial turf; aggregate base.
- Pet waste elimination.
 - Solid and liquid.
 - Storm sewer or sanitary sewer.
 - Resolution relating to Special Use Approval for kennel at 2300 Bellingham.

PUBLIC HEARING OPENED

No one was present to speak.

PUBLIC HEARING CLOSED

Members Ullmann and Sanzica said they could not support the application as proposed because of their concerns with the proposed pet waste elimination method.

At the request of Mr. Tagle, Mr. Farlow said the proposed parking spaces along the east façade would be designated for employee parking. He is agreeable to providing a paved walkway to service the spaces to the front entrance. Mr. Farlow said the lane is shared with the property owner to the east, and is one-way directional only. Mr. Farlow said he would work with the City on an appropriate parking solution.

Mr. Motzny clarified that the matter of storm sewer or sanitary sewer for pet waste elimination is an Engineering Department determination usually. But he noted the Planning Commission has the latitude with a Special Use application to impose conditions on an approval or postpone the item to seek further information and/or guidance from the Engineering Department.

Mr. Branigan asked to make the record clear that his written review does not expressly support approval of the Special Use application until such time that items noted in the report are addressed.

It was agreed that City staff and the Planning Consultant would meet with the petitioner to discuss alternative solutions for the treatment of pet waste and screen wall materials.

Resolution # PC-2010-08-057

Moved by: Schultz

Seconded by: Hutson

RESOLVED, To postpone action on this item until such time that:

1. The petitioner, staff, and consultants review and revise liquid waste management systems and screen wall materials to improve the

- environmental impact of the project and to provide adequate privacy and wellbeing to the neighboring property owners; and
2. The applicant has agreed to add four (4) additional parking spaces to the main parking lot and eliminate the five (5) spaces to the east of the building.

Yes: All present (8)
Absent: Vleck

MOTION CARRIED

OTHER BUSINESS

8. PUBLIC COMMENTS – Items on Current Agenda

There was no one present who wished to speak.

9. PLANNING COMMISSION COMMENTS

There was a brief discussion on:

- Transit Center.
 - September 8 Joint Meeting with Birmingham.
 - Potential to meet prior to scheduled Joint Meeting.
 - Legal clarification on site plan approval (Michigan Zoning Enabling Act).
- Zoning Ordinance Rewrite.
 - Potential to schedule additional meetings in effort to meet goals/objectives.
 - Update on progress made by Planning Consultant and Planning Department.

The Regular Meeting of the Planning Commission adjourned at 9:07 p.m.

Respectfully submitted,

Michael W. Hutson, Chair

Kathy L. Czarnecki, Recording Secretary

DATE: August 19, 2010

TO: Planning Commission

FROM: R. Brent Savidant, Acting Planning Director

SUBJECT: PUBLIC HEARING – SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW (File Number SU 382) – Proposed The Barkshire, North of Maple, West of Crooks (1501 Temple City Drive), Section 29, Currently Zoned M-1 (Light Industrial) District

The applicant, Victor Saroki & Associates Architects PC, proposes to renovate a vacant industrial building into a dog kennel and grooming facility. Dog kennels are permitted subject to Special Use Approval, therefore a public hearing is required.

The Planning Commission considered this item at the August 10, 2010 Regular meeting and postponed action on this item until such time that:

1. The petitioner, staff, and consultants review and revise liquid waste management systems and screen wall materials to improve the environmental impact of the project and to provide adequate privacy and wellbeing to the neighboring property owners; and
2. The applicant has agreed to add four (4) additional parking spaces to the main parking lot and eliminate the five (5) spaces to the east of the building.

The applicant revised the plans to address these issues, including meeting with representatives of the Engineering Department to address the liquid waste management issue. The attached report prepared by Carlisle/Wortman Associates, Inc. summarizes the project. Please be prepared to discuss the application at the August 24, 2010 Planning Commission Regular meeting.

Attachments:

1. Maps.
2. Report prepared by CWA.
3. Parking Analysis, prepared by PEA.

cc: Applicant
File/ SU 382

G:\SPECIAL USE\SU 382 The Barkshire Sec 29\SU-382 PC Report 08 24 2010.docx

SPECIAL USE REQUEST

7. PUBLIC HEARING – SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEW (File Number SU 382) – Proposed The Barkshire, North of Maple, West of Crooks (1501 Temple City Drive), Section 29, Currently Zoned M-1 (Light Industrial) District

Resolution # PC-2010-08-

Moved by:

Seconded by:

RESOLVED, The Planning Commission hereby approves a reduction in the number of required parking spaces for the proposed commercial kennel to 14 when a total of 25 spaces are required on the site based on off-street parking space requirements, as per Article XL. This 11-space reduction is justified through a comparison of parking spaces provided for similar uses in the area, as outlined in the Parking Analysis prepared by PEA. Furthermore, this reduction will allow for additional pervious surface throughout the site.

THEREFORE BE IT RESOLVED, That Preliminary Site Plan Approval for the proposed The Barkshire commercial kennel, located north of Maple, west of Crooks on 1501 Temple City Drive, Section 29, within the M-1 zoning district, be (granted, subject to the following conditions):

_____) or

(denied, for the following reasons: _____) or

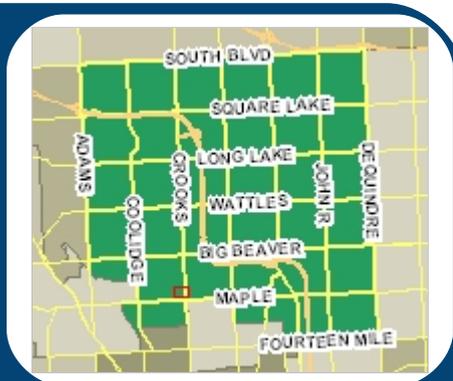
(postponed, for the following reasons: _____)

Yes:

No:

Absent:

MOTION CARRIED / DENIED



Legend

-  I-75
-  Road Centerline
 -  Major Road
 -  Industrial Road
 -  Local Road
-  Hydrography Poly
-  Hydrography Arc
-  Parcels
- Aerial Photos - 2008**
 -  Red: Band_1
 -  Green: Band_2
 -  Blue: Band_3

340 0 170 340Feet

Scale 1: 2,038





CARLISLE/WORTMAN ASSOCIATES, INC.
Community Planners /Landscape Architects

605 S. Main, Suite 1
Ann Arbor, MI 48104
734-662-2200
fax 734-662-1935

6401 Citation Drive, Suite E
Clarkston, MI 48346
248-625-8480
fax 248-625-8455

Date: August 5, 2010
Rev.: August 18, 2010

Special Use Review For City of Troy, Michigan

Applicant: Victor Saroki, FAIA, on behalf of the Barkshire
Project Name: The Barkshire
Plan Date: July 12, 2010
Location: 1501 Temple City Drive
Zoning: M-1, Light Industrial
Action Requested: Preliminary Site Plan Approval, Special Use Approval
Required Information: Deficiencies noted

PROJECT AND SITE DESCRIPTION

We are in receipt of a revised preliminary site plan and special use submittal for the reuse of an existing industrial building for a pet day care facility/commercial kennel. The project proposes a series of major improvements including a new parking lot, new building interior and exterior renovations, new landscaping, and a new outdoor dog play area.

Since the previous submittal, the applicant has completed a series of changes, including, but not limited to, the following:

1. The formerly proposed five spaces along the east façade have been removed and replaced by four new spaces in the main proposed parking lot.

2. The underground drain beneath the play area and underground aggregate infiltration is no longer connected to the storm sewer system. Rather, it is designed to allow for infiltration down through the soils, with an overflow backup that drains to the sanitary sewer system. We support this change, and final details can be coordinated with the engineering department prior to final site plan approval.
3. A covered "relief area" has been added along the south façade.
4. A curb has been added to the perimeter of the entire outdoor play area where fencing is proposed. This will result in the proposed fencing being much closer to grade than originally designed, limiting the gap between the bottom of the fence and the curb to a maximum of 2 inches. It will also guarantee that no runoff will leave the play area for adjacent sites.

Location of Subject Property:

The property is located on the south side of Temple City Drive, west of Crooks Road.

Size of Subject Property:

The parcel is 0.88 acres in size.

Proposed Uses of Subject Parcel:

The applicant proposes to use the existing building for a dog and cat day care facility.

Current Use of Subject Property:

The subject property is currently a vacant former industrial building.

Current Zoning:

The property is currently zoned M-1, Light Industrial District.

Zoning Classification of Adjacent Parcels

North: M-1, Light Industrial District

West: M-1, Light Industrial District

South: M-1, Light Industrial District

East: M-1, Light Industrial District

BUILDING LOCATION AND SITE ARRANGEMENT

The existing building is well positioned on this smaller site, with an area along the west side of the building available for a new parking area and the new proposed outdoor play area. The applicant intends to remove and replace the existing parking lot with a revised layout. The site is accessed from the north boundary along Temple City Drive. The applicant intends to maintain the same access.

Items to be Addressed: *None.*

AREA, WIDTH, HEIGHT, SETBACKS

The site is home to an existing building. Required and existing setbacks, which are not being altered by the project, are as follows:

	Required	Provided
Setbacks		
Front	50 feet	49.92 feet
Side East	10 feet	9.81 feet
Side West	10 feet	79.7 feet
Rear	20 feet	25.81 feet
Building Height	40 Feet, 3 stories	22 feet, 4 inches
Lot Coverage	40 percent	29.5 percent

There are two previously existing legal nonconformities on this site. Both the east side yard setback and the front yard setback are slightly deficient. However, the applicant is not proposing the increase the level of nonconformity and they are permitted to remain.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

Proposed Circulation:

The site is accessed from the north boundary along Temple City Drive. The applicant intends to maintain the same access point, but redesign and rebuild the approach itself. The City Traffic Engineer is concerned that the reconfiguration of the drive may impact access to the adjacent site to the west. The applicant should demonstrate that the proposed driveway reconfiguration will not negatively impact the site to the west.

The site plan no longer includes a row of new spaces along the east façade of the building.

Sidewalks:

The site provides a walkway from the proposed parking lot to the front door of the building. This neighborhood has no frontage sidewalks.

Items to be Addressed: Demonstrate that the proposed driveway will not negatively impact the site to the west.

PARKING

Proposed Parking:

The site plan indicates a total of 14 parking spaces which includes 1 barrier free parking space.

Parking Calculations:

The parking calculations provided by the applicant are as follows.

<u>Required</u>	<u>Provided</u>
One (1) for each employee in the largest working shift, plus one (1) for each fifteen (15) animals within the board capacity of the building; or one (1) for each four hundred fifty (450) square feet of gross floor area, whichever is greater. The applicant has used the following: One (1) space per 450 square feet of gross floor area = $11,382/450 = 25.29$ (25 spaces)	14 spaces. The applicant has also had a parking study completed and is requesting a parking modification

The applicant has now provided 14 spaces parking spaces, 11 less than that required by Ordinance. The formerly proposed spaces, accessible only from the east property, have been removed. The applicant added four more spaces to the main parking lot to offset this change.

The applicant has provided a parking study. The study states that approximately 15 spaces should be required based on other facilities in the area and their existing parking space counts compared with their number of kennels and square footage. We believe the study is sound and provides good guidance on parking demand. Consequently, we support the applicant receiving a parking modification to permit a reduced number of spaces. As noted in our previous review, we support the removal the five proposed spaces along the east façade and their replacement with four additional spaces in the main lot. We support a parking modification of 11 spaces, accommodating this design and very nearly matching the average number of spaces provided by other commercial kennels in the area.

Items to be Addressed: Obtain a modification of 11 spaces from the Planning Commission.

NATURAL RESOURCES

The site is previously developed and contains no natural features. The proposed plan would not impact any protected natural features, and will actually improve the natural condition of the site by adding a refreshed landscaped area.

Items to be Addressed: None.

LANDSCAPING

A landscape plan has been submitted as part of this application. The plan includes 6 new trees to satisfy the frontage tree requirement (1 tree for every 30 linear feet of frontage = $160 \text{ feet} / 30 = 5.3 = 6 \text{ trees}$). The site plan also provides adequate greenbelt along Temple City Drive. The site plan includes 12.6 percent landscaped area in the front and side yards, not including the greenbelt, exceeding the minimum 10 percent requirement.

Items to be Addressed: None.

LIGHTING

The applicant has not provided a photometric plan or any lighting details for this project. Full lighting details will be provided for final site plan approval.

Items to be Addressed: None.

SPECIAL USE REVIEW

For any special use, according to Section 03.31.04, the Planning Commission shall review the request, supplementary materials either in support or opposition thereto, as well as the Planning Department's report, at a Public Hearing established for that purpose, and shall either grant or deny the request, take action on the request, or grant the request subject to specific conditions.

Required Information

In the M-1 District, commercial kennels are permitted by Section 28.30.07 as a special use. As such, a special use permit must be issued to allow the project to move forward, in accordance with Section 03.31.00. Section 03.33.00 establishes the information required for a special use application. All required information has been provided.

Use Standards

Section 28.30.07 lists two conditions for kennels within the M-1 District. They are as follows:

A. The site shall be no closer than three hundred (300) feet from any residentially zoned or used property. This distance provision shall not apply to residentially zoned land which is developed or committed for uses other than the construction of residential dwellings.

B. A Commercial Kennel establishment may include ancillary uses such as pet grooming and pet obedience training.

The proposed facility is not within 300 feet of residential property and may include ancillary uses. The use-specific standards of special use approval for a commercial kennel have been met.

Standards of Approval

Section 03.31.05 states that before approving any requests for Special Use Approval, the Planning Commission, or the City Council, where indicated, shall find that:

1. *The land use or activity being proposed shall be of such location, size and character as to be compatible with the orderly development or use of adjacent land and/or Districts.*
2. *The land use or activity under consideration is within the capacity limitations of the existing or proposed public services and facilities which serve its location.*

We believe the land use as proposed by the site plan is of such location and character as to be compatible with the orderly development or use of adjacent land and/or Districts. The only outstanding concern that we believe merits consideration is the possibility of noise from barking dogs. Given that the adjacent properties are all zoned M-1 District and are used for non-residential purposes, and that the applicant has taken measures to screen the property, we do not believe that dog noise will create a significant disturbance. The majority of the time the dogs spend at the kennel will be spent indoors, where barking will not be audible from adjacent sites.

The City Engineer had no comment with regard to public services and facilities in this revised plan.

Items to be addressed: *Discuss noise concerns with the Planning Commission.*

SUBMITTAL REQUIREMENTS

Section 3.43.01 establishes the requirements for preliminary site plan approval. The minimum standards necessary for review have been met.

Items to be Addressed: None.

RECOMMENDATIONS

This project has been modified to address our concerns and the concerns of the Planning Commission. Therefore, we recommend that the Planning Commission grant the request for a parking modification of 11 spaces and special use and preliminary site plan approval.



CARLISLE/WORTMAN ASSOCIATES, INC.
Zachary G. Branigan, LEED AP, AICP
Associate



PROFESSIONAL ENGINEERING ASSOCIATES, INC.

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Vice President

July 2, 2010

Ms. Rita Dunker
1022 Waterfall Court
Birmingham, MI 48009

REC'D

JUL 12 2010

PLANNING DEPT.

RE: Parking Analysis Regarding the Proposed Barkshire in Troy, Michigan

Dear Ms. Dunker:

Pursuant to your request, Professional Engineering Associates (PEA) has completed an analysis of the parking requirements for the proposed Barkshire development. Our assignment in the matter was to determine the appropriate number of parking spaces for this proposed use based on the related attributes of similar developments in the area. The following sections present the analyses, associated results, and recommendations of this study.

ANALYSIS

General Information

Based on conversations with the development architect, review of the City of Troy Ordinance, and observation of the operation of several similar developments, the development team believed that the number of parking spaces (25) required by the City of Troy was excessive. Conversations with the City of Troy staff resulted in the need to provide an analytical approach toward supporting our reduced parking request. To that end we developed a scope of work for this study that was sent to the City staff for concurrence. The scope involved the following:

- Identifying similar developments in the immediate area,
- Determining the important attributes of each development, i.e. number of parking spaces, number of kennels, number of employees, gross square footage of building, services offered and hours of operation.

Based on this information, an average parking space requirement would be calculated based on the number kennels and another based on the gross square footage of the building. Then these requirements would be applied to the same attributes of the proposed Barkshire.

Parking Analysis

In the immediate area of the proposed Barkshire, three similar developments were identified, two in the City of Troy and one in the City of Royal Oak. The following table is a summary of these developments.

2009 American Society of Landscape Architects-Michigan Chapter "Firm of the Year"

Howell Office 2900 E. Grand River Avenue, Howell, MI 48843 • (517) 546-8583 • Fax (517) 546-8973

• Municipal Engineering • Traffic Engineering • Asset Management • Sustainable Design • Geotechnical Engineering • Site Development • Wetland Services

Barkshire Parking Analysis

Facility	Pet Suite Retreat	All American Pet Resort	Camp Bow Wow
City	Troy	Royal Oak	Troy
# Kennels	100	160	58
# Employees	2	4	3
Square Footage	12600	8500	8000
# Spaces	15	13	9
Hours of Operation	Sat-TH 8 to 8 Fri - 8 to 7	Mon-Sat - 9 to 7 Sun - Noon to 7	Mon-Fri 6:30 to 7 Sat-Sun 8 to 11 & 5 to 8

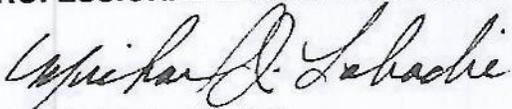
Based on this information, two parking rates were calculated, an average number of spaces per 15 kennels and average number of spaces per 450 sq ft of gross building size. These developments average 1.93 parking spaces per 15 kennels and they average 0.58 parking spaces per 450 sq ft of gross building size. The proposed Barkshire development will have 106 kennels and will be 11,340 gross square feet in size. Applying the average rates calculated from the similar developments to the Barkshire proposal results in 14 spaces required based on the proposed number of kennels and 15 spaces required based on gross square footage.

RECOMMENDATION

Based on the results of the analysis described above, PEA recommends that this development as proposed, include 15 parking spaces in the development proposal. This recommendation will require a 10 parking space waiver from the City of Troy.

Sincerely,

PROFESSIONAL ENGINEERING ASSOCIATES, INC.



Michael J. Labadie, P.E.
Senior Transportation Engineer

REC'D

JUL 12 2010

PLANNING DEPT.

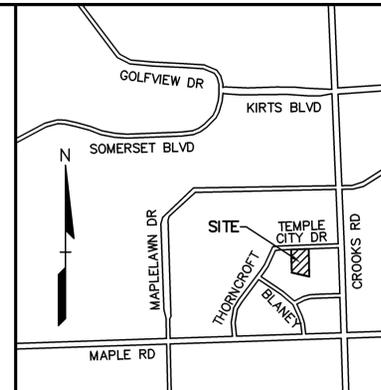
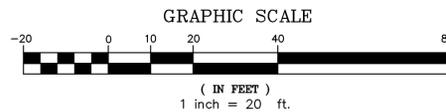
ZONING:
The current zoning classification is M-1 Light Industrial District.
(Per City of Troy Online Zoning Map)
Required setbacks (per City of Troy Zoning Ordinance, Chapter 39, Article XXVIII and XXX):
M-1 Zoning:
Front Yard: 50 FT
Side Yard: 10 FT least one, 20 FT total two
Rear Yard: 20 FT
Maximum Building Height: 3 Stories, 40 FT

BENCHMARKS:
BM #1:
Arrow on hydrant, south side of Temple City Drive, approx. 58 feet north of the northeast building corner of building #1501.
Elev. = 704.878 NAVD88
BM #2:
Set benchmark in easterly face of utility pole, approx. 10 feet east and 30 feet south of the southeast building corner of building #1521.
Elev. = 705.072 NAVD88

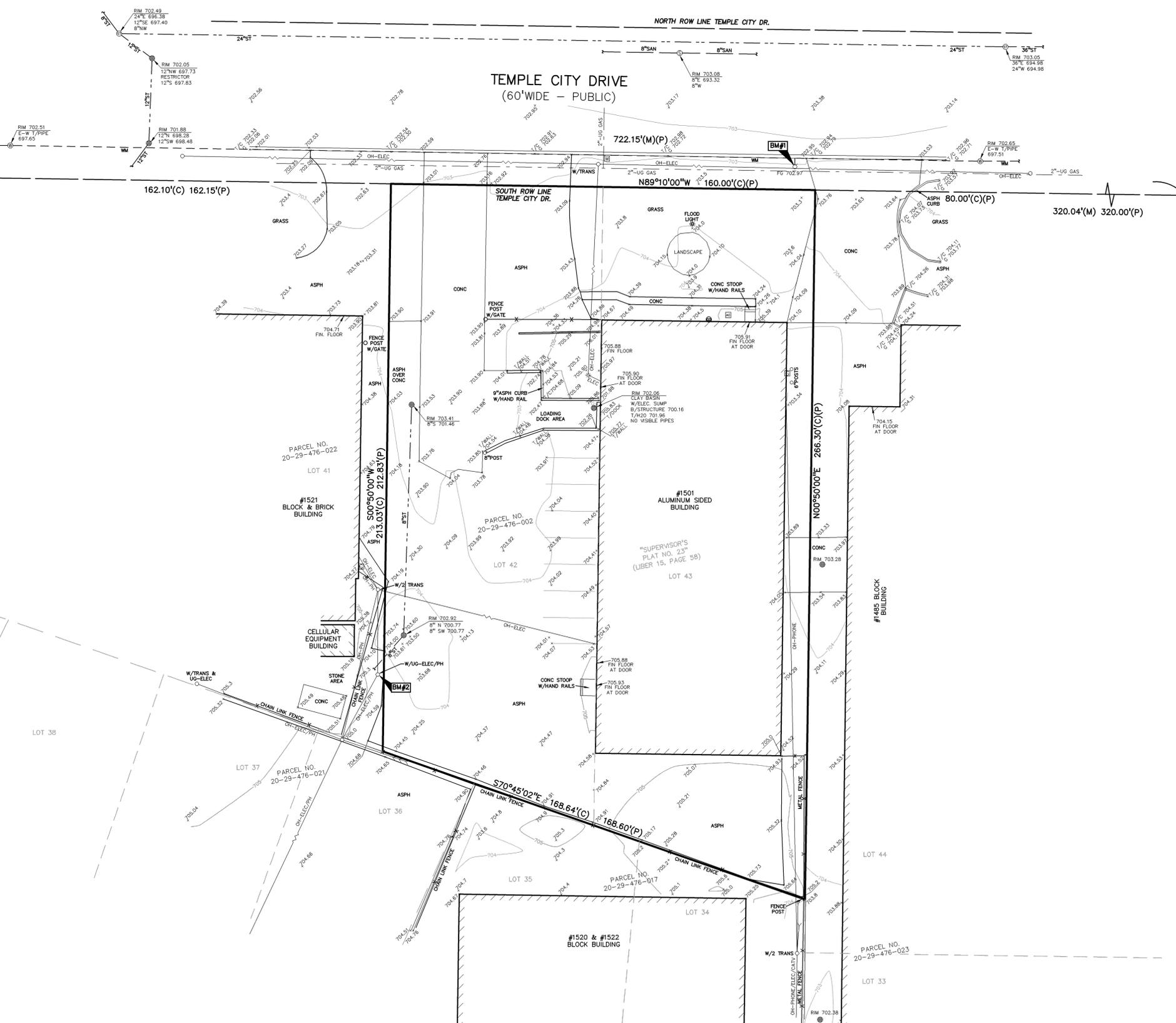
LEGAL DESCRIPTION
(Per City of Troy Tax Assessing Records)

PARCEL NO 20-29-476-002
Town 2 North, Range 11 East, Section 29, Lots 42 & 43 of "Supervisor's Plat No. 23", as recorded in Liber 15 of Plats, Page 58, Oakland County Records.

FLOODPLAIN:
Subject parcels are in "Areas determined to be outside of the 0.2% annual chance floodplain." (Zone X) per Flood Insurance Rate Map Number 26125C-0541F, Effective September 29, 2006.



NO.	DATE	REVISIONS
1		ISSUED
2		REVISED per City Comments
3		REVISED per City Comments
4		REVISED per City Comments
5		REVISED per City Comments
6		REVISED per City Comments
7		REVISED per City Comments
8		REVISED per City Comments
9		REVISED per City Comments
10		REVISED per City Comments



LEGEND

● IRON FOUND	○ BRASS PLUG SET	○ SEC. CORNER FOUND
⊗ IRON SET	○ MONUMENT FOUND	○ RECORDED
⊗ NAIL FOUND	○ MONUMENT SET	○ MEASURED
⊗ NAIL & CAP SET		○ CALCULATED

EXISTING

- OH-ELEC-W-O: ELEC. PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE
- UG-CATV: UNDERGROUND CABLE TV, CATV PEDESTAL
- UG-PHONE: TELEPHONE U.S. CABLE, PEDESTAL & MANHOLE
- UG-ELEC: ELECTRIC U.S. CABLE, MANHOLE, METER & HANDHOLE
- WATERMAN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- CATCH BASIN
- INLET (NO INCOMING LINES)
- YARD DRAIN (2" DIA. & SMALLER)
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE

AS BUILT ELEVATION

- 670: SPOT ELEVATION
- 670: GAS MAIN, VALVE & GAS LINE MARKER
- 670: FENCE
- 670: GUARD RAIL
- 670: STREET LIGHT
- 670: SIGN

CONCRETE

- CONC: CONCRETE
- ASPH: ASPHALT
- WETLAND: WETLAND
- GRAVEL SHOULDER: GRAVEL SHOULDER

REFERENCE DRAWINGS

- CITY OF TROY PLANS FOR TEMPLE CITY DRIVE, DATED MAY 1971
- CITY OF TROY PLANS FOR TEMPLE CITY DRIVE, DATED MAY 1971
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- ITC TRANSMISSION - NO FACILITIES ON SITE, ERIN KEELER, RECEIVED 6-3-10
- THE OUTSIDE SALES PRODUCT MAP #153-354, DETROIT EDITION, ROBIN O'CONNELL, RECEIVED 5-25-10
- HERZOG AND COMMUNICATIONS - NO FACILITIES, JOHN BACHOLDER, RECEIVED 6-4-10
- BUCKEYE PIPELINE - NO FACILITIES ON SITE, TERRANN FOLEY, RECEIVED 5-24-10
- CONSUMERS ENERGY MAP 02-25-15-4 DATED 5-21-10, CONSUMERS ENERGY, MIRON KEZEL, RECEIVED 5-24-10
- SUNSHINE PIPELINE - NO FACILITIES ON SITE, TRACY HOFFMAN, RECEIVED 5-26-10
- "COMCAST PRINT" - 1501 TEMPLE CITY COMCAST, CHRIS CYR, RECEIVED 6-9-10

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CONTRACTOR SHALL ADDRESS THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR ASSESSING AND VERIFYING THE ACCURACY OF ALL INFORMATION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THE CONTRACTOR SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL LIABILITY FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

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BIRMINGHAM, MI 48409

TOPOGRAPHIC SURVEY THE BARKSHIRE
1501 TEMPLE CITY DRIVE
CITY OF TROY, OKLAHOMA COUNTY, MICHIGAN

DES. PB DN. SUR. KTR. P.M. SAS

ORIGINAL
ISSUE DATE: JULY 12, 2010
PEA JOB NO. 2010-095
SCALE: 1" = 20'
DRAWING NUMBER:
P-1.0

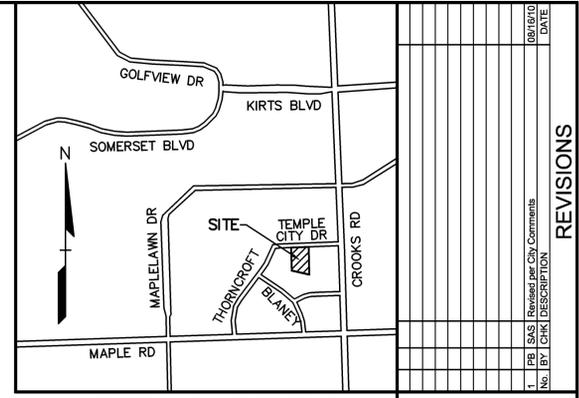
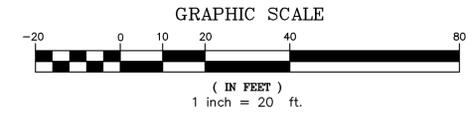
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ZONING:
 The current zoning classification is M-1 Light Industrial District.
 (Per City of Troy Online Zoning Map)
 Required setbacks (Per City of Troy Zoning Ordinance, Chapter 39, Article XXVIII and XXX):
 M-1 Zonings:
 Front Yard: 50 FT
 Side Yard: 10 FT least one, 20 FT total two
 Rear Yard: 20 FT
 Maximum Building Height: 3 Stories, 40 FT

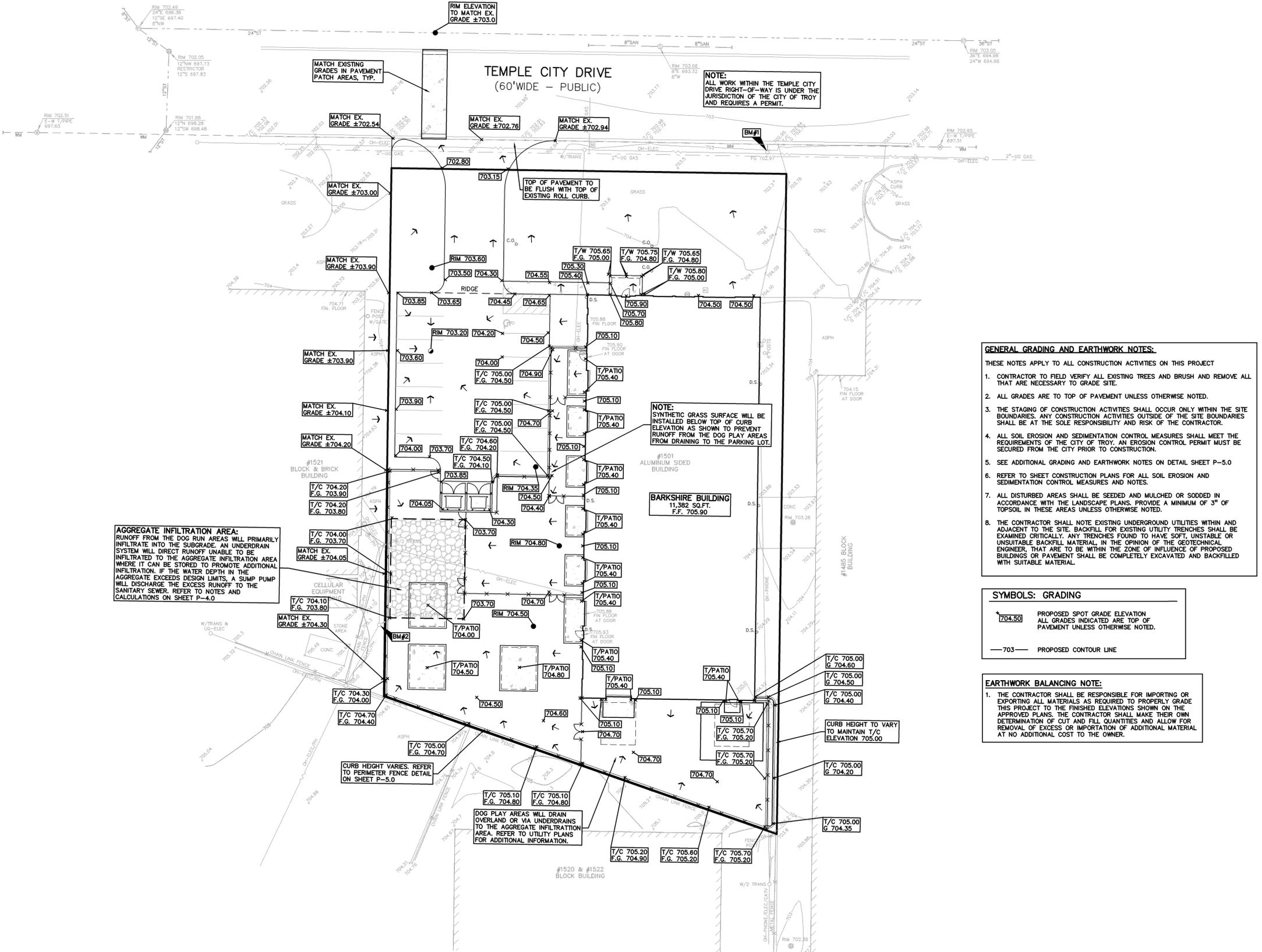
BENCHMARKS:
 BM #1:
 Arrow on hydrant, south side of Temple City Drive, approx. 58 feet north of the northeast building corner of building #1501.
 Elev. = 704.878 NAVD88
 BM #2:
 Set benchline in easterly face of utility pole, approx. 10 feet east and 30 feet south of the southeast building corner of building #1521.
 Elev. = 705.072 NAVD88

LEGAL DESCRIPTION:
 (Per City of Troy Tax Assessing Records)
PARCEL NO 20-29-476-002
 Town 2 North, Range 11 East, Section 29, Lots 42 & 43 of "Supervisor's Plat No. 23", as recorded in Liber 15 of Plats, Page 58, Oakland County Records.

FLOODPLAIN:
 Subject parcels are in "Areas determined to be outside of the 0.2% annual chance floodplain." (Zone X) per Flood Insurance Rate Map Number 26125C-0541F, Effective September 29, 2006.



NO.	DATE	DESCRIPTION



LEGEND

● IRON FOUND	○ BRASS PLUG SET	○ SEC. CORNER FOUND
○ IRON SET	○ MONUMENT FOUND	○ R RECORDED
○ NAIL FOUND	○ MONUMENT SET	○ M MEASURED
○ NAIL & CAP SET	○ C CALCULATED	○ C CALCULATED

EXISTING

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- UG-CATV— TELEPHONE U.S. CABLE, PEDESTAL & HANDHOLE
- UG-ELEC— TELEPHONE U.S. CABLE, MANHOLE, METER & HANDHOLE
- UG-ELEC— SANITARY SEWER, CLEANOUT & MANHOLE
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- UG-ELEC— STORM SEWER, CLEANOUT & MANHOLE
- UG-ELEC— COMBINED SEWER & MANHOLE
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- UG-ELEC— INLET (NO INCOMING LINES)
- UG-ELEC— GAS MAIN, VALVE & GAS LINE MARKER
- UG-ELEC— YARD DRAIN (2" DIA. & SMALLER)
- UG-ELEC— POST INDICATOR VALVE
- UG-ELEC— WATER VALVE BOX/HORIZONTAL VALVE BOX, SERVICE SHUTOFF
- UG-ELEC— MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UG-ELEC— UNIDENTIFIED STRUCTURE

PROPOSED

- ELEV.— SPOT ELEVATION
- ELEV.— AS BUILT ELEVATION
- ELEV.— GAS MAIN, VALVE & GAS LINE MARKER
- ELEV.— YARD DRAIN (2" DIA. & SMALLER)
- ELEV.— POST INDICATOR VALVE
- ELEV.— WATER VALVE BOX/HORIZONTAL VALVE BOX, SERVICE SHUTOFF
- ELEV.— MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- ELEV.— UNIDENTIFIED STRUCTURE

CONCRETE

- CONC. CONCRETE
- ASPH. ASPHALT
- WETLAND WETLAND
- GRAVEL SHOULDER GRAVEL SHOULDER

REFERENCE DRAWINGS

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 "COMCAST PRINT" - 1501 TEMPLE CITY" COMCAST, CHRIS CYR, RECEIVED 6-9-10

GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

- CONTRACTOR TO FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
- ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE CITY OF TROY. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE CITY PRIOR TO CONSTRUCTION.
- SEE ADDITIONAL GRADING AND EARTHWORK NOTES ON DETAIL SHEET P-5.0
- REFER TO SHEET CONSTRUCTION PLANS FOR ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL IN THE OPINION OF THE GEOTECHNICAL ENGINEER, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.

SYMBOLS: GRADING

- 704.50 PROPOSED SPOT GRADE ELEVATION
- ALL GRADES INDICATED ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- 703 PROPOSED CONTOUR LINE

EARTHWORK BALANCING NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

CAUTION!
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CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TROY AND OTHER AGENCIES PRIOR TO THE START OF CONSTRUCTION.

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PRELIMINARY GRADING PLAN
THE BARKSHIRE
 1501 TEMPLE CITY DRIVE
 CITY OF TROY, OKLAHOMA COUNTY, MICHIGAN

DES. PB DN. SUR. KTR. P.M. SAS

ORIGINAL
 ISSUE DATE: JULY 12, 2010
 PEA JOB NO. 2010-095
 SCALE: 1" = 20'
 DRAWING NUMBER:
P-3.0

XREF: L:\2010095\DWG\TOPBASE-10095.DWG
 XREF: L:\2010095\DWG\SITE PLANS\PEASE-10095.DWG
 XREF: L:\2010095\DWG\SITE PLANS\TLK-10095.DWG

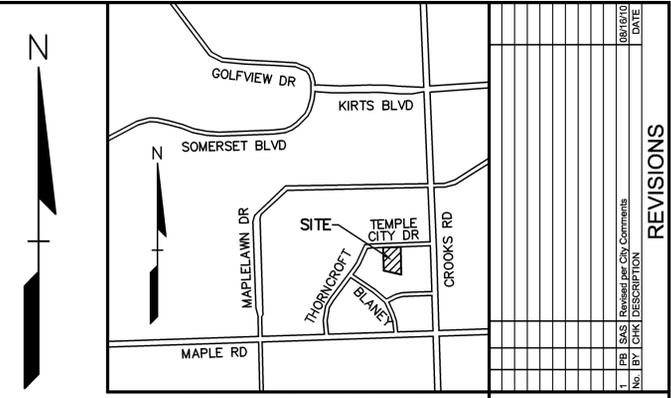
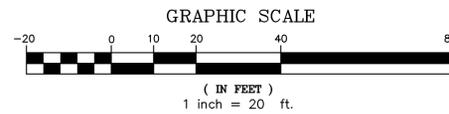
ZONING:
The current zoning classification is M-1 Light Industrial District. (Per City of Troy Online Zoning Map)
Required setbacks (per City of Troy Zoning Ordinance, Chapter 39, Article XXVII and XXX).
M-1 Zoning:
Front Yard: 50 FT
Side Yard: 10 FT least one, 20 FT total two
Rear Yard: 20 FT
Maximum Building Height: 3 Stories, 40 FT

BENCHMARKS:
BM #1:
Arrow on hydrant, south side of Temple City Drive, approx. 58 feet north of the northeast building corner of building #1501.
Elev. = 704.878 NAVD83
BM #2:
Set benchmark in easterly face of utility pole, approx. 10 feet east and 30 feet south of the southeast building corner of building #1521.
Elev. = 705.072 NAVD88

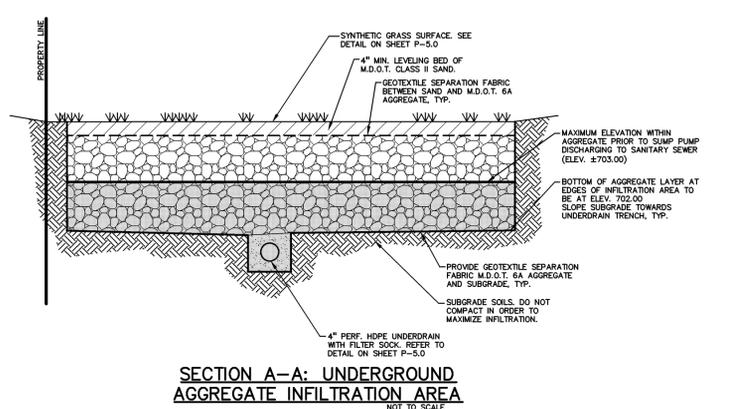
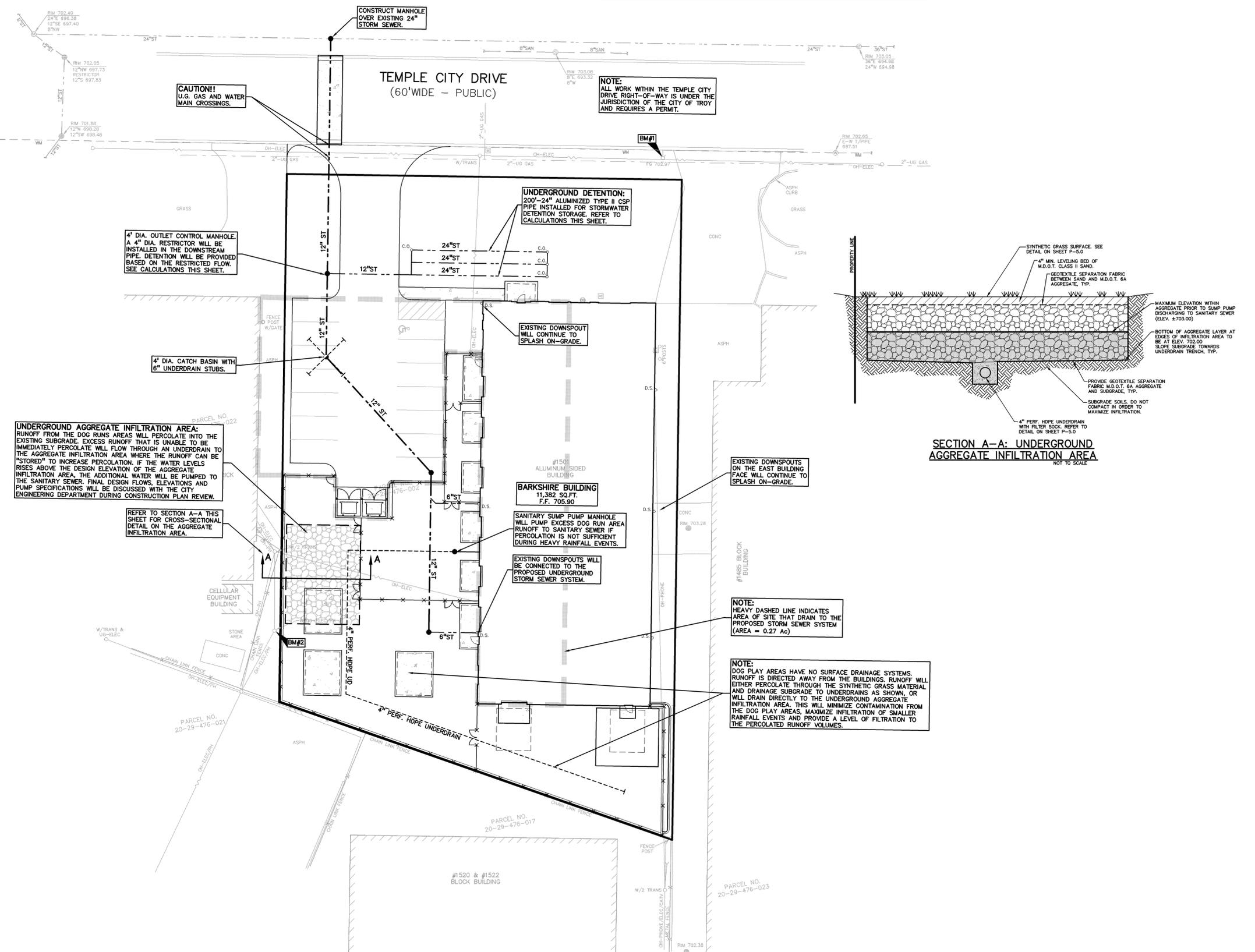
GENERAL UTILITY NOTES:
1. ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF TROY.
2. REFER TO CONSTRUCTION PLANS FOR ADDITIONAL UTILITY DETAILS AND NOTES.
3. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443).
4. ALL STORM SEWER LEADS SHALL BE PVC SCHEDULE 40 WITH GLUED JOINTS UNLESS OTHERWISE NOTED.
5. PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
6. THE CITY OF TROY STANDARD DETAIL SHEETS ARE INCORPORATED INTO AND MADE A PART OF THESE PLANS. CONTRACTOR TO REFER TO THE CITY OF TROY STANDARD DETAIL SHEETS FOR ALL STRUCTURE, PIPE MATERIALS, BEDDING, TESTING, ETC. NOTES AND DETAILS.

FLOODPLAIN:
Subject parcels are in "Areas determined to be outside of the 0.2% annual chance floodplain." (Zone X) per Flood Insurance Rate Map Number 26125C-0541F, Effective September 29, 2006.

LEGAL DESCRIPTION
(Per City of Troy Tax Assessing Records)
PARCEL NO 20-29-476-002
Town 2 North, Range 11 East, Section 29, Lots 42 & 43 of "Supervisor's Plat No. 23", as recorded in Liber 15 of Plats, Page 58, Oakland County Records.



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1		ISSUED
2		REVISIONS
3		REVISIONS
4		REVISIONS
5		REVISIONS
6		REVISIONS
7		REVISIONS
8		REVISIONS
9		REVISIONS
10		REVISIONS



LEGEND

● IRON FOUND	○ BRASS PLUG SET	○ SEC. CORNER FOUND
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- UNIDENTIFIED STRUCTURE

PROPOSED

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- CONTOUR LINE
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- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- WETLAND
- GRAVEL SHOULDER
- STANDARD HEAVY DUTY DEEP STRENGTH

REFERENCE DRAWINGS

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ROBEN O'DONNELL, RECEIVED 5-25-10
SERVICING COMMUNICATIONS - NO FACILITIES, JOHN BACHOLDER, RECEIVED 6-4-10
BUCKEYE PIPELINE - NO FACILITIES ON SITE, TERRANN FOLEY, RECEIVED 5-24-10
CONSUMERS ENERGY, RECEIVED 5-24-10 DATED 5-21-10 CONSUMERS ENERGY,
MURKIN KEELE, RECEIVED 5-24-10
SUNSHINE PIPELINE - NO FACILITIES ON SITE, TRACY HOFFMAN, RECEIVED 5-26-10
"COMCAST PRINT" - 1501 TEMPLE CITY COMCAST, CHRIS CYR, RECEIVED 6-9-10

STORMWATER STORAGE CALCULATIONS:

RESTRICTION CALCULATION:

THE ALLOWABLE DISCHARGE FROM THIS SITE WAS CALCULATED USING A 4" RESTRICTOR PIPE, THE SMALLEST ALLOWABLE DIAMETER BY THE CITY OF TROY ENGINEERING DEPARTMENT. THE HEAD OF THE RESTRICTOR PIPE WAS ASSUMED TO BE 12" BELOW THE CATCH BASIN RIM ELEVATION OF 703.20

USING THE ORIFICE EQUATION:

$$Q = 0.62A (2GH)^{0.5} = 0.62A (2 \times 0.5 \times (703.20 - 699.50))^{0.5} = 0.62A (7.4)^{0.5} = 0.62A \times 2.70 = 1.70A$$

ALLOWABLE DISCHARGE = 0.714 CFS

THESE CALCULATIONS WILL BE FINALIZED DURING CONSTRUCTION PLAN PREPARATION ONCE FINAL INVERT ELEVATIONS THROUGHOUT THE STORM SEWER SYSTEM ARE ESTABLISHED.

DETENTION CALCULATIONS:

AREA TO BE DETAINED = 0.27 ACRES (PROPERTY DRAINING TO STORAGE AREA)

AVERAGE RUNOFF COEFFICIENT = 0.91

ALLOWABLE DISCHARGE = FLOW FROM 4" RESTRICTOR PIPE (0.714 CFS)

DETENTION REQUIREMENT (OAKLAND CO. FORMULA)

$$Q_0 = \text{ALLOWABLE DISCHARGE} / \text{ACREAGE (RUNOFF COEF.)} = 0.714 \text{ C.F.S.} / (0.27 \text{ AC.} \times 0.91) = 2.906 \text{ CFS/ACRE OF IMPERVIOUSNESS}$$

O.C.D.C. ORIFICE OUTLET FORMULA FOR STORAGE TIME FOR A 10 YEAR STORM DESIGN

$$T = -25 + (6562.5 / Q_0)^{0.5} = -25 + (6562.5 / 2.906)^{0.5} = 22.52 \text{ MINUTES}$$

$$V_s = 10,500T - 400Q_0T = (10500 \times 22.52) - 40 \times 2.906 \times 22.52 = 2358 \text{ C.F./ACRE}$$

TOTAL REQUIRED STORAGE VOLUME = 579 C.F.

DETENTION PROVIDED:

DETENTION STORAGE WILL BE PROVIDED IN UNDERGROUND 24" DIAMETER PIPES WITHIN THE FRONT YARD.

REQUIRED VOLUME = 579 C.F.

VOLUME OF STORAGE PROVIDED:

24" PIPE AREA = 3.14 SQ.FT.

THEREFORE 3.14 C.F. OF STORAGE PROVIDED PER LF OF PIPE.

579 C.F. / 3.14 C.F. PER LF = 184 LF. OF PIPE REQUIRED

STORAGE PIPE PROVIDED = 185 LF = 581 C.F.

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website: www.peainc.com

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PRELIMINARY UTILITY PLAN

THE BARKSHIRE

1501 TEMPLE CITY DRIVE
CITY OF TROY, OAKLAND COUNTY, MICHIGAN

DES. PB DN SUR. KTR. P.M. SAS

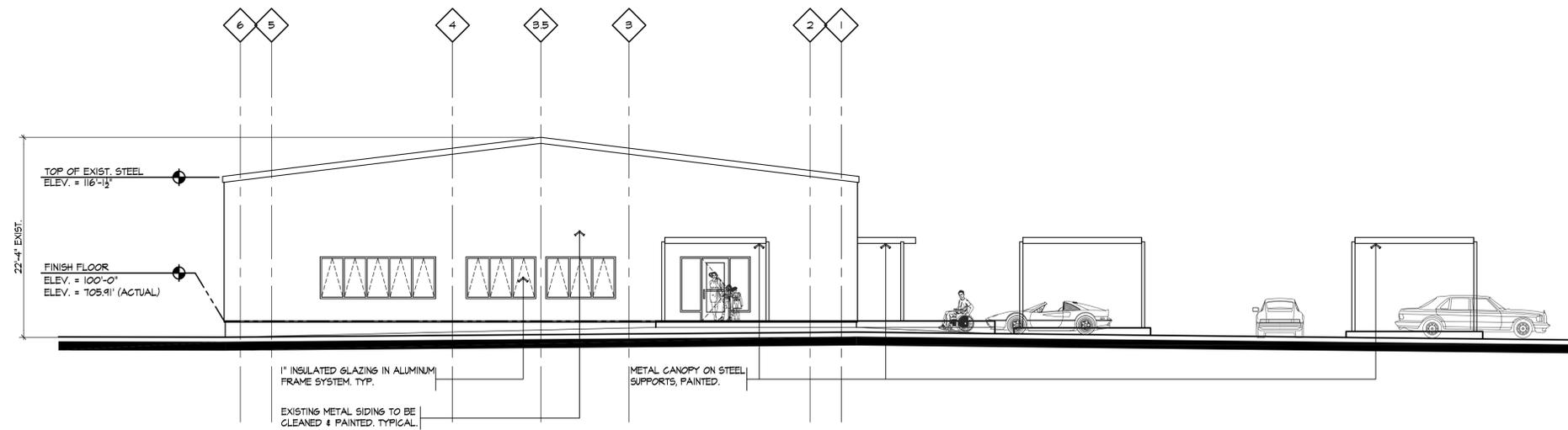
ORIGINAL
ISSUE DATE: JULY 12, 2010

PEA JOB NO. 2010-095

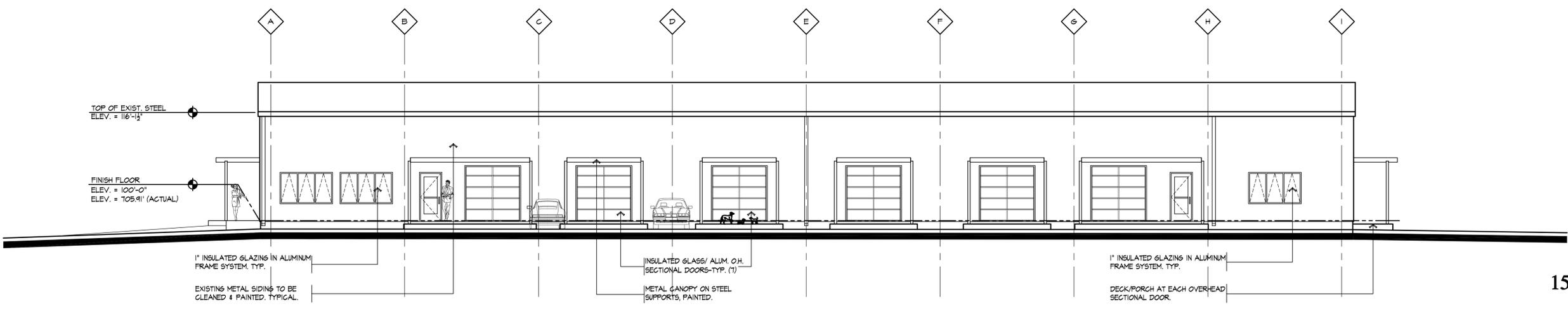
SCALE: 1" = 20'

DRAWING NUMBER:
P-4.0

XREF: L:\2010095\DWG\TOP\BASE-10095.DWG
XREF: L:\2010095\DWG\SITE PLANS\PSAISE-10095.DWG
XREF: L:\2010095\DWG\SITE PLANS\TLK-10095.DWG



FRONT (NORTH) ELEVATION



SIDE (WEST) ELEVATION

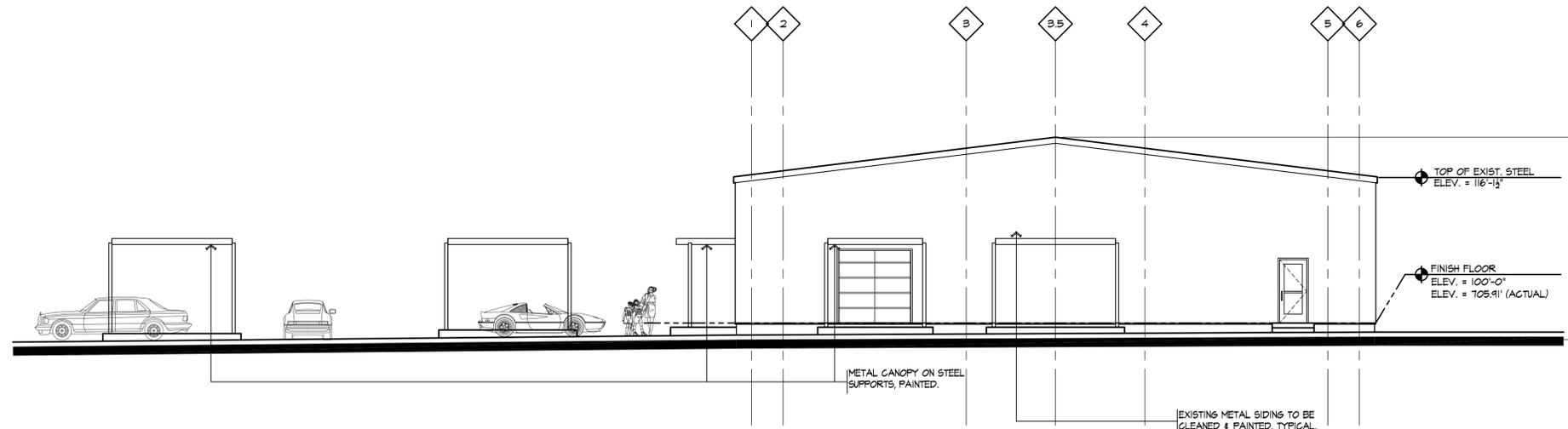
The
Barkshire

ELEVATIONS

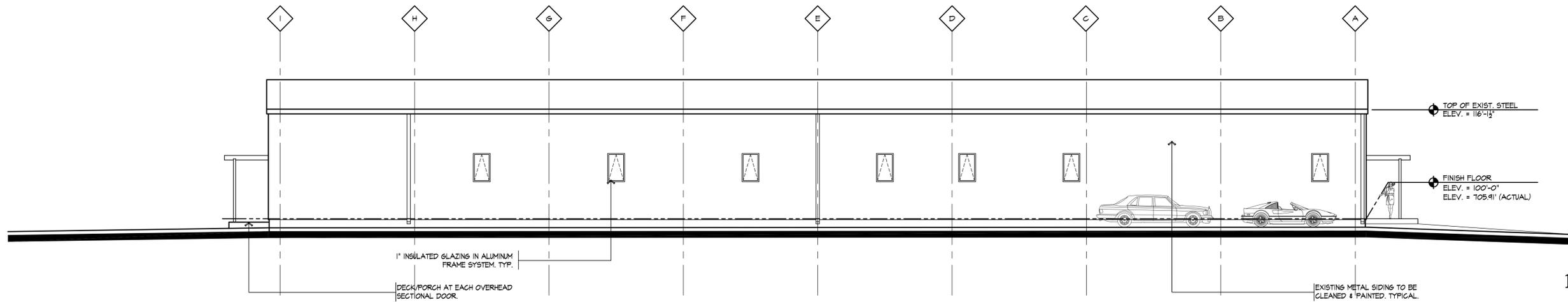
1501 Temple City Drive
Troy, Michigan

Scale: 1/8" = 1'-0"
Date: July 9, 2010

Victor Saroki & Associates Architects PC
430 North Old Woodward Avenue / Birmingham, Michigan 48009
T: 248.258.5707 F: 248.258.5515



REAR (SOUTH) ELEVATION



SIDE (EAST) ELEVATION

The
Barkshire

ELEVATIONS

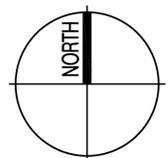
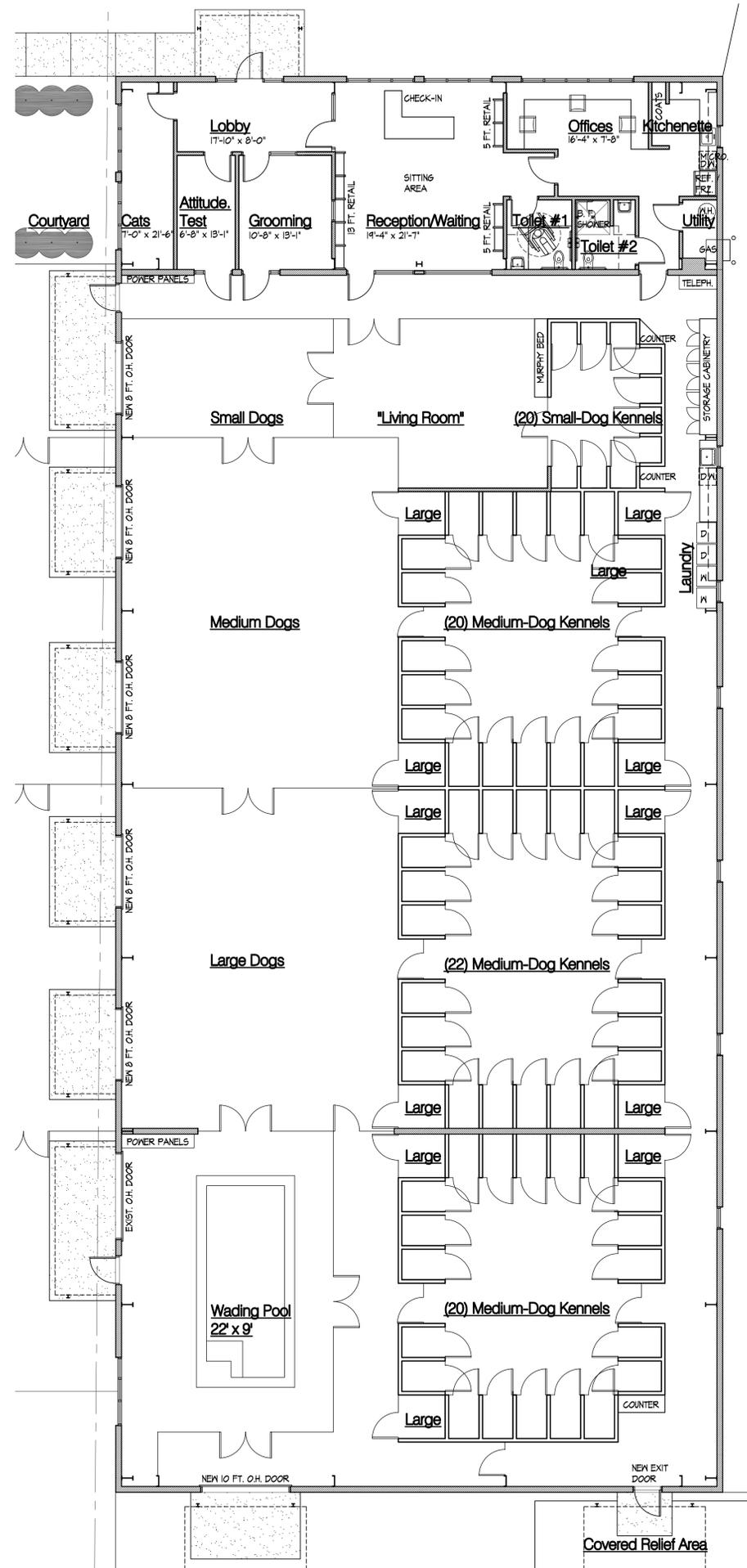
1501 Temple City Drive
Troy, Michigan

Scale: 1/8" = 1'-0"

Date: July 9, 2010

Victor Saroki & Associates Architects PC

430 North Old Woodward Avenue / Birmingham, Michigan 48009
T: 248.258.5707 F: 248.258.5515



The Barkshire

FLOOR PLAN

1501 Temple City Drive
Troy, Michigan

Scale: 1/8" = 1'-0"

Date: July 17, 2010

Victor Saroki & Associates Architects PC

430 North Old Woodward Avenue / Birmingham, Michigan 48009
T: 248.258.5707 F: 248.258.5515

From: [Jerry Williams](#)
To: [Planning](#)
Subject: Planning File # SU-382 The Barkshire : Parcel # 88-20-29-476-002
Date: Friday, July 23, 2010 4:45:12 PM

Re: Planning File # SU-382 The Barkshire : Parcel # 88-20-29-476-002

Dear Planning Department,

I am the tenant/owner of 1450 Temple City Drive and am across the street and 2 buildings down from the proposed parcel zone change.

I am strongly opposed to this zoning request change. I can appreciate the desire of the individual to start or move a business, however I feel this would further reduce the value of our property and deter further investment or expansion by other's on the street.

Please do not allow this zoning change request.

Respectfully,

Jerry Williams
Vice President
[Detection Systems & Engineering Co.](#)

From: [WK Jackson](#)
To: [Planning](#)
Subject: Planning File No: SU-382 The Barkshire
Date: Monday, August 09, 2010 9:49:59 AM

Dear Planning Commission,

Please accept my comments in writing because I am unable to attend your scheduled meeting.

In light of the high vacancy rate in commercial property in southern Troy, any proposed new enterprise is to be applauded. But one has to ask how such an operation would adversely affect the rental and sale prospects of neighboring business. Or should I say, businesses within earshot of the barks, howls, yaps and snarls that would resound from a commercial kennel--especially one that is located in an older, thin-walled building to which are added outdoor runs and exercise spaces. My exposure to kennels suggests that sounds carry further than one might expect. And this stress-induced barking soon gets on the nerves of those forced to listen to it. Perhaps that is why the only other Barkshire kennel I could find through Google Earth, is located in semi-rural Wisconsin with a bar and a fireworks dealer within close earshot.

I am an advertising photographer whose studio is just two-buildings removed from the proposed kennel. I fear that barking may irritate clients in my parking lot and make it more difficult to work inside my studio

Thank you,

Bill Jackson

1490 Premier Dr.
Troy, MI 48084

From: [Francis Engelhardt](#)
To: [Planning](#)
Cc: [Francis Engelhardt](#)
Subject: Reference Public Hearing Planning File # SU-382 The Barkshire
Date: Saturday, July 31, 2010 3:39:56 PM

This is in reference to a application for a Special Use file # SU-382 at 1501 Temple City Drive.

I am the owner of a 6-unit multi-tenant building at 1490 Premier Road 88-20-29-476-018, which is located to the south of the subject property.

Since there are five tenants that utilize my building, I am concerned about the noise that a dog kennel will produce at 1501 Temple City Drive directly to the north of my property. I have tenants who have expressed their concern also to me and I do not want a special use which produces objectionable noise to cause my tenants to vacate their suites.

Since I am unable to attend the August 10 hearing, please register my objection to this "Special Use" request to the Planning Commission.

Sincerely,

Francis A. Engelhardt, member
Engelwood Resources L.L.C.
P. O. Box 412
Birmingham, Michigan

From: [Jill Denman](#)
To: [Planning](#)
Subject: zoning request on Temple City Drive
Date: Tuesday, August 10, 2010 11:15:57 AM

Good Day,

I work at 1521 Temple City Drive right next door to the building seeking a zoning request. I have no problem with the Barksdale Company opening a business there. I went to the company's website and it looks like an established well run business. I am happy that a new business is coming to Troy.

I know a photographer came to our company upset that they wanted to open because he thought he would hear barking and howling at night. I doubt he does much photography at night plus his rented space is on another street with a building in between his and the proposed Barksdale Company.

In my opinion lets welcome new business to Troy with welcome arms. Any questions, please call me at 248-267-0130.

Jill Denman-Duggan

From: [Joe Del](#)
To: [Planning](#)
Cc: [Dhawal Zatakia](#)
Subject: SU-382 THE BARKSIRE
Date: Tuesday, July 27, 2010 1:07:18 PM

Relative to Parcel No. 88-20-29-476-002
1501 Temple City Drive

Pls accept the following comments relative to the above:

I have experienced the noise level barking dogs in close proximity of kennel
This continuous barking is noise pollution to neighboring businesses and
is disruptive in the daily work process.

In one case I know is a business in the Rochester Area that had to move
because a kennel moved in next door...common wall.....strip
mall....barking noise levels where distracting....

It is the continuously barking that creates the problem...pollution

I have nothing against anyone running a business, but this kind of a
business should be noise isolated from the businesses nearby

Thank You

Joe Del

for

AMERICAN HYDROSTATICS

1750 BLANEY RD

TROY

48084

From: [Jarvis Williams](#)
To: [Planning](#)
Subject: file SU-382 THE BARKSHIRE
Date: Friday, July 23, 2010 5:19:52 PM

AS OWNER OF THE PROPERTY @1450 TEMPLE CITY DR, WE ARE DEAD SET AGAINST HAVING SUCH A BUSINESS ON OUR STREET. THIS WILL CREATE A CONSTANT NOISE AND BE INCONSISTENT WITH OUR INDUSTRIAL ZONING. SUCH A BUSINESS MUST BE LOCATED OUTSIDE OF MAJOR POPULATION AREAS. SHOULD YOU HAVE ADDED CONCERN PLEASE ADVISE.
RESPECTFULLY
JARVIS WILLIAMS MGR
TEMPLE CITY INV LLC

Date: August 18, 2010
To: Planning Commission
From: R. Brent Savidant, Acting Planning Director
Subject: COMPREHENSIVE ZONING ORDINANCE REWRITE (ZOTA 236) –
Discussion with Representatives from Carlisle/Wortman Associates, Inc.

Representatives of Carlisle/Wortman Associates, Inc. (CWA) will attend the August 24, 2010 Special/Study meeting to discuss the following information related to the Comprehensive Zoning Ordinance rewrite:

1. Article 20 – Form-Based Codes

A copy of the draft Downtown Development Authority Design Guidelines is attached.

Please be prepared to discuss this item at the August 24, 2010 Special/Study meeting.

Attachment:

1. Article 20 – Form-Based Code (draft).
2. Downtown Development Authority Design Guidelines (draft).

cc: Richard Carlisle, Carlisle/Wortman Associates, Inc.

G:\ZOTAs\ZOTA 236 Zoning Ordinance Rewrite\PC Memo 08 24 2010.docx

ARTICLE 20

FORM-BASED DISTRICTS

5

SECTION 20.01 GENERAL PURPOSE AND INTENT

10 A. The Zoning Ordinance regulates the intensity and use of development, which is appropriate in most parts of the City. There are also areas within the City in which the Master Plan places greater emphasis on regulating urban form and character of development as well as use and intensity of use.

15 B. These regulations are based on two (2) significant factors: site context and building form. Site context is derived from existing and desired characteristics of the area where these regulations are applied. Areas are distinguished from one another by their size and configuration of the site, street patterns, location, and intensity of use. Therefore, considering site context provides a customized approach to the inherent conditions of the areas where these regulations are applied.

20 Building form addresses the manner in which buildings and structures relate to their lots, surrounding buildings, and street frontage. Building form standards control height, placement, building configuration, parking location, and ground story activation applicable to the site context.

25 C. The specific intent of these regulations are as follows:

1. Ensure that development is of human scale, primarily pedestrian-oriented and designed to create attractive streetscapes and pedestrian spaces.

30 2. Promote infill development and redevelopment to expand employment and economic base.

3. Promote mixed-use development in both a horizontal and vertical form.

35 4. Ensure reasonable transition between higher intensity development and adjacent neighborhoods.

40 5. Improve mobility options and reduce the need for on-site parking by encouraging alternative means of transportation.

D. Regulations are tailored to meet the intent of more specific districts. These districts and their intents are set forth elsewhere in this Article.

45

SECTION 20.02 APPLICABILITY AND ORGANIZATION

A. **Applicability.**

- 5 1. Any new use or expansion of existing use that requires site plan review shall comply
with the requirements of this Article and other applicable requirements of this
Ordinance.
- 10 2. The requirements of this Article shall not apply to:
- a. Continuation of a permitted use within an existing structure;
- b. Changes of use within existing structures that do not require increased
15 parking;
- c. Normal repair and maintenance of existing structures that do not increase its
size or parking demand; and
- 20 d. Continuation of a non-conforming situation in accordance with Article
_____.

25 B. **Regulating Plans.** Each area of the City to which these standards apply shall be governed
by a Regulating Plan, as set forth in Section _____. The Regulating Plan determines
Building Form and Allowable Use for each property within a Form-Based District.

30 C. **Allowable Uses.** Authorized uses are based upon the Regulating Plan set forth in Section
_____. Authorized land uses are organized by use groups. The intensity that a site may be
developed is governed by the Regulating Plan and applicable site design requirements.

35 D. **Building Form Standards.** Building Form Standards, set forth in Section _____,
establish the parameters for building form, height, and placement.

40 E. **Design Standards.** Design Standards, set forth in Section _____, are supplementary to
other requirements of the Ordinance and regulate parking, landscaping, and other site design
45 requirements.

SECTION 20.03 BIG BEAVER DISTRICT

40 A. **Intent.** The Big Beaver (BB) District is intended to implement the policies set forth n the
Big Beaver Corridor Study, Big Beaver Design Guidelines, and the City’s Master Plan.
These regulations are intended to promote a unified vision for transforming Big Beaver
Road into a world-class destination focused on mixed-use development and increased land
use intensity that is oriented as much to the needs of the pedestrian as to those of the
45 automobile.

B. Regulating Plan.

1. Explanation.

5 a. The Regulating Plan, as set forth in Figure _____, identifies allowable uses and permissible development within the District based on location.

10 b. The Regulating Plan is based on two (2) factors: Site Type and Street Type. Site Types, as set forth in Section _____, are determined by lot size, location, and relationship to neighboring sites. Street Types, as set forth in Section _____, recognize that street patterns within the City of Troy are established. Streets range from primary corridors which carry a large volume of traffic to local streets which convey lower volumes of neighborhood traffic.

15 c. Site Types. The Regulating Plan includes three (3) different Site Types, described as follows:

20 i. Site Type A (large scale regional sites) – Site Type A properties are predominantly between 10.01 and twenty (20) acres in area, but they are more strongly related to one another through their nature and large, campus-style properties with multiple large buildings designed to function as one unit.

25 Walkability within and between sites and provision of supporting buildings and uses are important to the success of the very large, Type A developments. They should be designed with a mix of uses in mind to allow for users to obtain basic services on or immediately near the site. Especially within large office centers, where hundreds of workers may populate the site during the day, restaurants, postal facilities and other daily needs should be integrated within existing buildings or permitted to exist in smaller out-lot developments or nearby developments in Type B or C categories.

35 Parking for Type A sites should be accommodated in structured parking whenever possible to maximize the use of the site for the primary use and to allow the site to be developed more densely than it could with surface parking.

40 The site design should strongly focus on putting the densest components of the project within close range of the primary right-of-way to combat the vast open areas that frequently make such sites difficult or undesirable to cross on foot. A busy arrangement of campus uses along the right of way in outlots will help keep

45

pedestrians engaged and will make these larger sites fit better with surrounding smaller sites in the Type B and C categories.

- ii. Site Type B (medium sites/classic retail sites/mixed use) – The sites in Site Type B are mostly between 2.51 and ten (10) acres in area, and are located at the edges of larger, Type A sites. They are located on sites large enough to warrant additional consideration to landscaping and surface parking in that they can often accommodate large surface lots, which can compromise the cohesiveness of the area if not designed with connectivity in mind.

This category also includes larger, single-use developments situated nearby one another. Hotels, single office buildings, and other medium single building developments often fall into this category. They often house employment centers.

The Site Type B category should be designed with integration in mind. Integration with one another, with Type A sites, and in support of much larger destination retail and office complex sites in Type A. This will allow for better interaction between users, which could lead to a more readily shared customer and tenant base and could help reduce Big Beaver traffic.

- iii. Site Type C (small sites/outlot sites) – Made up mostly of lots in the two and a half (2.5) acre and smaller range, the Site Type C category is reserved for the smallest, single-use sites developed for individually standing businesses. Small coffee shops or fast food restaurants would often be found in this category, as well as small multi-tenant office buildings or single-tenant office buildings.

Site Type C is primarily found along Big Beaver Road in areas between the “pulses” of major intersections, where lot depths are constrained and where older, smaller buildings predominate. These sites must be designed to better integrate with their surroundings to contribute to a more cohesive District, a more consistent building line, and more efficient access between sites. Good access for pedestrians and cross access for vehicles will help sites in this Category reduce trips entering and existing from Big Beaver Road.

Groups of Site Type C properties may make excellent candidates for coordinated combination of properties to create more cohesive mini-destinations.

- d. Street Types. The Regulation Plan includes three (3) different Street Types, described as follows:

- 5
- i. Street Type A (Primary Corridor) – Category A refers to Big Beaver Road. Big Beaver has the widest spacing between building fronts of all roads within the form-based code area, and has many unique characteristics. The category is meant to reflect the “world class boulevard” characteristics established in the Big Beaver Corridor Study, and is used in the highest profile areas of the City of Troy.

10

Category A will integrate features designed to accommodate through traffic and local traffic, will focus on gateways, and will enhance the Big Beaver Corridor experience. This category will reflect all the strongest and most prominent features proposed in the Big Beaver Corridor Study.

15

Strong landscaping regimens, pedestrian and traffic-scale lighting, effective signage, wide non-motorized pathways, and a complementary relationship with transit opportunities will make Category A a distinguished area within the region.

- 20
- ii. Street Type B (Arterial) – Category B is meant for the main north-south roads that cross the form-based code district. These roads connect the area with the rest of the City and the region. They are characterized by a narrower building-to-building distance, safe and effective non-motorized pathways designed to encourage users to reach Big Beaver Road by bike or on foot, effective signage and lighting, and few individual residential curb cuts.

25

The crosswalks spanning Arterial Roads will make use of a series of features intended to protect pedestrians by establishing equity between pedestrians and motorists through effective design. Raised walks of high-quality materials, signage, landscaping, and pedestrian respite islands are several options that may be found within Category B.

30

Arterial Roads will also be characterized by strong landscaping designed to mitigate the negative impacts of high traffic volumes from adjacent residential areas which provide a unique and memorable visual character for the roadway.

35

The intersections between Category A and B roads will be marquis places with enhanced community and corridor landmarks. The spaces will be defined by a stable and consistent building-to-building ratio complemented by landmark structures, superior landscaping and community signage with medians, and memorable architecture.

- 40
- iii. Street Type C (Local/Collector) – Category C roads are those roads tying together smaller areas within the District. They have a more
- 45

varied and localized character than Categories A or B, depending on their context within predominantly office, retail, or residential areas. They act as the backbone of smaller neighborhoods within the area and tie those areas to Category A and B roads.

5

Category C roads will be very welcoming of non-motorized users and will have defined pedestrian rest areas and other amenities whenever possible. Their scale will be similar to that of a main road within a conventional subdivision or industrial park, and their width will be determined primarily on their purpose. A Category C road within an industrial area may be required to be wider than one in a residential area, although their purpose is similar.

10

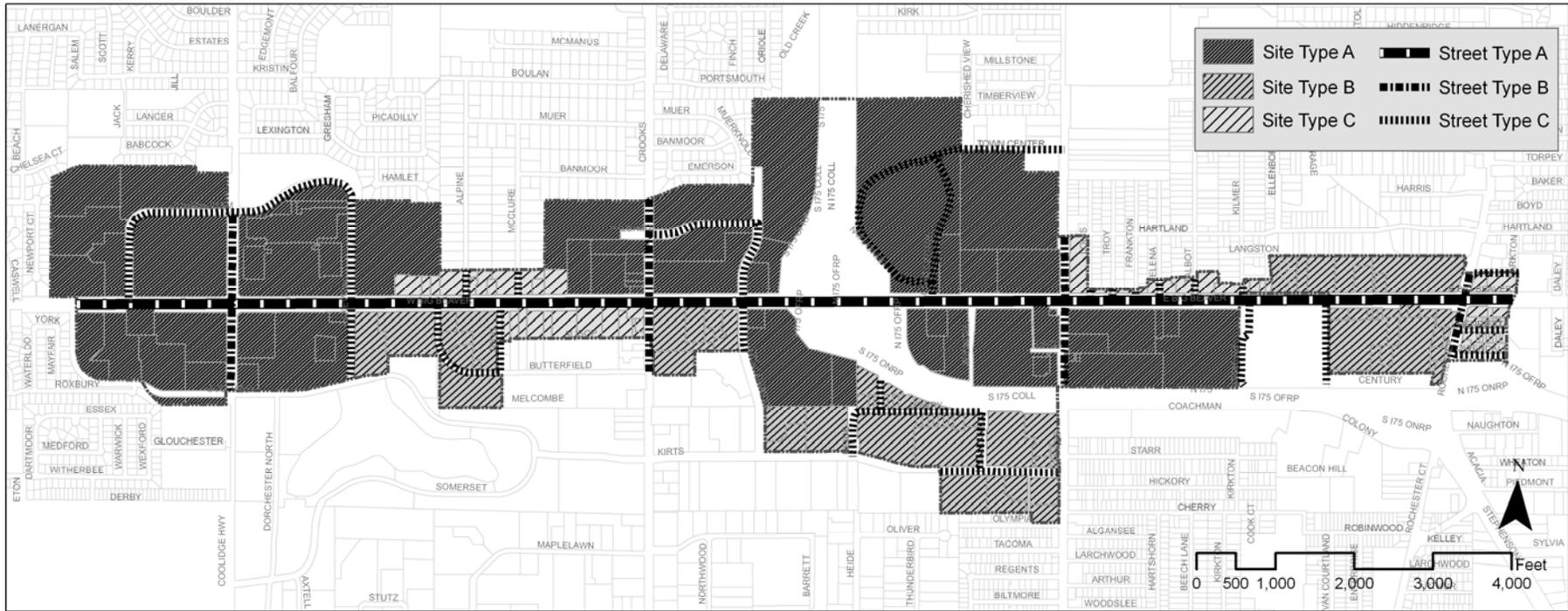
Category C roads will have a much higher frequency of curb cuts than Category A and B roads, and will often provide direct access to retail centers or office complexes. Sufficient width should be retained on either side of the roadway whenever possible to allow for a rigorous landscaping plan to ensure that the immediate uses served are adequately protected from the moderate traffic volumes anticipated on a Category C road.

15

20

DRAFT

Map ____: Regulating Plan



C. **Authorized Use Groups.**

1. Explanation.

a. Authorized uses are categorized by Use Groups as set forth in Section 20.04.B, Table _____. Use groups generally contain similar types of uses in terms of function, character, and intensity.

b. Table _____ assigns allowable Use Groups to locations based on the Regulating Plan. Use Groups are classified in the following manner:

i. Permitted Use Groups. These Use Groups are permitted as of right in the locations specified, and are depicted in Table ____ with the symbol P.

ii. Permitted Use Groups in Upper Stories. These Use Groups are permitted as of right in upper stories only in the location specified and are depicted in Table _____ with the symbol UP.

iii. Special Use Groups. These Use Groups are permitted after review and approval by the Planning Commission, in accordance with the procedures set forth in Article 7.0 and the standards in this Ordinance. Use Groups requiring special use approval are depicted in Table _____ with the symbol S.

iv. Prohibited Use Groups. These Use Groups are prohibited in the locations specified, and are depicted in Table _____ with the symbol NP.

v. Uses permitted in all locations within the District: Public parks and essential public services are permitted by right in all locations in the Big Beaver District.

vi. Similar Uses. If a use is not listed but is similar to other uses within a Use Group, the Zoning Administrator may make the interpretation that the use is similar to other uses within a Use Group.

The Zoning Administrator may also make the determination whether the use is permitted as of right, permitted in upper stories only, or permitted as a special use. The Zoning Administrator may refer the review of a similar use to the Planning Commission for a recommendation.

Table _____
Use Groups by Category

PRINCIPAL USE
Use Group 1
Residential Uses:
One-Family dwellings
Two-Family dwellings
Use Group 2
Residential/Lodging Uses:
Multiple-Family dwellings
Live/Work units
Senior assisted/independent living
Group day care
Child care centers
Use Group 3
Office/Institution:
General office
Professional office
Hospitals
Medical office
Primary/secondary schools
Colleges
Places of worship
Data centers
Technology centers/office research
Experimental Research & Testing Labs
Public service buildings
Funeral homes
Veterinary clinic

Use Group 4
Auto/Transportation Uses:
Auto sales
Auto service station
Auto repair station
Auto body repair
Auto wash
Use Group 5
Retail/Entertainment Uses:
Financial institutions
General retail
Retail, large format
Multi-tenant shopping centers
Fitness centers
Theaters
Indoor recreation establishments
Restaurant
Personal service
Dry cleaning
Hair care
Use Group 6
Misc. Commercial Uses:
Building & lumber supply
Garden centers, nurseries
Outdoor recreation
Golf driving ranges, mini-golf
Commercial outdoor storage
Mini / Self-Storage
Commercial kennels
Pet day care
Use Group 7
Industrial Uses:
Contractor's Equipment Storage
Food Products
Manufacturing, Processing, etc.
Metal Plating
Plastics
Printing
Tool & Die, Gauge & Machine Shops
Truck / Trailer Rental
Warehousing / Wholesale

**Table _____
Use Groups Permitted**

<u>Use Group</u>	Site Type A: Major Sites			Site Type B: Medium Sites			Site Type C: Minor Sites		
	<i>Street Type A: Big Beaver</i>	<i>Street Type B: Arterials</i>	<i>Street Type C: Collectors</i>	<i>Street Type A: Big Beaver</i>	<i>Street Type B: Arterials</i>	<i>Street Type C: Collectors</i>	<i>Street Type A: Big Beaver</i>	<i>Street Type B: Arterials</i>	<i>Street Type C: Collectors</i>
1	NP	NP	NP	NP	NP	NP	NP	NP	NP
2	UP	UP	P	UP	UP	P	UP	UP	P
3	P	P	P	P	P	P	P	P	P
4	NP	NP	NP	NP	NP	NP	NP	NP	NP
5	P	P	P	P	P	P	P	P	P
6	NP	NP	NP	NP	NP	NP	NP	NP	NP
7	NP	NP	NP	NP	NP	NP	NP	NP	NP

5

D. Building Form Standards.

1. The Big Beaver Form Based District permits a series of potential building forms, dependant on the site's location. The six building forms established in this section are as follows:

a. Building Form A: Small, generally single purpose buildings for retail, office, restaurant, or service uses. Typically situated in an out lot of a larger classification building form, or on a smaller, more remote site location within the district.

b. Building Form B: Smaller, multiple-tenant buildings for retail, restaurant, office, service, or residential uses. This category also includes multiple-tenant center style development, although it requires a second story to encourage a mix of uses or a higher-density project than those conventionally associated with a classic roadside retail shopping center.

c. Building Form C: This category is primarily designed for attached residential or live-work residential units. Townhouses and urban-style residential developments that are compatible with the higher-density and more urban character of the area, as envisioned by the Big Beaver Corridor Study, are the primary buildings permitted under this building form.

d. Building Form D: This category includes multi-story mixed-use developments with a residential component on upper floors and retail, office, service, or restaurant uses on the first and lower floors. The category takes into consideration residential and commercial parking, access, and connectivity, and requires buildings that are between 3 and 6 stories, to complement the higher-intensity areas within the district.

e. Building Form E: This category provides an opportunity for large-format retail or entertainment uses within the district under specific conditions. These buildings are over 50,000 square feet, but unlike classic large-format retail or entertainment uses, they directly abut the right-of-way, provide parking in the rear or side yards, and contribute to the street atmosphere by providing a consistent street front with other, more pedestrian-oriented projects. They may be set back from the right-of-way, but only when they provide out-lots within the same project for category a, b, c, or d building forms on the same or on separate lots.

f. Building Form F: This category is designed for large-scale buildings of unlimited height which serve as anchors within the district. These buildings function much like category E building forms, but with a minimum 5 story height. They may incorporate a series of mixed uses, typically are supported by lesser-classified building forms, and require complex solutions for parking and access.

2. Table _____ assigns allowable Building Forms to locations based on the Regulating Plan. Use Groups are classified in the following manner:

5 a. Permitted Building Forms. These Building Forms are permitted as of right in the locations specified, and are depicted in Table _____ with the symbol P.

10 b. Special Building Forms. These Building Forms are permitted after review and approval by the Planning Commission, in accordance with the procedures set forth in Article 7.0 and the standards in this Ordinance. Building Forms requiring special use approval are depicted in Table _____ with the symbol S.

15 c. Prohibited Building Forms. These Building Forms are prohibited in the locations specified, and are depicted in Table _____ with the symbol NP.

d. Exceptions: For all building forms in all locations, awnings may project into the right-of-way beyond the required building line by up to 5 feet.

20 3. Following the building form tables, Table _____ describes the permitted forms within the district. The regulating plan dictates the site type and street type for each individual property in the district. Once the site and street type are determined by the regulating plan, Table _____ described the permitted building forms with that property. Building forms are permitted, permitted subject to special use approval, or
25 not permitted in the site and street combination of each property.

1. Building Form A: Small, generally single purpose buildings for retail, office, restaurant, or service uses. Typically situated in an out lot of a larger classification building form, or on a smaller, more remote site location within the district.

height	minimum	stories	1 story
		feet	14 feet
	maximum	stories	3 stories
		feet	45 feet
ground floor minimum	feet	12 feet	
placement	front	required building line ¹	0 feet. 75% of the building façade must meet the required building line, while up to 25% of the façade can be setback to allow for architectural consideration
		minimum setback	n/a
	side	minimum setback	n/a (buildings may be placed up to the property line, but are not required to do so)
	rear	minimum setback	30 feet
Lot	required open space		30 percent
	lot coverage by all buildings		n/a
	access and circulation		driveways may access the site from any side, pedestrian pathways must be provided from the right-of-way, and cross access must be provided in instances where a development is within an out lot of a high classified building form
	parking location		parking shall be located in a side or rear yard; when located in a side yard and abutting the required building line adjacent the primary building, parking shall be screened with a minimum 30-inch masonry wall on the required building line, or within 5 feet of the required building line provided that a landscape treatment is added between the wall and the required building line.

1: The Planning Commission may adjust the required building line to a maximum of 30 feet beyond the property line for projects incorporating a permanent space for an outdoor café, public space, or a cross access drive with an adjacent parcel. Outdoor cafes or public spaces must be developed as part of the primary building and must incorporate a permanent wall or landscaping area along the required building line.

[insert graphic]

2. Building Form B: Smaller, multiple-tenant buildings for retail, restaurant, office, service, or residential uses. This category also includes multiple-tenant "strip mall" style development, although it requires a second story to encourage a mix of use

height	minimum	stories	2 story
		feet	24 feet
	maximum	stories	6 stories
		feet	72 feet
	ground floor minimum	feet	12 feet
placement	front	maximum setback	60 feet
		minimum setback	n/a
	side	minimum setback	n/a (buildings may be placed up to the property line, but are not required to do so)
	rear	minimum setback	30 feet
Lot	required open space		15 percent
	lot coverage by all buildings		n/a
	access and circulation		driveways may access the site from any side, pedestrian pathways must be provided from the right-of-way, and cross access must be provided
	parking location		parking shall be located in any yard; however, only one row of parking and a maneuvering lane shall be permitted in a front yard. When parking is located in a side yard and abutting the required building line adjacent a primary building that abuts the right of way, parking shall be screened with a minimum 30-inch masonry wall on the required building line, or within 5 feet of the required building line provided that a landscape treatment is added between the wall and the required building line

[insert graphic]

3. Building Form C: This category is primarily designed for attached residential or live-work residential units. Townhouses and urban-style residential developments that are compatible with the higher-density and more urban character of the area, as envisioned by the Big Beaver Corridor Study, are the primary buildings permitted under this building form.

height	minimum	stories	2 stories
		feet	n/a
	maximum	stories	4 stories
		feet	55 feet
	ground floor minimum	feet	n/a
placement	front	required building line ¹	0 feet. 75% of the building façade must meet the required building line, while up to 25% of the façade can be setback to allow for architectural consideration
		minimum setback	n/a
	side	minimum setback	n/a (buildings may be placed up to the property line, but are not required to do so)
	rear	minimum setback	30 feet
Lot	required open space		15 percent
	lot coverage by all buildings		30 percent
	access and circulation		driveways must access garages, if provided, integrated into buildings from the rear, in an alley configuration; detached garages or multi-garage structures are permitted only in a rear yard, or behind primary buildings in an alley; pedestrian pathways must be provided from the right-of-way
	parking location		parking shall be located in a rear yard or in an alley between buildings; parking may also be provided in integrated garages or detached garages when accessed from an alley or rear yard; on-street parking within private roads in developments is highly encouraged

1: The Planning Commission may adjust the required building line to a maximum of 30 feet beyond the property line for projects incorporating a permanent front yard, enclosed space that must incorporate a permanent wall or landscaping area along the required building line.

[insert graphic]

4. Building Form D: This category includes multi-story mixed-use developments with a residential component on upper floors and retail, office, service, or restaurant uses on the first and lower floors. The category takes into consideration residential and commercial parking, access, and connectivity, and requires buildings that are between 3 and 6 stories, to complement the higher-intensity areas within the district.

height	minimum	stories	3 stories
		feet	35 feet
	maximum	stories	6 stories
		feet	66 feet
	ground floor minimum	feet	12 feet
placement	front	required building line ¹	0 feet. 75% of the building façade must meet the required building line, while up to 25% of the façade can be setback to allow for architectural consideration
		minimum setback	n/a
	side	minimum setback	n/a (buildings may be placed up to the property line, but are not required to do so)
	rear	minimum setback	40 feet
Lot	required open space		15 percent
	lot coverage by all buildings		30 percent
	access and circulation		If a garage or below-grade parking are integrated into the building, they must be accessible from a side yard, rear yard, an alley, or from a side street in the case of a corner lot; access to surface parking for commercial traffic may be accessible from any direction; pedestrian pathways must be provided from the right-of-way
	parking location		surface parking shall be located in a rear yard or side yard; parking for residential tenants may be provided in integrated garages or below-grade parking

1: The Planning Commission may adjust the required building line to a maximum of 30 feet beyond the property line for projects incorporating a permanent space for an outdoor café, public space, or a cross access drive with an adjacent parcel. Outdoor cafes or public spaces must be developed as part of the primary building and must incorporate a permanent wall or landscaping area along the required building line.

[insert graphic]

Building Form E: This category provides an opportunity for large-format retail or entertainment uses within the district under very specific conditions. These buildings are over 20,000 square feet, but unlike classic large-format retail or entertainment uses, they directly abut the right-of-way, provide parking in the rear or side yards, and contribute to the street atmosphere by providing a consistent street front with other, more pedestrian-oriented projects. They may be set back from the right-of-way, but only when they provide out-lots within the same project for category a, b, c, or d building forms on the same or on separate lots.

height	minimum	stories	1 story
		feet	14 feet
	maximum	stories	n/a
		feet	n/a
	ground floor minimum	feet	12 feet
placement	front	required building line ¹	0 feet. 75% of the building façade must meet the required building line, while up to 25% of the façade can be setback to allow for architectural consideration
		minimum setback	n/a
	side	minimum setback	n/a (buildings may be placed up to the property line, but are not required to do so)
	rear	minimum setback	40 feet
Lot	required open space		n/a
	minimum ground floor area		20,000 square feet
	lot coverage by all buildings		30 percent
	access and circulation		driveways may access the site from any side, pedestrian pathways must be provided from the right-of-way, and cross access must be provided between category building forms and all lesser or equally classified building forms
	parking location		parking shall be located in a side or rear yard; when located in a side yard and abutting the required building line adjacent the primary building, parking shall be screened with a minimum 30-inch masonry wall on the required building line, or within 5 feet of the line with a landscape transition; in instances where outlots line the required building line and the required building line has been waived for the category 5 building, parking may be located between outlot buildings and the category 5 building or buildings

1: The Planning Commission may eliminate the required building line for projects incorporating a permanent series of outlots or smaller buildings in the a, b, c, or d building form categories, provided that those outlots and/or buildings make up the entire frontage of the overall development along the required building line, with the exception of access drives. The required building line frontage minimum for the outlots and/or other building forms along the required building line shall apply for each individual outlot and/or building.

[insert graphic]

Building Form F: This category is designed for large-scale buildings of unlimited height which serve as anchors within the district. These buildings function much like category E building forms, but with a minimum 5 story height. They may incorporate a series of mixed uses, typically are supported by lesser-classified building forms, and require complex solutions for parking and access.

height	minimum	stories	5 stories
		feet	55 feet
	maximum	stories	n/a
		feet	n/a
	ground floor minimum	feet	12 feet
placement	front	required building line ¹	0 feet. 75% of the building façade must meet the required building line, while up to 25% of the façade can be setback to allow for architectural consideration
		minimum setback	n/a
	side	minimum setback	n/a (buildings may be placed up to the property line, but are not required to do so)
	rear	minimum setback	40 feet
Lot	required open space		n/a
	lot coverage by all buildings		30 percent
	access and circulation		If a garage or below-grade parking are integrated into the building, they must be accessible from a side yard, rear yard, an alley, or from a side street in the case of a corner lot; access to surface parking for commercial traffic may be accessible from any direction; pedestrian pathways must be provided from the right-of-way
	parking location		surface parking shall be located in a rear yard or side yard; parking for residential tenants may be provided in integrated garages or below-grade parking

1: The Planning Commission may eliminate the required building line for projects incorporating a permanent series of outlots or smaller buildings in the a, b, c, or d building form categories, provided that those outlots and/or buildings make up the entire frontage of the overall development along the required building line, with the exception of access drives. The required building line frontage minimum for the outlots and/or other building forms along the required building line shall apply for each individual outlot and/or building.

[insert graphic]

**Table _____
Building Forms Permitted**

Building Forms	Site Type A: Major Sites			Site Type B: Medium Sites			Site Type C: Minor Sites		
	Street Type A: Big Beaver	Street Type B: Arterials	Street Type C: Collectors	Street Type A: Big Beaver	Street Type B: Arterials	Street Type C: Collectors	Street Type A: Big Beaver	Street Type B: Arterials	Street Type C: Collectors
<u>1: small, single purpose, out buildings</u>	P ¹	P	P	P ¹	P	P	P	P	P
<u>2: small, multi-tenant commercial with mixed use</u>	P ¹	P	P	S	P	P	P	P	P
<u>3: attached residential or live-work</u>	S	S	S	P	P	P	P	P	P
<u>4: multi-story mixed use, medium density</u>	P	P	P	P	P	P	P	P	P
<u>5: large format commercial</u>	P	P	S	P	P	S	NP	NP	NP
<u>6: large format mixed-use</u>	P	P	S	P	P	S	NP	NP	NP

1 Permitted only when located in an outlot of a Building Form 4, 5, or 6 project in a separate parcel, or within a designated outlot that remains part of the primary parcel

E. **Design Standards.** In addition to standards set forth in this Ordinance, all proposed development shall comply with the Design Standards for the Big Beaver Corridor and the standards set forth herein.

5 1. **General Standards.** These requirements are designed to promote mixed-use development, infill development, and rehabilitation that shall:

10 a. Establish a development pattern in which new buildings and building modifications enhance the character of the existing built environment;

b. Increase transparency (windows) to add visual interest, increase pedestrian traffic, and to reduce crime through increased surveillance;

15 c. Enhance a sense of place and contribute to the sustainability of the City;

d. Orient building entrances and storefronts to the street;

e. Articulate longer building façades into more human-scale increments;

20 f. Distinguish commercial uses based on scale and auto-orientation; and

g. Encourage transportation alternatives (walking, biking, and transit) to reduce automobile dependence and fuel consumption.

25 2. **Materials.**

30 a. Durable building materials, simple configurations, and solid craftsmanship are required. Fifty percent (50%) of walls visible from public streets, exclusive of wall areas devoted to meeting transparency requirements, shall be constructed of brick, glass, fiber cement siding, metal (beams, lintels, trim elements, and ornamentation only), wood lap, stucco, split-faced block, or stone. DriVit and vinyl or aluminum siding should only be used for accents.

35 3. **Façade Variation.**

40 a. **Uninterrupted Façade.** The maximum linear length of an uninterrupted building façade facing public streets and/or parks shall be thirty (30) feet. Façade articulation or architectural design variations for building walls facing the street are required to ensure that the building is not monotonous in appearance. Building wall offsets (projections and recesses); cornices, varying building materials or pilasters shall be used to break up the mass of a single building.

45 4. **Building Orientation / Entrance.**

- a. Primary Entrance. The primary building entrance shall be located in the front façade parallel to the street.
 - b. Identifiable Entrance. A clearly identifiable and useable building entrance is required for every sixty (60) feet of a building’s frontage on a primary street.
 - c. Recessed Doorways. Where the building entrance is located on or within five (5) feet of a lot line, doorways shall be recessed into the face of the building to provide a sense of entrance and to add variety to the streetscape. The entrance recess shall not be less than the width of the door(s) when opened outward.
 - d. Residential Dwellings. Entrances for all residential dwellings shall be clearly defined by at least one (1) of the following:
 - i. Projecting or recessed entrance. A recessed entrance is required if the building entrance is located on or within five (5) feet of the lot line.
 - ii. Stoop or enclosed or covered porch.
 - iii. Transom and/or side light window panels framing the door opening.
 - iv. Architectural trim or unique color treatments framing the door opening.
5. Expression Line (EL).
- a. A horizontal line on the façade known as the Expression Line (EL) shall distinguish the base of the building from the remainder to enhance the pedestrian environment. The EL shall be created by a change in material, a change in design, or by a continuous setback, recess, or projection above or below the Expression Line. Such elements as cornices, belt courses, corbelling, molding, stringcourses, ornamentation, and changes in material or color or other sculpturing of the base are appropriate design elements for ELs.
 - b. If applicable, the height of the Expression Line shall be related to the prevailing scale of development in the area. A change of scale may require a transitional design element between existing and proposed features.
6. Transparency.
- a. The first floors of all buildings shall be designed to encourage and complement pedestrian-scale activity and crime prevention techniques. It is intended that this be accomplished principally by the use of windows and

doors arranged so that active uses within the building are visible from or accessible to the street, and parking areas are visible to occupants of the building.

5 b. The minimum transparency requirement shall apply to all sides of a building that abut an urban open space or public right-of-way. Transparency requirements shall not apply to sides which abut an alley.

10 c. Windows for building sides (non-front) shall be concentrated toward the front edge of the building, in locations most visible from an urban open space or public right-of-way.

7. Transitional Features.

15 a. Transitional features are architectural elements, site features, or alterations to building massing that are used to provide a transition between higher intensity uses and low- or moderate-density residential areas. These features assist in mitigating potential conflicts between those uses in lieu of conventional landscape buffers or large setbacks. Given the complex relationships present between residential and non-residential land uses along the Big Beaver corridor, and the encouragement of mixed-use development, these features must be incorporated to ensure desirable conditions between uses and projects of varying intensity. It is the intent of these standards to:

- 25 i. Reduce land consumption;
- ii. Create a compatible mixed-use environment;
- 30 iii. Limit interruptions in vehicular and pedestrian connections created by efforts to segregate uses; and
- iv. Establish or maintain vibrant pedestrian- and transit-oriented areas where differing uses can operate in close proximity to one another.

35 b. Landscape Buffer. A landscape buffer may be provided in lieu of, or in addition to, a transitional feature where such landscape buffer would reduce potentially adverse impacts between incompatible uses or different building types.

40 c. Intensity. A continuum of use intensity, where moderate intensity uses are sited between high-intensity uses and low-intensity uses, shall be developed for multi-building developments on one (1) or more lots. An example would be an office use between commercial and residential uses.

45 d. Height and Mass. Building height and mass in the form of building step-backs, recess lines or other techniques shall be graduated so that structures

with higher intensity uses are comparable in scale with adjacent structures of lower-intensity uses.

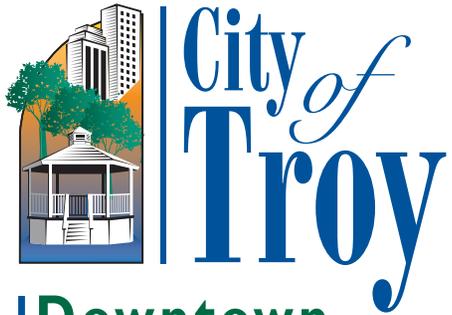
- e. Orientation. Primary building facades shall be placed away from the residential use.
- f. Architectural Features. Similarly sized and patterned architectural features such as windows, doors, arcades, pilasters, cornices, wall offsets, building materials, and other building articulations included on the lower-intensity use shall be incorporated in the transitional features.
- g. Parking and Loading. Off-street parking, loading, service and utility areas shall be located away from the lower-intensity use and, where possible, adjacent to similar site features on surrounding sites.
- h. Lighting and Noise. Incompatible outdoor lighting or sources of audible noise shall be prevented whenever practicable.

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SECTION 20.04 MAPLE ROAD DISTRICT

5 **SECTION 20.05 NEIGHBORHOOD NODES DISTRICT**

DRAFT



DRAFT 8.13.2010

**Downtown
Development
Authority**

**Design
Guidelines**





**Downtown
Development
Authority**

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Guidelines**

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This Document was adopted
by the City of Troy Downtown Development Authority on
MONTH DATE, 2010

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by the City of Troy Planning Commission on
MONTH DATE, 2010

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Introduction

The Big Beaver Design Guidelines were developed to bridge the gap between the Big Beaver Corridor Study, the City of Troy Master Plan, Troy Vision 2020, and the City of Troy Zoning Ordinance. This document details more specifically what elements are critical to the implementation of the goals and objectives laid out in these documents. The Guidelines first describe large scale, “big picture” elements, such as general site layout, access, and building scale. Second, the Guidelines provide more prescriptive standards for site planning details, street and streetscape elements, and architectural components.

There are two primary goals of the document. The first is the establishment of a consistent, adopted set of guidelines to provide direct, immediate guidance for developers and redevelopers in the City of Troy. This will greatly benefit all parties in that the development community will not be left to guess as to what elements are more or less favorable to the decision-making bodies of the City, and the staff and officials of the City will have a document which reflects a consensus on these matters. In short, the guidelines will make the entitlement process more efficient, more predictable, and more successful on all fronts.

The second goal of the Guidelines document is to provide a basis for the development of a regulatory framework for a form-based code for the Big Beaver Corridor. The comprehensive City of Troy Zoning Ordinance rewrite project has been conducted concurrently with the creation of this document, and has informed the detailed

requirements that have been drafted for the Ordinance. The Ordinance will legislate many of the hard and fast rules for development and redevelopment in the area, while the Guidelines will help with the details. The main, underlying recommendations of the Guidelines and the regulations of the Ordinance will be consistent with one another.

History of the Project

As noted above, this document was created to help implement the Big Beaver Corridor Study, which was adopted as part of the City of Troy Master Plan in 2008. At that time, it was determined that the Study, while an excellent big-picture document that provided a visionary future for the Corridor, needed additional support to adequately serve its purpose. These Guidelines represent that additional support. Work began on the Design Guidelines in 2008, and has been ongoing in a series of efforts until its adoption in 2010. The Downtown Development Authority funded the project, while oversight and adoption authority of the final product is shared between the DDA and the Planning Commission. Both parties were involved regularly in the review of the Guidelines.

The Big Beaver Corridor Study

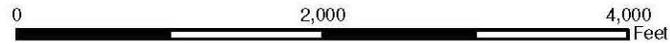
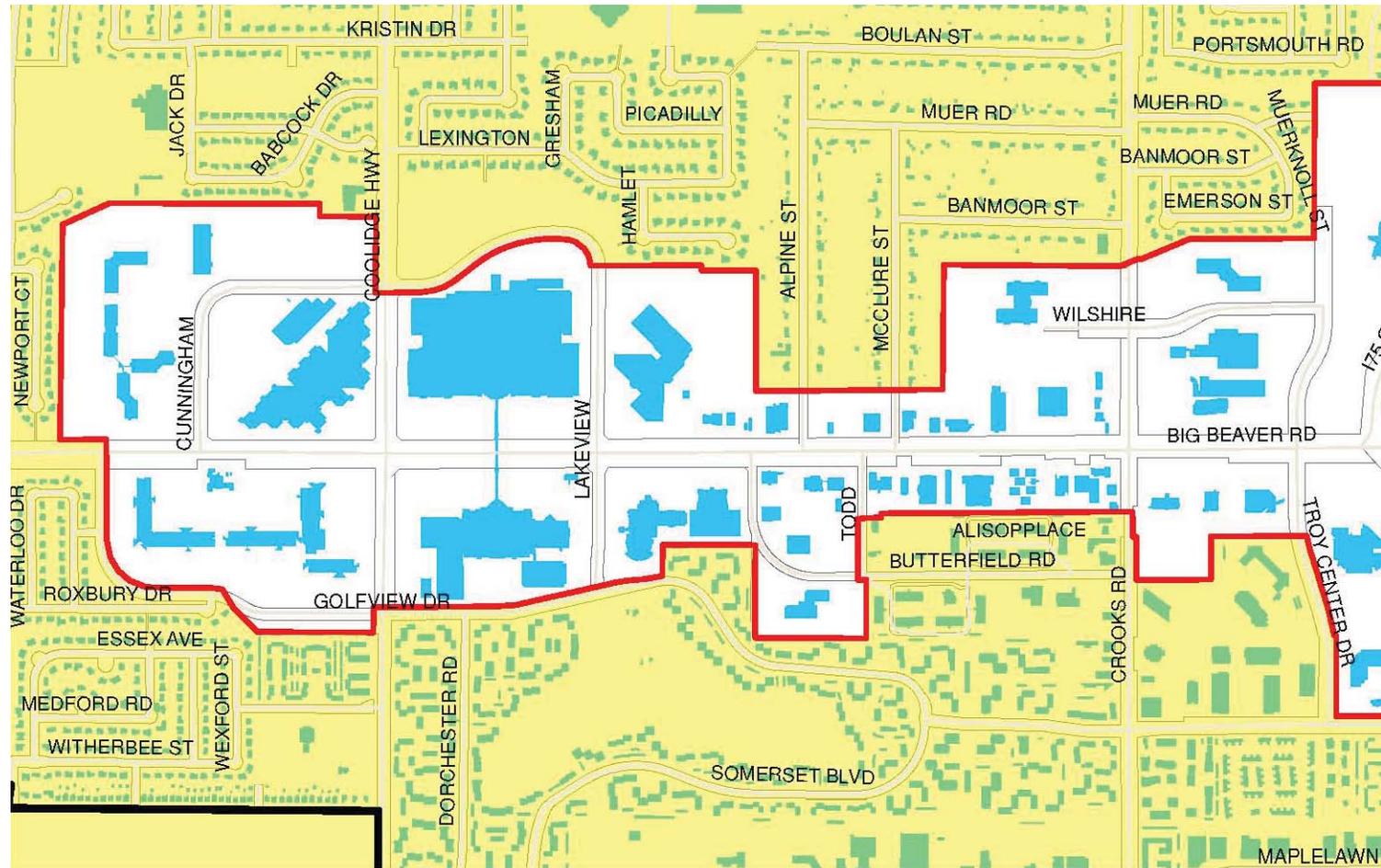
In the Troy Master Plan, it states that the Big Beaver Corridor "...is responsible for the first impression many people have throughout Michigan when they think of the City of Troy. The high-rise

buildings, Somerset Collection, and its immediate proximity to I-75 are frequently the main elements visitors remember about the Corridor and the City. In order to remain competitive and continue to be a leader in economic development in Southeast Michigan, Troy must plan for this Corridor to evolve in light of a changing economy.”

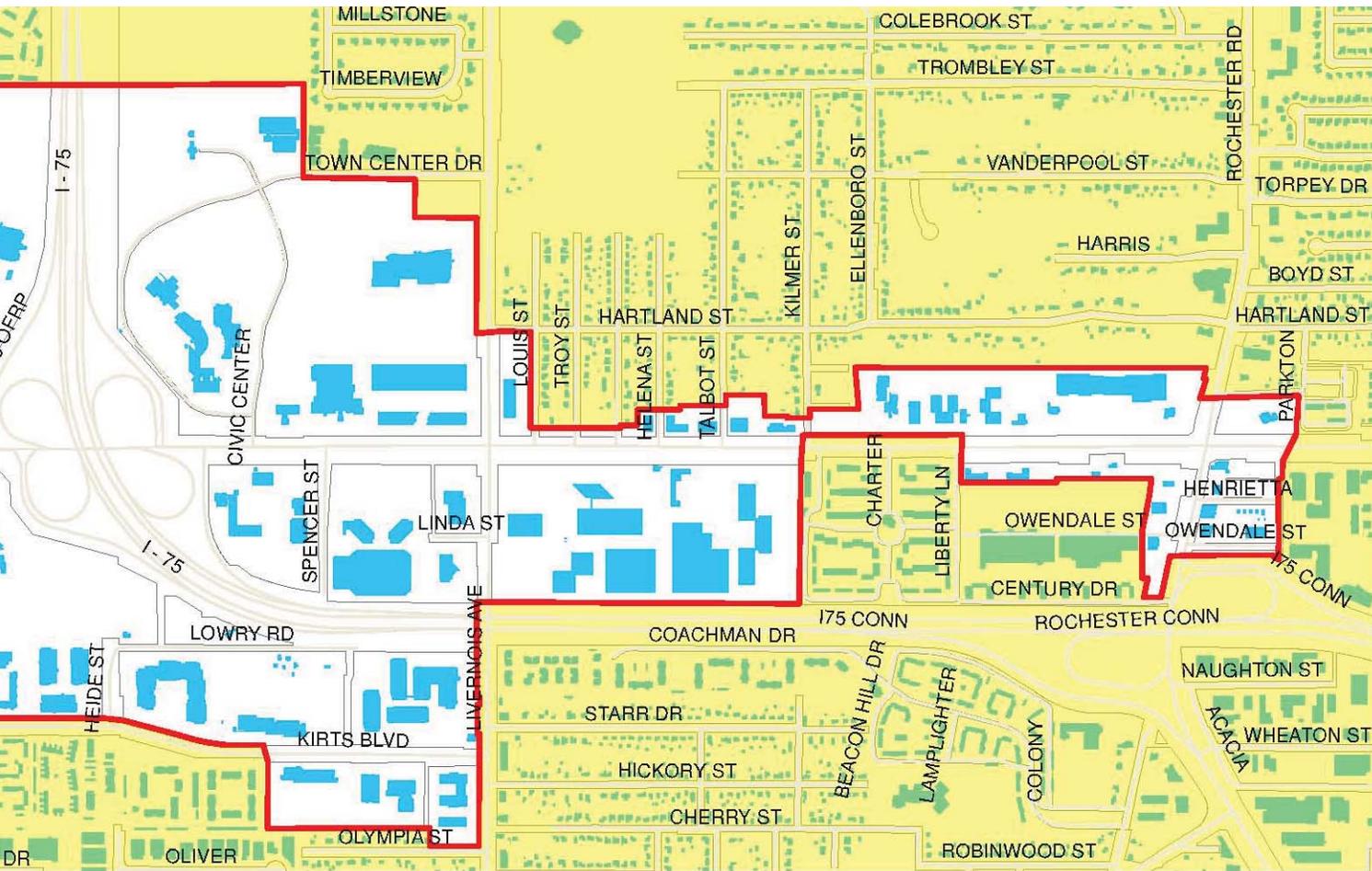
Therefore, the City developed the Big Beaver Corridor Study. The key concept areas of the Big Beaver Corridor Study are:

- Gateways, Districts and Transitions
- Trees and Landscape as Ceilings and Walls
- Walking Becomes Entertainment - Much to Observe & Engage In
- Mixing the Uses Turns on the Lights - Energetic Dynamic of Mixed Uses with a Focus on Residential
- The Automobile & Parking are No Longer #1.
- Civic Art as the Wise Sage of the Boulevard

It goes on to state that the Study provided a comprehensive analysis of the existing and potential characteristics. It supports the concept that the planned future land uses in the Big Beaver Corridor must be mixed-use, to allow for a wave of new residential development and the redevelopment of individual sites to make a more meaningful contribution to the quality of life of the City. The main difference between the various mixed-use districts planned in the Study is building height, but also other characteristics, which this document will clarify.



Plot Generation: 6.16.08



Basemap Source: Oakland County Planning

Downtown District Authority

- DDA Boundary
- Areas Outside DDA
- Building Footprints

Development Guidelines: Described

The first components of the Design Guidelines are primarily concerned with the “big picture” urban form elements on which little negotiation should be considered. These factors include building size, relationships with other buildings and the street, and a building’s location on the site.

Regardless of the architectural style of a proposed project, these topics are a starting point for site designers. They are critical to establish the building relationships and outdoor spaces envisioned within the Big Beaver Corridor Study. Building consensus on these main factors will allow the DDA, Planning Commission, and City Council to uniformly apply similar principles across the board within the DDA.

The more specific design elements for streets and sites represent a “focusing” of the DDA’s lens on more physically prescriptive elements of development and more specific site design factors. These standards set the bar for site and architectural design elements and are meant to provide designers with a menu of options. These options communicate to the designer what level of material quality is appropriate in a given area, for instance, but may not necessarily prescribe any one particular material, color, or architectural style.

The Design Guidelines address site amenities and elements like waste receptacles, fences, planters, banners, flagpoles, water fountains, street cafes, retaining and screen walls, and street furniture.

While not intended to prescribe any one make or model of any site amenity, the Design Guidelines provide the rules under which a designer should select their proposed elements.

How will this document be used?

This document contains many design guidelines and standards. It covers the entire Downtown Development Authority, although there are many different types of development in the area. The Corridor itself is varied with high-rise office, shopping centers, stand alone retail and restaurants, and even converted single-family homes. This complex environment led the development of the unique approach of this document.

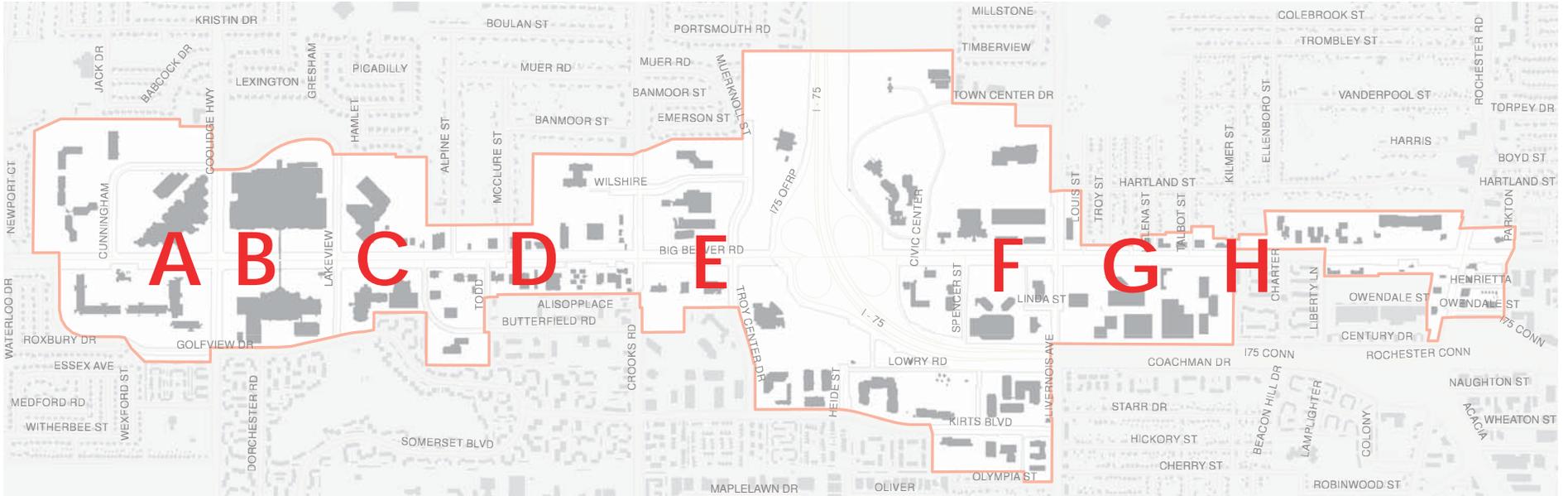
The Guidelines provide specific information for each site in the DDA, depending on what type of site the project is on, and what type of roadway it is adjacent to. In order to find what sections apply to a particular property, one must first select their site on the Site Types Map and determine their site type. Then looking at the Street Types Map, the owner can identify if they are on a Primary Corridor, Arterial, etc. Once a user has the site and street type, they can simply look up those pages in the table of contents that describe the site and street design guidelines for that site and street type and essentially ignore the rest.

After each site and street types section, there are a series of pages detailing more prescriptive elements that effect a site's development. These apply to all properties that are on the site types or street types covered by these detailed elements.

Finally, this document provides guidelines on structure types. Depending on the desired building type, one of five structure type guideline sets can be applied to a project.

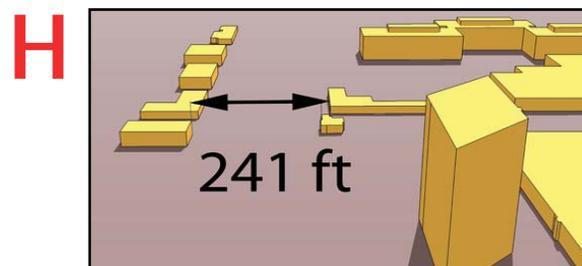
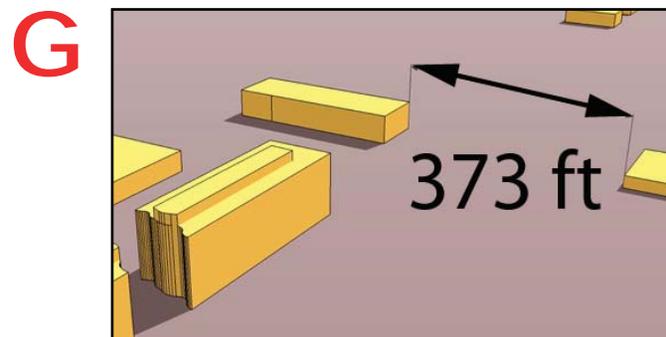
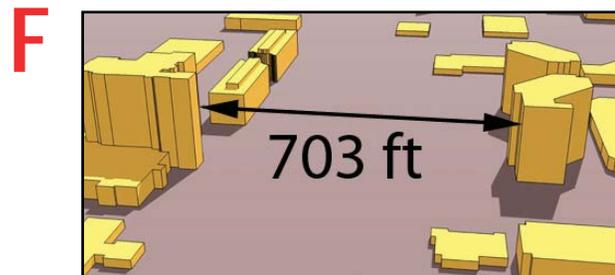
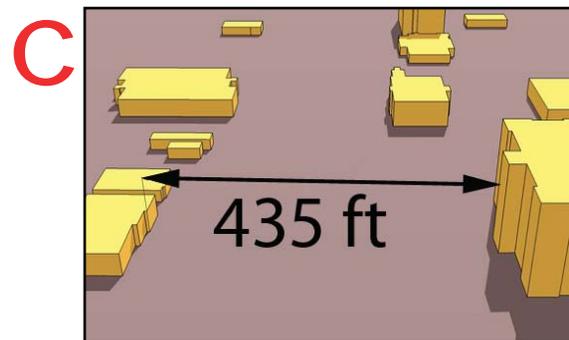
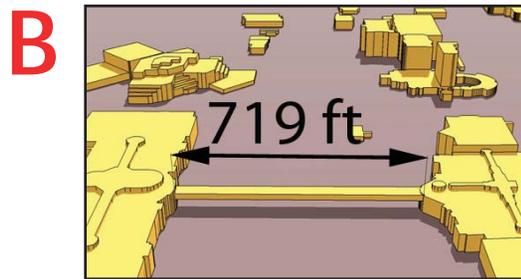
Existing Conditions

One the following page is a graphic which shows how varied the development pattern is along the Big Beaver Corridor. The scope and scale of project go from very small, to regionally prominent. The building front to building front span can be as wide as 700 feet, or as narrow as 300 feet, with buildings of differing heights on either side. This is but one example of the challenges of the existing Big Beaver Corridor, and why this document comprehensively addresses what goes on within the right-of-way (streets), what goes on in the private realm (sites), and what goes vertical (structures).

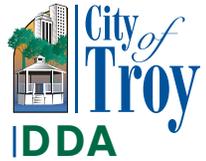


Basemap Source: Oakland County Planning

DDA Distances Between Buildings



Streets Sites Structures



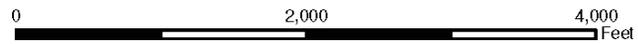
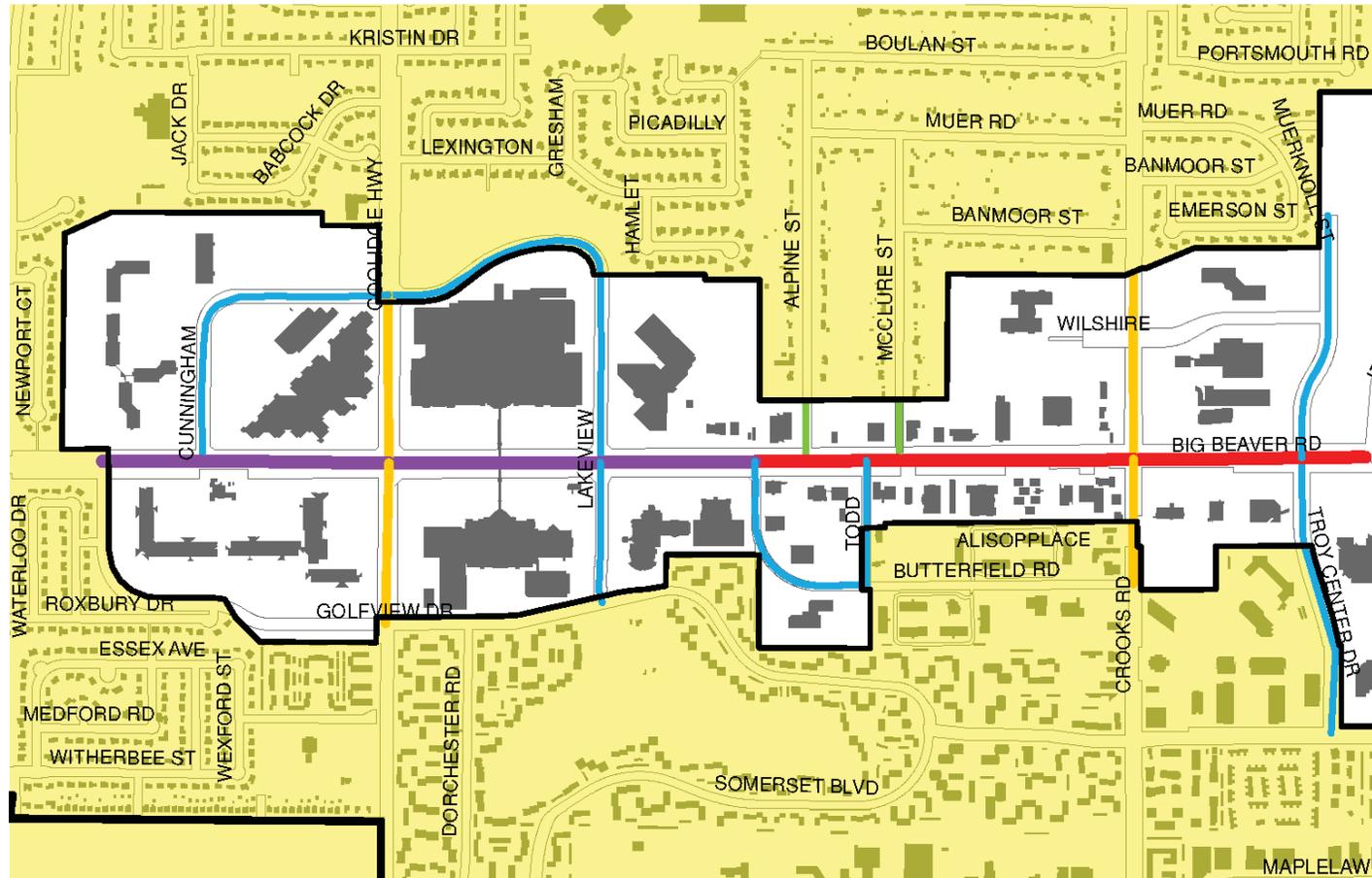
This document identifies five street types, four of which are the subject of design guidelines. Only local, residential streets are not provided with a set of guidelines, due to the small and unique character of these streets. The main thoroughfare Big Beaver Road, is split into two categories, Primary Corridor A and Primary Corridor B. The main difference between the two is the presence of an access drive in Primary Corridor A; an extended pedestrian pathway characterizes Primary Corridor B.

The other remaining streets are labeled Arterial or Collector, based on their widths, function, and long-term potential. These two street types have their own sets of guidelines as well.

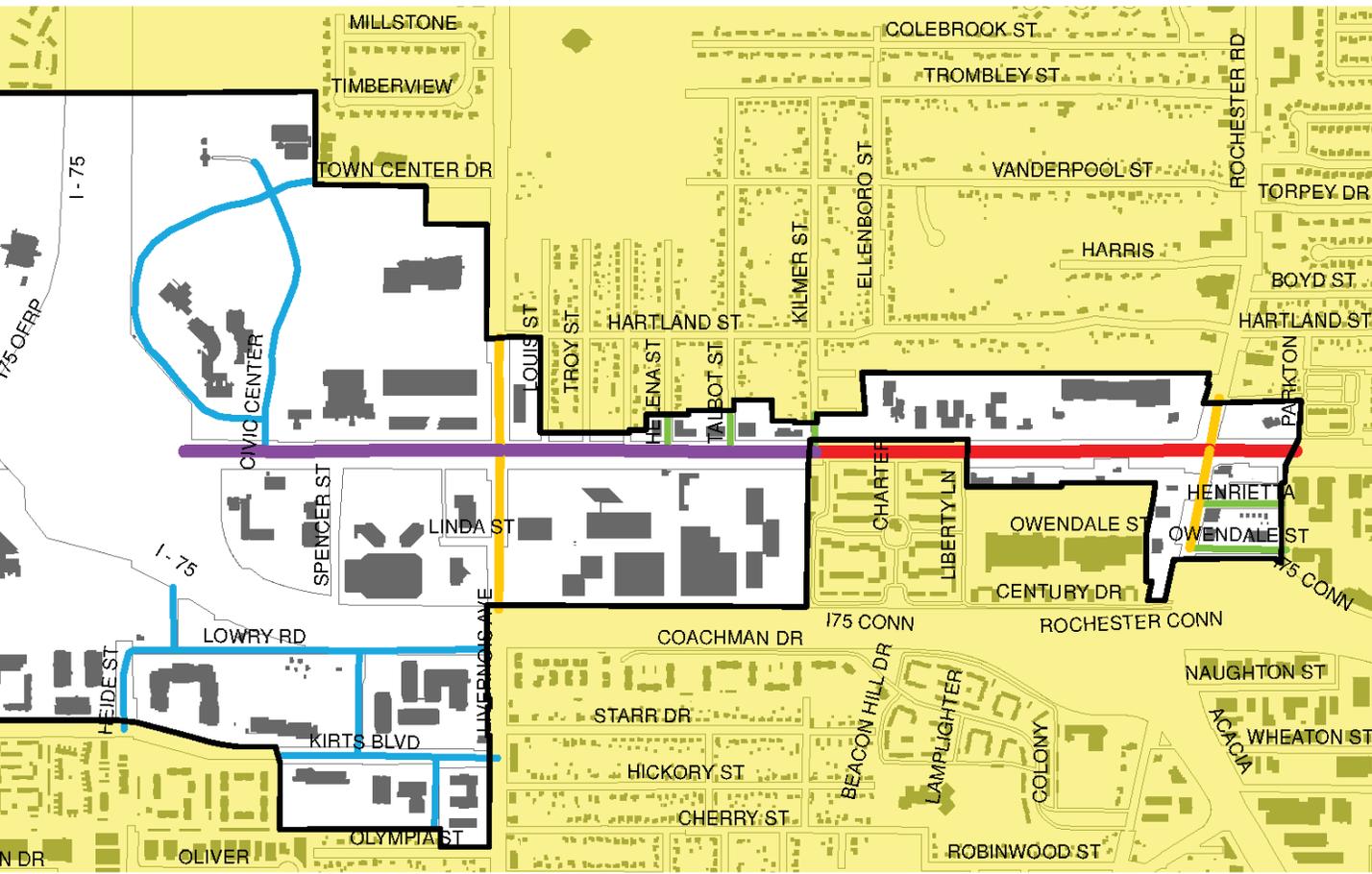
The map on the following pages is to be used as a key when identifying which set of guidelines is applicable to a specific site.

The map is followed by the guidelines themselves each set of which have a section and overhead drawing, accompanied by a text description, on the first two pages. The following two pages contain a rendering and a more detailed section and plan-view illustration.

The first two street types are Primary Corridor A and Primary Corridor B. Their guidelines are followed by a series of ages describing the specific design elements of various, more prescriptive components of streetscape design.



Plot Generation: 7.15.08



Basemap Source: Oakland County Planning

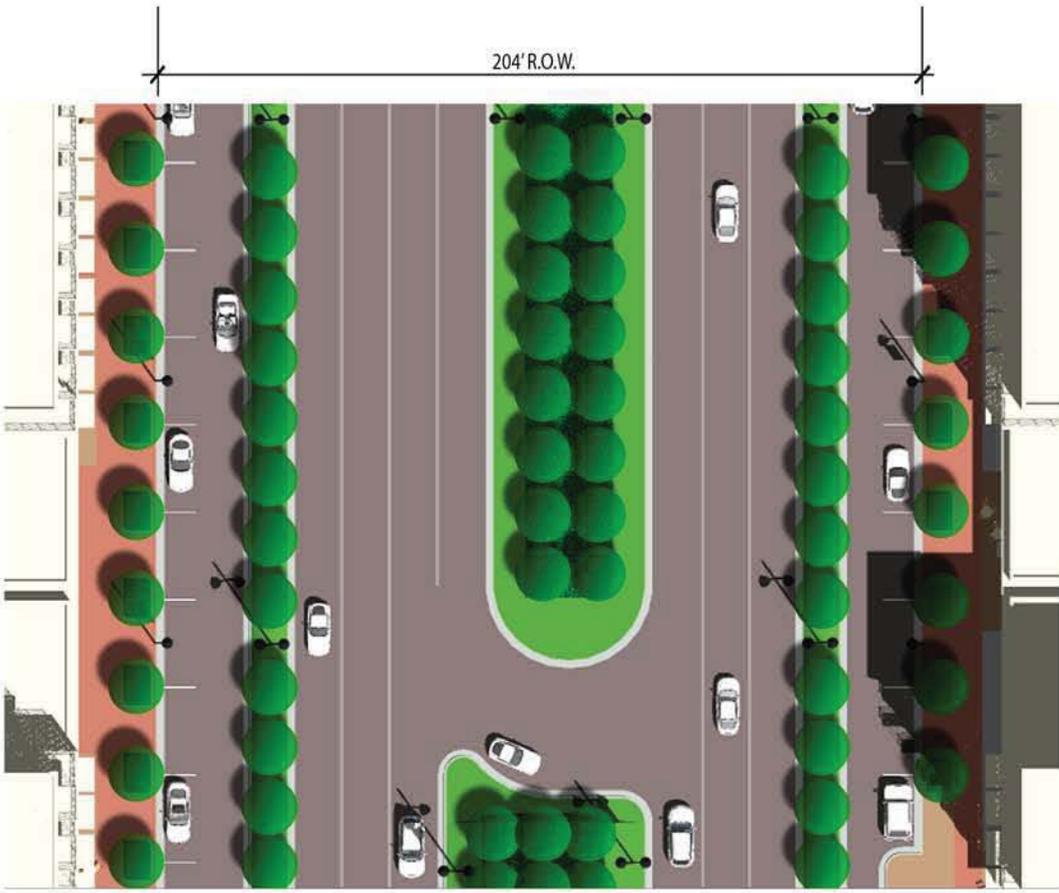
DDA Street Types

- Primary Corridor A
- Primary Corridor B
- Arterial
- Collector
- Residential Local
- DDA Boundary
- Areas Outside DDA
- Building Footprints



STREETS PRIMARY
CORRIDOR 'A'
204' ROW

- Reflects all major components of the "World Class Boulevard"
- Service drives with parallel parking
 - Wide pedestrian walkways, amenities
 - Large tree allees, lighting, graphics, pocket parks, public squares, streetscape amenities
 - Zero line building locations
 - Mixed uses front corridor
 - Highest density – Urban districts (city center)

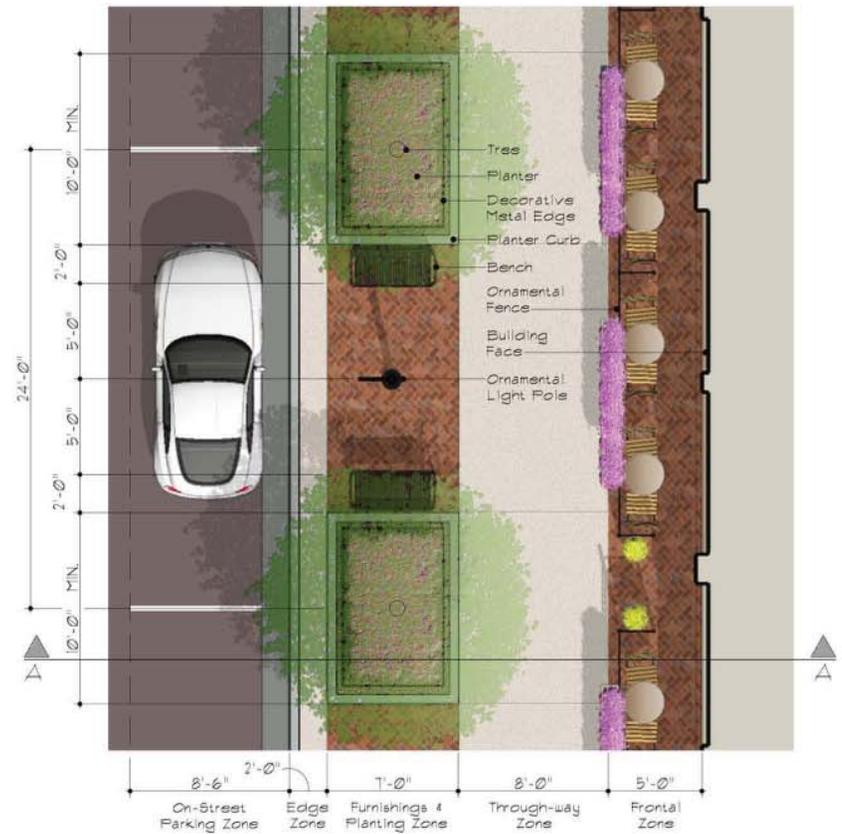
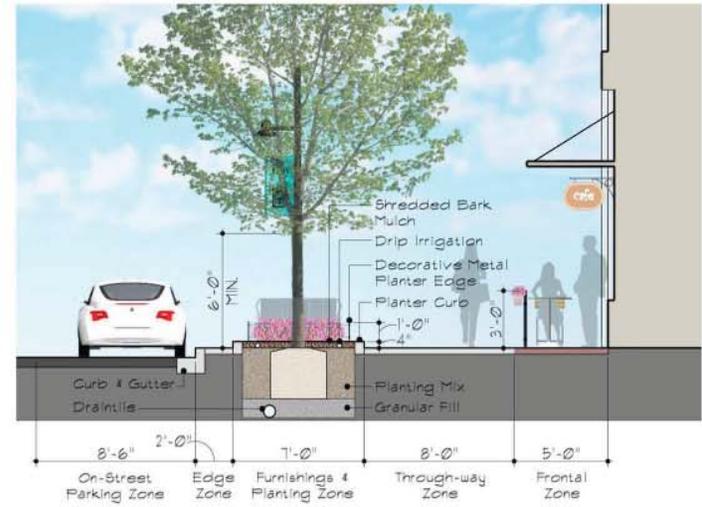


The Primary Corridor A category refers to portions of Big Beaver Road with the widest spacing between building fronts and in which service drives may potentially be implemented. The category is meant to reflect the “world class boulevard” characteristics established in the Big Beaver Corridor Study, and is used in the highest profile areas of the Big Beaver Corridor.

The portions of Big Beaver classified as Primary Corridor A will integrate features designed to accommodate through traffic and local traffic, will focus on gateways, and will enhance the Big Beaver Corridor experience. Together with Primary Corridor B, this category will reflect all the strongest and most prominent features proposed in the Big Beaver Corridor Study.

Strong landscaping regimens, pedestrian and traffic-scale lighting, effective signage, wide non-motorized pathways, and a complementary relationship with transit opportunities will make Primary Corridor A a distinguished area within the region.

The design standards for the public realm would primarily address the streetscape and median zones within the rights of way for each street type as described in the Development Guidelines and could be applied to all public properties developed within the DDA boundary.



Primary Corridor 'A'

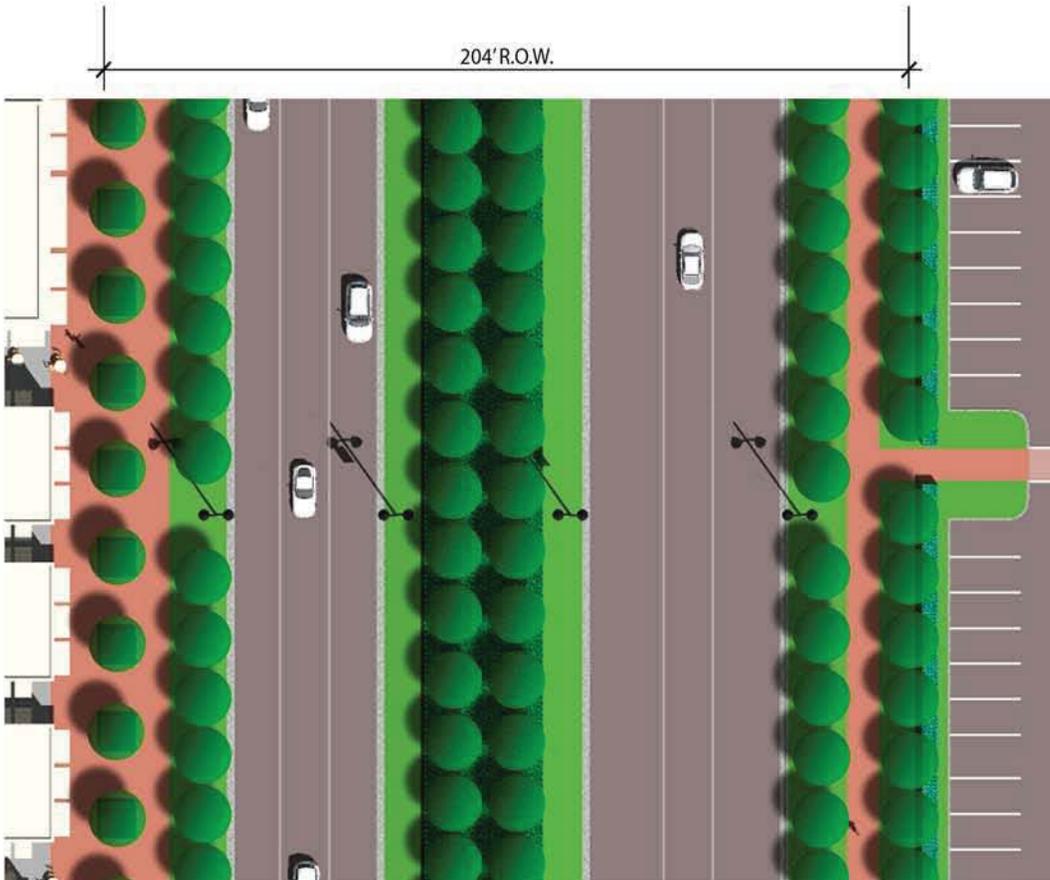
Streets Sites Structures





STREETS PRIMARY
CORRIDOR 'B'
204' ROW

- Same as Primary Corridor A but without service drives
- Most of the featured amenities
- Lower profile (less urban)
- 8' wide walkways
- Gateways (e.g. Rochester/Big Beaver)
- Medium density less urban

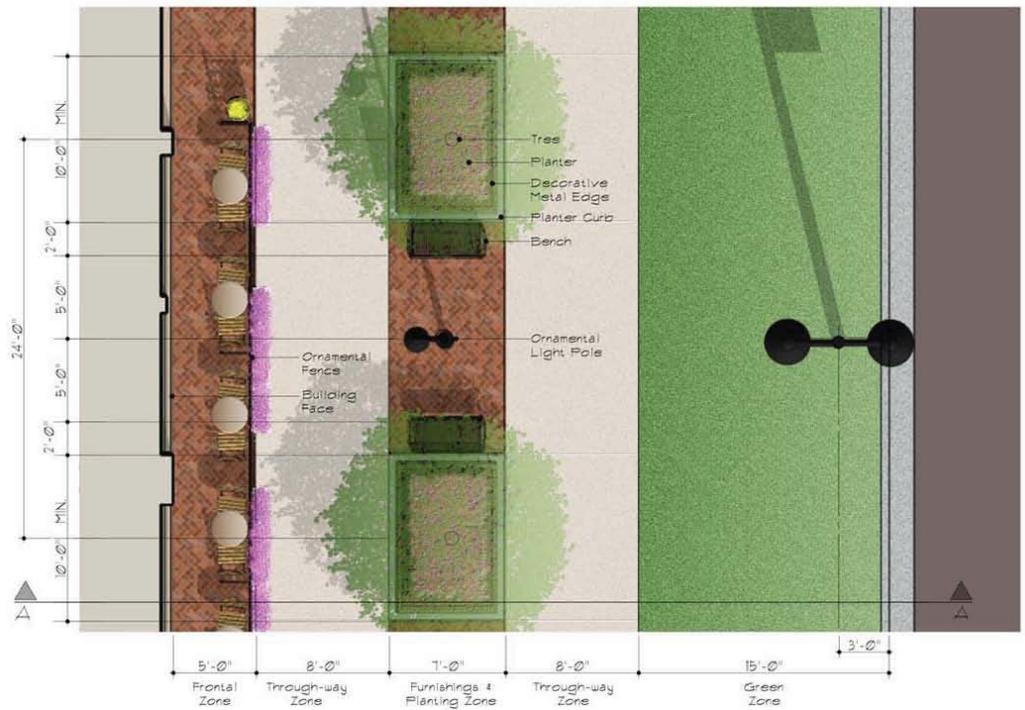
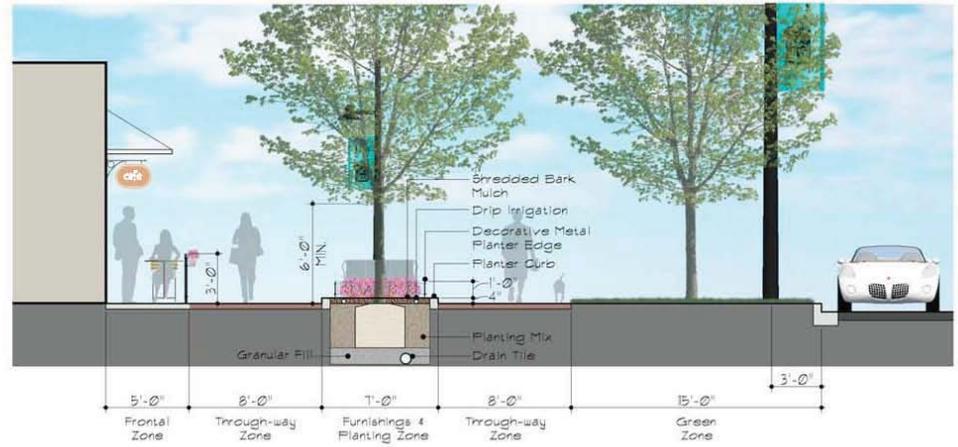


The Primary Corridor B category refers to portions of Big Beaver Road with narrower spacing between building fronts and in which service drives will likely not be used. Like Primary Corridor A, the category is meant to reflect the “world class boulevard” characteristics established in the Big Beaver Corridor Study, but is used in lower profile areas of the Corridor than Primary Corridor A.

The portions of Big Beaver classified as Primary Corridor B will integrate features designed to accommodate through traffic and local traffic, will focus on gateways, and which will enhance the Big Beaver Corridor experience. Together with Primary Corridor A, this category will reflect all the strongest and most prominent features proposed in the Corridor Study.

Strong landscaping regimens, pedestrian and traffic-scale lighting, effective signage, wide non-motorized pathways, and a complementary relationship with transit opportunities will make Primary Corridor B a distinguished area within the region.

The design standards for the public realm would primarily address the streetscape and median zones within the rights of way for each street type as described in the Development Guidelines and could be applied to all public properties developed within the DDA boundary.



Primary Corridor 'B'

Streets Sites Structures



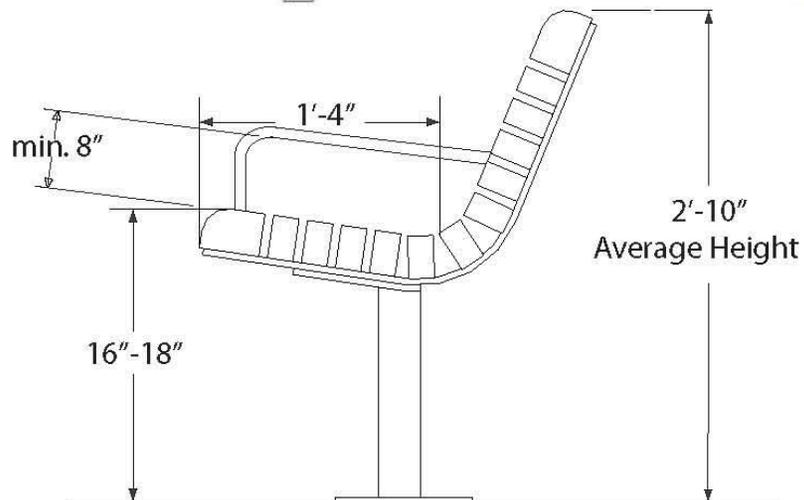
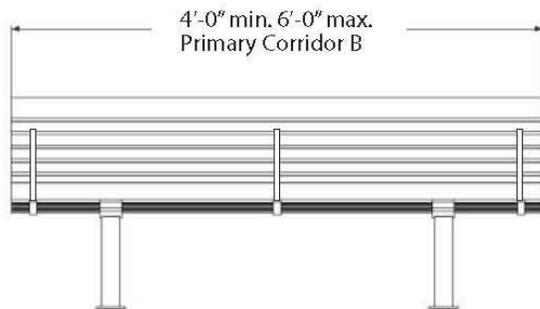
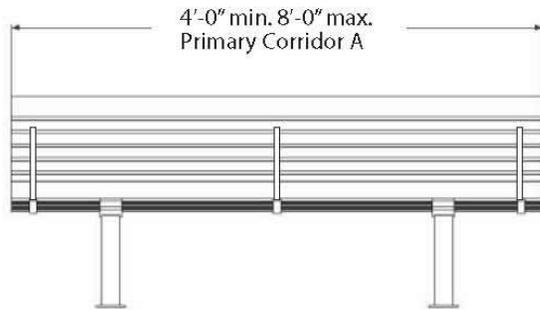
Amenities

Benches

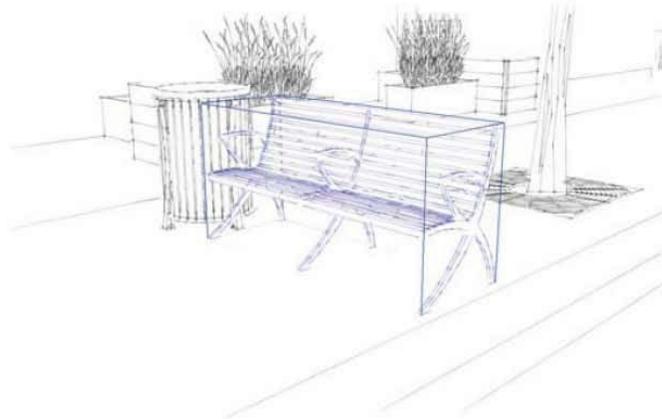
Style: Contemporary

Material: Metal, Recycled Plastic

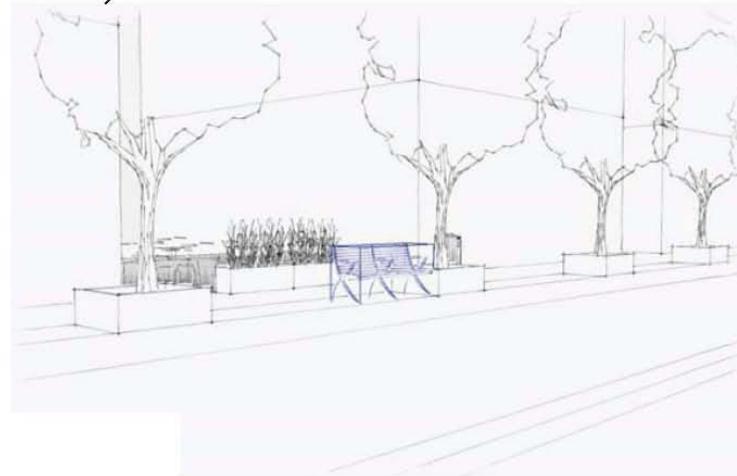
Finish: Painted, Anodized, or Plastic Coated



Primary Corridor A



Primary Corridor B

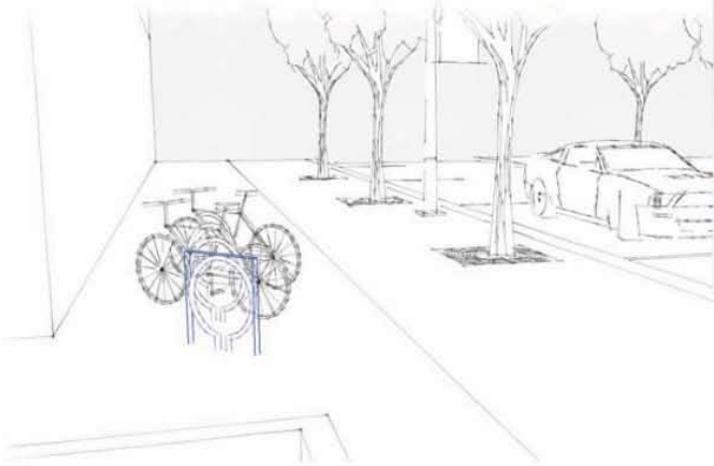


Amenities

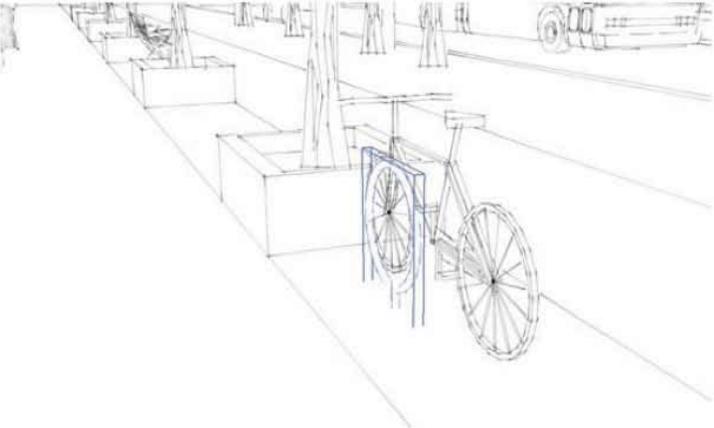
Bicycle Racks

Style: Contemporary
Material: Metal
Finish: Painted, Anodized, Plastic Coated

Primary Corridor A



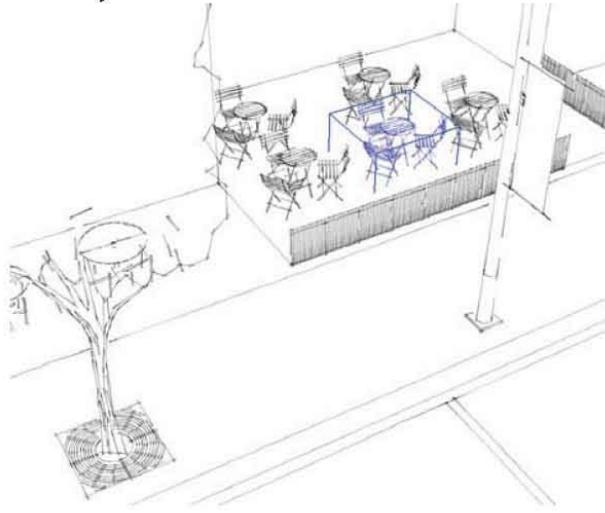
Primary Corridor B



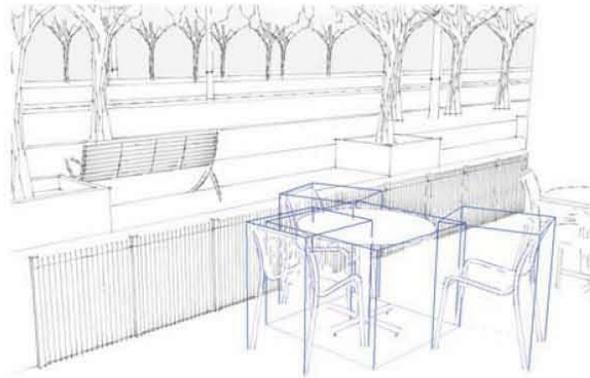
Amenities

Sidewalk Cafe

Primary Corridor A



Primary Corridor B



Amenities

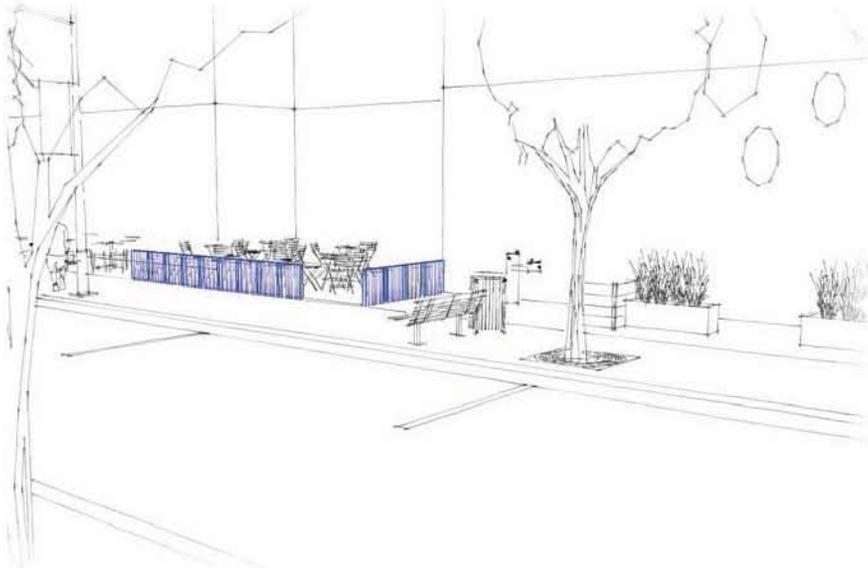
Fences

Style:

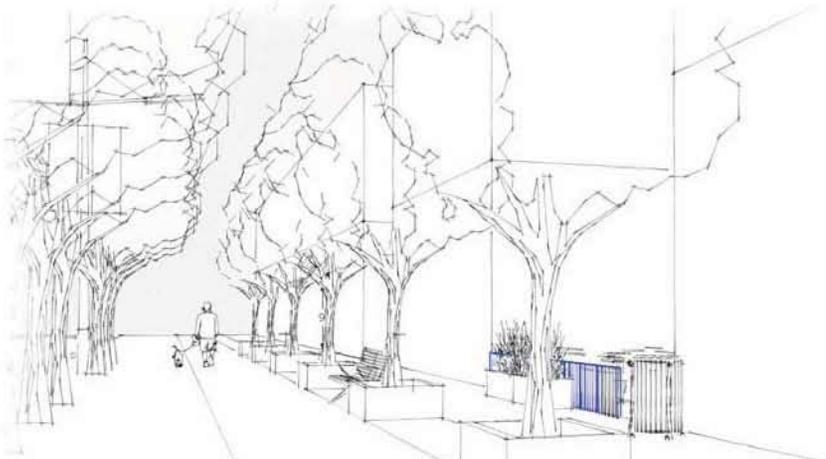
Material: Metal

Finish: Painted, Anodized, Plastic Coated

Primary Corridor A



Primary Corridor B



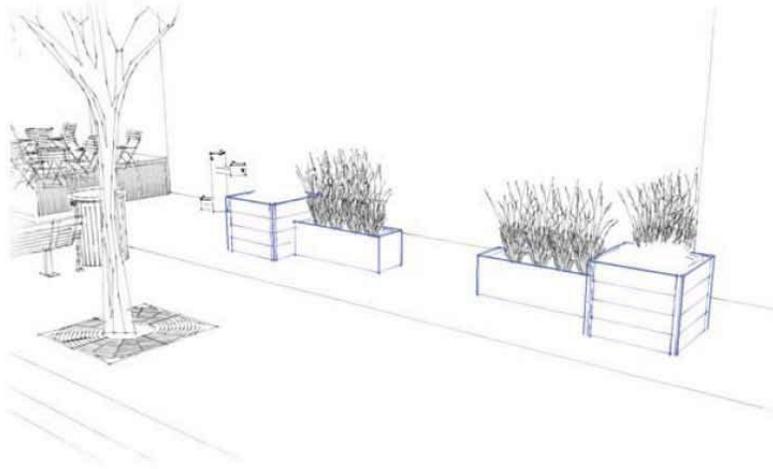
Amenities

Planters

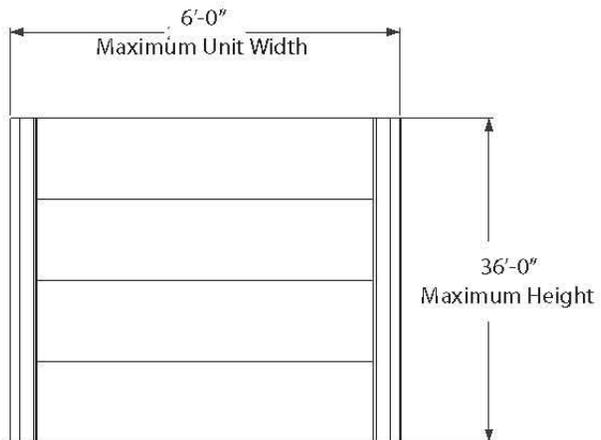
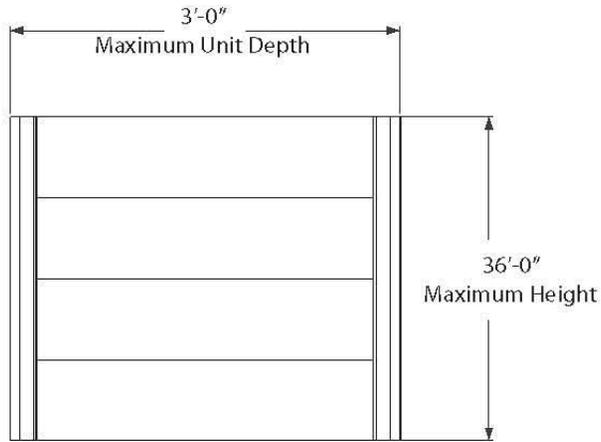
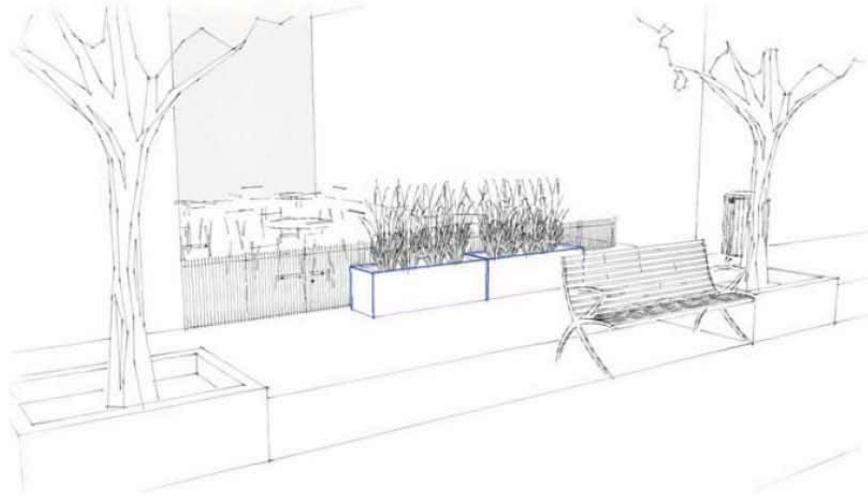
Style: Rectangular
Material: Metal, Recycled Plastic, Concrete
Finish: Painted, Anodized, Plastic Coated, Stained

The images shown are of products that emulate the look of wood. These are acceptable because of their increased durability and reduced need for maintenance.

Primary Corridor A



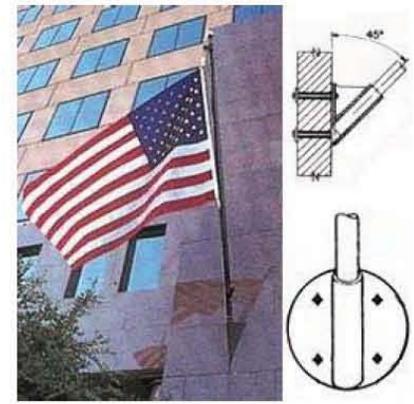
Primary Corridor B



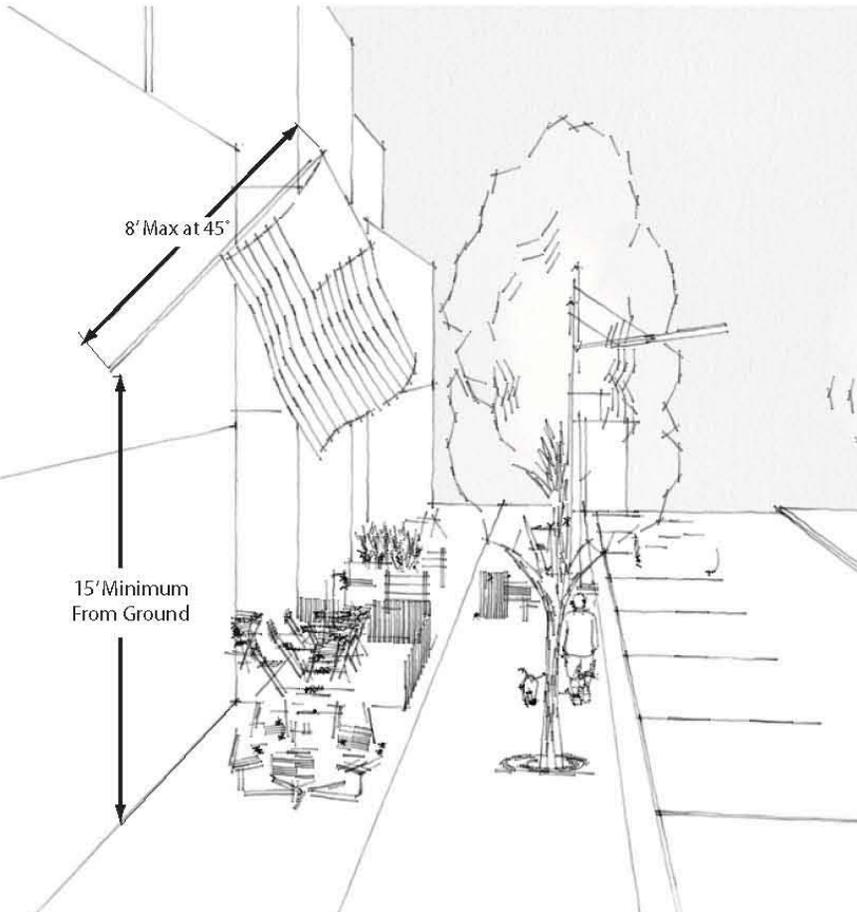
Amenities

Flagpoles

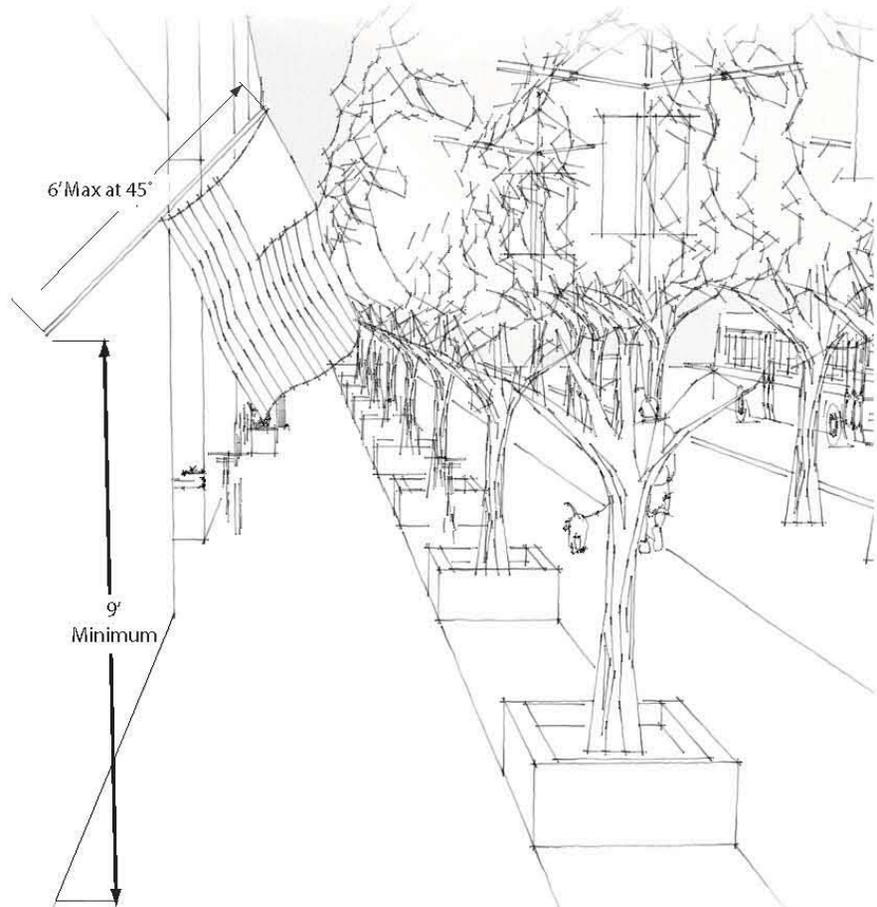
Style: Outrigger Pole
Material: Metal, Fiberglass
Finish: Painted, Anodized, Clear Coating



Primary Corridor A



Primary Corridor B



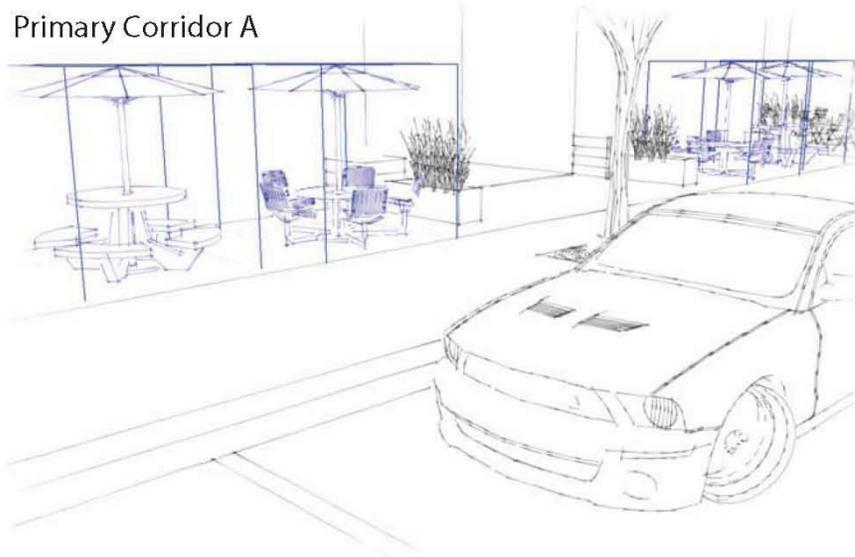
Amenities

Tables and Chairs

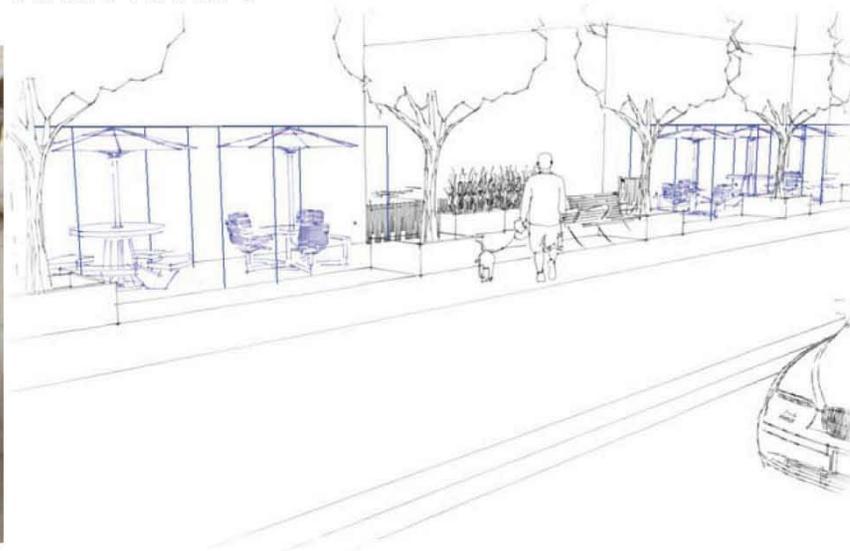
Style: Contemporary, pedestal tables, attached assembly
Material: Metal, recycled plastic, wood, concrete
Finish: Painted, anodized, plastic coated, stained or sealed.



Primary Corridor A



Primary Corridor B



Amenities

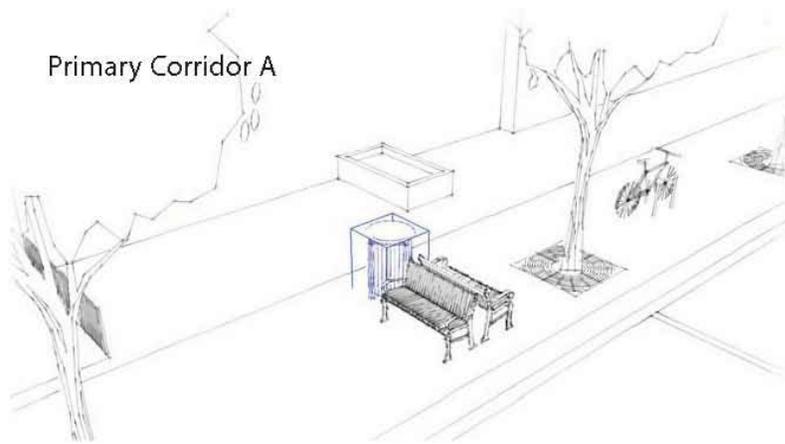
Waste Receptacles

Style: Cylindrical

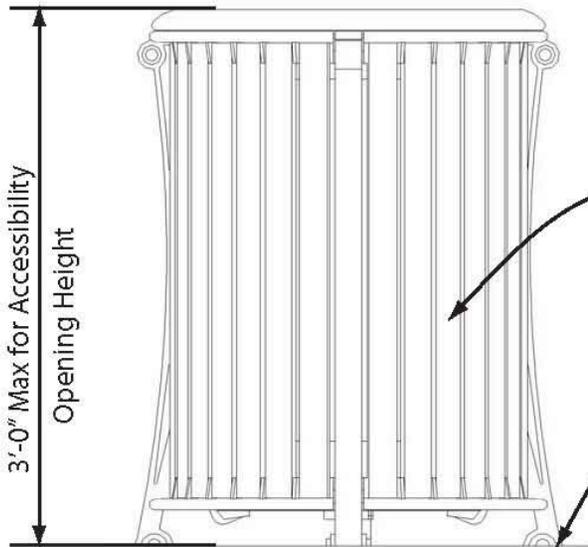
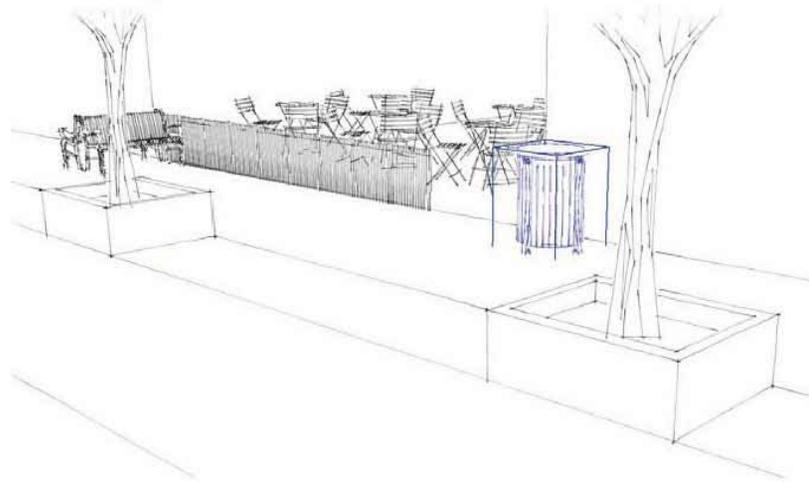
Material: Metal

Finish: Painted, Anodized, or Plastic Coated

Primary Corridor A



Primary Corridor B



Material shall be metal

Solid Base to eliminate tip over

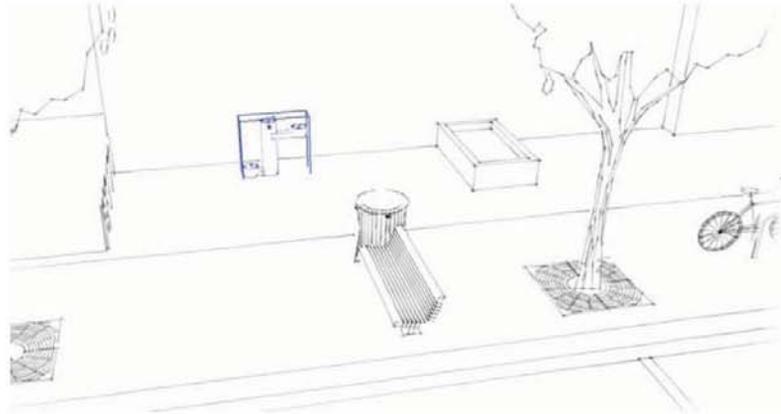


Amenities

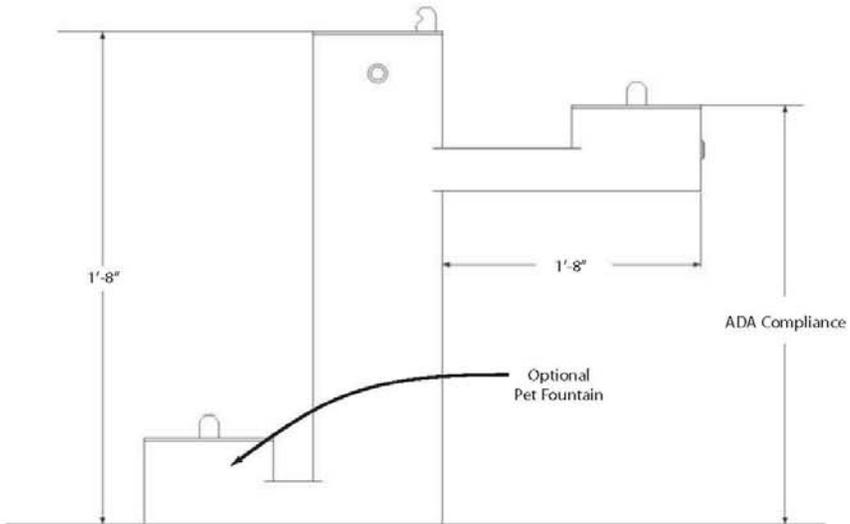
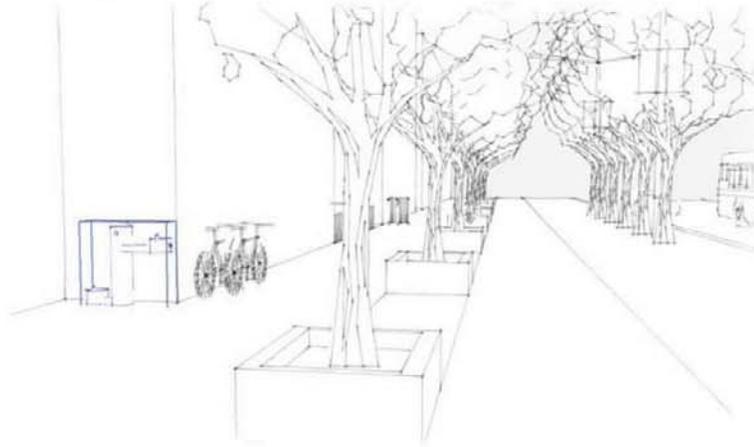
Drinking Fountains

Style: Contemporary, ADA compliant,
Material: Metal
Finish: Painted, Anodized

Primary Corridor A



Primary Corridor B



Amenities

Banners

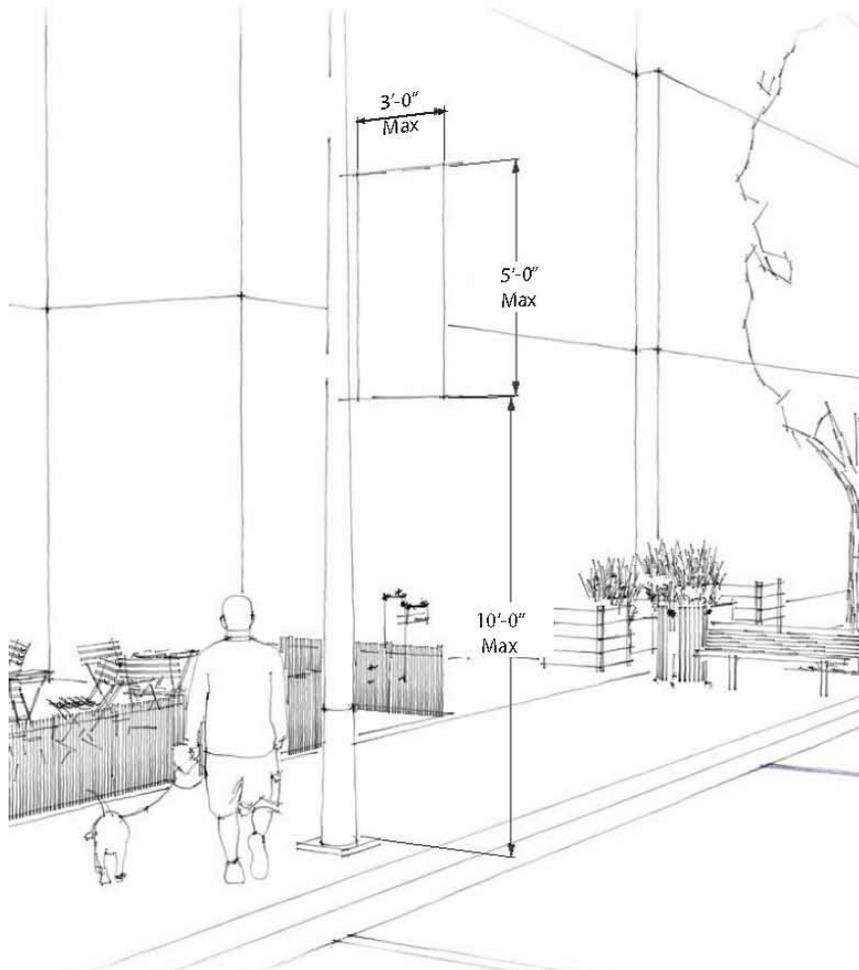
Style: Street Lamp Attachment

Material: Metal (bracketing) Fabric (banner)

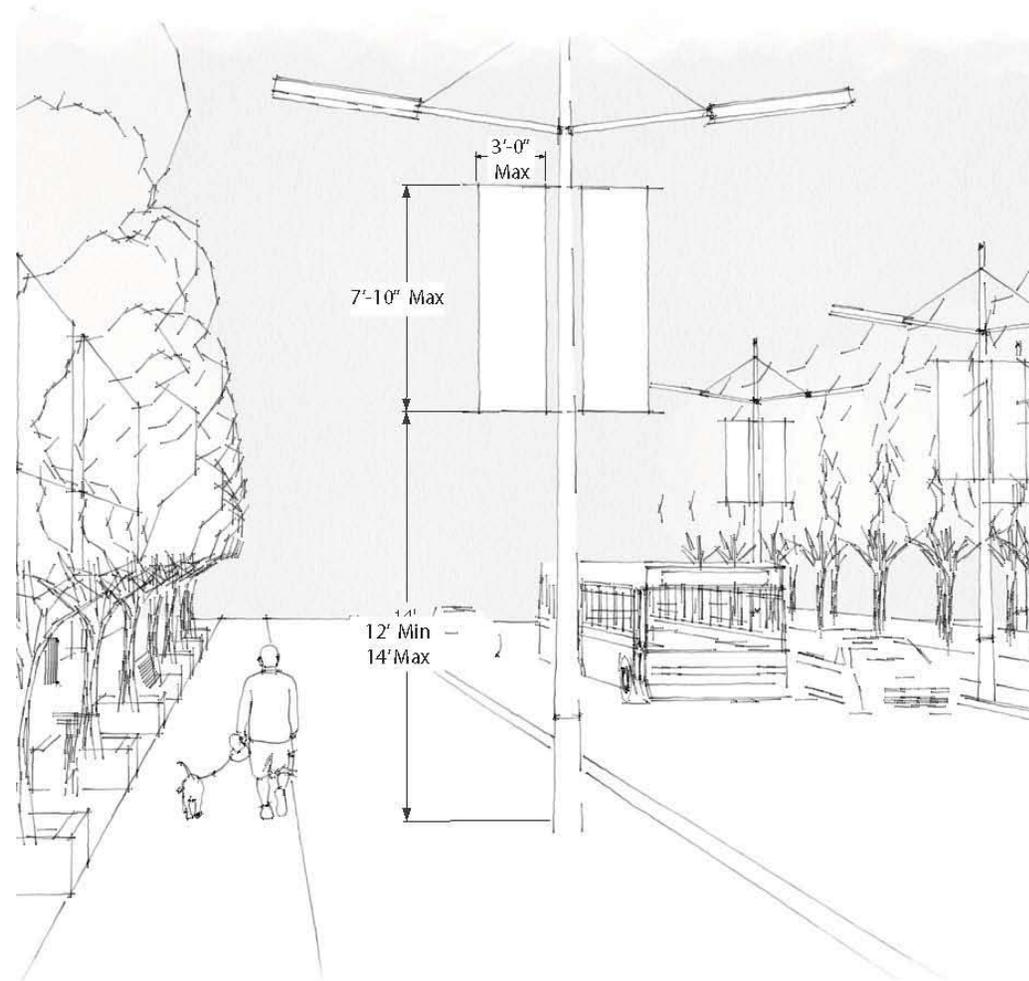
Finish: Painted, Anodized, Plastic Coated



Primary Corridor A



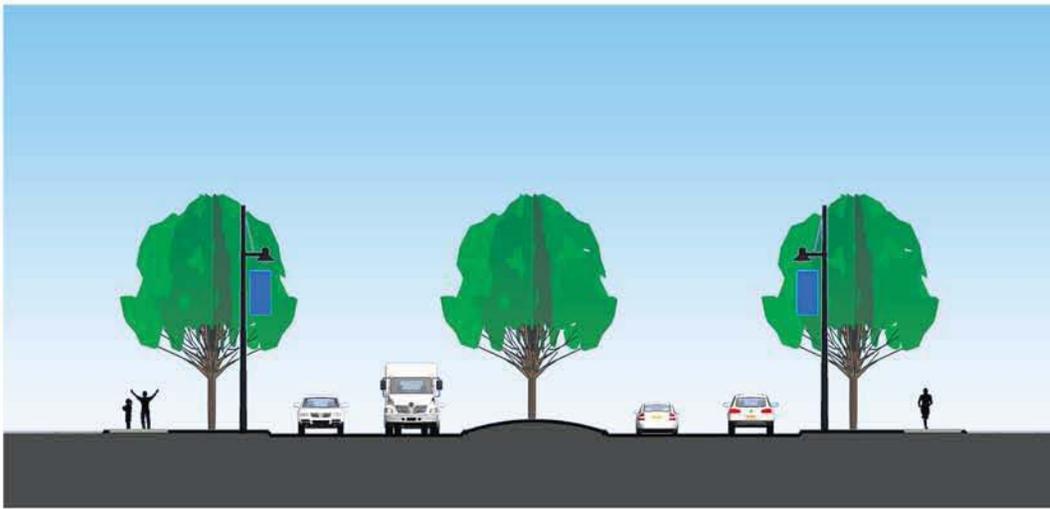
Primary Corridor B



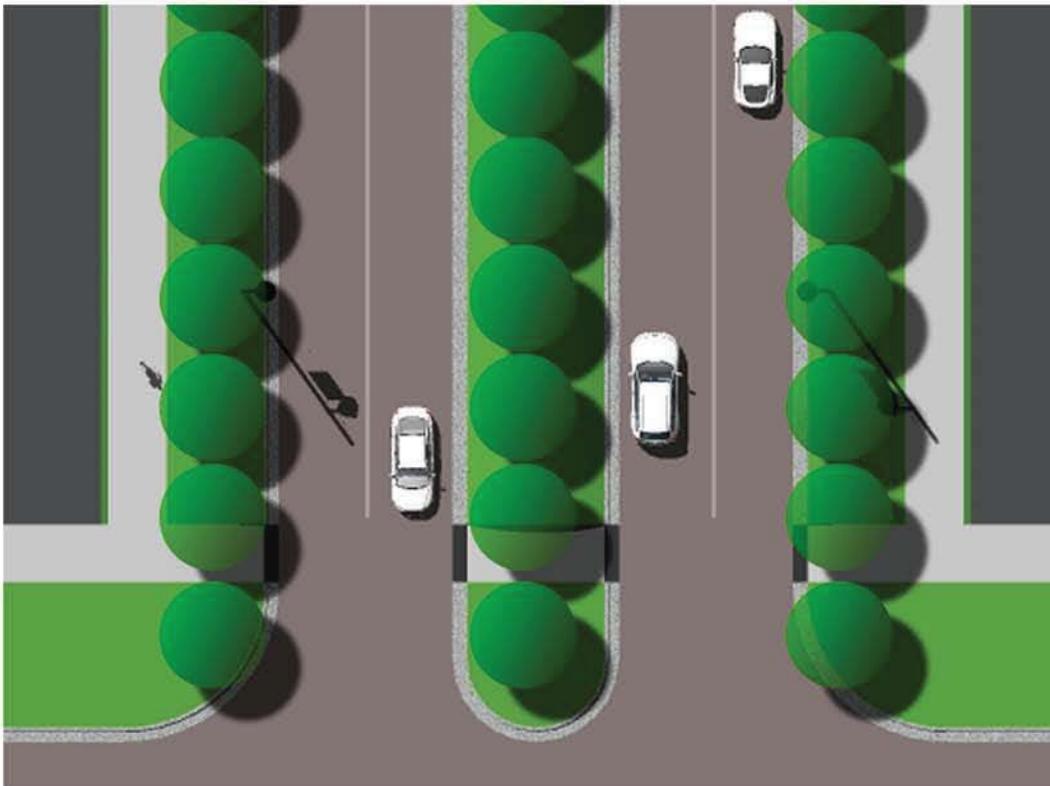
Streets Sites Structures



The following guidelines and associated standards for streetscape design elements are for the Arterial and Collector categories. Like the Primary Corridor A and B categories, they provide a section and overhead drawing, accompanied by a text description, on the first two pages. The following two pages contain a rendering and a more detailed section and plan-view illustration. These are followed by a series of pages with more prescriptive design standards for the Arterial and Collector types.



120' R.O.W.



STREETS

ARTERIAL
120' ROW

- Main north/south roads (e.g. Crooks)
 - Connected to corridor and ring roads
 - Disperse traffic
- 5 lanes with landscaped medians or center turn lane
- Connects pedestrians to corridor
- Highly emphasized pedestrian crossings
 - With refuge areas (medians)
- Landscaped, tree lined, quality lighting

Streets Sites Structures



The Arterial Road category is meant for the main north-south roads that cross the Big Beaver Corridor. These roads connect the main corridor with the rest of the City and the region. They are characterized by a narrower building-to-building distance, safe and effective non-motorized pathways designed to encourage users to reach the Primary Corridor areas by bike or on foot, effective signage and lighting, and few individual residential curb cuts.

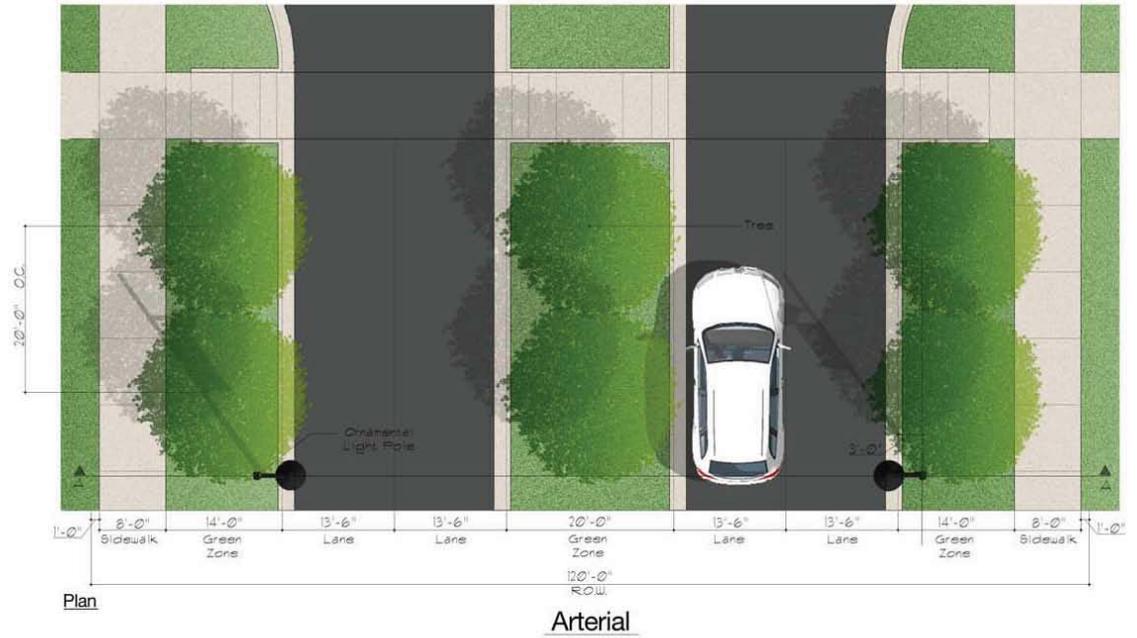
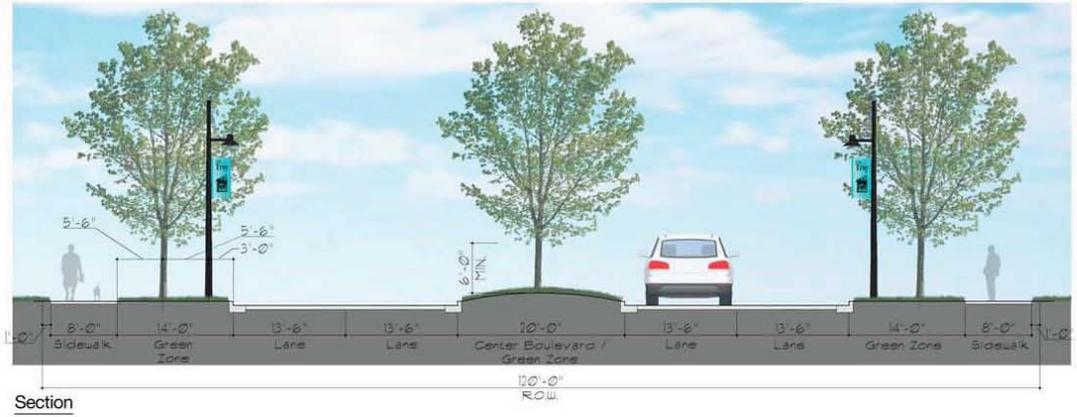
The crosswalks spanning Arterial Roads will make use of a series of features intended to protect pedestrians by establishing equity between pedestrians and motorists through effective design. Raised walks of high-quality materials, signage, landscaping, and pedestrian respite islands are several options that may be found at crosswalk areas along an Arterial Road.

Arterial Roads will also be characterized by strong landscaping designed to mitigate the negative impacts of high traffic volumes from adjacent residential areas which provide a unique and memorable visual character for the roadway.

The intersections between the Arterial Roads and Big Beaver Road will be marquis places with enhanced community and corridor landmarks. The spaces will be defined by a stable and consistent building-to-building

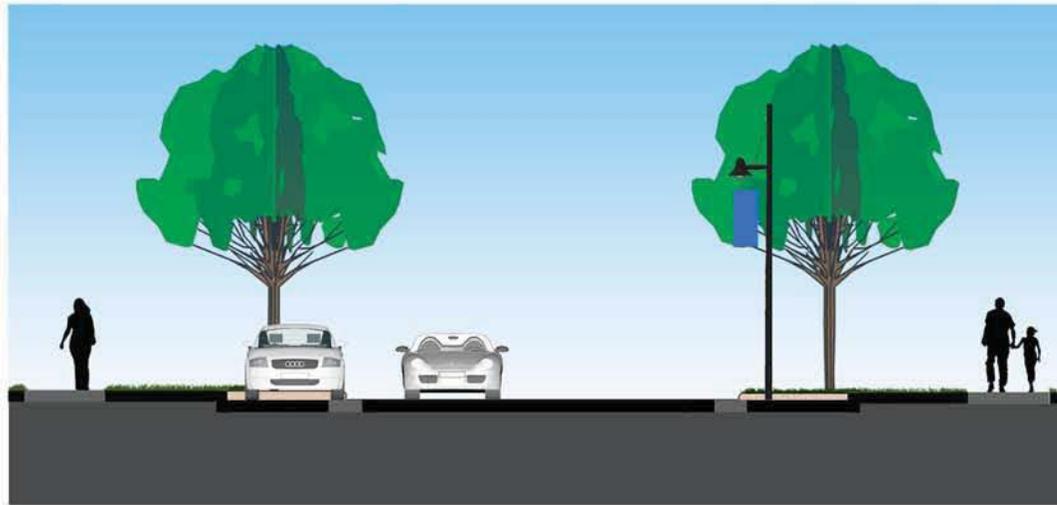
ratio complemented by landmark structures, superior landscaping and community signage with medians, and memorable architecture.

The design standards for the public realm would primarily address the streetscape and median zones within the rights of way for each street type as described in the Development Guidelines and could be applied to all public properties developed within the DDA boundary.

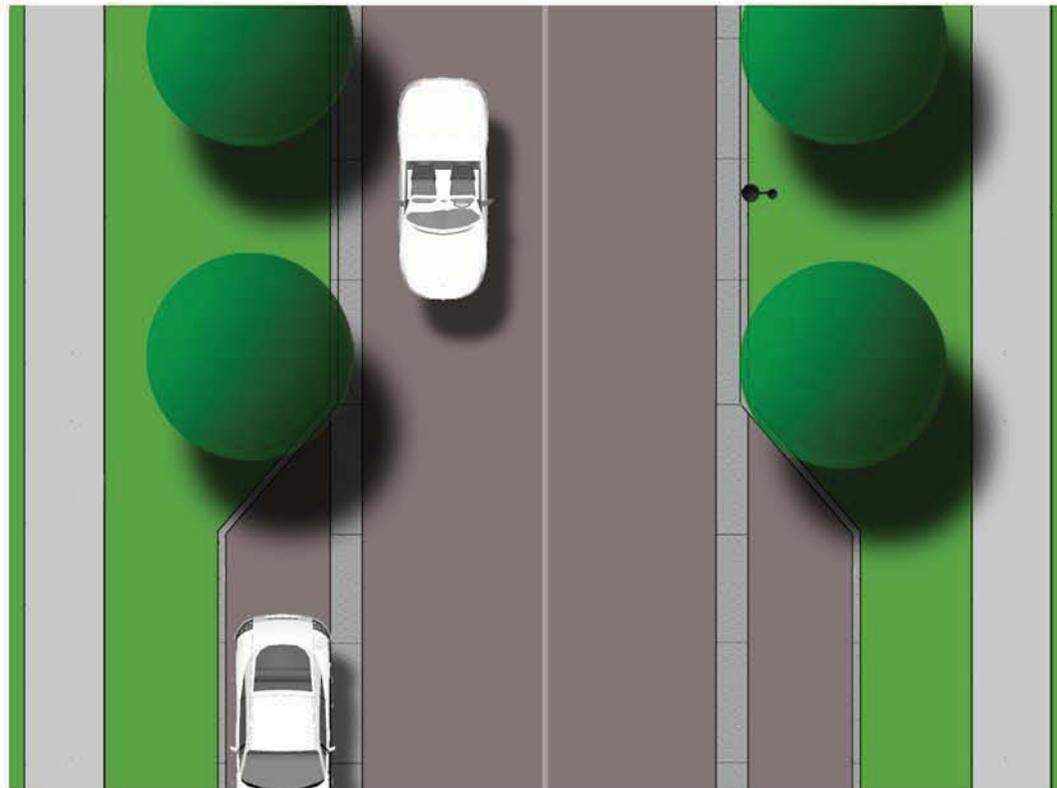


Streets Sites Structures





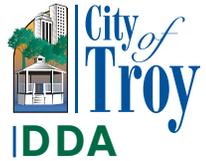
60' R.O.W.



STREETS COLLECTOR 60' ROW

- Make up the street grid
- Link the neighborhoods within the districts
- Width based upon use
- On street parking (where applicable)
- More frequent curb cuts
- Pedestrian scale "Neighborhood Streets"
- Defined pedestrian crosswalks (more frequent)
- 5' wide walkways
- Tree lined
- Street signs, pedestrian scale lighting

Streets Sites Structures



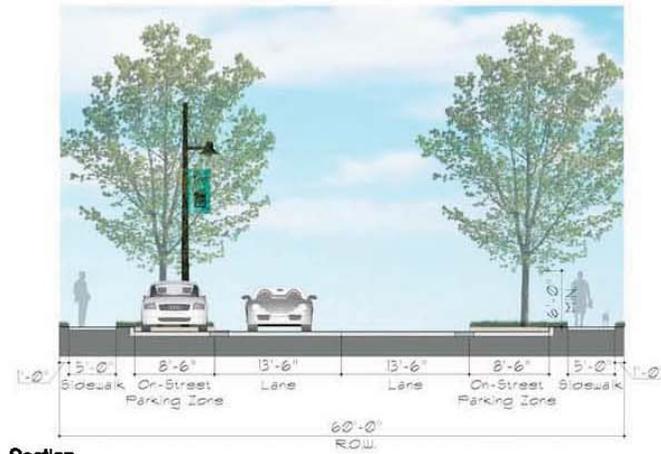
The Collector Road category defines those roads tying together smaller areas within the District. Collectors have a more varied and localized character than Primary or Arterial Roads depending on their context within predominantly office, retail, or residential areas. Collectors act as the backbone of smaller neighborhoods within the District and tie those areas to Arterials.

Collectors will be very welcoming of non-motorized users and will have defined pedestrian rest areas and other amenities whenever possible. Their scale will be similar to that of a main road within a conventional subdivision or industrial park, and their width will be determined primarily on their purpose. A Collector within an industrial area may be required to be wider than one in a residential area, although their purpose is similar.

Collectors will have a much higher frequency of curb cuts than Arterial or Primary Roads, and will often provide direct access to retail centers or office complexes. Sufficient width should be retained on either side of the roadway whenever possible to allow for a rigorous landscaping plan to ensure that the immediate uses served are adequately protected from the moderate traffic volumes anticipated on a Collector Road.

The Collector category is also meant to include any new roads constructed within the Downtown Development Authority designed as part of the Ring Road proposed by the Big Beaver Corridor Study.

The design standards for the public realm would primarily address the streetscape and median zones within the rights of way for each street type as described in the Development Guidelines and could be applied to all public properties developed within the DDA boundary.



Section



Plan

Collector

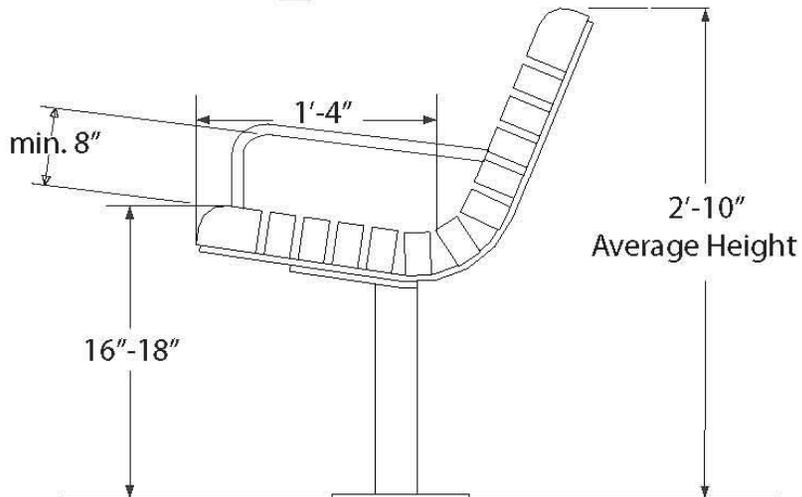
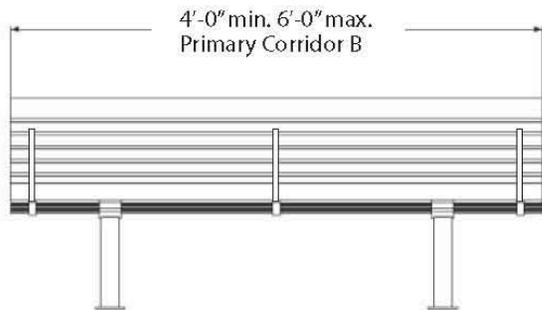
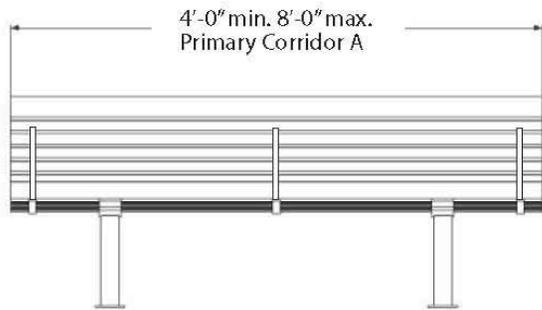
Streets Sites Structures



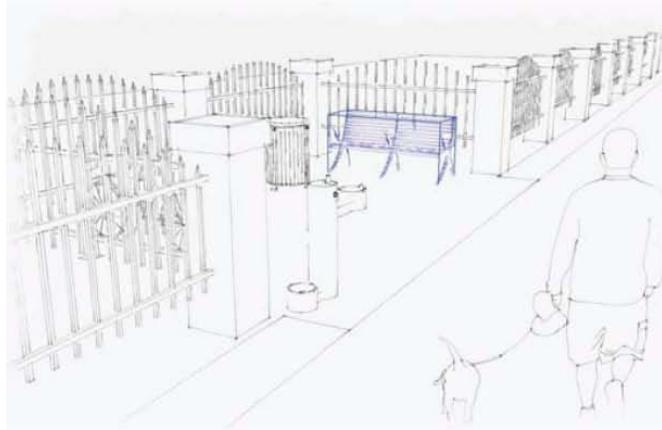
Amenities

Benches

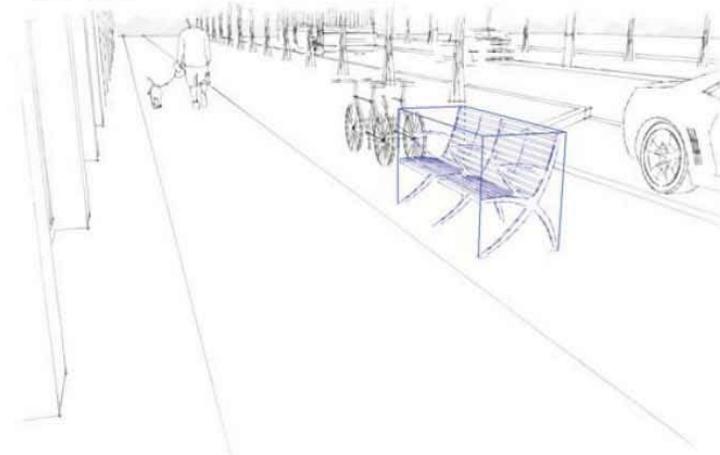
Style: Contemporary
Material: Metal, Recycled Plastic
Finish: Painted, Anodized, or Plastic Coated



Arterial



Collector



Amenities

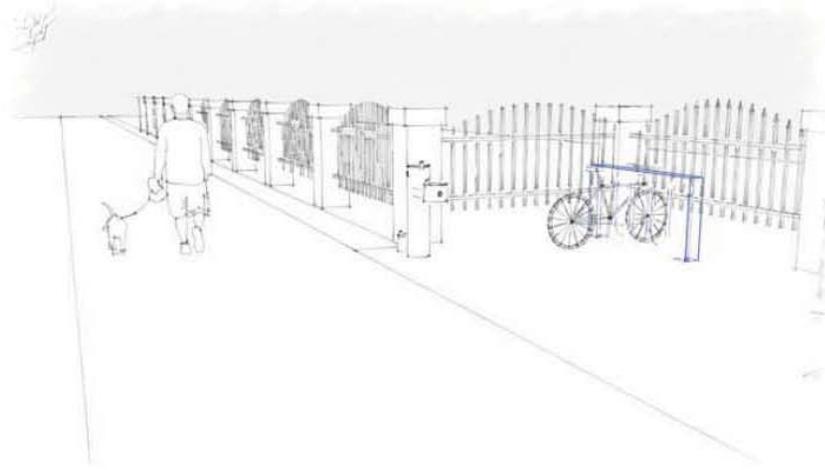
Bicycle Racks

Style: Contemporary

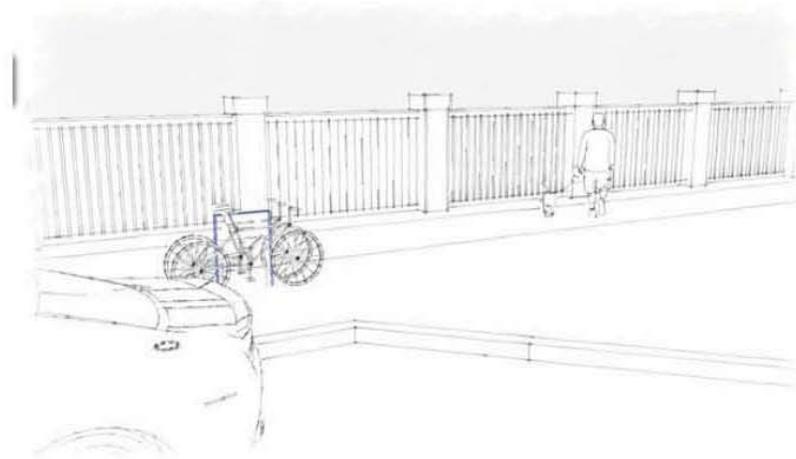
Material: Metal

Finish: Painted, Anodized, Plastic Coated

Arterial



Collector



Amenities

Fences

Style:

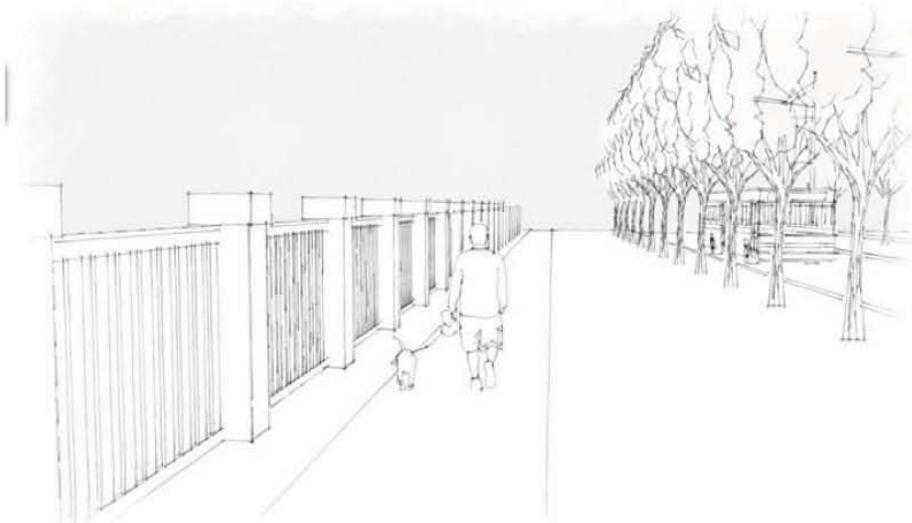
Material: Metal, masonry, composite fiber

Finish: Painted, Anodized, Plastic Coated

Arterial



Collector

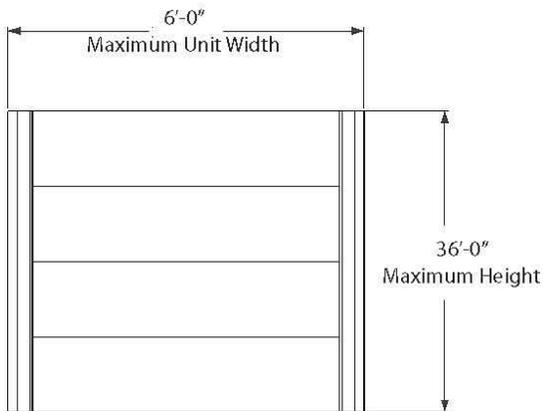
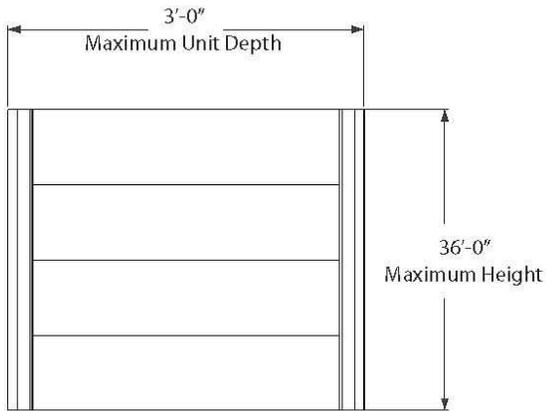


Amenities

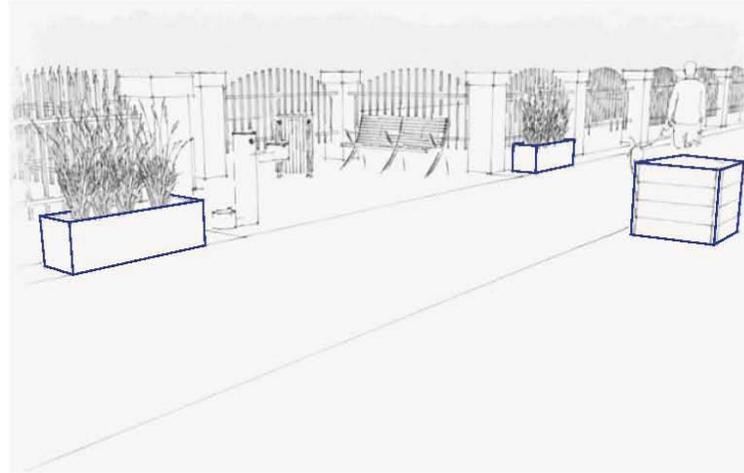
Planters

Style: Rectangular
Material: Metal, Recycled Plastic, Concrete
Finish: Painted, Anodized, Plastic Coated, Stained

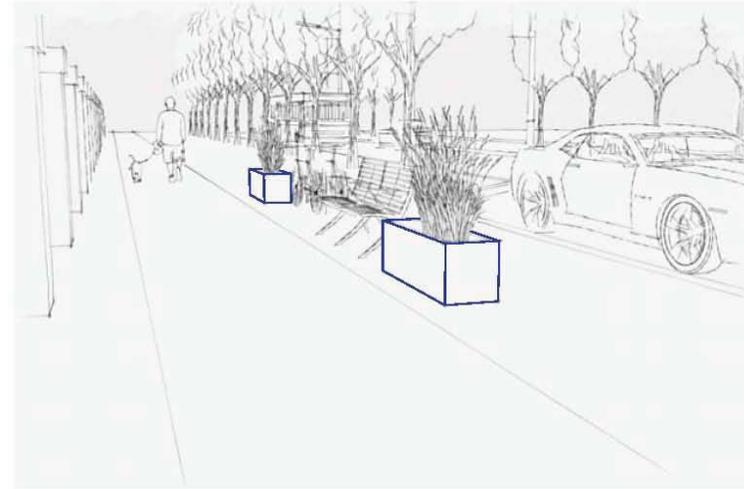
The images shown are of products that emulate the look of wood. These are acceptable because of their increased durability and reduced need for maintenance.



Arterial



Collector



Amenities

Flagpoles

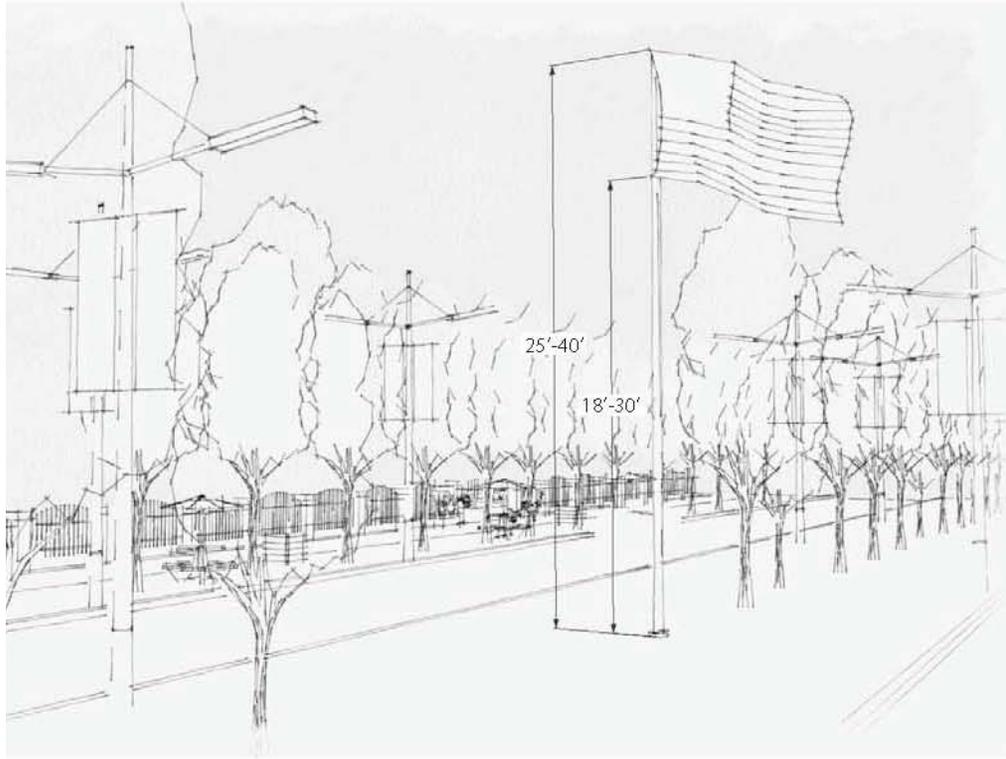
Style: Outrigger Pole

Material: Metal, Fiberglass

Finish: Painted, Anodized, Clear Coating



Arterial



Collector



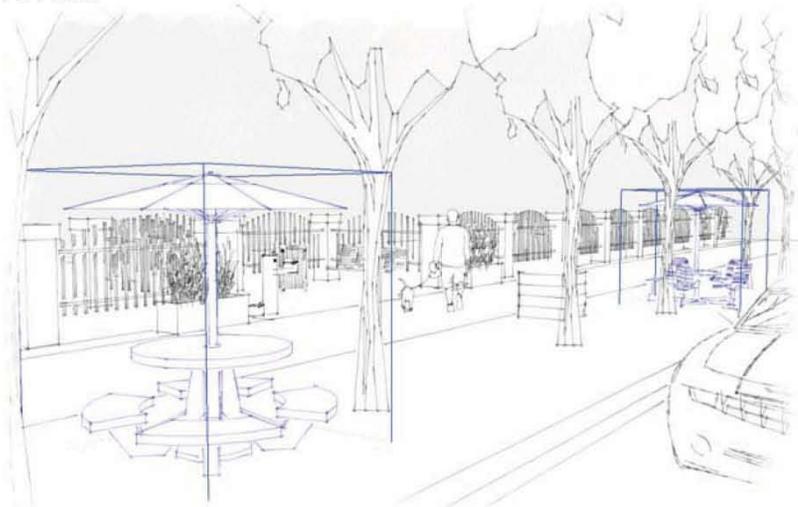
Amenities

Tables and Chairs

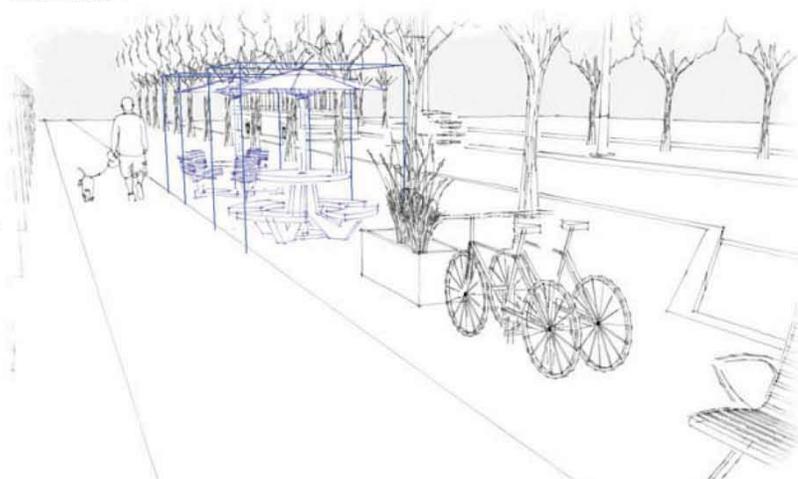
Style: Contemporary, pedestal tables, attached assembly
Material: Metal, recycled plastic, wood, concrete
Finish: Painted, anodized, plastic coated, stained or sealed.



Arterial



Collector



Amenities

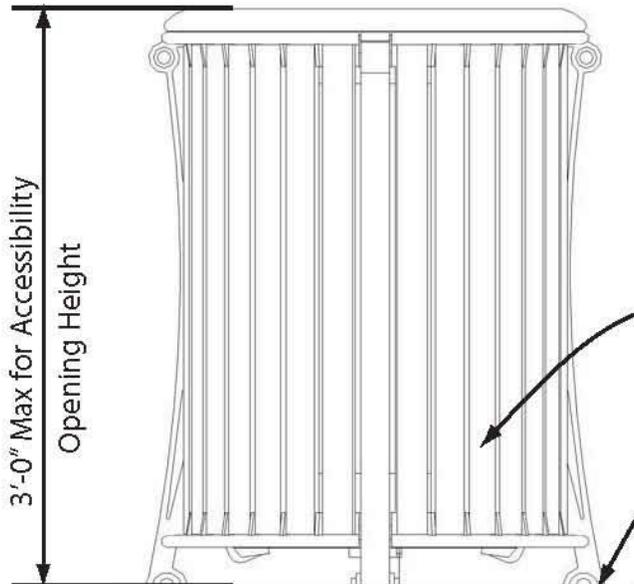
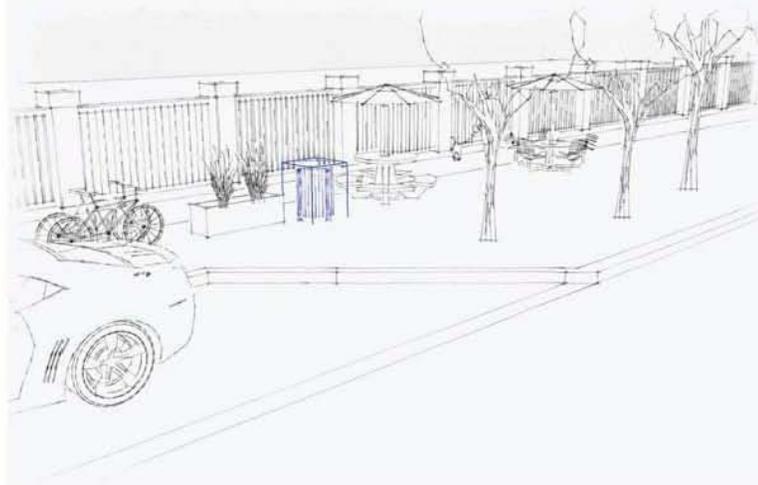
Waste Receptacles

Style: Cylindrical
Material: Metal
Finish: Painted, Anodized, or Plastic Coated

Arterial



Collector



Material shall be metal

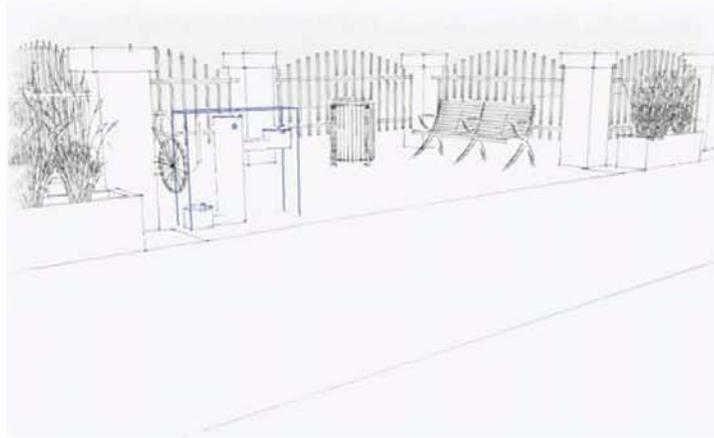
Solid Base to eliminate tip over

Amenities

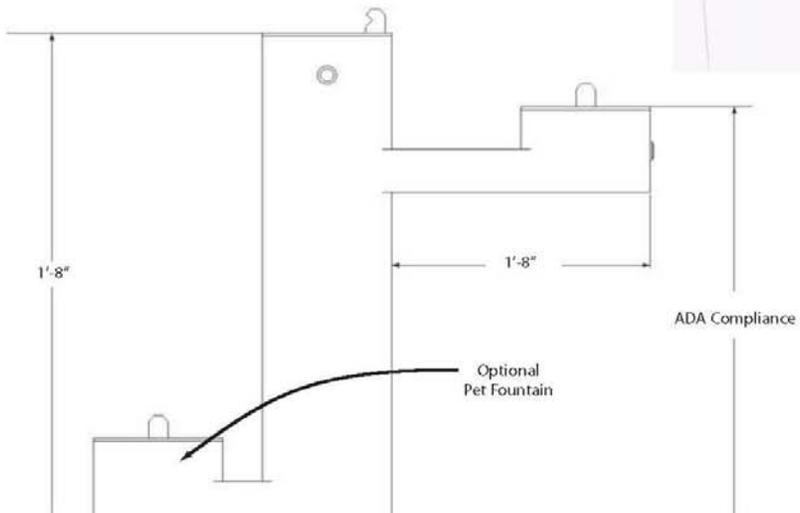
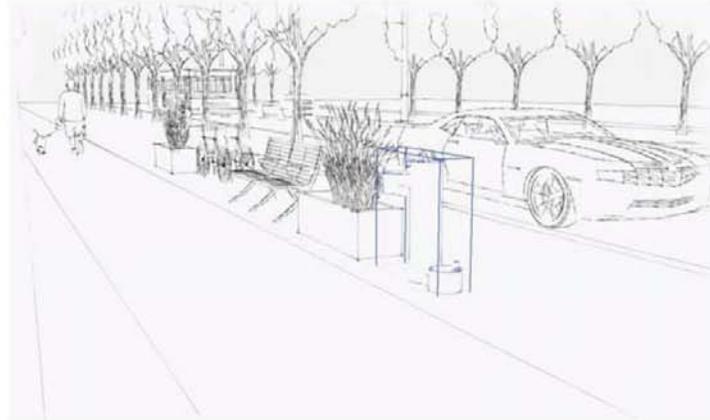
Drinking Fountains

Style: Contemporary, ADA compliant,
Material: Metal
Finish: Painted, Anodized

Arterial



Collector



Amenities

Banners

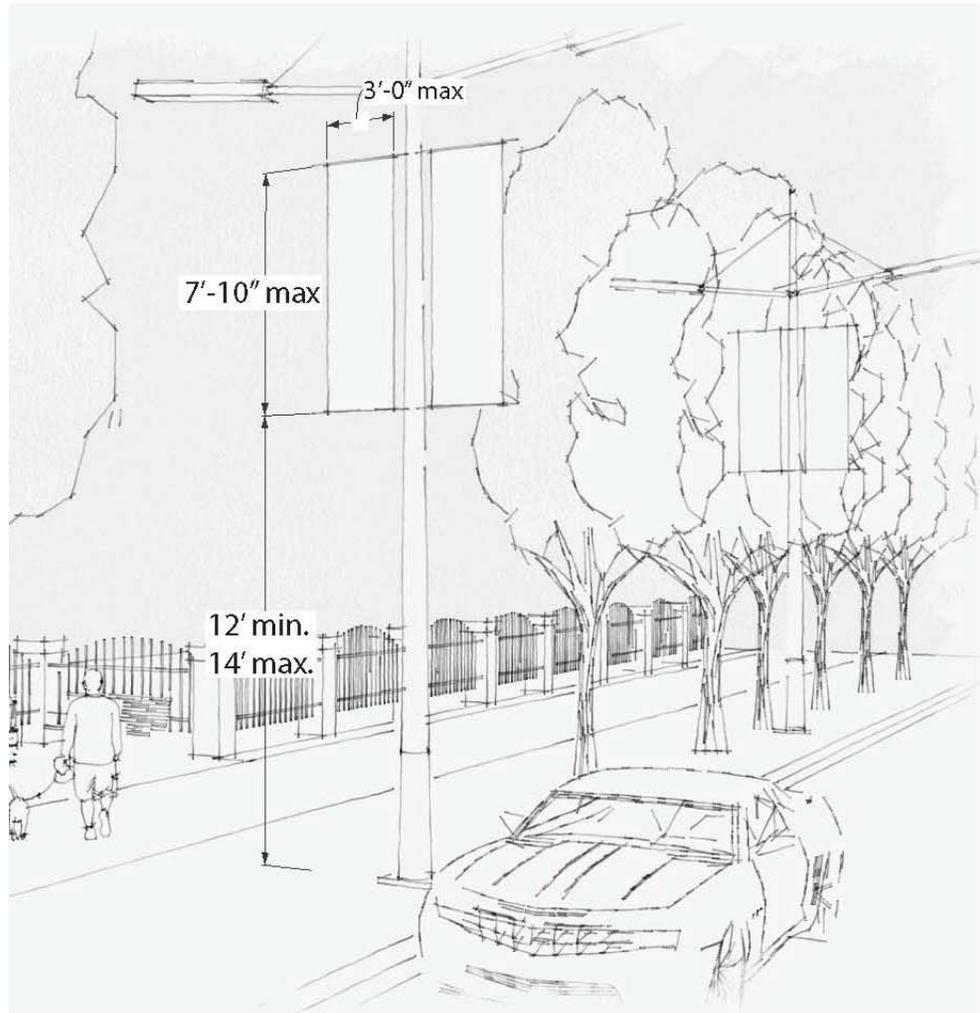
Style: Street Lamp Attachment

Material: Metal (bracketing) Fabric (banner)

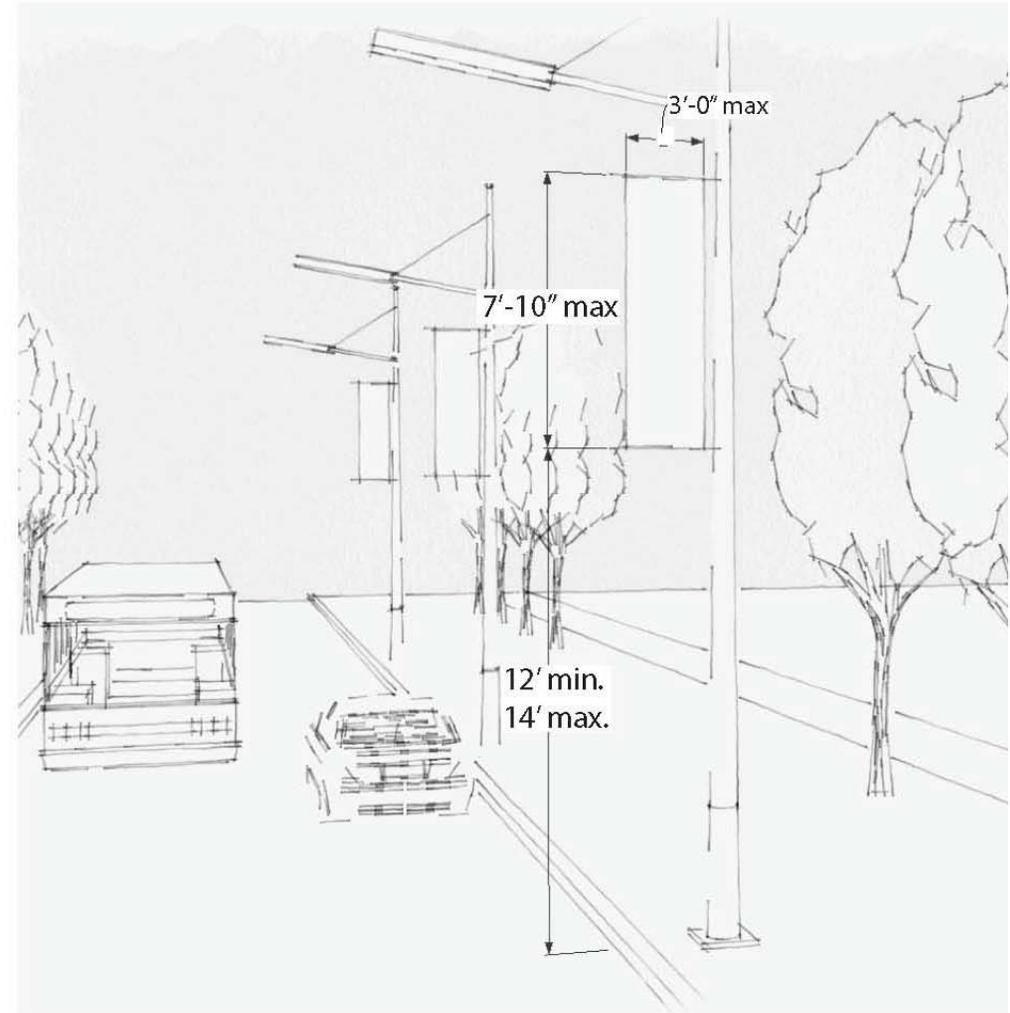
Finish: Painted, Anodized, Plastic Coated



Arterial



Collector



Streets Sites Structures



The following guidelines and associated images are for monuments and signage throughout the DDA that are designed to help transition the driver into the corridor and establish a feeling of arrival in the community.

Signage

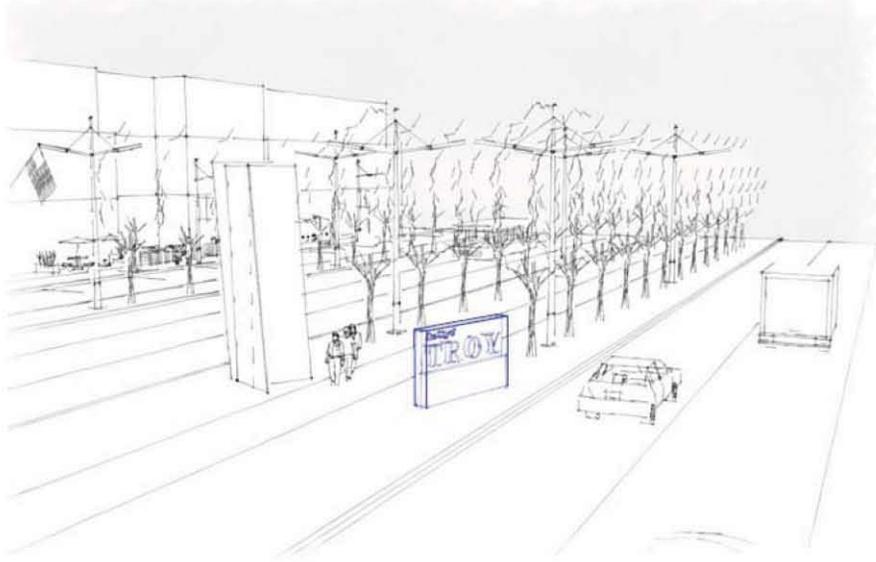
Gateway Treatments and Signage

Style: Free Standing Structure or Art Sculpture (civic scale)

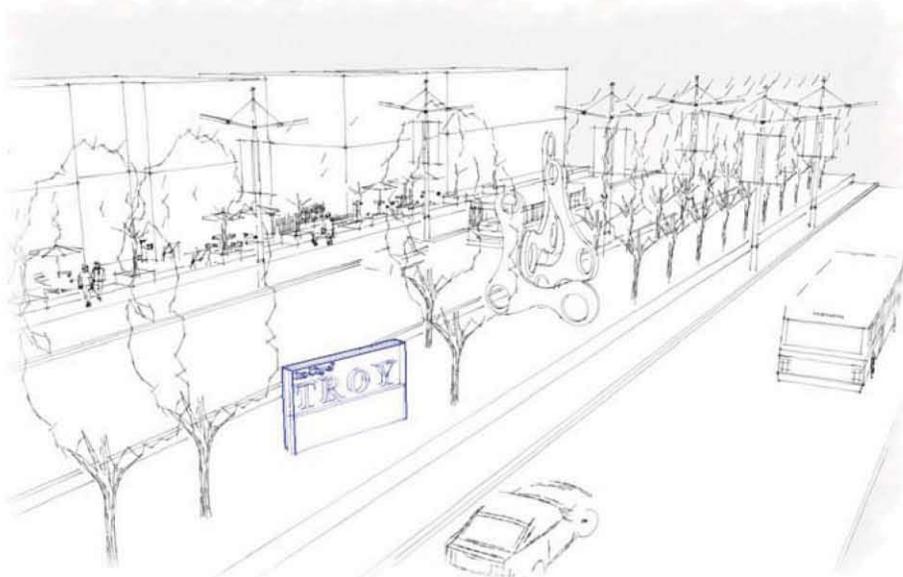
Material: Metal, wood, concrete, plastic, glass

Finish: Painted, stained, natural, illuminated

Primary Corridor A



Primary Corridor B



Signage

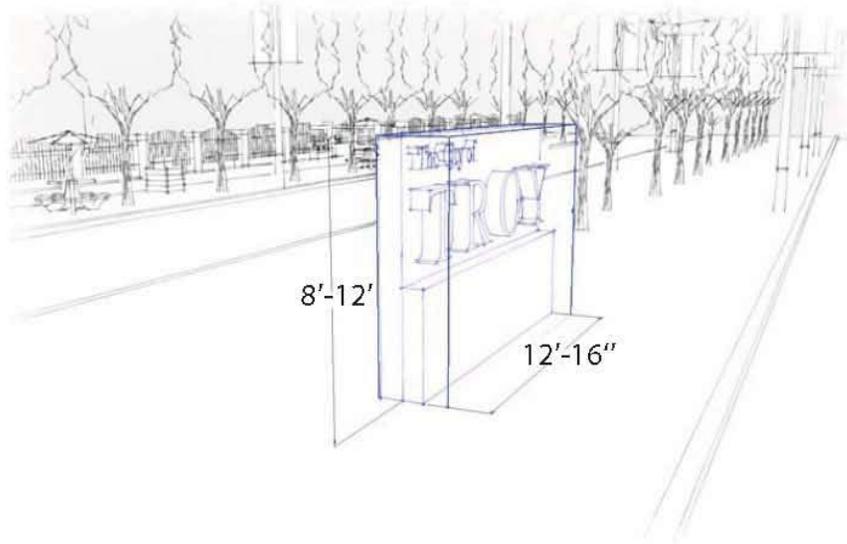
Gateway Treatments and Signage

Style: Free Standing or Attached to building (intimate scale)

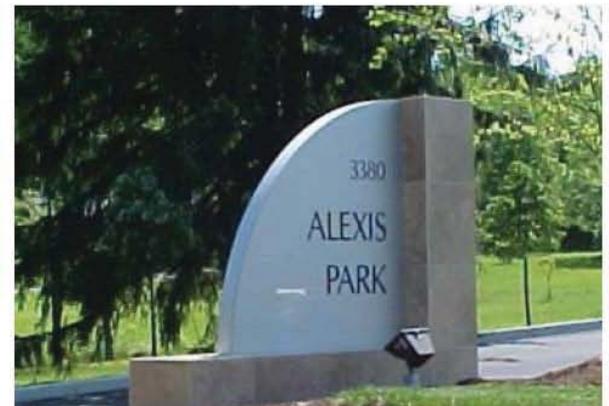
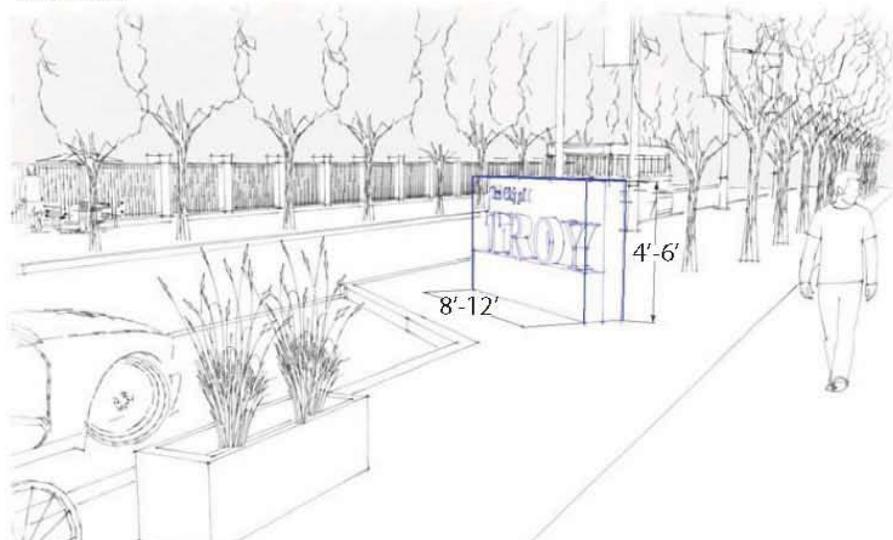
Material: Metal, wood, concrete, plastic, glass

Finish: Painted, stained, natural, illuminated

Arterial



Collector



Landmarks and Focal Points

District Distinction Elements

Style: Monuments, Signage or Art Sculptures

Material: Metal, wood, plastic, glass, water

Finish: Painted, coated, stained, illuminated

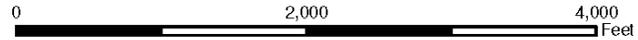
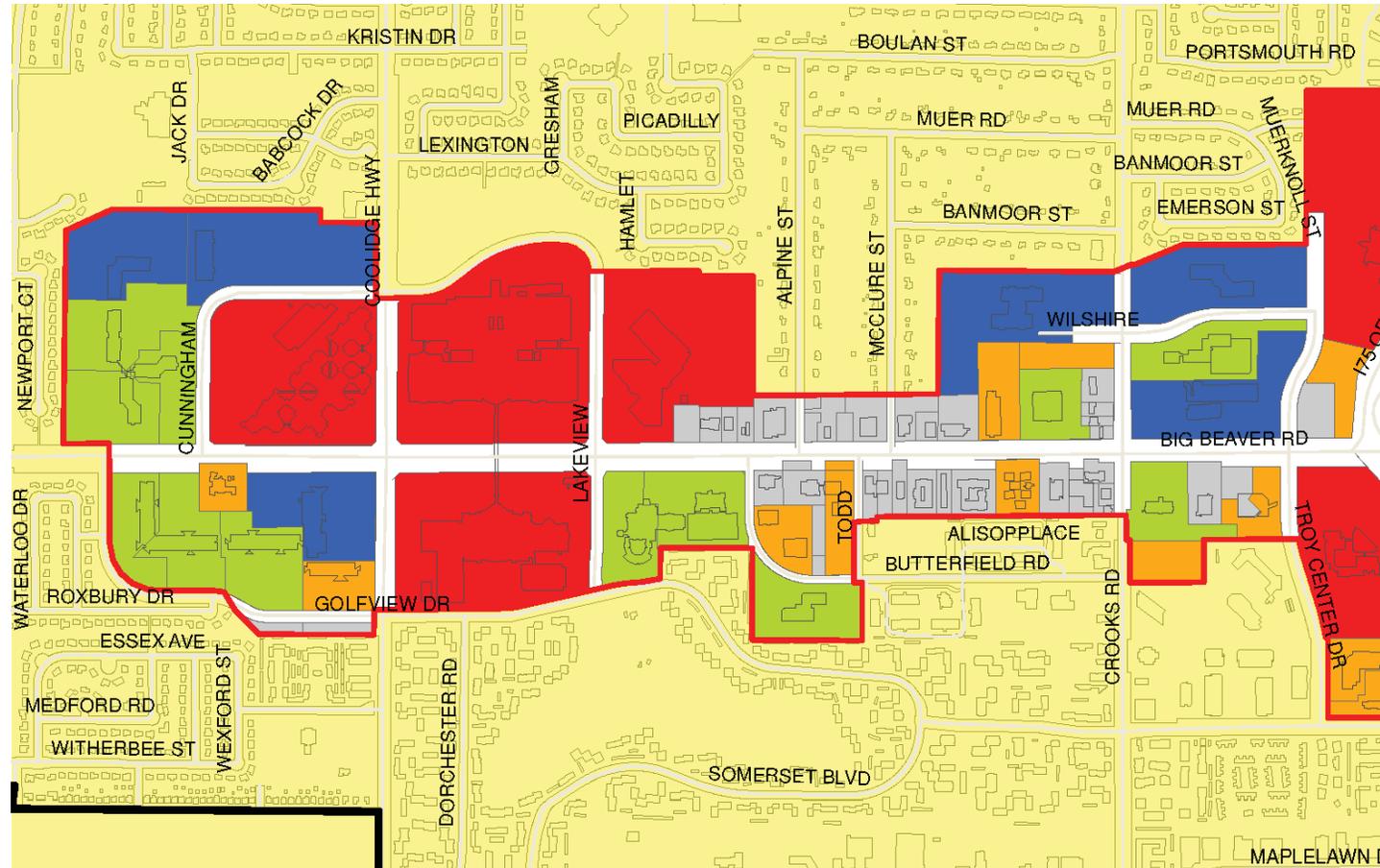


Site types are largely, though not exclusively established by lot size. Some sites were shifted to groups primarily made up of smaller or larger lots based on their other characteristics, such as location, adjacency to other lot types, proximity to certain street types, or the established use.

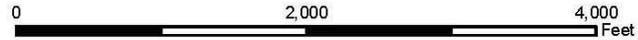
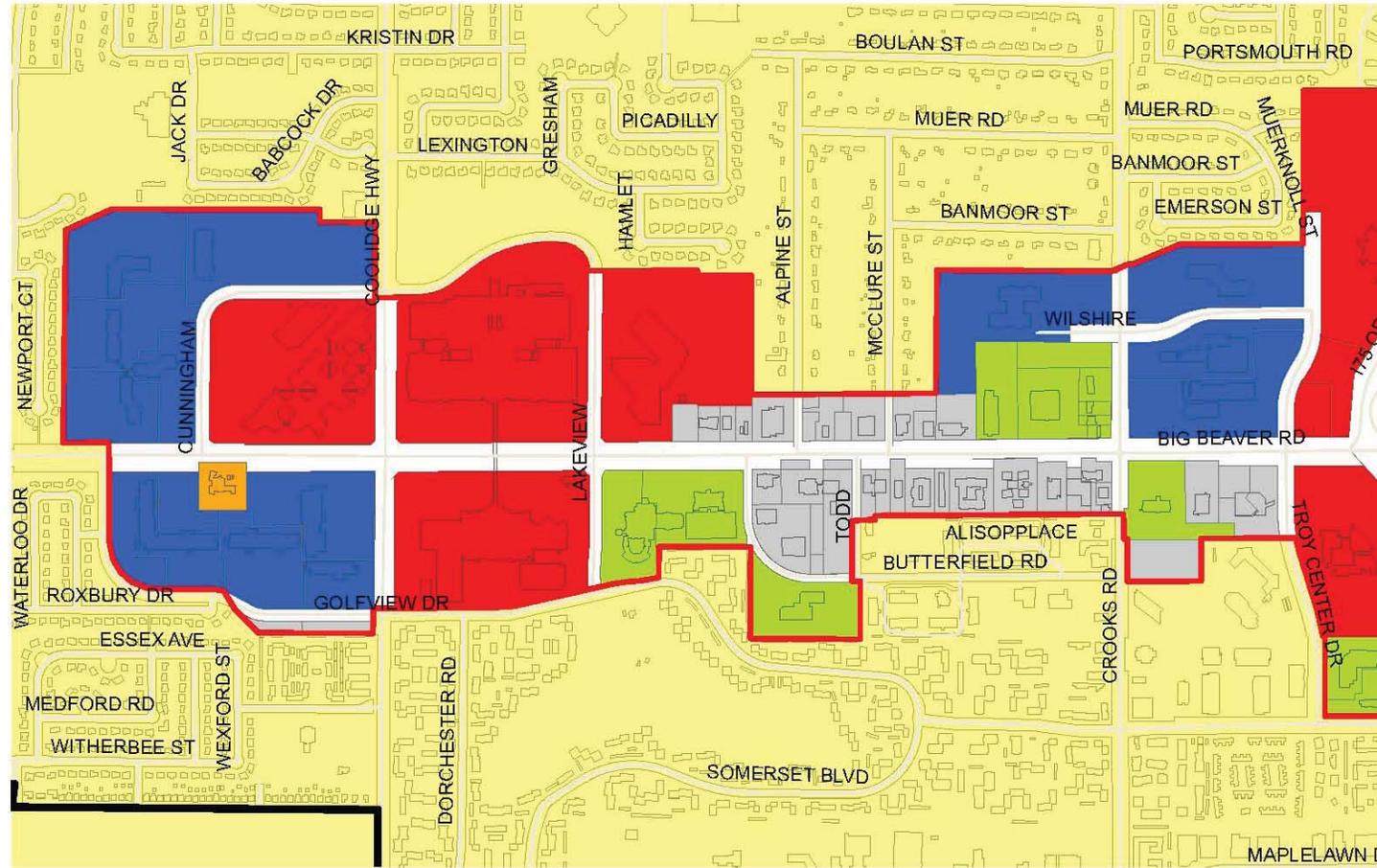
The following pages have two maps, the first of which is an analysis of lot size. The second map is the key for the Guidelines, it describes which site types were ultimately classified in certain areas throughout the DDA.

The maps are followed by five spreads describing the five site types identified by these Guidelines. They are designed to help the reader understand, in a simple, graphic way, the difference between existing conditions and desired conditions for the various sites throughout the DDA.

The primary guidelines are then followed by a series of pages describing the more prescriptive design elements for private property in the DDA. They include standards similar to those for the street types, but are supported by additional guidance for parking lot and deck design, screening for service areas, and wall design.



Plot Generation: 7.8.08



Plot Generation: 7.17.08

SITES TYPE A

Building Placement

- Zero line
- 5' off zero line
- Fronts corridors, streets, parks

Vehicle Circulation

- Interconnected to adjacent sites
- Shared access
- Connected to arterial/collector roads to disperse traffic (minimize primary corridor access)
- Screened service access

Pedestrian Circulation

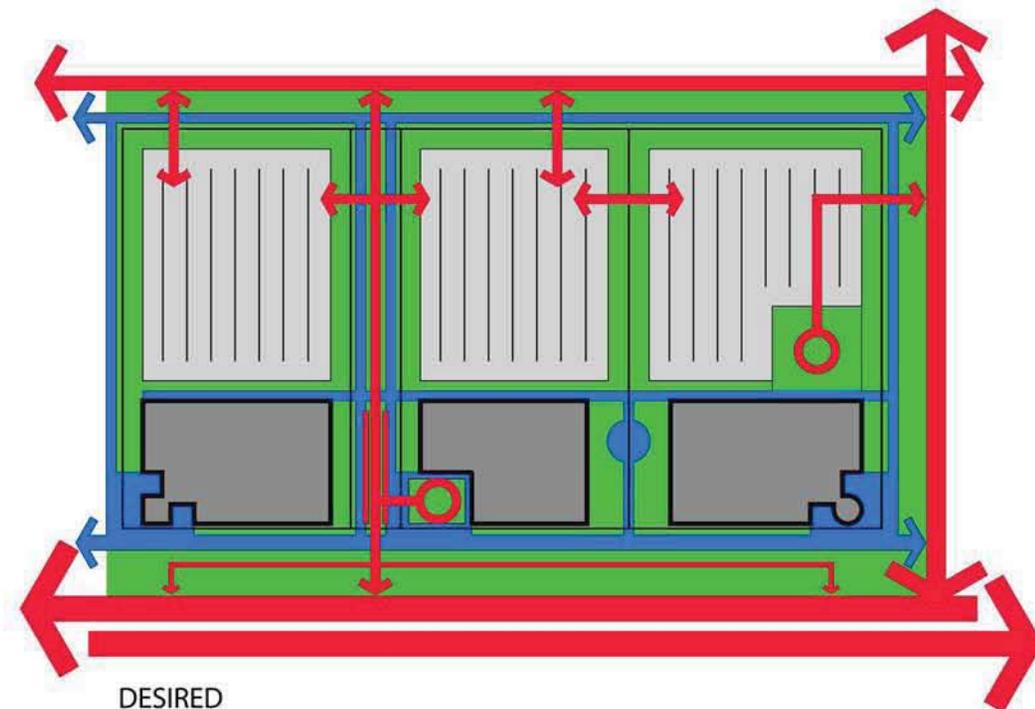
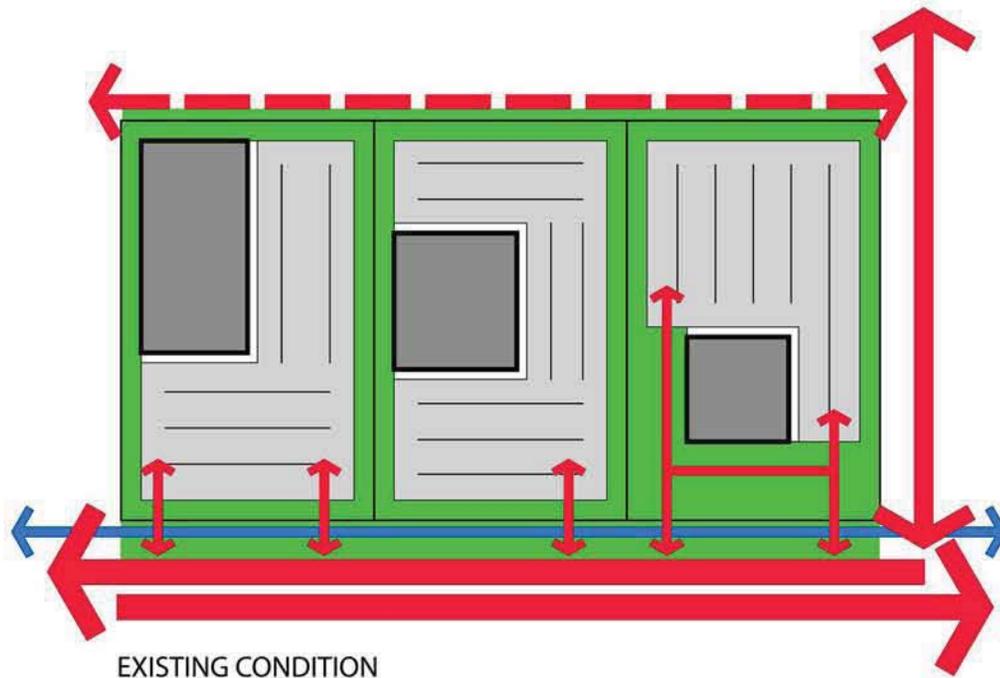
- Linked to primary corridor
- Interconnected
- Direct connection to building entrances
- Minimize conflicts with vehicular circulation

Parking

- Locate in Rear Yard
- Screened
- Shared between uncommon uses
- Interconnected
- Oriented to pedestrian flow
- Accessed from collector and arterial roads where possible

LEGEND

	BUILDING MASS		SERVICE LANES
	OPEN SPACE OR PARK		VEHICULAR CIRCULATION
	PARKING FIELD		PEDESTRIAN CIRCULATION
	PARKING DECK		PEDESTRIAN BRIDGE
	DROP OFF/ARRIVAL COURT		PROPERTY BOUNDARY
	ON-STREET PARKING		



Made up mostly of lots in the 2.5 acre and smaller range, the Site Type A category is reserved for the smallest, single-use sites developed for individually standing businesses. Small coffee shops or fast food restaurants would often be found in this category, as well as small multi-tenant office buildings or single-tenant office buildings.

Site Type A is primarily found along Big Beaver Road in areas between the “pulses” of major intersections, where lot depths are constrained and where older, smaller buildings predominate. These sites must be designed to better integrate with their surroundings to contribute to a more cohesive District, a more consistent building line, and more efficient access between sites. Good access for pedestrians and cross access for vehicles will help sites in this Category reduce trips entering and existing from Big Beaver Road.

Groups of Site Type A properties may make excellent candidates for coordinated combination of properties to create more cohesive mini-destinations.

SITES TYPE B

Building Placement

- Zero line
- 5' off zero line
- Fronts corridors, streets, parks
- Relationship with adjacent buildings

Vehicle Circulation

- Interconnected to adjacent sites
- Shared access
- Connected to arterial/collector roads to disperse traffic (minimize primary corridor access)
- Screened service access
- Drop off/arrival courts accessed from collector road or internal drive
- Shared drop off/arrival court with common collector road or drive

Pedestrian Circulation

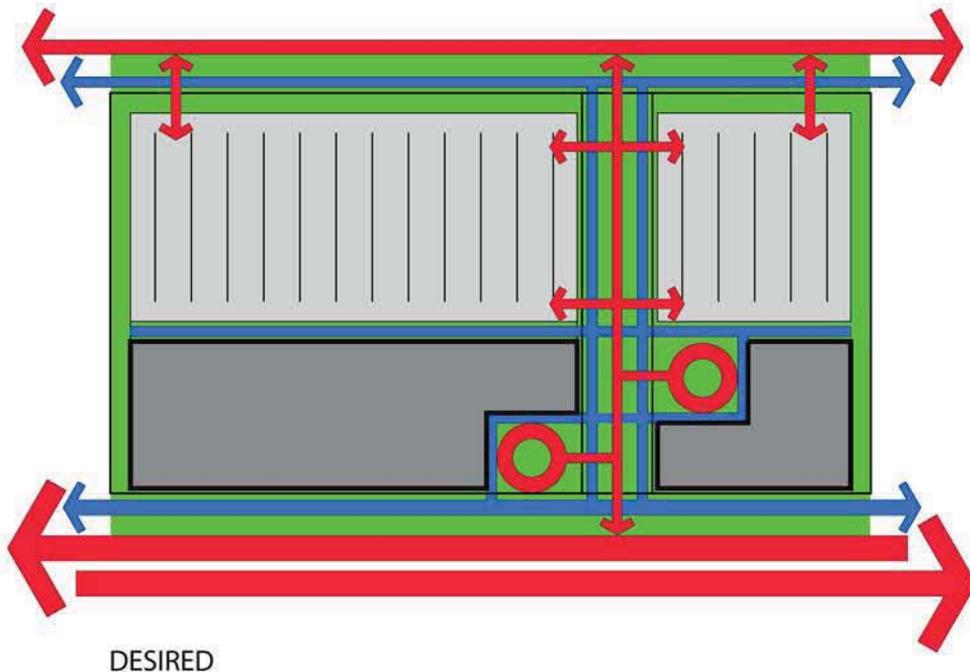
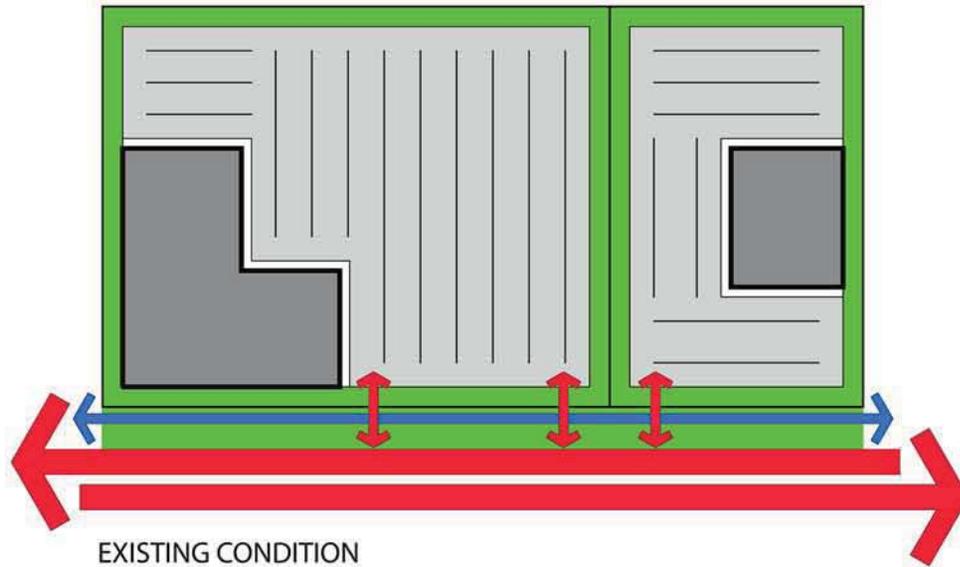
- Linked to primary corridor
- Interconnected
- Direct connection to building entrances
- Minimize conflicts with vehicular circulation

Parking

- Locate in Rear Yard
- Screened
- Shared between uncommon uses
- Interconnected
- Oriented to pedestrian flow
- Accessed from collector and arterial roads where possible

LEGEND

	BUILDING MASS		SERVICE LANES
	OPEN SPACE OR PARK		VEHICULAR CIRCULATION
	PARKING FIELD		PEDESTRIAN CIRCULATION
	PARKING DECK		PEDESTRIAN BRIDGE
	DROP OFF/ARRIVAL COURT		PROPERTY BOUNDARY
	ON-STREET PARKING		



The sites in Site Type B are mostly between 2.51 and 5 acres in area, and are located in and around areas mostly filled with smaller, Type A sites. Similar to Type A sites in character, they are located on sites large enough to warrant additional consideration to landscaping and surface parking in that they can often accommodate large surface lots, which can compromise the cohesiveness of the area if not designed with connectivity in mind.

SITES TYPE C

Building Placement

- Zero line (when possible)
- 5' off zero line
- Fronts corridors, streets, parks
- Relationship with adjacent buildings

Vehicle Circulation

- Interconnected to adjacent sites
- Shared access
- Connected to arterial/collector roads to disperse traffic (minimize primary corridor access)
- Screened service access
- Drop off/arrival courts/accessed from collector road or internal drive
- Shared and grouped drop off/arrival court with common collector road or drive

Pedestrian Circulation

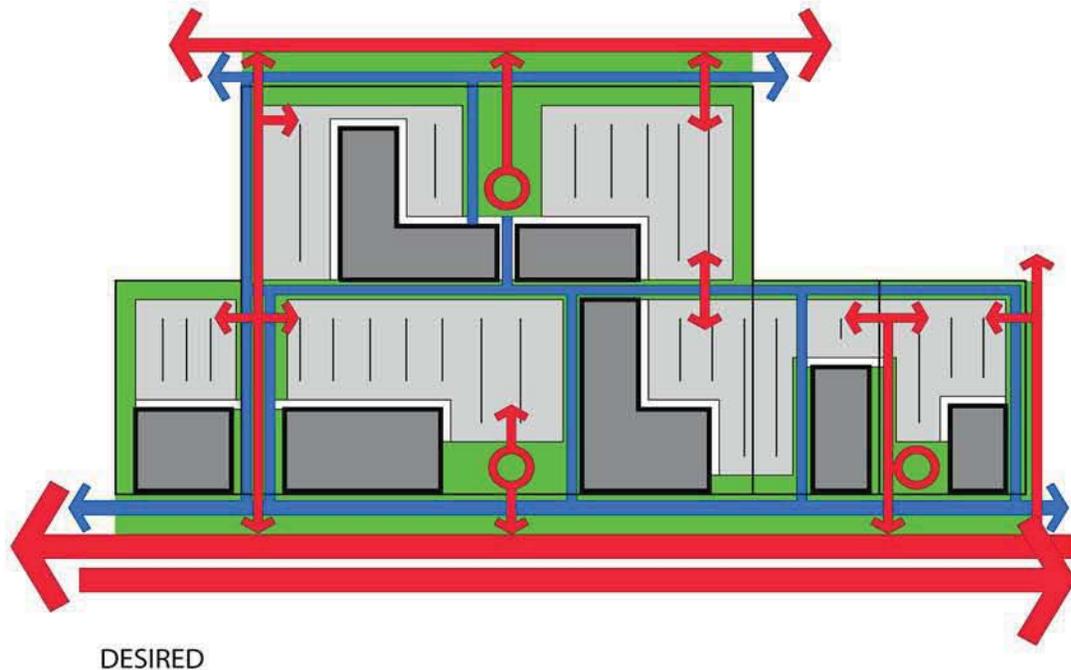
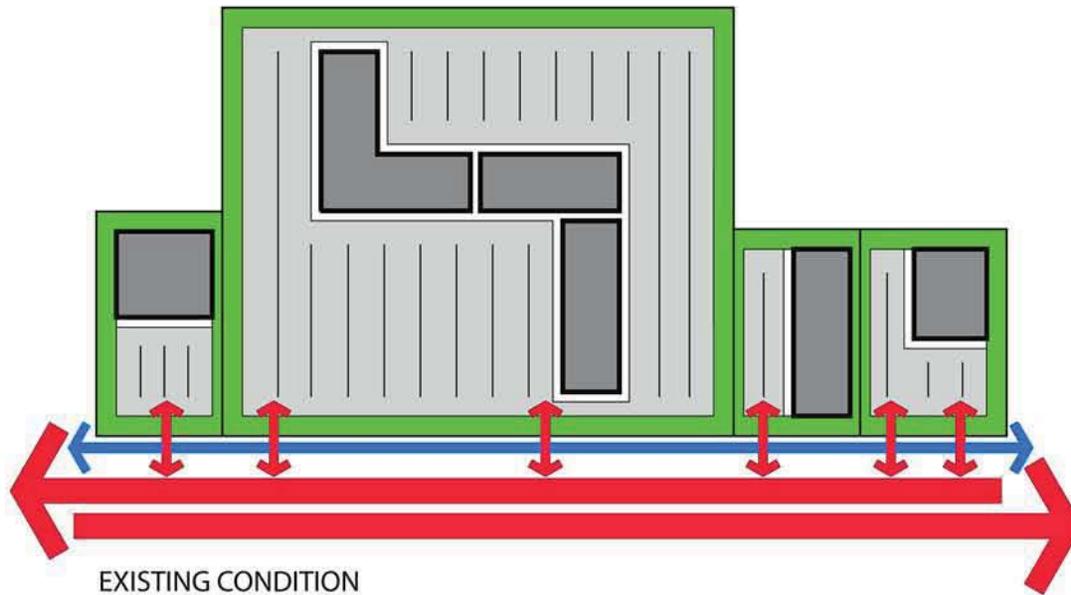
- Linked to primary corridor
- Interconnected
- Direct connection to building entrances
- Minimize conflicts with vehicular circulation

Parking

- Locate in Rear Yard
- Screened
- Shared between uncommon uses
- Interconnected
- Oriented to pedestrian flow
- Accessed from collector and arterial roads where possible

LEGEND

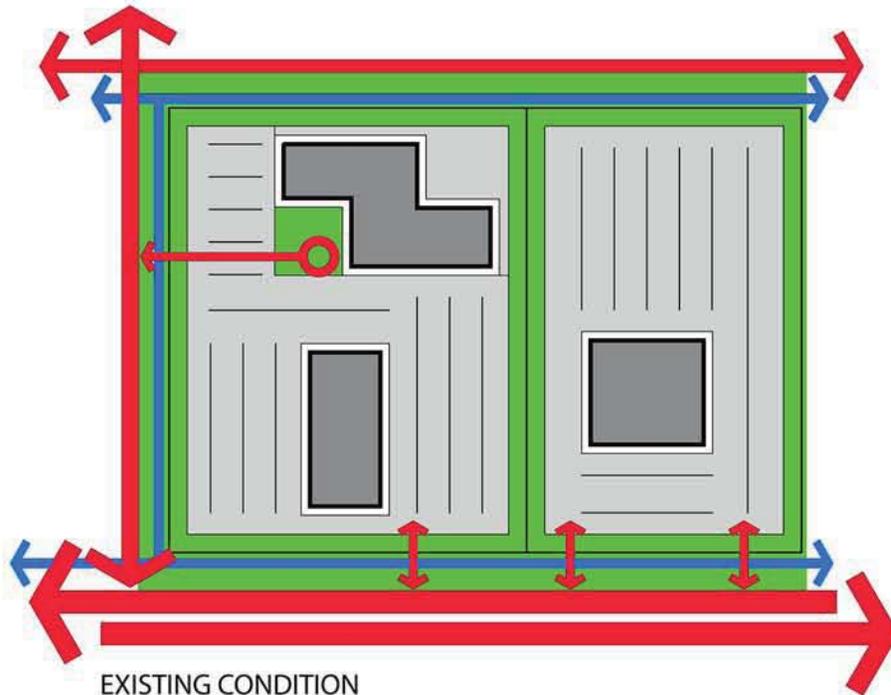
	BUILDING MASS		SERVICE LANES
	OPEN SPACE OR PARK		VEHICULAR CIRCULATION
	PARKING FIELD		PEDESTRIAN CIRCULATION
	PARKING DECK		PEDESTRIAN BRIDGE
	DROP OFF/ARRIVAL COURT		PROPERTY BOUNDARY
	ON-STREET PARKING		



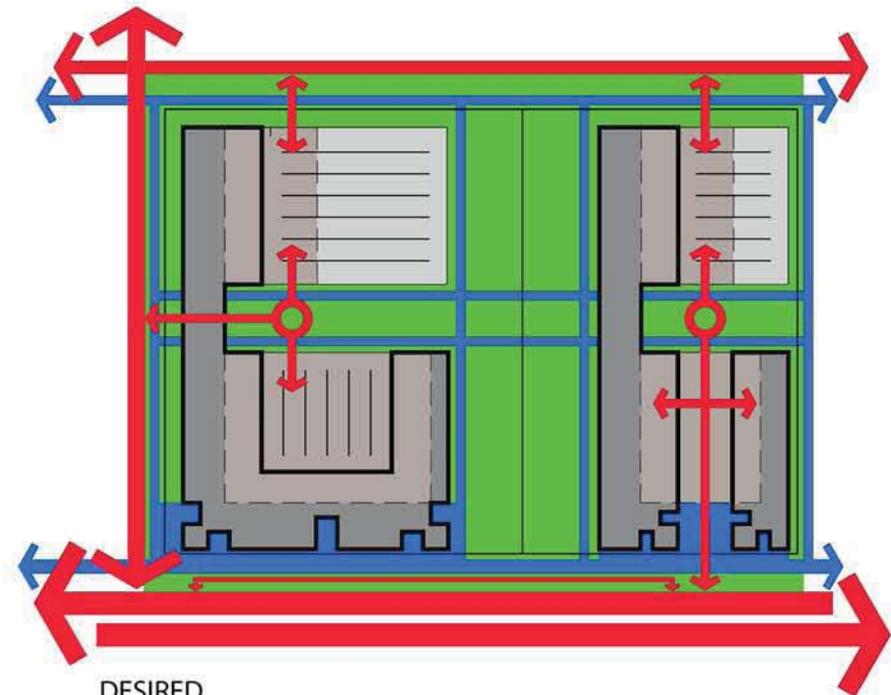
Between 5.01 and 10 acres are most of the Site Type C sites. Groupings of Type C sites are found off Big Beaver within industrial areas of the DDA, and in locations where several larger, single-use developments are situated nearby one another. Hotels, single office buildings, and other large single building developments often fall into this category. They often house large employment centers.

The Site Type C category should be designed with integration in mind. Integration with one another and with much larger destination retail and office complex sites will allow for better interaction between users, which could lead to a more readily shared customer and tenant base and could help reduce Big Beaver traffic.

Site Type C sites are mostly transitional in that they serve as a buffer between small site uses and very large uses in Type D and E, such as the Somerset Collection. They are of sufficient area to allow for significant pedestrian and landscaping amenities, quality signage and buffered surface parking.



EXISTING CONDITION



DESIRED

SITES ^{TYPE D}

Building Placement

- Zero line
- 5' off zero line
- Fronts corridors, streets, parks
- Relationship with adjacent buildings
- Zero line (when possible)
- May include multiple grouped buildings
- Buildings may interconnect
- Includes shared open space
- Buildings front open space as well as streets

Pedestrian Circulation

- Linked to primary corridor
- Interconnected
- Direct connection to building entrances
- Minimize conflicts with vehicular circulation
- Connected to common open space
- Connected to collector streets
- Walkability between sites

Vehicle Circulation

- Interconnected to adjacent sites
- Shared access
- Connected to arterial/collector roads to disperse traffic (minimize primary corridor access)
- Screened service access
- Drop off (arrival courts) accessed off collector road or internal drive
- Shared drop off (arrival court) common road/drive
- Grouped/shared drop off/arrival courts
- Limit access drives to primary corridors
- May include service drive on primary corridor
- Consolidate/share vehicular access

Parking

- Locate in Rear Yard
- Screened
- Shared between uncommon uses
- Interconnected
- Oriented to pedestrian flow
- Accessed from collector and arterial roads where possible
- Includes parking decks and surface lots
- Integrate parking decks with buildings
- Building and parking deck architecture blend

LEGEND

 BUILDING MASS	 SERVICE LANES
 OPEN SPACE OR PARK	 VEHICULAR CIRCULATION
 PARKING FIELD	 PEDESTRIAN CIRCULATION
 PARKING DECK	 PEDESTRIAN BRIDGE
 DROP OFF/ARRIVAL COURT	 PROPERTY BOUNDARY
 ON-STREET PARKING	

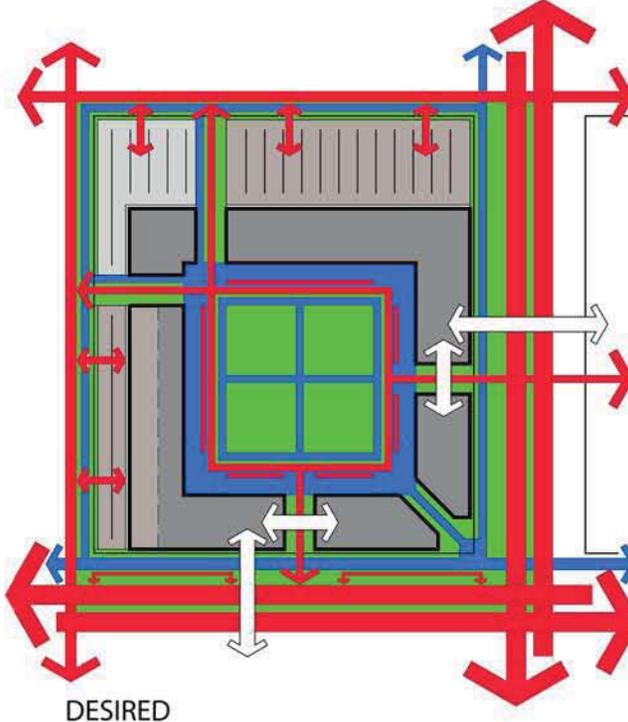
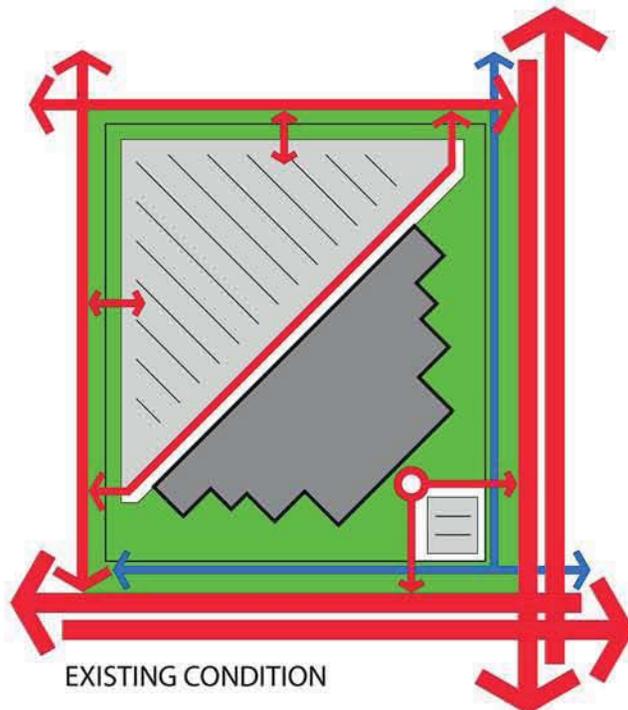
Site Type D properties are predominantly between 10.01 and 20 acres in area, but they are more strongly related to one another through their nature and large, campus-style properties with multiple large buildings designed to function as one unit.

make such sites difficult or undesirable to cross on foot. A busy arrangement of campus uses along the right of way will help keep pedestrians engaged and will make these larger sites fit better with surrounding smaller sites in the Type A and B categories.

Walkability between sites and provision of on-site open space are key to the success of these types of sites from an urban design perspective. They should be designed with a mix of uses in mind to allow for users to obtain basic services on or immediately near the site. Especially within large office centers in the Type D category, where hundreds of workers may populate the site during the day, restaurants, postal facilities and other daily needs should be integrated within existing buildings or permitted to exist in smaller out-lot developments.

Parking for Type D sites should be accommodated in structured parking whenever possible to maximize the use of the site for the primary use and to allow the site to be developed more densely than it could with surface parking.

The site design should strongly focus on putting the densest components of the project within close range of the primary right-of-way to combat the vast open areas that frequently



SITES TYPE E

Building Placement

- Zero line
- 5' off zero line
- Fronts corridors, streets, parks
- Relationship with adjacent buildings
- Zero line (when possible)
- May include multiple grouped buildings
- Buildings may interconnect
- Includes open shared space
- Buildings front open space as well as streets
- Building forms shape open space
- Connection to streetscape critical
- May include (all weather) bridges to adjacent large scale type D or E properties

Vehicle Circulation

- Interconnected to adjacent sites
- Shared access
- Connected to arterial/collector roads to disperse traffic (minimize primary corridor access)
- Screened service access
- Drop off (arrival courts) accessed off collector road or internal drive
- Shared drop off (arrival court) common road/drive
- Grouped/shared drop off/arrival courts
- Limit access drives to primary corridors
- May include service drive off primary corridor
- Consolidate share vehicular access

Parking

- Locate in Rear Yard
- Screened
- Shared between uncommon uses
- Interconnected
- Oriented to pedestrian flow
- Accessed from collector and arterial roads where possible
- Includes parking decks and surface lots
- Integrate parking decks with buildings
- Building and parking deck architecture blend

Pedestrian Circulation

- Linked to primary corridor
- Interconnected
- Direct connection to building entrances
- Minimize conflicts with vehicular circulation
- Connected to common open space
- Connected to collector streets
- Walkability between sites

LEGEND

	BUILDING MASS		SERVICE LANES
	OPEN SPACE OR PARK		VEHICULAR CIRCULATION
	PARKING FIELD		PEDESTRIAN CIRCULATION
	PARKING DECK		PEDESTRIAN BRIDGE
	DROP OFF/ARRIVAL COURT		PROPERTY BOUNDARY
	ON-STREET PARKING		

Like Type D, Type E sites are predominantly campus-style projects; however they are limited to sites over 20 acres. These large sites have existing mixed-use or multi-tenant developments or would be ideal to accommodate such developments. They share make of the characteristics of Type D sites, and should strive to achieve the walkability and connectivity guidelines of a Type D property at a more regional scale.

The Type E category is meant to serve the destination properties of the Corridor. Somerset Collection, the Municipal Campus and Top of Troy are found in this category. These are the largest, most prominent marquis properties along the Corridor and should reflect the highest standard of design encouraged by the Big Beaver Corridor Study with regard to pedestrian amenities, high quality signage and landscaping, and ideal site lighting. They should be sited to reinforce the existing or desired building line along the Corridor and provide a wide range of mixed uses.

Amenities

Site Furnishings



Amenities

Fences



Amenities

Wall (Retaining)

Style:

Material: Concrete, Masonry, Planting, Steel

Finish: Sealed, Stained, Colored, Painted, Plastic Coated



Amenities

Wall (Retaining)



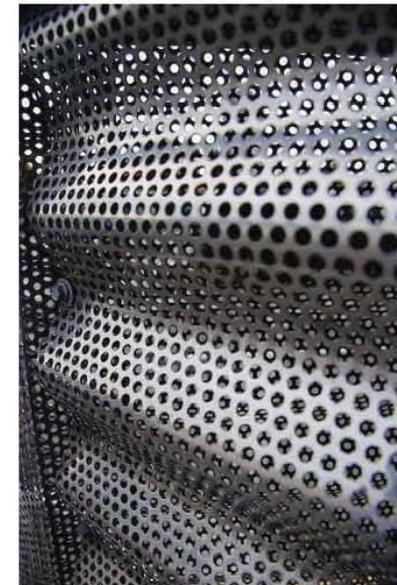
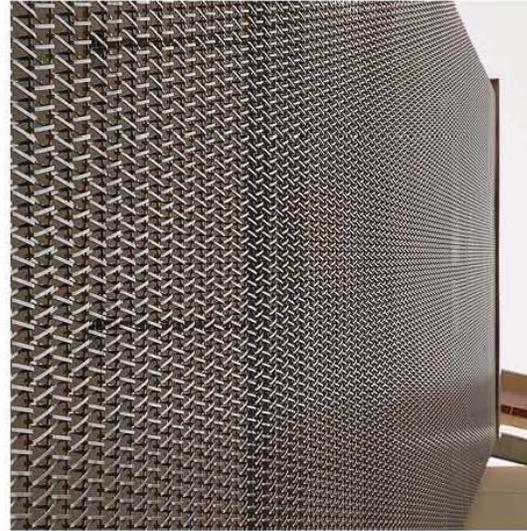
Amenities

Wall (Parking Screen)

Style:

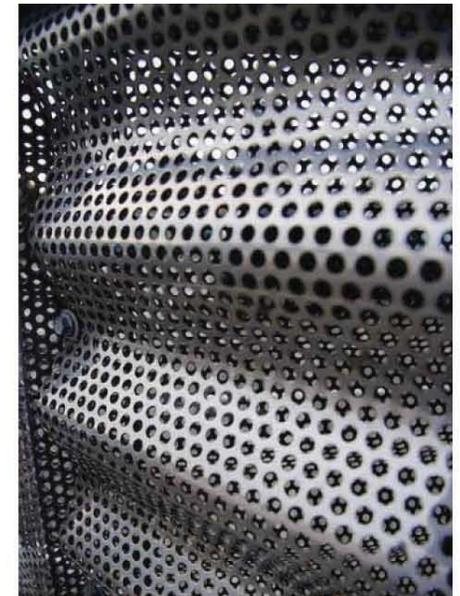
Material: Concrete, Masonry, Planting, Steel

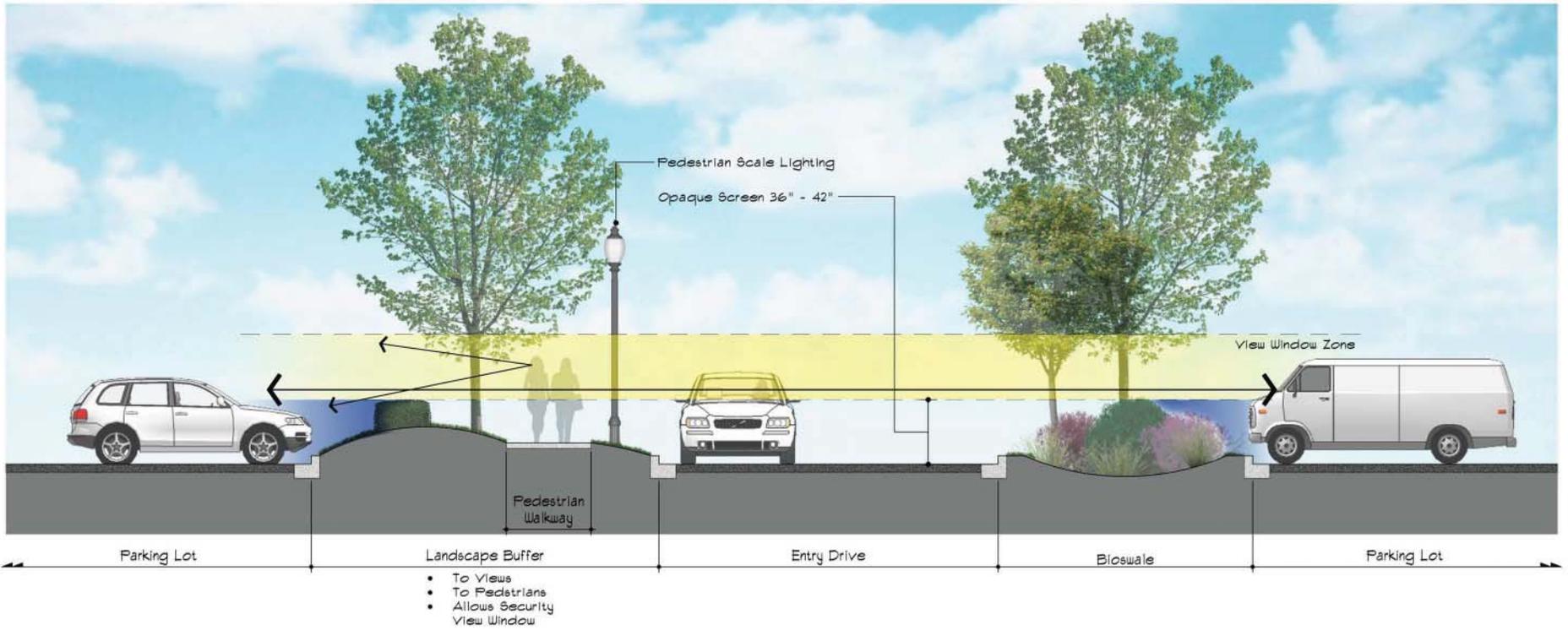
Finish: Sealed, Stained, Colored, Painted, Plastic Coated



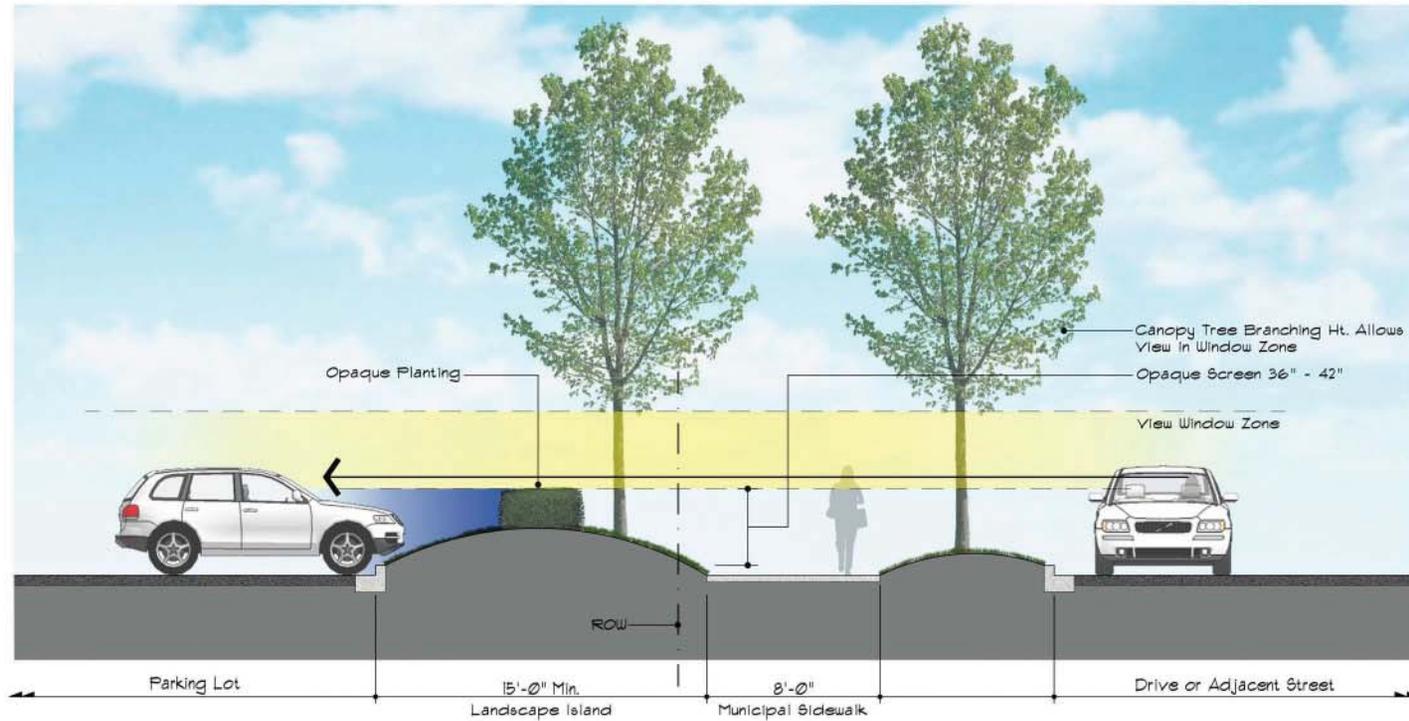
Amenities

Wall (Screening)





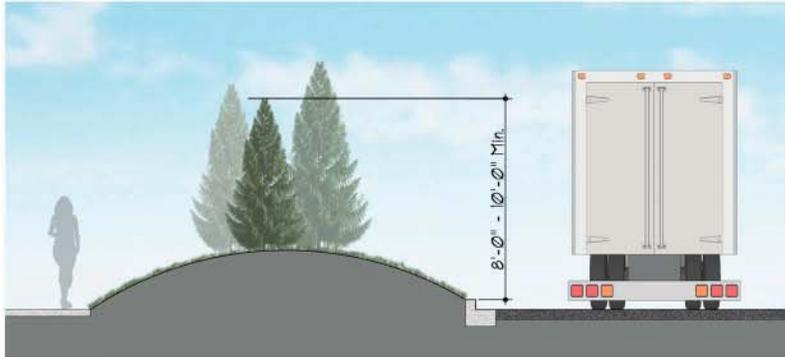
Entrance Drive - Landscape Treatment



Intent

- Screen Parking from Adjacent Street or Pedestrian View
- Allow View Window for Security

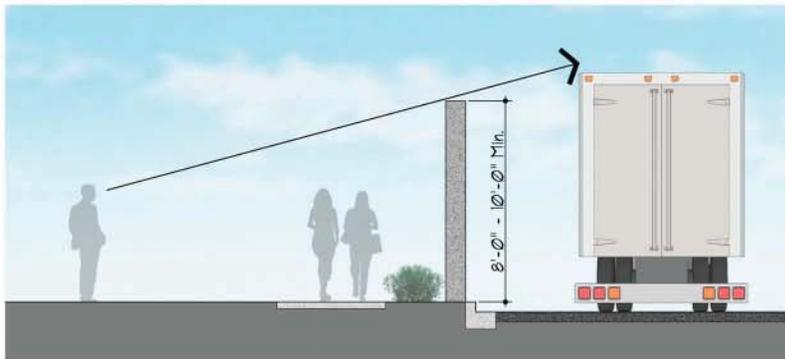
Parking Lot - Landscape Buffer



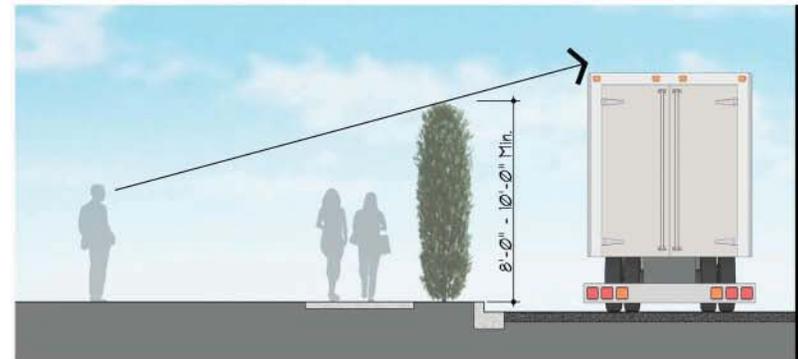
Total Opaque Screen



Screen with Security Window
(Where Security is High Concern)

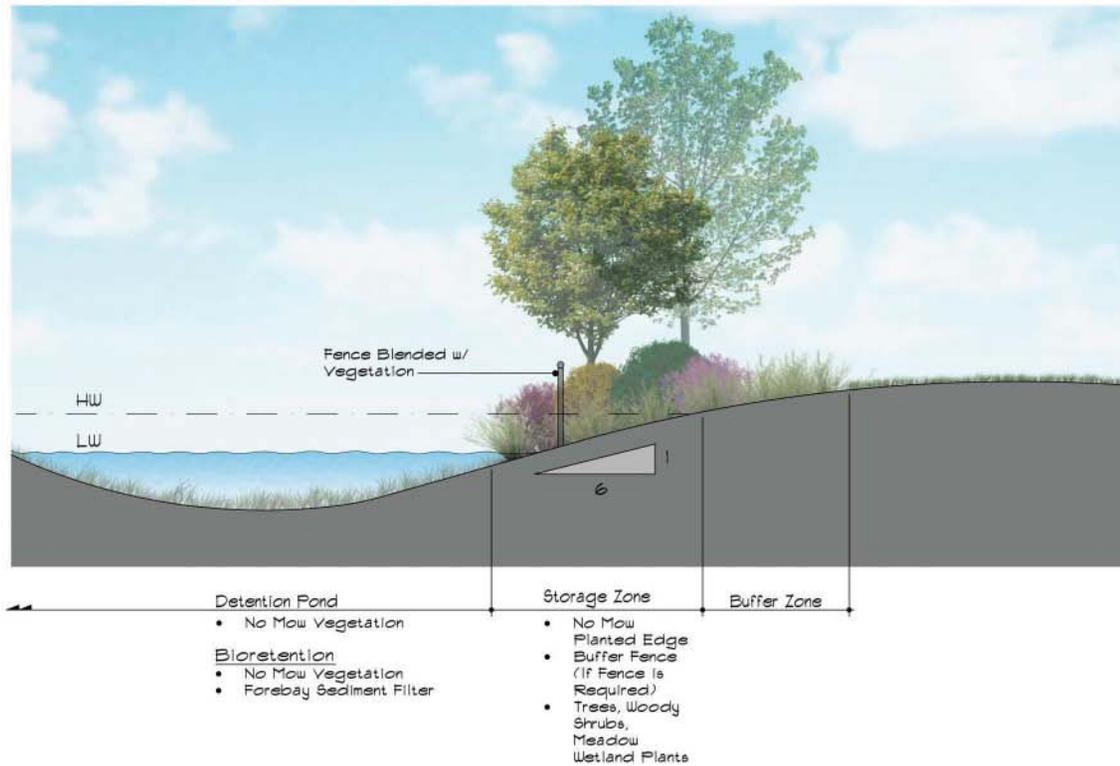


Screen with Opaque Architectural Wall
(Narrow Space Option)

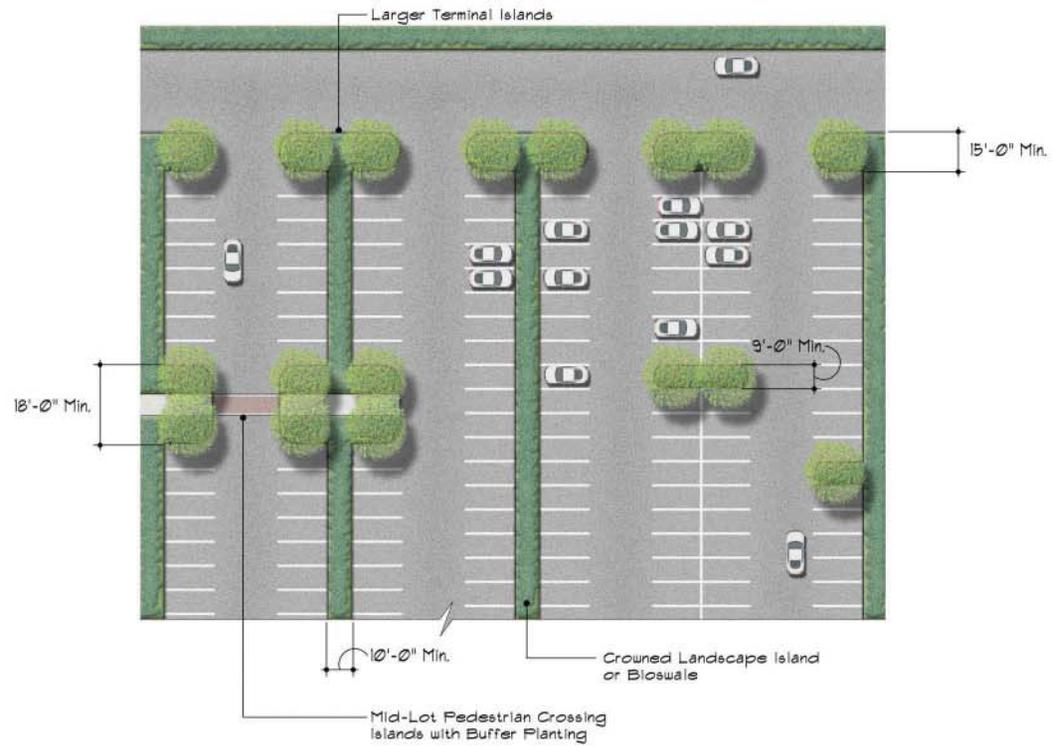


Screen with "Green" Vegetated Wall
(Narrow Space Option)

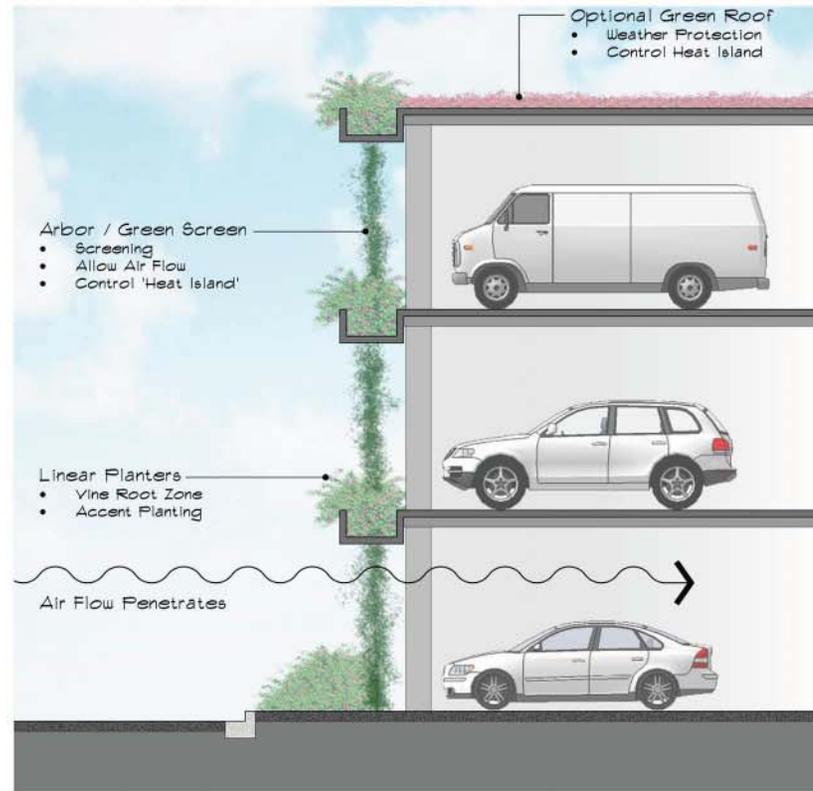
Service Area Screen / Landscape



Detention / Bioretention / Forebay - Landscape



Parking Lot Interior Landscape



Green Parking Deck Option

Pedestrian / Vehicular Hardscape Materials

Drives



Asphalt



Permeable Asphalt



Concrete



Permeable Conc.

Parking Areas



Asphalt



Permeable Asphalt



Concrete



Permeable Conc.



Permeable Pavers

Sidewalks



Concrete



Textured Concrete



Colored Concrete



Permeable Pavers

Plazas



Concrete



Textured Concrete



Colored Concrete



Permeable Pavers



Blue Stone



Granite

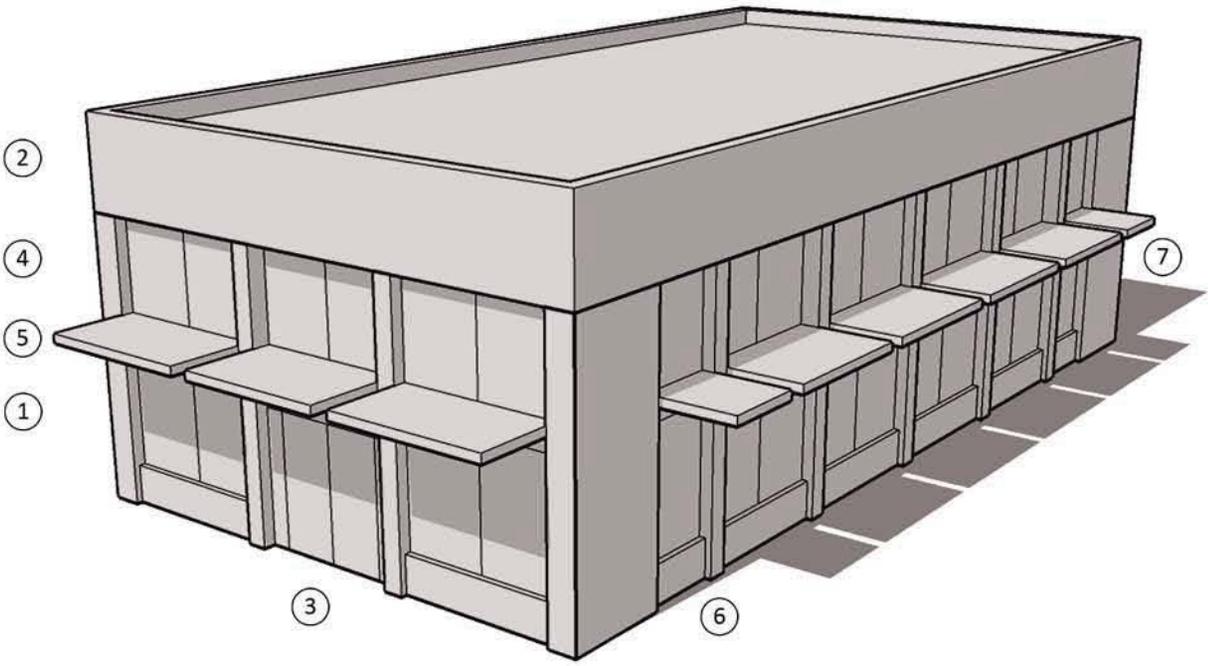
Streets Sites Structures



This final section describes the five structure types detailed in this document. There are no mandatory structure types, rather, the developer would follow the guidelines for the structure type that most closely reflects the structure they intend to build. The form-based codes in the Zoning Ordinance will also have a significant bearing on structure type.

STRUCTURE TYPE A
SINGLE TENANT COMMERCIAL, SMALL

- 1 – 2 stories (15,000 sf ±)
- Single use (café, small office, professional office, retail)
- High quality materials
- Non “branded,” allow for reuse
- Building entrance on street front
- Screened service in rear
- Exposed bays and articulated facades



NOTE KEY

- ① Base (storefront)
- ② Cap
- ③ Main Entry
- ④ Clearstory
- ⑤ Canopy or Awning
- ⑥ Retail Entry
- ⑦ Service Entry in Rear

The smallest structure style category is Type A. Type A structures are those that are 1-2 stories in height and which usually house a single use. Stand-alone coffee shops, small professional offices, and retail could all fall into this category.

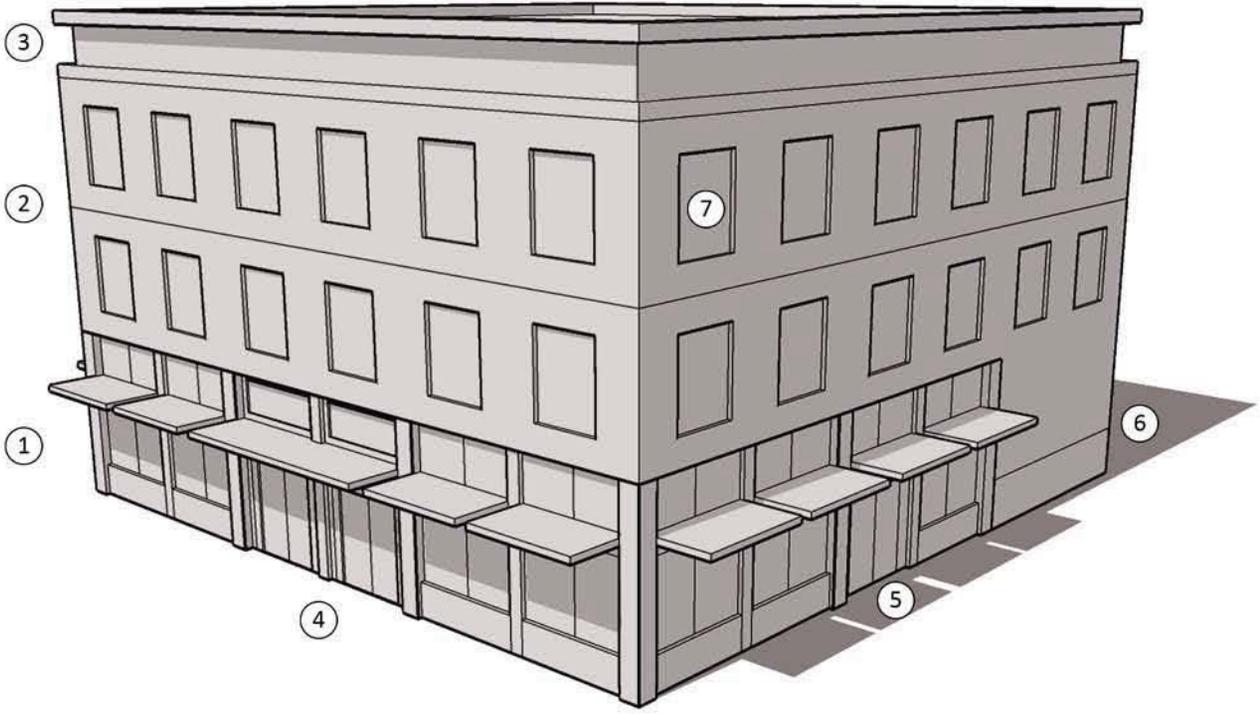
Square footage of a Type A Structure falls under about 15,000 square feet. This threshold allows it to include corner drug stores and other small retail buildings, but excludes larger scale “big box” structures.

Type A structures should be usually associated with other similar structures or located at the edges of larger structures or groups of structures and should serve as a buffer between residential and non-residential areas.

Type A structures should be unique and attractive structures built of high-quality materials and should avoid being “branded” so as to allow for their adaptation to future tenants.

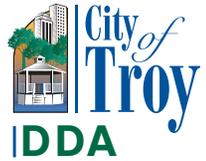
STRUCTURE TYPE B
SINGLE TENANT COMMERCIAL, LARGE

- 2 stories (15,000 sf +)
- Single use, usually retail
- High quality materials
- Non “branded,” allow for reuse
- Established bay patterns
- Entrance and storefront on façade, storefront may wrap around sides
- Screened service in rear
- Design complements surrounding multi-story uses



- NOTE KEY**
- ① Base (storefront)
 - ② Body (office 1-2 stories)
 - ③ Cap
 - ④ Main Entry
 - ⑤ Secondary Entry
 - ⑥ Service Entry in Rear
 - ⑦ Punched Openings

Streets Sites Structures

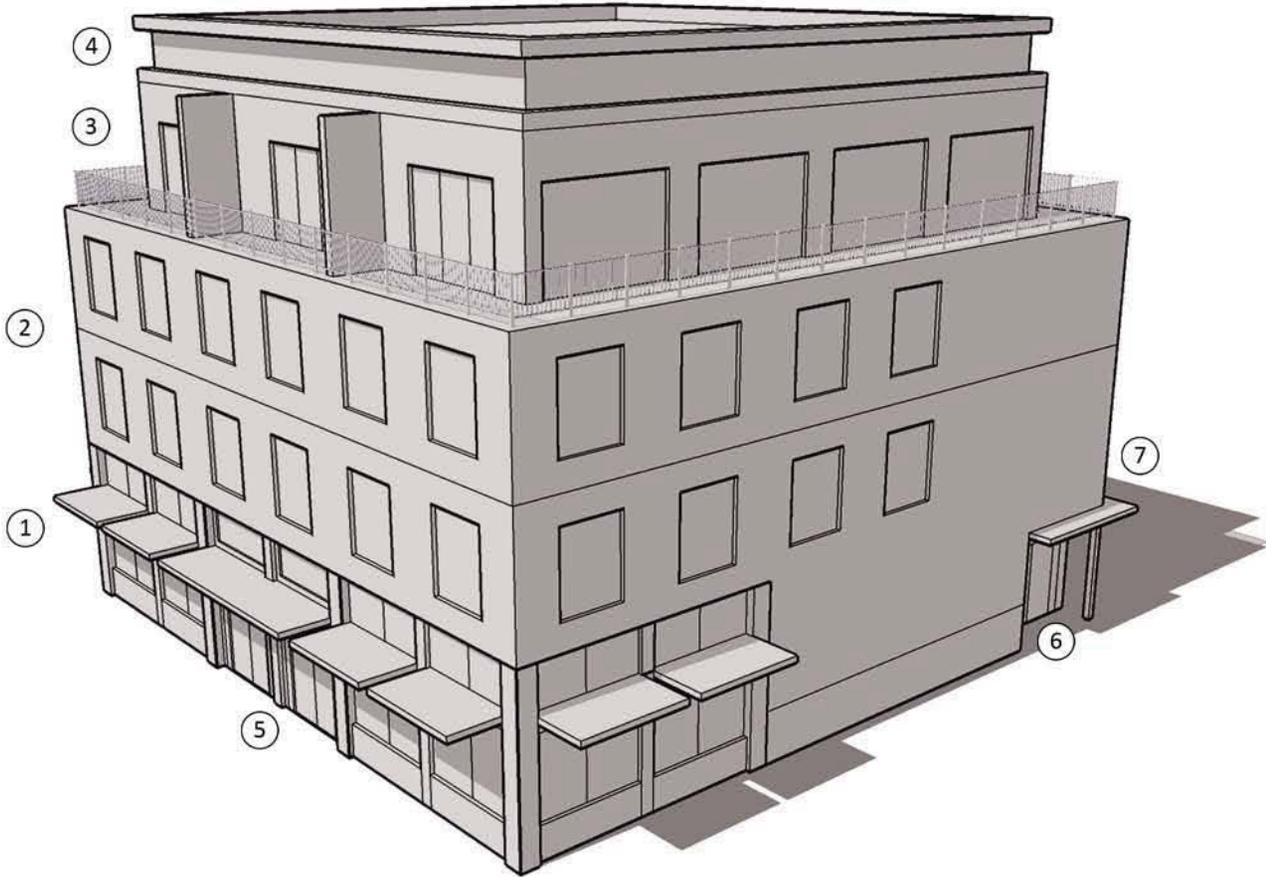


Type B structures are those designed for a single use, but with a large square footage, usually greater than 15,000 square feet in mind. Unlike a conventional “big box” however, Type B single-tenant structures of this size in the DDA will be at least 2 stories. New retail formats allow for multi-story large format retail locations which require a smaller footprint and which better complement the surrounding multi-story uses.

Like small single-tenant structures, these buildings should be unique and attractive structures built of high-quality materials and should avoid being “branded” so as to allow for their adaptation to future tenants.

STRUCTURE TYPE C
MIXED USE MID-RISE

- 3 – 5 stories (20,000 sf max)
- Mixed use, with residential floors above
- Separated office/retail entry from residential entries
- High quality materials and maximum use of windows
- Always mixed-use, residential component optional
- High quality commercial space with residential safety and comfort



- NOTE KEY**
- ① Base (storefront)
 - ② Body (office 2-3 stories)
 - ③ Residential with Balconies
 - ④ Cap
 - ⑤ Main Entry
 - ⑥ Private/Residential Entry
 - ⑦ Service Entry

Small mixed-use multi-tenant buildings fall into the Type C category. These structures may contain any combination of residential and non-residential uses, and will usually be less than 20,000 square feet in total area. Designed to be anchors in small pockets of walkable development, these projects allow for commercial uses to be located in close proximity to new alternative residential development. Useful in neighborhood nodes and in infill areas, Type C structures must take the safety and comfort of residential tenants into consideration as well as the quality of the commercial space for rent.

Residential areas in Type C structures should have private entrance areas separated from public, non-residential areas and should typically be located on the 2nd through 4th floors.

Type C structures can also house a combination of retail and office uses, but must always contain units which would accommodate some form of mixed-use, whether or not it includes a residential component.

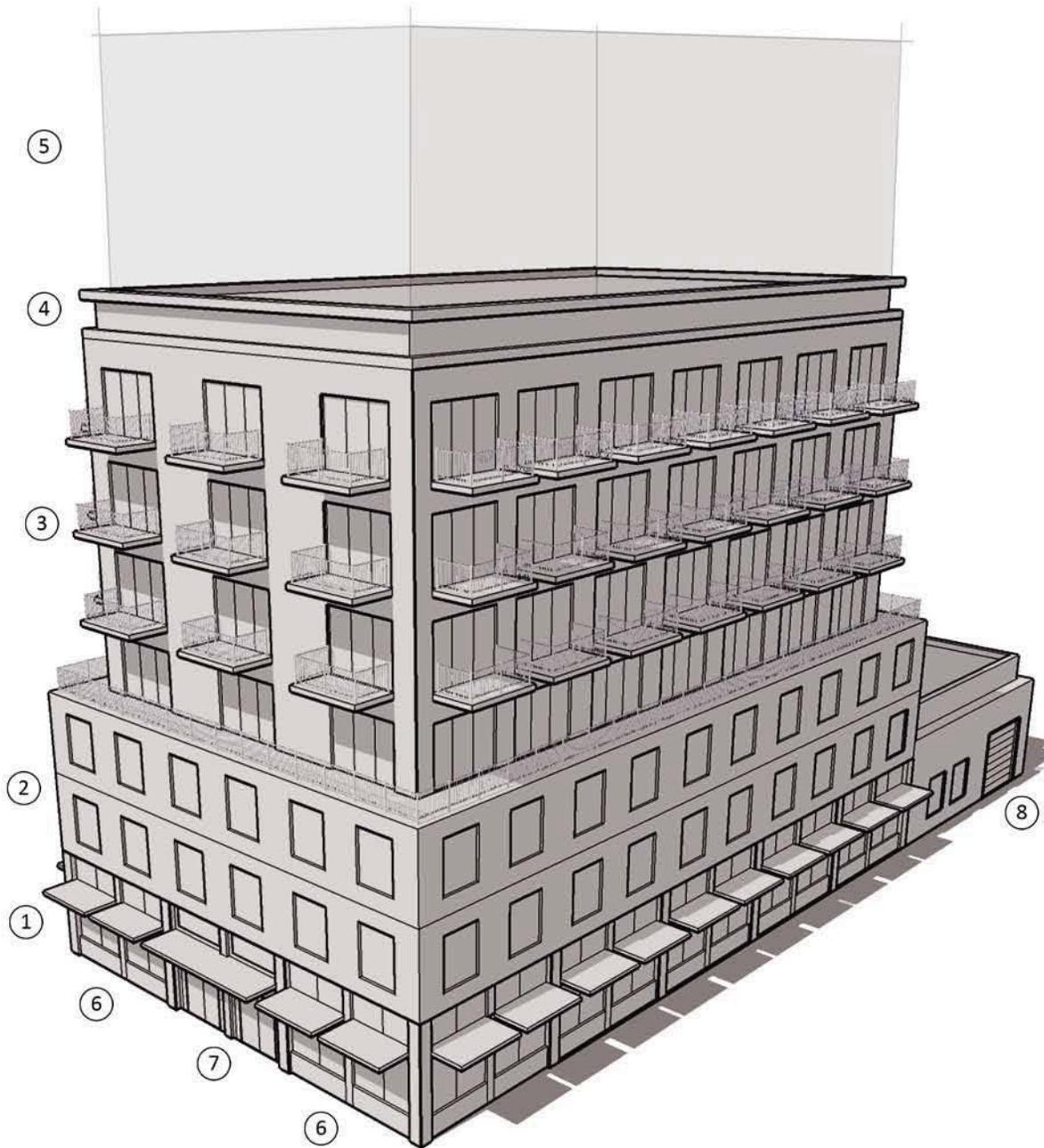
Extensive use of windows and high-quality building materials will characterize these structures, which should form a large portion of new construction in the DDA.

STRUCTURE TYPE D
MIXED USE TOWER

- 5 stories and up to 20 + stories
- Large mixed use developments (retail, office, hotel or residential)
- First floor interacts directly with public
- Design used to make an architectural statement and serve as a local landmark
- Mid-rise component (retail, office, service) integrated with tower component (hotel, residential)

NOTE KEY

- ① Base (storefront)
- ② Body (office 2-3 stories)
- ③ Residential with Balconies (2-10 stories or hotel)
- ④ Tower cap feature
- ⑤ Additional residential floors (up to 20 stories)
- ⑥ Retail Entry
- ⑦ Office/Residential Entry
- ⑧ Service Entry



Streets Sites Structures

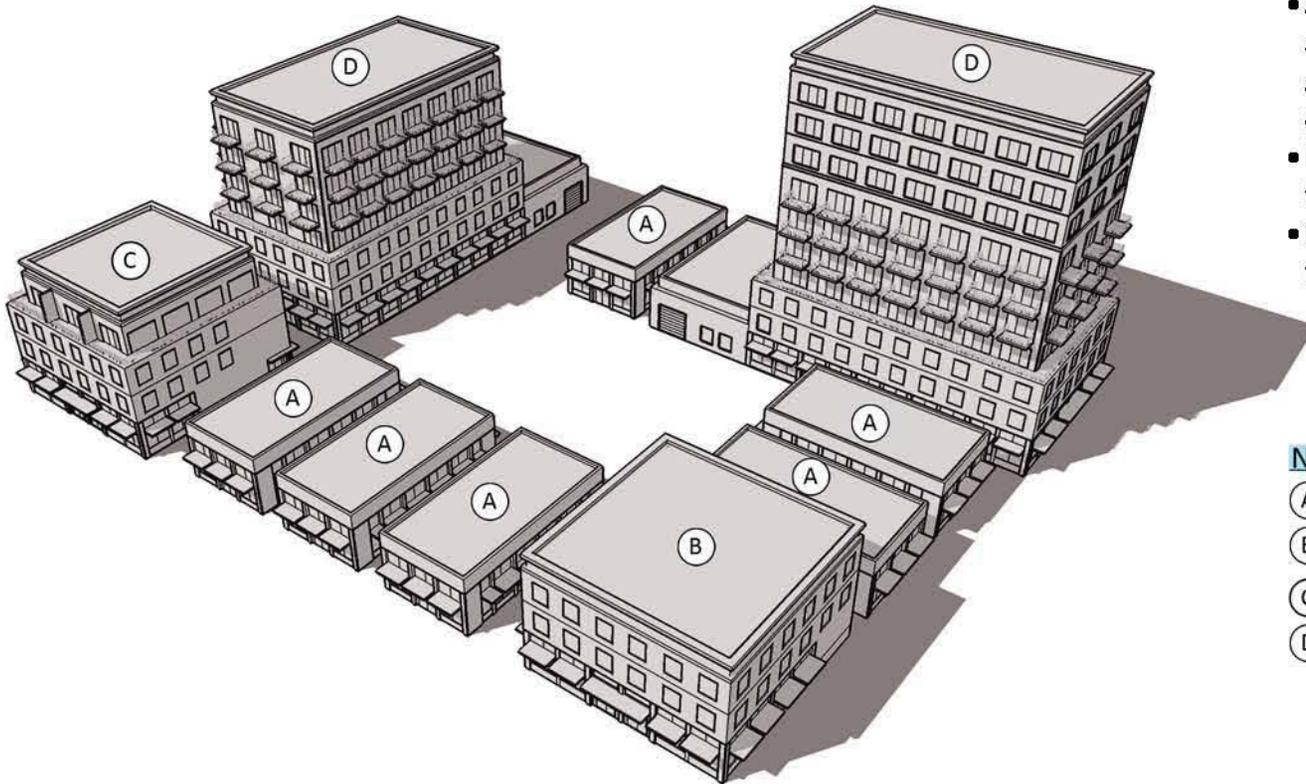


Very large, mixed-use developments fall into the Type D category. Designed to be 5 or more stories, these large buildings contain many residential units or a hotel component as well as units designed for office and retail. The first floor of a Type D structures should contain uses designed to interact directly with the public, like retail, restaurants, and even some forms of office.

These buildings should be allowed to make an architectural statement and serve as substantial anchors on larger lots throughout the DDA.

STRUCTURE TYPE E MIXED USE CAMPUS

- Collection of various footprint sizes and heights of buildings for any number of mixed uses
- Buildings to be designed to complement each other and to share a common function and form
- Should include mixed uses, but could also include one or more large structures for a single use such as office or hotel
- High quality materials, designed for future reuse
- Integrated pedestrian features throughout campus desired



NOTE KEY

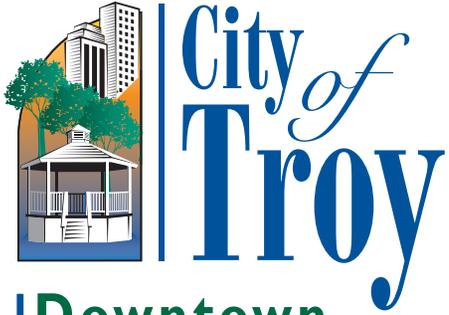
- (A) Type 'A' - Single tenant commercial, small
- (B) Type 'B' - Single tenant commercial, large
- (C) Type 'C' - Mixed use, mid-rise
- (D) Type 'D' - Mixed use, tower

The largest structure category is reserved for “campus” style developments, meaning a collection of larger buildings designed for any number of mixed uses.

Type E structures could house a collection of buildings that may be considered Type D if they were on their own, but when grouped they become Type E structures. Type E structures should be designed with the overall function and form of the entire project in mind and should be designed to complement one another and function as a unit.

Type E structures should include a mix of uses, but could include one or more large structures within a campus designed for a single large use, such as office or a hotel, provided that the project is designed as a single cohesive unit.

Type E structures will serve as memorable destinations for the entire region and should be designed and constructed with future generations in mind. Quality materials, adaptable tenant spaces, safe and secure residential components, and integrated walkable features throughout the project will characterize the structures in this category.



**Downtown
Development
Authority**

**Design
Guidelines**