



690 Chesterfield Pkwy W • Chesterfield MO 63017-0760 Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Architectural Review Board Staff Report

Project Type: Site Development Plan

Meeting Date: May 12, 2016

From: Justin Wyse

Senior Planner

Location: 16300 Lydia Road

Applicant: Watermark Residential

Description: Chesterfield Village Mall (Watermark at Chesterfield Village) SDP: A Site

Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 12.96 acre tract of land zoned "R-8" Residence District with a Planned Environment Unit (PEU) procedure located southeast of the intersection of Chesterfield Parkway West and

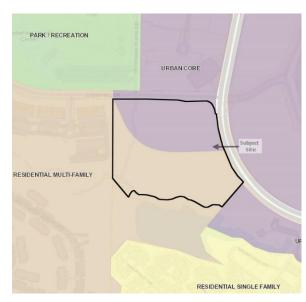
Lydia Hill Road.

PROPOSAL SUMMARY

The request is for construction of three (3), four-story multi-family buildings. The subject site is zoned "R-8" Residence District with a Planned Environment Unit (PEU) procedure. The site is bisected by two future land use designations; multi-family and urban core. The property is governed under the terms and conditions of City of Chesterfield Ordinance 2021.

ZONING HISTORY OF SUBJECT SITE

This site is located within the Southwest Quadrant of the Chesterfield Village, specifically parcel C207. The Southwest Quadrant of Olive/Clarkson and I-64 was included in the original presentation



to the St. Louis County Planning Commission in 1971 to initiate development of Chesterfield Village. St. Louis County Ordinance 6,816 was approved in 1973 which authorized and gave approval to Planned Environment Unit plans for the residential areas of the southwest quadrant of the Chesterfield Village.

A Final Development Plan for the southwest quadrant was submitted and approved by St. Louis County in February of 1974. This plan approved a total of 528 units on parcel C207. The Final Development Plan was amended in July of 1979 and modified the density on parcel C207 to include a maximum of 608 units. The current site development plan proposes 350 units.



Figure 1: Aerial Photo

STAFF ANALYSIS

General Requirements for Site Design:

A. Site Relationships

This is a 12.96 acre tract located within the Southwest Quadrant of the Chesterfield Village. The proposal includes three (3) buildings that are four (4) stories in height. Connections are provided from buildings on the site to the sidewalks along the perimeter of the site, including the Pathway on the Parkway. Additionally, the proposal includes relocating the existing trail on the site to the

western side of the site and provides a connection from the proposed development to the trail system. Two trailhead locations are shown on the plans which are areas where the applicant intends to install improvements to incorporate art features into the development and to emphasize the trail connection between Central Park and the riparian trail.

The site is situated with frontage on Chesterfield Parkway and Lydia Hill Rd. The property is adjacent to a mix of uses with residential to the west (Monarch Trace) and south (Oak & Justus Pointe), retail to the east (Chesterfield Mall and outlots), office to the north, and Central Park northwest of the site.



B. Circulation System and Access

Primary access to the site will be from Lydia Hill Rd. Additionally, a right-in, right-out only access point is proposed on Chesterfield Parkway. One defined pedestrian route is shown from the Pathway on the Parkway (along Chesterfield Parkway) into the site. Staff is working with the applicant to provide an additional route connecting the proposed sidewalk on Lydia Hill Rd. into the site.

Parking is spread around the site to reduce and eliminate large expanses of parking areas. The proposal shows 184 of the required parking spaces (~43%) in parking structures under Buildings 1 and 3 on the site. Section 04-01.C.2. encourages rear and side parking areas. While the

proposal does include some parking along the frontage of Chesterfield Parkway and Lydia Hill Rd., parking fields along these high visibility areas are minimized with the use of structured parking (under the building) and a parking lot in the rear.

The applicant has also proposed two "trailhead" locations on the site. The intent is that these areas will be designed to provide artistic elements at these locations to define these areas as focal amenities for both the future residents of the development as well as the general public.

C. Topography

The northeast portion of the site is the high point on the site. Grades decrease as you move south / southwest across the site. The proposal seeks to take advantage of this grade change by including structured parking under two of the buildings (i.e. cutting the parking into the slope).

The included elevations, section profiles, and renderings illustrate how this structured parking is proposed to incorporate the parking under Buildings 1 and 3 while minimizing the visual impact from Chesterfield Parkway and Lydia Hill Rd.

D. Retaining Walls

Retaining walls are proposed with this development. A Redi-Rock retaining wall system is proposed along the perimeter of the development. These engineered walls are designed to provide a natural look while providing structural requirements with minimal reinforcement necessary.

These walls have been situated to preserve as much tree canopy as possible while providing functional areas for the development of the site.



Additionally, a retaining wall section is proposed on the western side of the site along the relocated trail section. This wall is necessary under the proposed design to allow for grading of an accessible trail section through this portion of the site.

General Requirements for Building Design:

A. Scale, Design, Materials and Color

Article 4 states that multi-family developments should utilize material, color, and plane changes to express individual living units within the structures and that monotonous designs be avoided. The proposal incorporates lap, board and batten, and panel designs on the units to provide this variation in materials. Brick is also used on lower portions of each of the buildings. Building offsets and changes in roofline height and canopies are included in the design.

Article 4 also requires that all facades be designed with regard to color, types and number of materials, and architectural form and detailing. Buildings 1 and 3 (which incorporate parking under the buildings) utilize additional material change on portions of the exposed parking structure. Building 2 incorporates this additional material detailing (brick) on the facades along Chesterfield Parkway and Lydia Hill



BLDG 2 FRONT ELEVATION



BLDG-1/BLDG 3 FRONT ELEVATION

B. Landscape Design, Screening and Fencing

A combination of deciduous, coniferous and shrubs/bushes have been utilized throughout the site. Tree protection is focused on the southern end of the site. This will minimize the visual impact of the development from the riparian trail and assist in maintaining this trail as a natural area within the Chesterfield Village area. Additional landscaping is proposed along these areas to supplement and enhance the existing vegetation in providing this theme along the trail.

The proposal includes mitigation plantings as the site has "Special Conditions" as defined by the Unified Development Code. Mitigation plantings are included in the packet of information to illustrate the overall plan for the site. However, the mitigation plan is not approved as part of the site plan review process and will be reviewed after review / approval of the site plan. Staff has worked with the applicant and conveyed a strong desire for additional plantings to be proposed along the trail. The relocation of the trail connection through the site will require tree removal in order to provide an accessible trail section in conjunction with the proposed

development of the site. The mitigation plan focuses heavily on this section to minimize the long term impact in this area. This planting satisfies the buffering requirement between residential developments and exceeds the requirement in order to qualify for mitigation.

Other buffers are included along Chesterfield Parkway and Lydia Hill Rd. A thirty (30) foot buffer is required along these two frontages and proposed landscaping in these locations meets and generally exceeds this requirement. Plantings are included in the parking area on the rear parking lot to reduce the visual impact and soften this area. Finally, landscaping is provided throughout the site including areas within parking fields, in front of building locations, and in the common area behind Building 2 (where the pool is).

C. Lighting

Lighting consists of utilitarian lighting in compliance with the City of Chesterfield's lighting requirements.

D. Multi-Family Architecture

Section 04-01 includes specific requirements for multi-family architecture.

<u>Provide an on-site pedestrian system with access to common ground areas</u> – The buildings include sidewalks along the frontage of the buildings. This system allows for pedestrian movement from the buildings to the common areas (i.e. pool) along a route dedicated for pedestrian movement. Additionally, connections are proposed to allow for access from the site to sidewalks on the perimeter of the site and connection to the riparian trail.

<u>Express architecturally the individual dwelling units within the building</u> – In addition to other items mentioned in the report thus far, the proposal includes outdoor decks which helps to emphasize the individual units within the building.

<u>Utilize color, material, and plane changes to articulate facades. Avoid monotonous or institutional designs</u> – As discussed on pages 3-4, the proposal includes color and design changes to avoid a monotonous design. Canopies are included on the first level of the development which provide human scale and add additional detailing at the pedestrian level.

<u>Respect the scale, proportion and character of the adjacent or predominant neighborhood</u> – The site sits between multiple developments and use types. An office building is located on the adjacent corner of Chesterfield Parkway and Lydia Hill. This building is five stories in height and building materials include a brick veneer, aluminum composite panels, and glass.

Monarch Trace condominiums are located west of the subject site on Lydia Hill Rd. This development includes four three-story buildings on the site. Exterior materials include stone and siding with asphalt shingles on a gabled roof. Parking canopies are included on the interior of the development to provide covered parking.

The Chesterfield Mall is located across Chesterfield Parkway from the site. The parcel adjacent to the subject site is currently vacant but is zoned C-8 Planned Commercial District. A commercial development is permitted on the property under the current zoning and approved Final Development Plan.

<u>Provide functional recreation areas</u> – The proposal includes common areas behind Building 2 and includes a swimming pool. Additionally, connections are provided to the adjacent amenities through the trail system.

<u>Provide outdoor space for each dwelling</u> – In addition to common areas, balconies are provided. The balconies provide outdoor space for each unit and also add an element of depth to the proposed buildings.

<u>Provide visual transitions between the street and the dwelling units</u> – Inclusion of heavy buffering provides a break between the residential units and the street. Additionally, sidewalk and landscape areas are provided between the building and parking lot to provide this visual transition.

DEPARTMENTAL INPUT

Staff has reviewed the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design. Be advised, this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission.

Staff requests review and recommendation on this submittal for Chesterfield Village Mall (Watermark at Chesterfield Village) Site Development Plan.

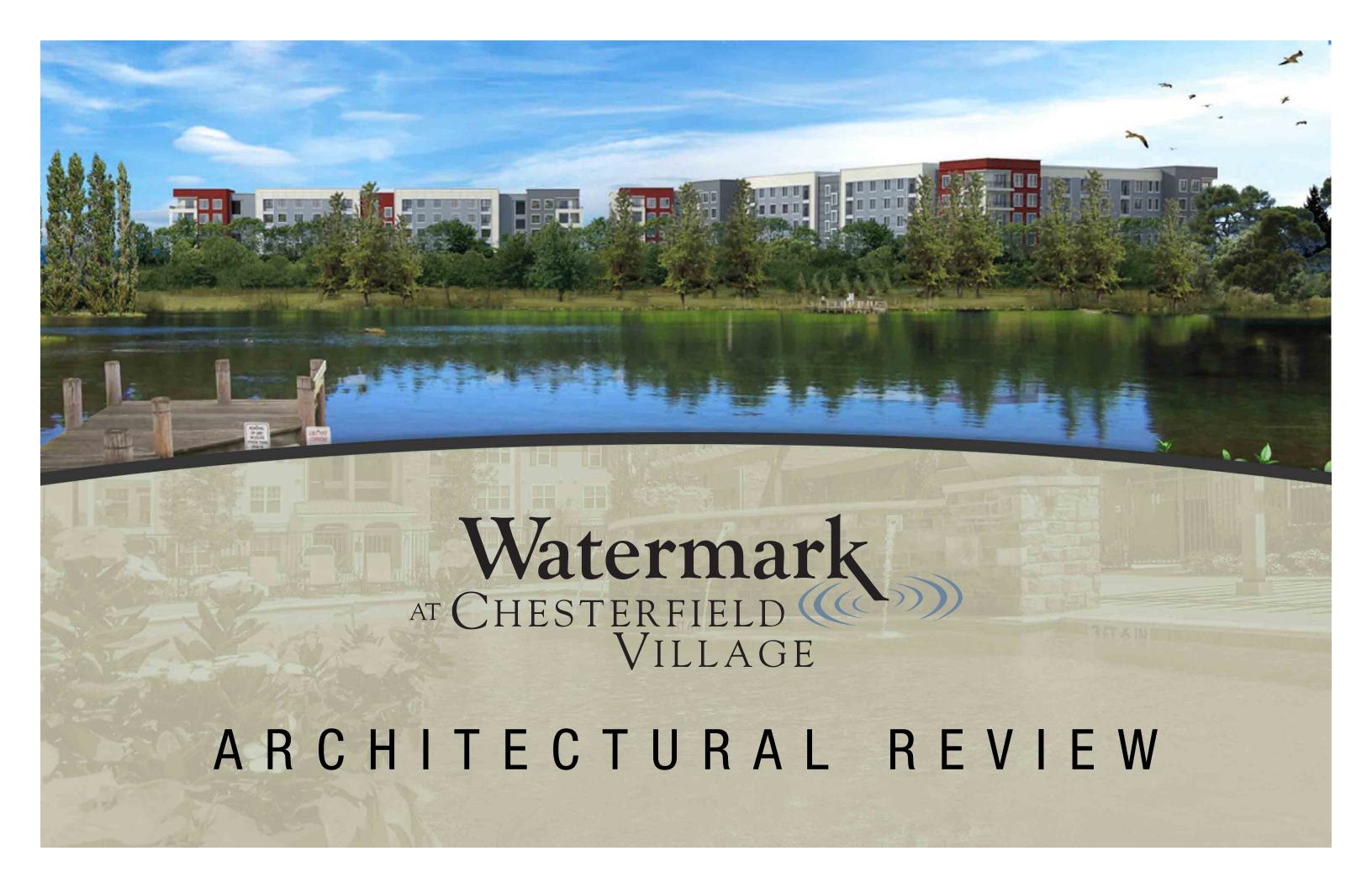
MOTION

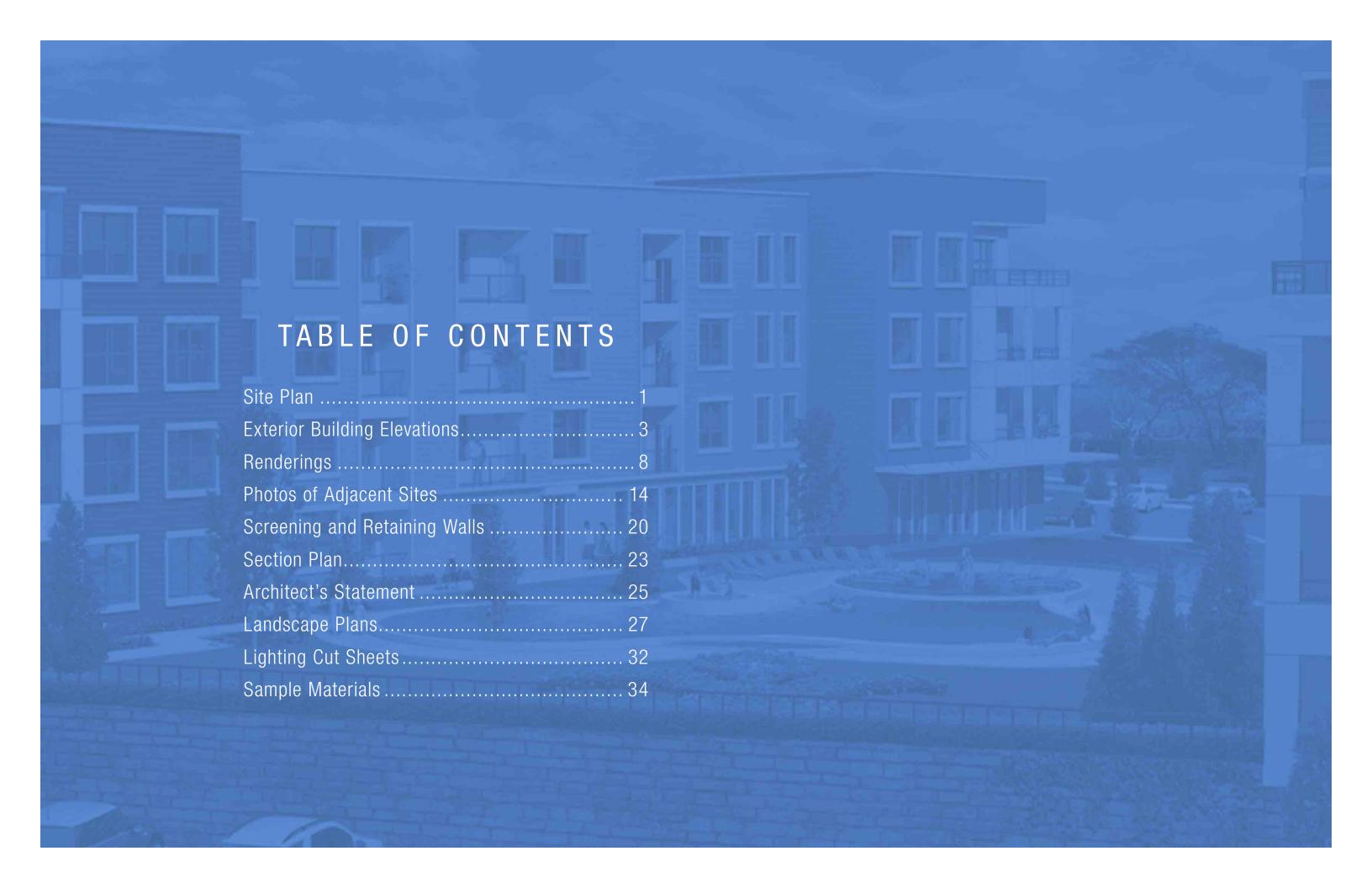
The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) "I move to forward the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design, for Chesterfield Village Mall (Watermark at Chesterfield Village), as presented, with a recommendation for approval (or denial) to the Planning Commission."
- 2) "I move to forward the Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect's Statement of Design, for Chesterfield Village Mall (Watermark at Chesterfield Village), to the Planning Commission with a recommendation for approval with the following conditions..."

Attachments

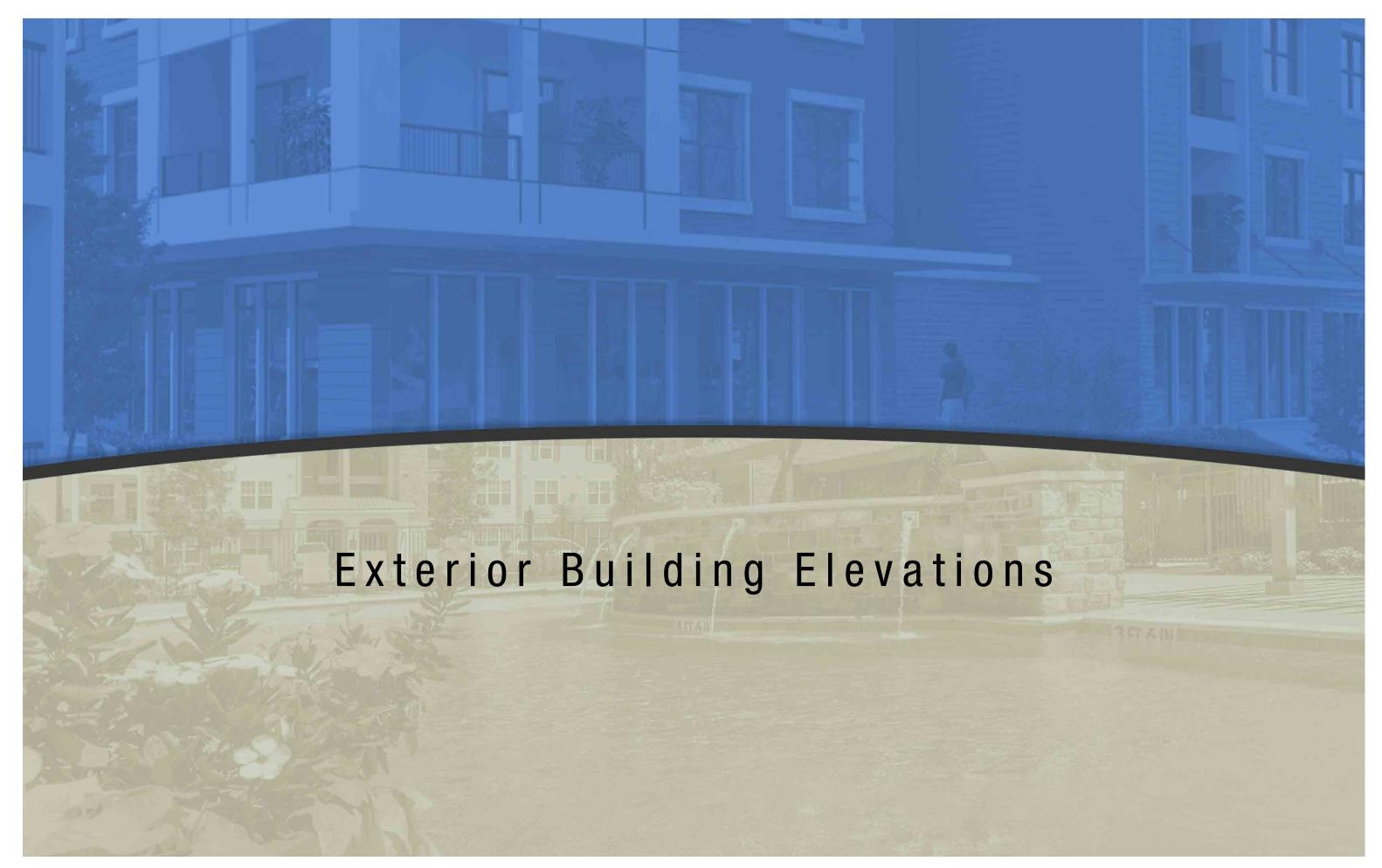
1. Architectural Review Packet Submittal













BLDG-1/BLDG 3 FRONT ELEVATION



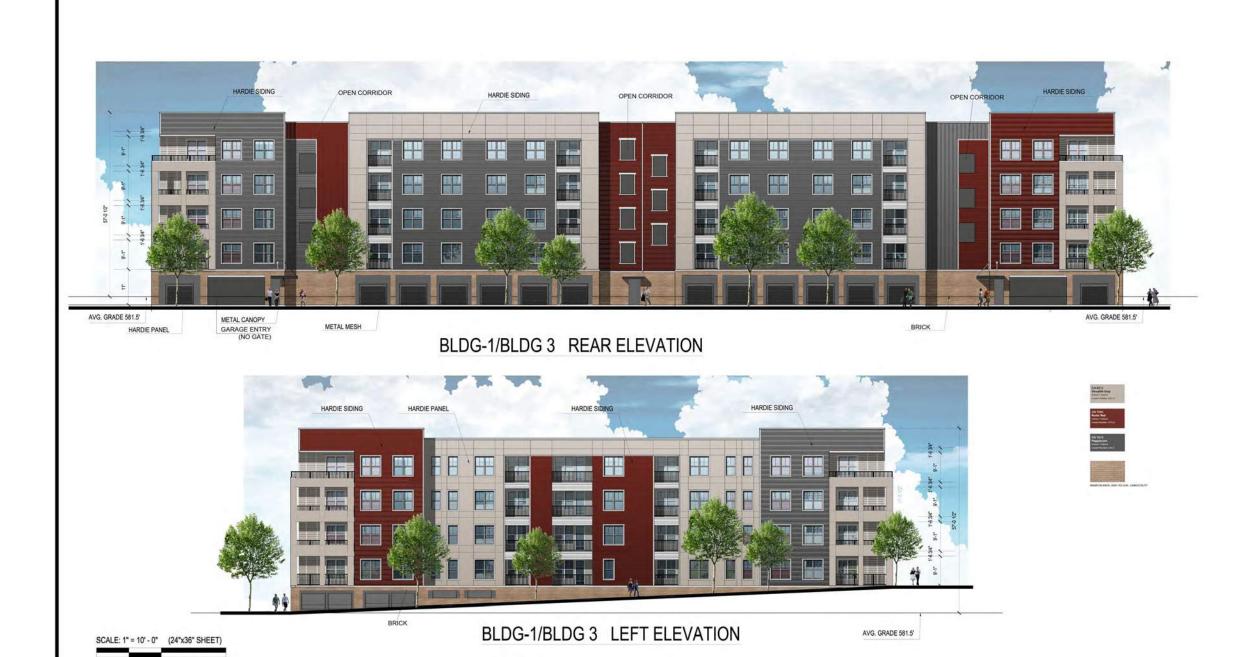
WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO WATERMARK RESIDENTIAL





COLOR ELEVATIONS



WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO WATERMARK RESIDENTIAL







BLDG 2 FRONT ELEVATION



BLDG 2 RIGHT ELEVATION

SCALE: 1" = 10' - 0" (24"x36" SHEET)



WATERMARK CHESTERFIELD VILLAGE CHESTERFIELD, MO WATERMARK RESIDENTIAL





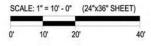




BLDG-2 REAR ELEVATION



BLDG 2 LEFT ELEVATION



WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO WATERMARK RESIDENTIAL





COLOR ELEVATIONS





WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO
WATERMARK RESIDENTIAL

9

SHEET CONTENTS: RENDERING 01





WATERMARK
CHESTERFIELD VILLAGE
CHESTERFIELD, MO
WATERMARK RESIDENTIAL







WATERMARK CHESTERFIELD VILLAGE

CHESTERFIELD, MO WATERMARK RESIDENTIAL









CHESTERFIELD, MO WATERMARK RESIDENTIAL

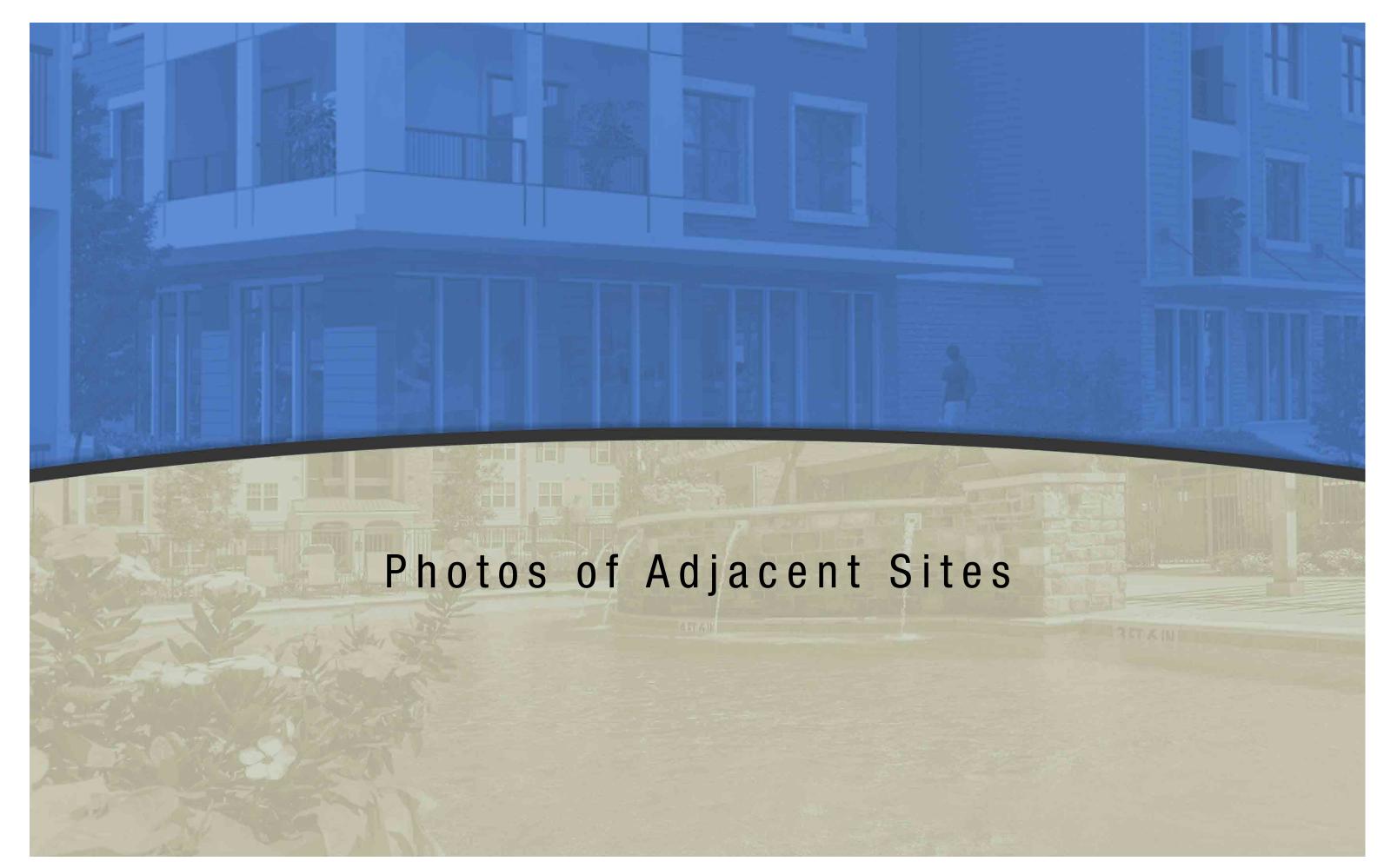


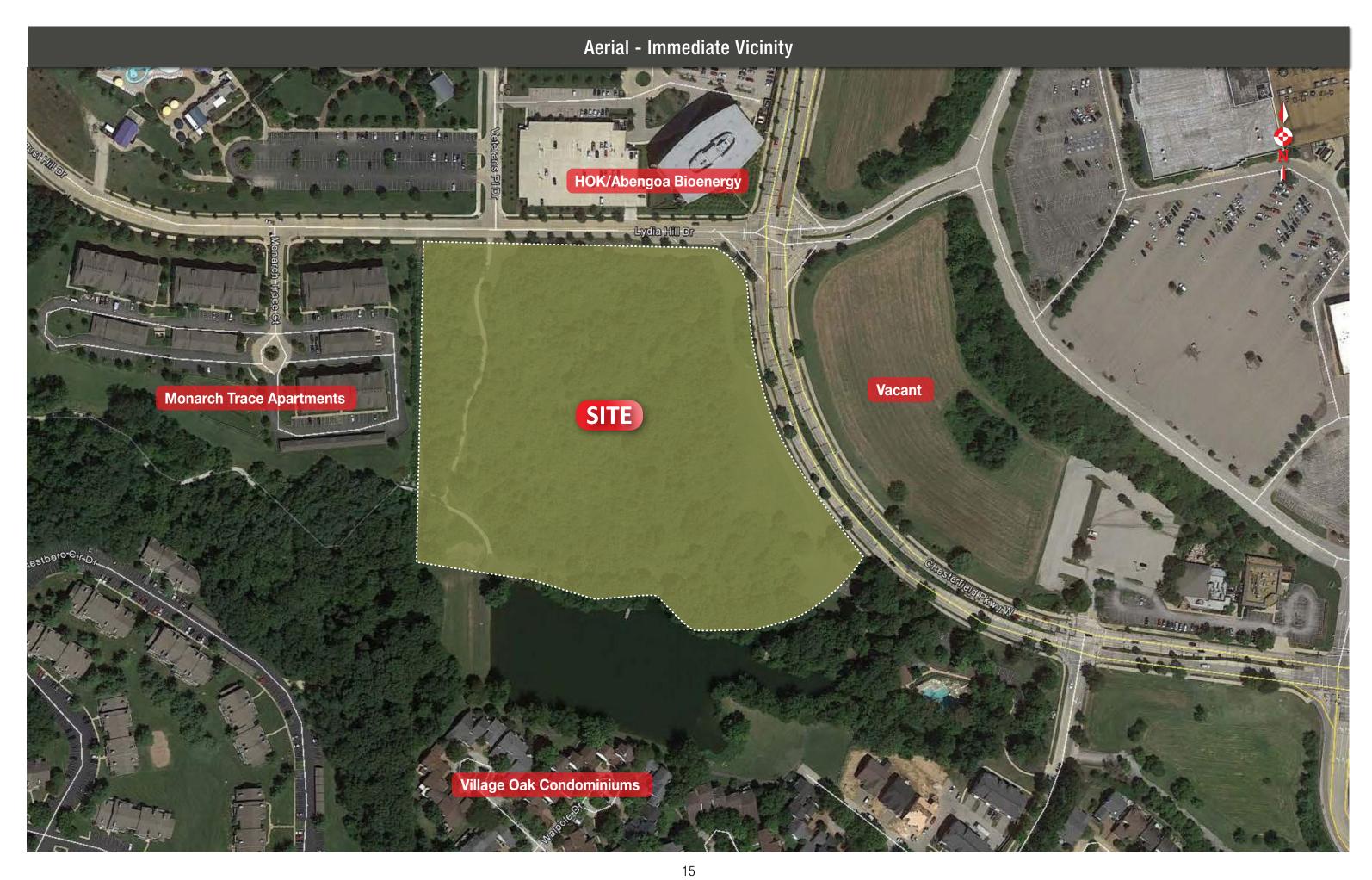
12

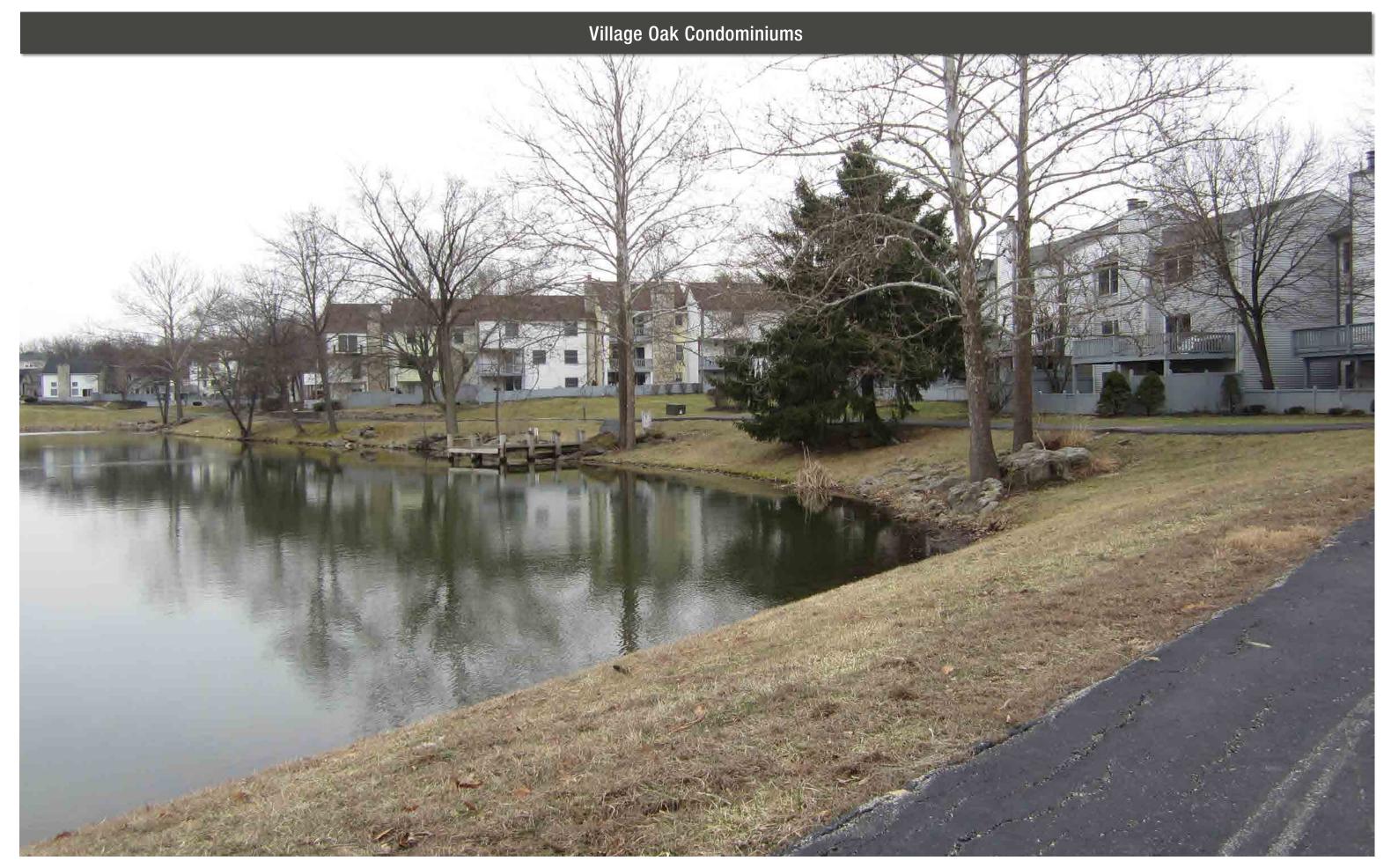


CHESTERFIELD, MO WATERMARK RESIDENTIAL

13



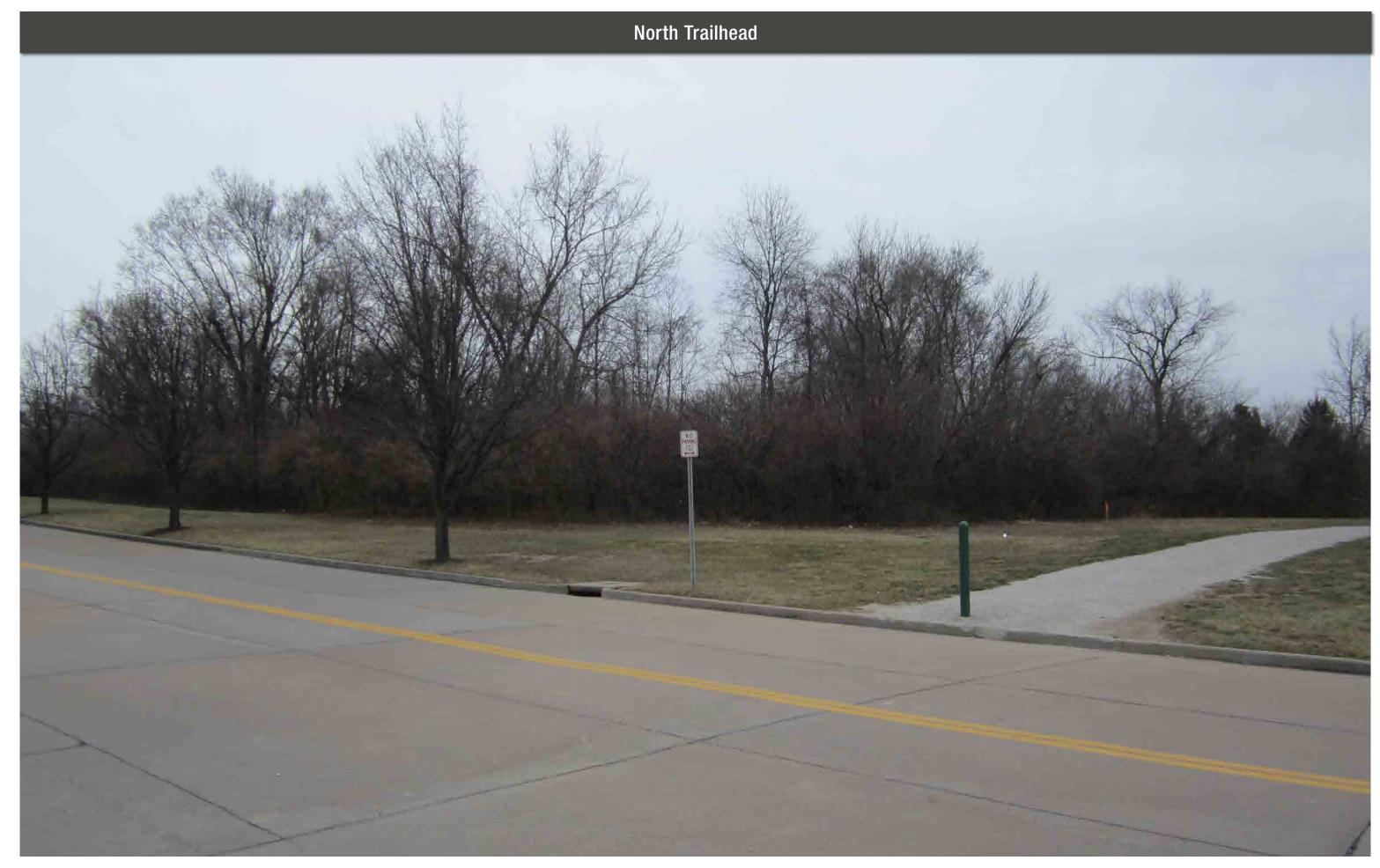


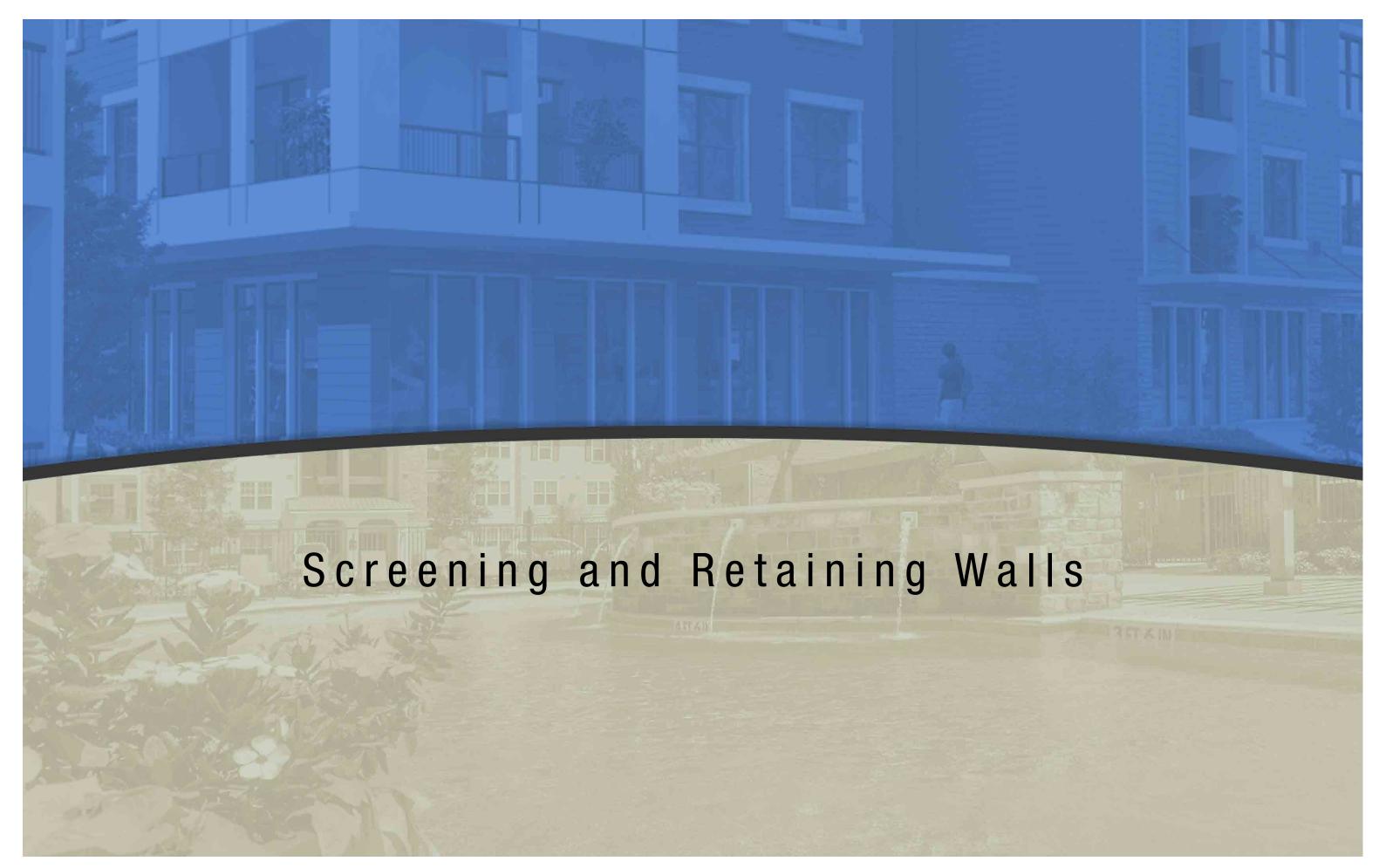




Abengoa Bioenergy







MONTAGE PLUS®









Montage Plus ornamental steel fence has the *versatility to fit many different project applications*. With its ability to *traverse varying grades*, variety of *distinct product styles* and unmatched coating performance, Montage Plus is the *preferred choice for ornamental fence*.

PRIMARY APPLICATIONS

- Commercial Developments
- Self Storage
- > Apartments (Multi-Family)
- Parks & Recreation
- > Schools & Universities
- **Childcare Facilities**

ORNAMENTAL STEEL FENCE

.75"sq x 18ga PICKETS | 1.4375" x 1.5" x 14ga RAILS | 2.5"sq x 16ga POSTS AVAILABLE HEIGHTS: 3', 3½', 4', 4½', 5' & 6'





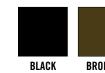


STYLE OPTIONS

Also available in Pool, Pet & Play (3" air spacing) *



COLOR OPTIONS



ADORNMENTS









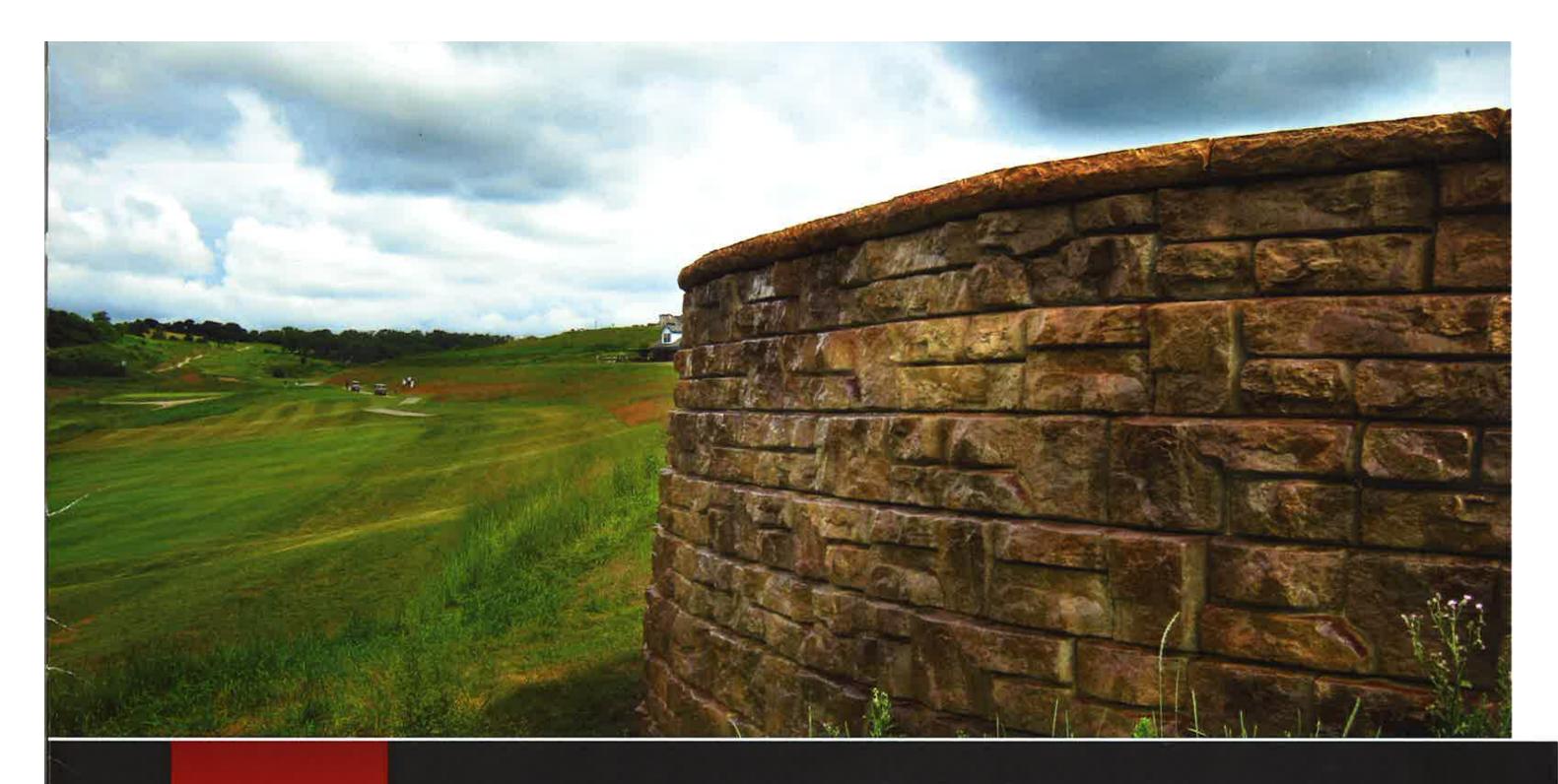






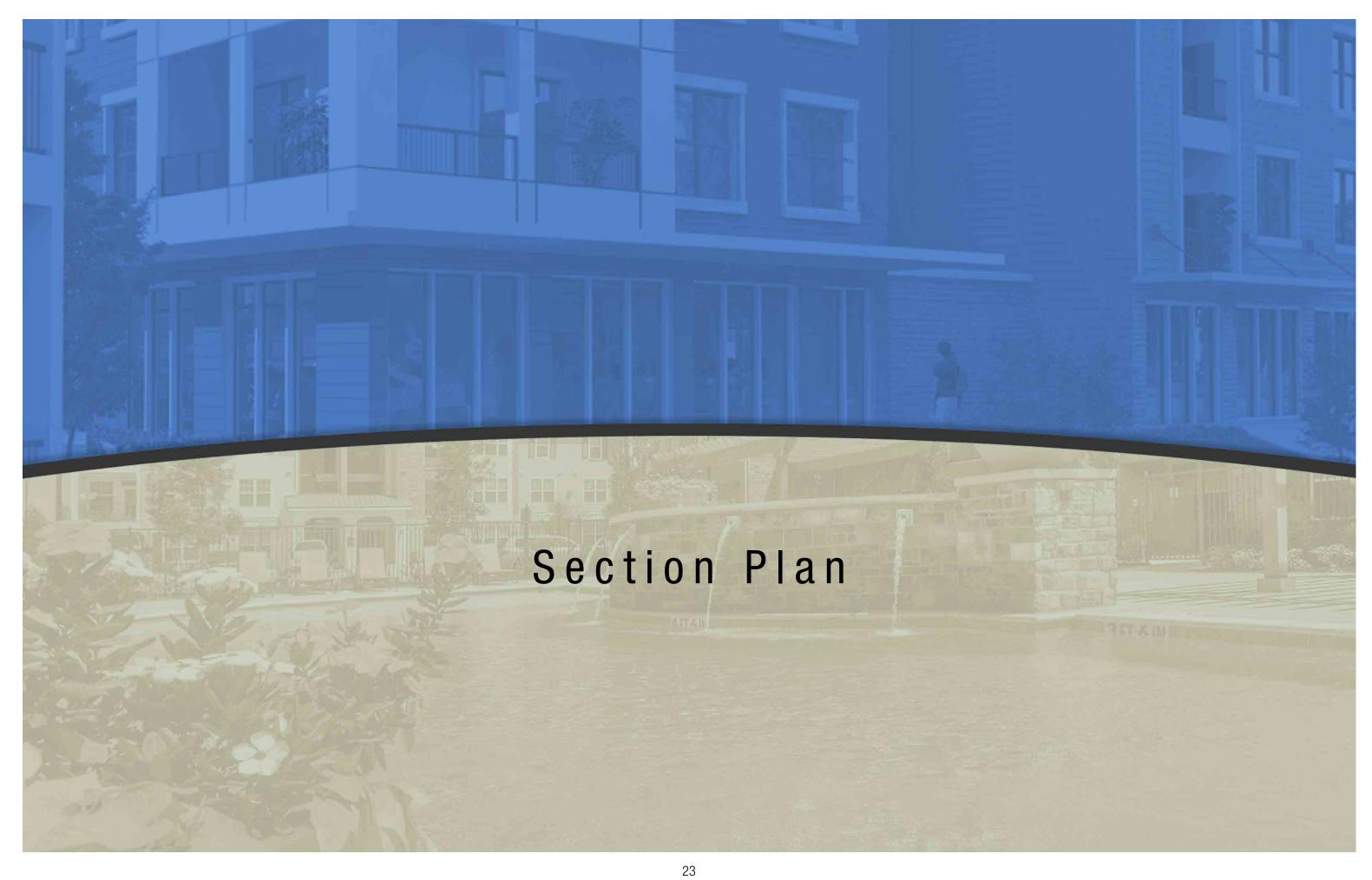


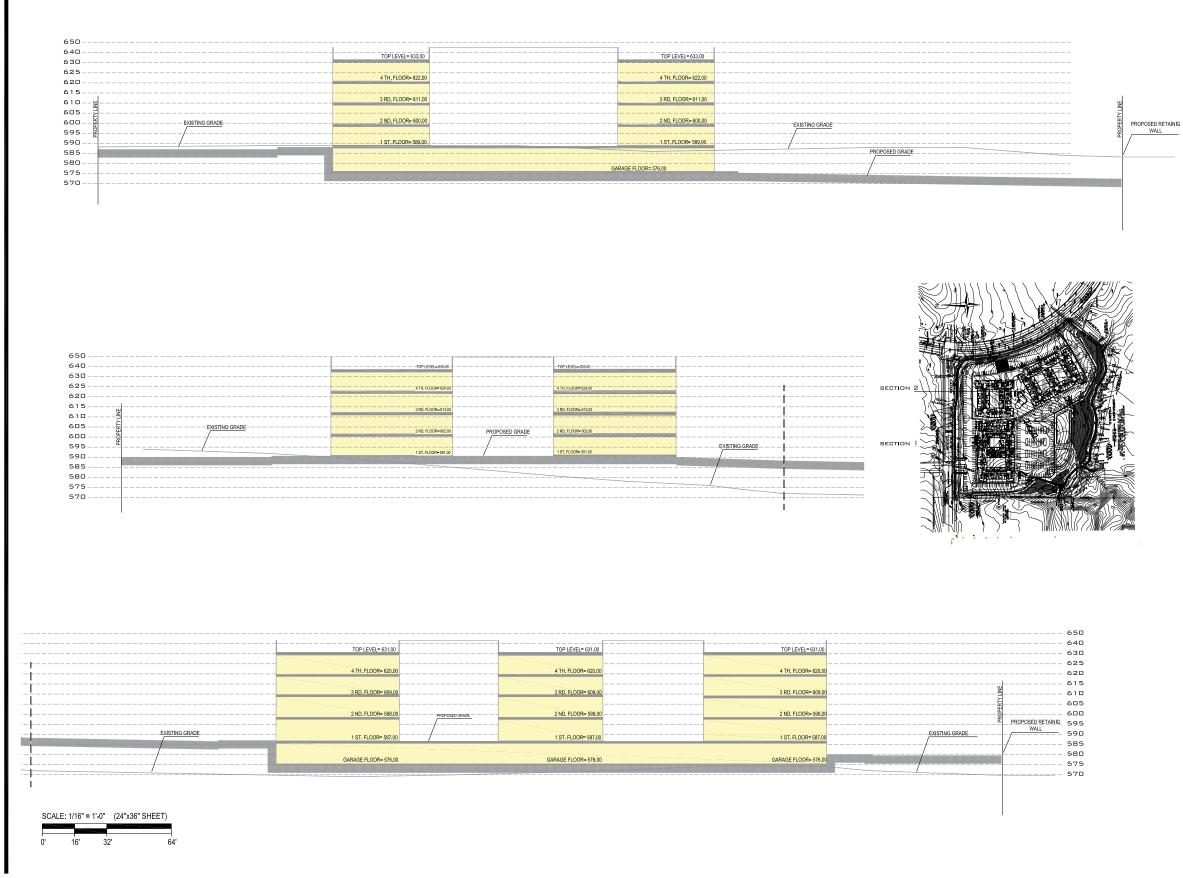
Montage Plus gate options vary from *swing gates* for pedestrian or vehicle access to *sliding gates* for high functioning points of entry. Each of these gate systems are *individually constructed* to provide project specific performance.



REDI+ROCK

PRODUCTS & SOLUTIONS





I _

WATERMARK CHESTERFIELD VILLAGE CHESTERFIELD, MO WATERMARK RESIDENTIAL





General Requirements for Site Design:

A. Site Relationships

The subject site is adjacent to existing residential uses; it is east of Monarch Trace Condominiums on Lydia Hill Drive, and north of Village Oak (separated by the lake platted as Lake Post Commons Recreation Area). However, unlike both of these projects, the proposed buildings are intended for rental homes, and reflect the current design trends, amenities and architecture found in upscale apartment communities elsewhere in the Midwest. Street art is proposed at two locations: on Lydia Hill Drive where an 8-ft. trail connects to the street sidewalks, and along the rear of the site where the 8-ft trail connects to the existing Riparian trail.

B. Circulation System and Access

The site proposes two curb-cuts. A full access curb cut is proposed on Lydia Hill Drive, which aligns with the existing curb cut serving the Abengoa/ HOK building to the north. On Chesterfield Parkway West, a right in-and-out curb cut is proposed, with no median break on the Parkway. Interior to the site, drive aisles will permit circulation access to both the front and rear of each of the three buildings, and to the parking areas strategically designed near the pedestrian entrances to each building.

C. Topography

The site has a high point near the intersection of Lydia Hill Drive and Chesterfield Parkway West and falls in relation to both streets towards the lake in the rear.

D. Retaining Walls

The proposal includes retaining walls integrated to the basement garage to reduce the fill and cut of the site. The varying height retaining walls on the site and walls along the pool area will include an architectural stone finish. Furthermore, modular brick walls are proposed in the exposed parking garage perimeters, with architectural grille at the window openings to provide light, ventilation and design aesthetic. A consideration in the selection of the proposed wall system is to minimize the footprint of the wall and foundation systems, to minimize impact to existing vegetation.

General Requirements for Building Design:

A. Scale

We are proposing three 4-story buildings on the site. Two of the buildings have underground parking accessible, and visible, only from the rear. The total building height is approximately 55 feet in height. The proposed height is harmonious with the Abengoa/ HOK office building heights north of Lydia Hill Drive. The proposed building elevations are articulated by setbacks, projections, balconies and recessed entry ways. We also break up the building massing by using 3 different colors and different texture of materials, such as brick, hardie panel and horizontal hardie siding. At the exposed sides of the basement level, brick walls ground the building and provide a visual break.

B. Design

The building is designed to link the interior and exterior spaces through the human scale entries that clearly identified by protected awnings. All the buildings have four pedestrian entry ways at the ground level that connect to the sidewalks. These entry ways lead to the internal courtyards to create connections of public space and semi-public space. The design takes a contemporary route to reflect the technology and desire for today's modern living. It provides a contemporary colorful image and sets this project apart from the older developments.

C. Materials and Color

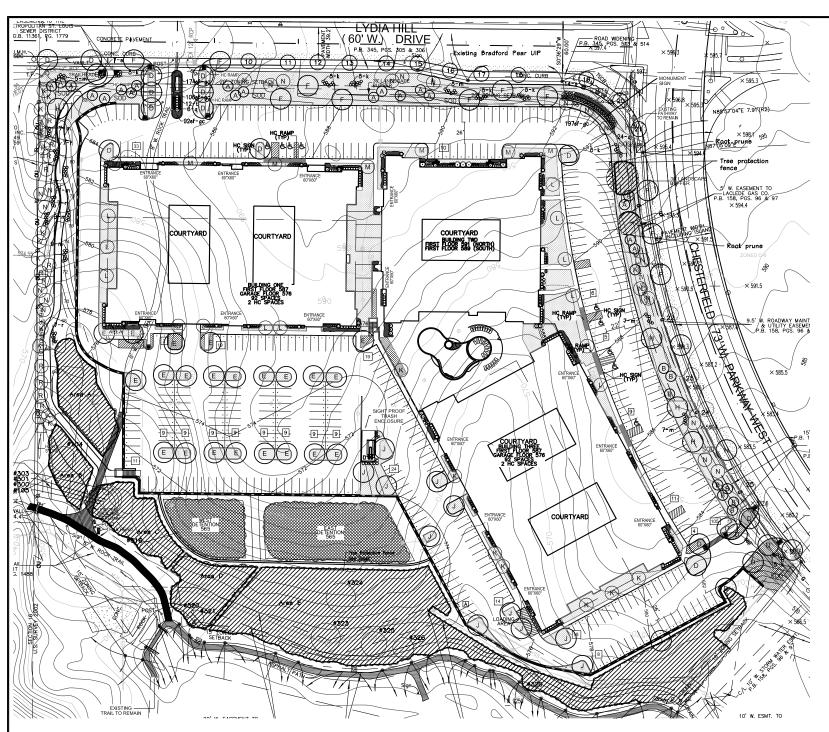
The building materials will be primarily comprised of vinyl windows (Low E glazing), stone, brick, hardie panels and horizontal hardie siding. These materials are proposed to provide a highly sustainable project while still providing expansive views, natural light exposure and integrating materials consistent with the natural woodlands setting. The hardie panels and sidings are in three tones to provide varieties and visual interest.

D. Landscape Design, Screening and Fencing

New plantings will consist of a combination of deciduous and coniferous trees, as well as decorative shrubs and bushes throughout the exterior of the buildings, parking areas and along the frontage roads; additionally, the two (2) water quality facilities will be landscaped in accordance with MSD requirements. Significant existing vegetation will be preserved, particularly along the south boundaries of the property. A proposed trash compactor is proposed in a central location of the rear parking area, to be enclosed in a structure to be constructed of a design and masonry materials matching the proposed buildings. A 6-ft tall fence is proposed at all locations where a retaining wall is proposed along the disturbance limits of the drive aisles and parking areas.







STREET TREE SCHEDULE

Bradford Pear

Watermark Residential 101 West Ohio Street, Suite 2000 Indianapolis, IN 46204 (317) 454-8100

watermark-residential.com



GENERAL NOTES

GENERAL NOTES:

- 1. VERIFY SITE INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, BUILDINGS, ROADWAY CURB AND GUTTERS, UTILITIES AND OTHER INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS. MORE SPECIFIC UTILITY INFORMATION IS INDICATED ON THE OTHER CONSULTANTS DRAWINGS, THE CIVIL DRAWINGS AND SITE RECORD DRAWINGS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL CONTACT THE OWNER AND THE LANDSCAPE ARCHITECT FOR DIRECTION ON HOW TO PROCEED IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS SHOWN ON THE CIVIL ENGINEERS OR LANDSCAPE ARCHITECTS PLANS.
- THE CONTRACTOR SHALL NOTIFY LOCAL AUTHORITIES AND THE GENERAL CONTRACTOR FOR LOCATION OF EXISTING UNDERGROUND UTILITIES.

 EXCAVATE AS NECESSARY TO CONFIRM LOCATIONS PRIOR TO EXCAVATION.
- 3. EXCAVATION IN THE VICINITY OF UTILITIES SHALL BE UNDERTAKEN WITH CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SITE UTILITIES PRIOR TO BEGINNING EXCAVATION. ANY DAMAGE TO UTILITIES THAT ARE TO REMAIN CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER.
- 4. CONTRACTOR TO VERIFY CONSTRUCTION COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT (ADA) OF 1990, AS AMENDED AND THE ADA ACCESSIBILITY GUIDELINES (ADAAG) OF 2004, AS AMENDED. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
- 5. CONTRACTOR TO PROVIDE NECESSARY EROSION CONTROL MEASURES AS NEEDED.
- 6. ALL CONSTRUCTION WILL CONFORM TO THESE PLANS AND SPECIFICATIONS OR TO CITY OF CHESTERFIELD, MISSOURI STANDARDS AND SPECIFICATIONS WHERE REFERENCED.

TREE PRESERVATIONS CALCULATIONS

Total Site Area: 12.7 Ac or 553,212 sf
Total Existing Canopy: 8.22 Ac or 358,263 sq. ft.
Tree Canopy Proposed to be Removed: 302,630 sf (84.5%)
Tree Canopy Proposed for Preservation: 55,633 sf (15.5%)

	PLANTING SCHEDULE								
QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	TYPE / NOTES				
21	Picea pungene	Colorado Spruce	8'	30-40	Medium Growing				
8	Pinus resinosa	Red Pine	8'	45'+	Medium Growing				
18	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2.5"	45'+	Fast Growing				
22	Gleditsia triancanthos inermis 'Shademaster'	Shadmaster Honeylocust	2.5"	45'+	Medium Growing				
3	Tilia americana 'Redmond'	Redmond Linden	2.5"	45'+	Fast Growing				
		Bald Cypress	2.5"	45'+	Medium Growing				
4	Quercus bicolor								
12	Tilia cordata 'Greenspire'	Greenspire Linden	2.5"	45'+	Slow Growing				
18	Amelanchier laevis 'Cumulus'	Cumulus Serviceberry	2.5"	25'+	Slow Growing				
13	Cercis canadensis	Redbud	2.5"	25'+	Fast Growing				
7	Cornus florida	Dogwood	2.5"	25'+	Slow Growing				
21	Crataegus virdis 'Winter King'	Winter King Hawthorn	2.5"	25'+	Medium Growing				
27	Juniperus virginiana 'Taylor'	Taylor Juniper	6'	15'+	Medium Growing				
30	Juniperus chinensis 'Spartan'	Spartan Juniper	6'	15'+	Medium Growing				
14	Cercis canadensis	Redbud	2.5"	25'+	Fast Growing				
56	llex verticillata 'Winter Red'	Winterberry	24-30"		PLANT AS SHOWN				
59	Forsythia X intermedia 'Sunrise'	Sunrise Forsythia	24-30"		PLANT AS SHOWN				
9	llex x meserveae 'Blue Princess'	Blue Holly	5'-6'		PLANT AS SHOWN				
92	llex glabra 'Shamrock'	Shamrock Inkberry Holly	24-30"		PLANT AS SHOWN				

Wintergreen Boxwood Gro-Low Fragrant Sumad

Japanese Spirea
Japanese Forest Grass
Moudry Fountain Grass

WATERMARK AT
CHESTERFIELD VILLAGE
Lydia Hill Drive
Chesterfield, Missouri 63017

Revisions:
Date Description No

Performs Architecture, LLC Manage Architecture, LLC Manage Architecture, LLC Manage Architecture, LLC Manage St. Louis, MO. 63117 (314) 346-4856 delong, la@gmail.com

Sheet Title:	LANDSCAPE PLA
Sheet No:	L-1
Date: Job #:	3/25/2016 150.001

Site - Landscape Plan

Existing Street Tree

Existing Street Tree
Acer rubrum 'Red Sunset'
Tilia americana 'Redmond'

GENERAL NOTES:

Lydla HIII DrIve 759.5 If/50 ft = 15.2 or 15 street trees 11 existing street trees + 4 new street trees= 15 Chesterfield Parkway 540.11 If/50 = 10.8 or 11

5 existing stret trees + 6 new street trees = 11

All street trees will be located at least 3' from proposed curb

All street trees will be located at least 3' from proposed curb.
 All street trees will be located at least 25' from street lights and signs.

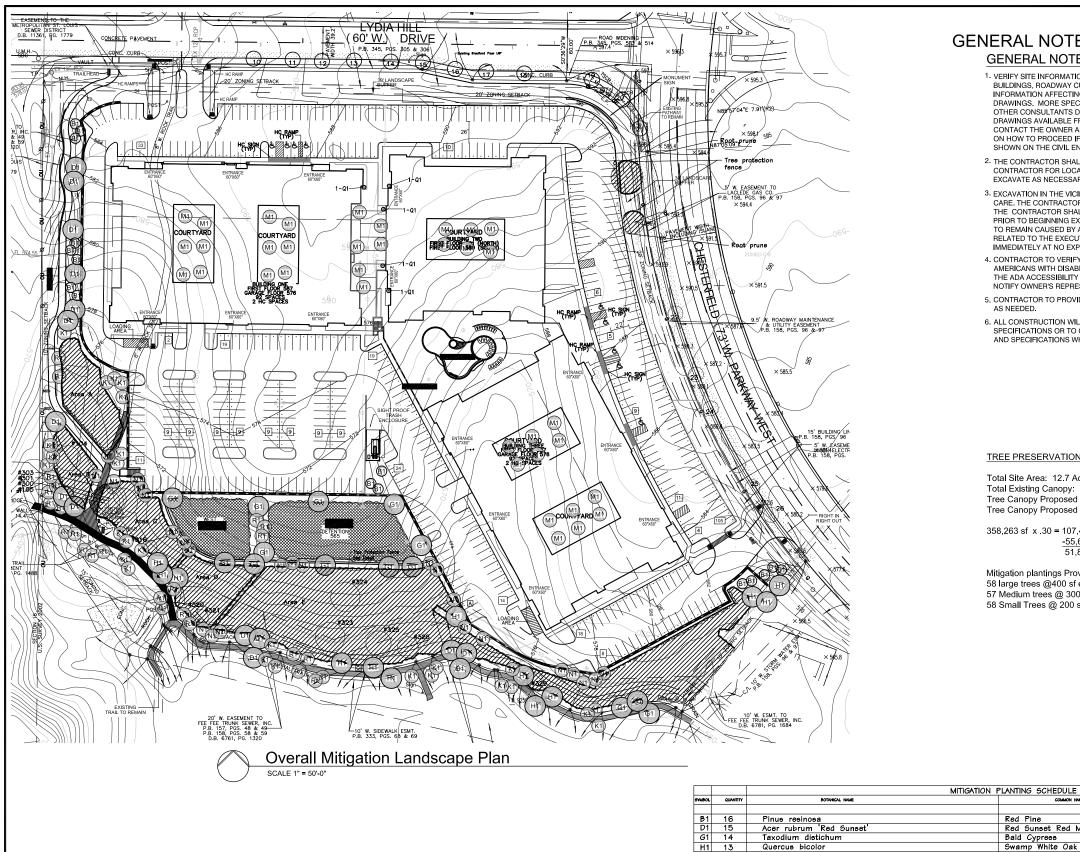
5) All street trees will be located at least 10' from all storm sewer structures.6) All turf areas will be sodded unless noted otherwise.

7) An in-ground irrigation system will be provided.

7.

Buxus einica var. insularis Wintergreen Rhus aromatica 'Gro-Low' Spirea japonica 'Lemon Princess' Hakonechlos macra 'Aureola' Pennisetum alopecuroides 'Moudry'

Model to Freedom | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1970 | 1



GENERAL NOTES GENERAL NOTES:

VERIFY SITE INFORMATION, INCLUDING PROPERTY LINES, EASEMENTS, BUILDINGS, ROADWAY CURB AND GUTTERS, UTILITIES AND OTHER

INFORMATION AFFECTING THE SCOPE OF WORK INCLUDED ON THESE DRAWINGS. MORE SPECIFIC UTILITY INFORMATION IS INDICATED ON THE OTHER CONSULTANTS DRAWINGS, THE CIVIL DRAWINGS AND SITE RECORD DRAWINGS AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL CONTACT THE OWNER AND THE LANDSCAPE ARCHITECT FOR DIRECTION ON HOW TO PROCEED IF ACTUAL SITE CONDITIONS VARY FROM WHAT IS

SHOWN ON THE CIVIL ENGINEERS OR LANDSCAPE ARCHITECTS PLANS. 2. THE CONTRACTOR SHALL NOTIFY LOCAL AUTHORITIES AND THE GENERAL CONTRACTOR FOR LOCATION OF EXISTING UNDERGROUND UTILITIES. EXCAVATE AS NECESSARY TO CONFIRM LOCATIONS PRIOR TO EXCAVATION.

3. EXCAVATION IN THE VICINITY OF UTILITIES SHALL BE UNDERTAKEN WITH CARE. THE CONTRACTOR BEARS FULL RESPONSIBILITY FOR THIS WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SITE UTILITIES

PRIOR TO BEGINNING EXCAVATION. ANY DAMAGE TO UTILITIES THAT ARE TO REMAIN CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOL

RELATED TO THE EXECUTION OF THE CONTRACT SHALL BE REPAIRED IMMEDIATELY AT NO EXPENSE TO THE OWNER.

4. CONTRACTOR TO VERIFY CONSTRUCTION COMPLIANCE WITH AMERICANS WITH DISABIILITIES ACT (ADA) OF 1990, AS AMENDED AND

THE ADA ACCESSIBILITY GUIDELINES (ADAAG) OF 2004, AS AMENDED. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.

5. CONTRACTOR TO PROVIDE NECESSARY EROSION CONTROL MEASURES

6. ALL CONSTRUCTION WILL CONFORM TO THESE PLANS AND SPECIFICATIONS OR TO CITY OF CHESTERFIELD, MISSOURI STANDARDS

Watermark Residential 101 West Ohio Street, Suite 2000 Indianapolis, IN 46204 (317) 454-8100



WATERMARK AT
CHESTERFIELD VILLAGE
Lydia Hill Drive
Chesterfield, Missouri 63017

TYPE / NOTES

Large/Med. Growing Large/Fast Growing Large/Med. Growing

Large/Med. Growing Med./Slow Growing

Small/Slow Growing Small/Med. Growing

Med./Med. Growing

Med./Fast Growing

45'+ 45'+ 25'+ 25'+ 25'+ 15'+

25'+

2.5" 2.5" 2.5"

TCC VISIOII.	5.	
Date	Description	No
/25/16	City Comments	1
Drawn: Checked:	WBM DAD	
eLong rchitecture, LLC	7620 West Bruno Ave St. Louis, MO. 63117 (314) 346-4856	delong.ia eginan.com
Sheet Title:	MITIGATION LANDSCAPE F	LAN

3/25/2016 150.001

TREE PRESERVATIONS CALCULATIONS

AND SPECIFICATIONS WHERE REFERENCED.

Total Site Area: 12.7 Ac or 553,212 sf Total Existing Canopy: 8.22 Ac or 358,263 sq. ft. Tree Canopy Proposed to be Removed: 302,630 sf (84.5%) Tree Canopy Proposed for Preservation: 55,633 sf (15.5%)

 $358,263 \text{ sf } \times .30 = 107,479 \text{ sf of tree canopy preservation required.}$ -55,633 sf of tree canoy provided 51,846 s.f. of mitigation tree canopy required

Mitigation plantings Provided:

Red Sunset Red Maple Bald Cypress

Cumulus Serviceberr

Winter King Hawthorn

Swamp White Oak

Spartan Juniper

Dogwood

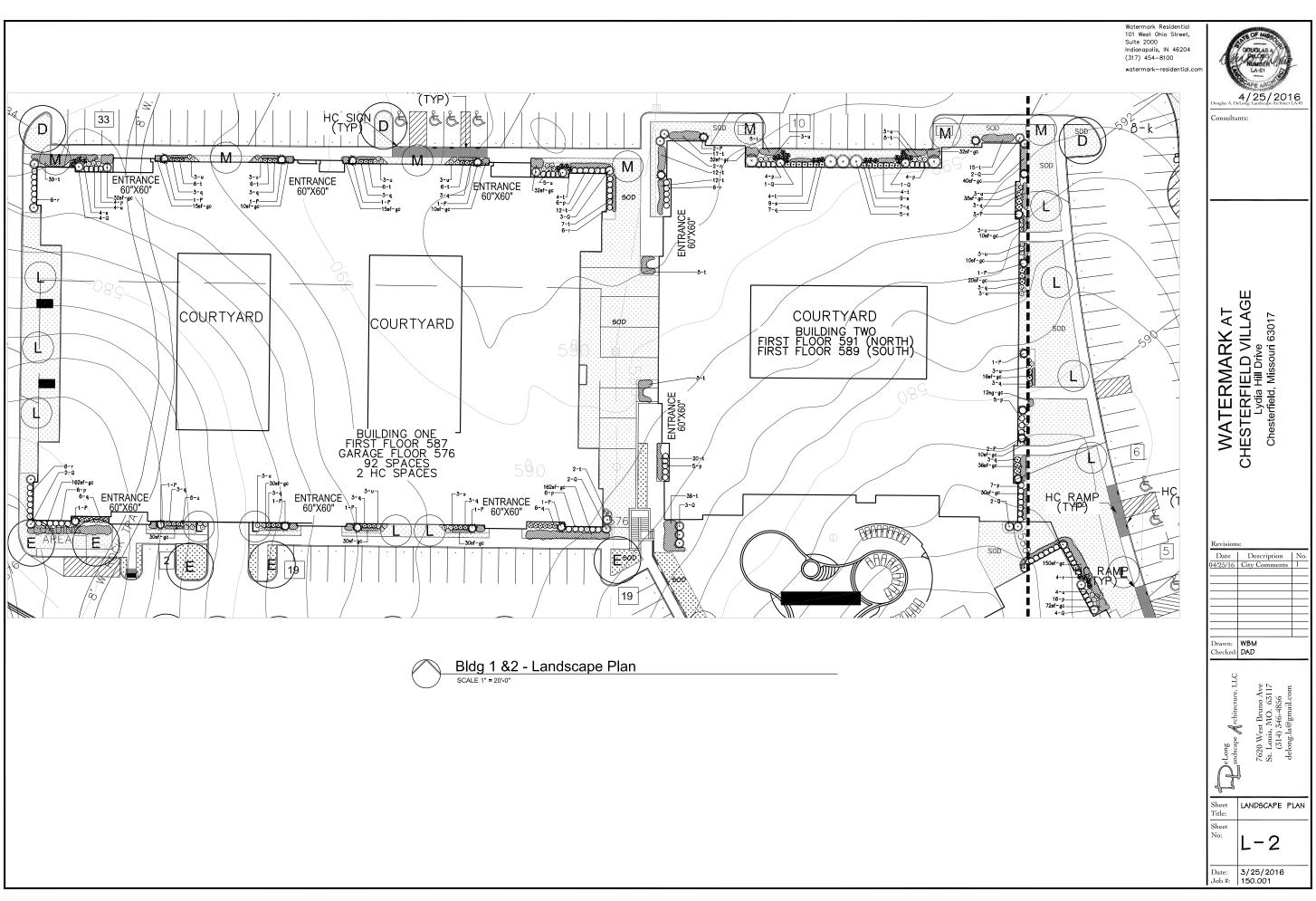
58 large trees @400 sf each = 23,200 sf 57 Medium trees @ 300 sf each = 17,100 sf 58 Small Trees @ 200 sf each = 11,600 sf

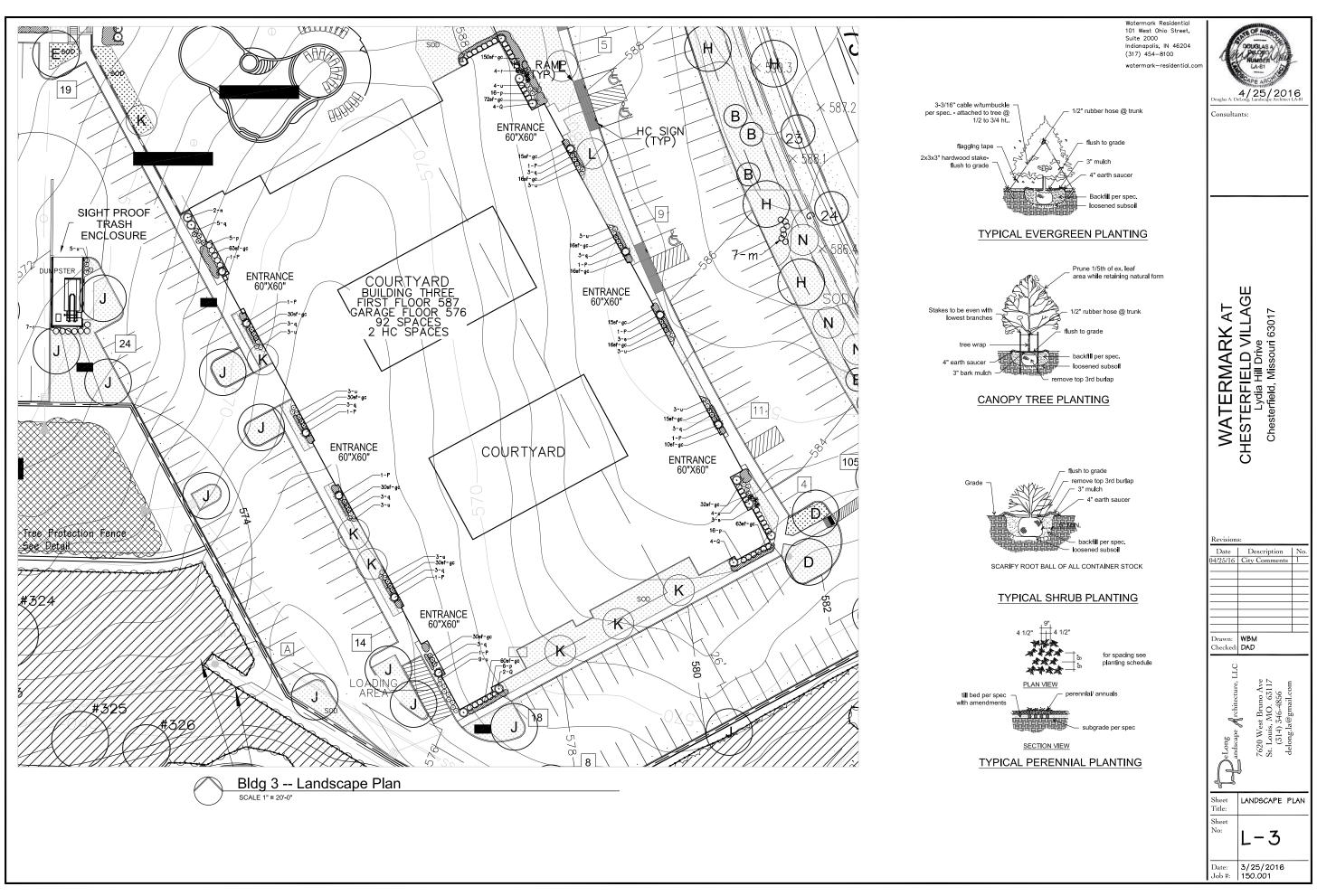
Amelanchier laevis 'Cumulus' Cornus florida

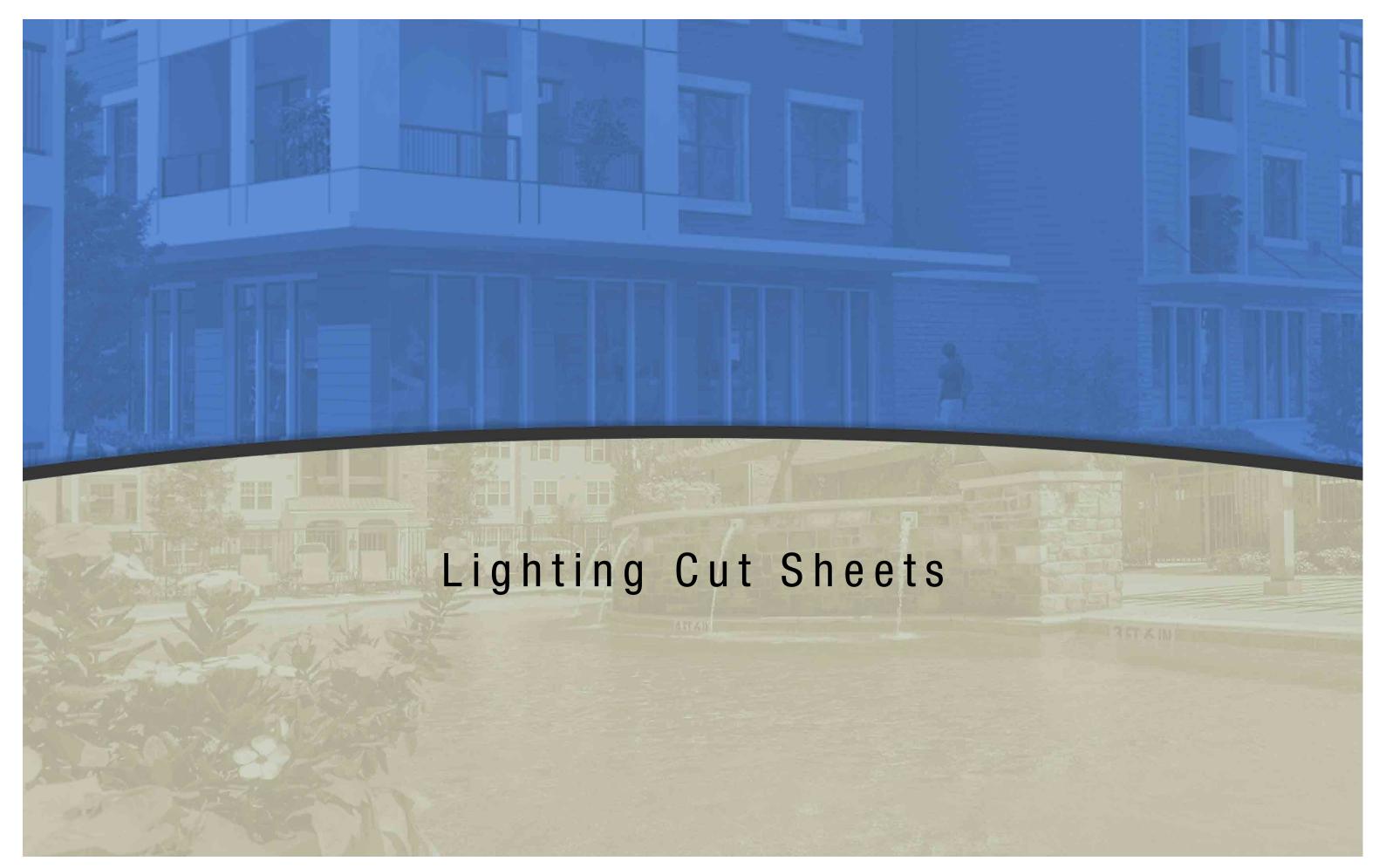
Crataegus virdis Winter King

Juniperus chinensis 'Spartan

Cercis canadensis









DIMENSIONS CLXM 16-5/16"

WLS LIGHTING SYSTEMS CLASERIES

HOUSING - One-piece, die-formed aluminum housing contains factory prewired driver. Wiring access door (with safety lanyard) located underneath.

OPTICAL UNIT - Clear tempered flat glass lens permanently sealed to weather-tight aluminum optic frame creates an IP65 rated optical unit (includes pressure-stabilizing breather). Optic frame recessed into housing cavity and sealed to the housing with one piece EPDM gasket.

EXPECTED LIFE - Minimum 60.000 hours to 100.000 hours depending upon the ambient temperature of the installation location.

LEDS - Select high-brightness LEDs in Cool White (5000K nominal), or Neutral White (4000K nominal) color temperature, 70 CRI (nominal).

DISTRIBUTION / PERFORMANCE - Types III, FT, 5 and enhanced 5E and FTE. Exceptional uniformity creates bright environment at lower levels. Internal Louver (IL) option available for improved backlight control without sacrificing street side performance for FT distribution.

ELECTRICAL - Two-stage surge protection (including separate surge protection built into electronic driver) meets Location Category C Low. Available with universal voltage power supply 120-277 VAC (50/60Hz input), and 347-480 VAC. Optional button-type photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified).

DRIVER - Available in SS (Super Saver) and HO (High Output) drive currents. Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

MOUNTING - Use with 5" traditional drilling pattern. An extruded radius 8" arm is shipped standard and compatible with all fixture mounting configurations. The fixture may also be mounted to 3"-5" round poles using the round pole plate adaptor accessory (RPP), which must be ordered separately.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F)

FINISH - Fixtures are finished with WLS DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling, and is guaranteed for five full years.

WARRANTY - WLS LED fixtures carry a limited 5-year warranty.

LISTING - ETL listed to U.S. and Canadian safety standards. Suitable for wet locations.

us	ROHS	F©	ARRA Funding Compliant	American Innovation
ek t locations				

Approved By:	_ Project Name:	· • •
Location:	Date:	- WLS LIGHTING SYSTEMS
1919 Windsor Place Fort Worth, TX 76110	800.633.8711 Fax: 817.735.4824 www.wl	vislighting.com Consider the Impact!

Specifications subject to change without notice. 01 Rev. 1/16

CLX SERIES

SERIES	DISTRIBUTION	LIGHT SOURCE	DRIVE Current	COLOR TEMPERATURE	LINE VOLTAGE	LUMINAIRE FINISH	OPTIONS	ACCESSORIES
! !	3 - Type III 5 - Type V FP - Forward Throw 5E - Type V Enhanced FPE - Forward Throw Enhanced	LED	SS - Super Saver H0 - High Output	CW - Cool White NW - Neutral White	UE - Universal Voltage (120-277) 347 - 480	BRZ - Bronze BLK - Black PLP - Platinum Plus BUF- Buff WHT - White SVG - Satin Verde	PCR - Photoelectric Control Receptacle ¹ NO - No Options	GS - Glare Shield PC - Photocell RPP - Round Pole Plate WM - Wall Mount Plate
CLXL ²	5 - Type V FP - Forward Throw FPL - Forward Optic Rotated for D180 (left) FPR - Forward Optic Rotated for D180(Right) 5E - Type V Enhanced FPE - Forward Throw Enhanced					Green GPT - Graphite MSV - Metallic Silver CC - Custom Color		RA - Radius Arm UB - Upsweep Brack for round or square poles SF - Single Fusing DF - Double Fusing NA - No Accessories
1	Rotated for D180(Right) 5E - Type V Enhanced FPE - Forward Throw	LED	SS	CW	UE	BRZ	NO	

ORDER:

WLS-CLX

FOOTNOTES:
- Photocell must be ordered separately - see Accessories. - 5E and FPE not available in CLXL.

LUMINA	IRE EPA C	HART - CLXS	П	LUMINAIRE EPA CI	HART - C
-	Single	0.4	Ш	Single	0.5
	D180°	0.8	Ш	■- ■ D180°	1.0
V.	D90°	0.6	Ш	D90°	0.8
-2-	T90°	1.4	Ш	■ T90°	1.7
	TN120°	1.4	Ш	TN120°	1.7
-2-	Q90°	1.6	Ш	■ X ■ Q90°	1.9
	use Side Shie	eld adds to fixture		Note: House Side Shie	ld adds to

UMINAIRE EPA CHART - CLXM			LUMINAIRE EPA CHART - CLXL		
Single	0.5	П	-	Single	.7
■- ■ D180°	1.0	П		D180°	1.4
D90°	0.8	П	.	D90°	1.1
■ T90°	1.7	П	-7-	T90°	2.3
TN120°	1.7	П		TN120°	2.3
■ ¥■ Q90°	1.9	П		Q90°	2.6
Note: House Side Shie EPA. Consult Factory.			ouse Side Shie nsult Factory.	ld adds to fixture	

LEFT AND RIGHT VERSIONS OF TYPE FT REFLECTORS (TOP VIEW)								
	Area to be Lit	A	Note: Optics are not field-rotatable. For D180 Forward					
Use Type FT-L	pole	Use Type FT-R	Throw installations specify left (FT-L) and/or right (FT-R) side mounting. Orientation is based on standing at the pole and looking out at the area to be lit.					
(left)		(right)						

LIGHT OUTPUT - CLXS									
		Type 3	TypeFTE	Watts (Nominal)					
le el	SS	10100	11400	11400	8200	7800	97		
Ω₹	НО	10100 14000	15500	15700	11600	10600	140		
Neutral White	SS	9700	10400	10800	7900	7500	97		
Men	НО	13400	14700	15200	11000	10500	140		

LED Chips are frequently updated therefore values may increase.

LIGHT OUTPUT - CLXM							
	Lumens (Nominal) Type 3 Type FT Type 5 Type5E TypeFTE				(Nominal)		
I—		Type 3	турстт	Type 3	Typese	Typerite	(I to I I I I I I I I
- ª	SS	19900	22800	22900	15500	15800	193
Cool	НО	27500	30900	31100	21200	21100	278
≒ ≓	SS	19300	20000	20600	15000	15000	193
	НО	26700	27800	28500	20100	20400	278

LED Chips are frequently updated therefore values may increase.

LIGHT OUTPUT- CLXL						
		Lur Type 3	mens (Nor Type FT	ninal) Type 5	FTA	Watts (Nominal)
Cool	SS	45800	49500	50700	C/F	435
Ŭ ≶	НО	53400	57300	59100	58900	542
Neutral White	SS	45600		C/F	435	
Neu	НО	52800	56300	57600	C/F	542

LED Chips are frequently updated therefore values may increase.

tpp:07cd by	Troject Nume.		
ocation:	Date:	WLS LIGHTING	G SYSTEMS
1919 Windsor Place # Fort Worth TX 76110 # #	800 633 8711 Fav: 817 735 4824 www.wl	slighting.com	Consider the Impact!

Specifications subject to change without notice. 01 Rev. 4/16

33

IP67 **(€**

