



SPECIAL ANNOUNCEMENT REGARDING PLANNING AND ZONING COMMISSION MEETINGS

Under Section 610.015 of the Missouri Sunshine Law provides that members of the Planning and Zoning Commission who are not physically in the Council Chambers can participate and vote on all matters when an emergency exists and the nature of the emergency is stated in the minutes.

The U.S., and the World, is in a state of emergency due to the Coronavirus--Covid-19. The Missouri Governor and the County Executive directed all citizens to limit meetings and gatherings to a few people to avoid the spread of the Coronavirus. Therefore, members of the Planning and Zoning Commission have elected to participate in this meeting electronically so that we are compliant with such Orders and for the public health and safety of each other and the general public.

To follow along with the Planning and Zoning Commission meeting, please see the instructions below. To make a comment during the public comment portion of the meeting, you will need to access via the Zoom application and click the hand icon to "raise your hand". Raised hands will be called on in the order received. Please note, if dialing in from a phone, you will "raise your hand" by dialing *9.

You are invited to a Zoom webinar.

When: Sep 2, 2020 7:00 PM Central Time (US and Canada)

Topic: Planning & Zoning Commission

Please click the link below to join the webinar:

<https://zoom.us/j/93529889676?pwd=SnPbU52Ry90QmU1aFZUa3Q0NDFaQT09>

Passcode: 890705

Or iPhone one-tap :

US: +13017158592,,93529889676#,,,,,,0#,,890705# or +13126266799,,93529889676#,,,,,,0#,,890705#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 301 715 8592 or +1 312 626 6799 or +1 646 876 9923 or +1 253 215 8782 or +1 346 248 7799 or +1 408 638 0968 or +1 669 900 6833

Webinar ID: 935 2988 9676

Passcode: 890705

International numbers available: <https://zoom.us/j/93529889676?pwd=SnPbU52Ry90QmU1aFZUa3Q0NDFaQT09>

SEE THE FOLLOWING PAGE FOR THE AGENDA

A digital copy of the packet for this meeting may be accessed by clicking on the event for this meeting on the City's website calendar at the following link: <https://www.kirkwoodmo.org/services/events-calendar>.



**Planning & Zoning Commission
Agenda
Wednesday, September 2, 2020, 7:00 p.m.
Via Zoom Virtual Meeting
Posted August 26, 2020**

I. ROLL CALL

II. APPROVAL OF THE MINUTES OF THE AUGUST 19, 2020, MEETING

III. UNFINISHED BUSINESS

1. **PZ-28-20 ZONING CODE AMENDMENT, SPECIAL USE PERMIT (ASSISTED LIVING), AND SITE PLAN REVIEW FOR MIXED-USE DEVELOPMENT IN B-2 ZONING DISTRICT 300 NORTH KIRKWOOD ROAD**
Submitted: 2-21-20; Revised 8-26-20 Automatic Recommendation: 9-24-20
Petitioner's Agent, George Stock
(Subcommittee – Commissioners Adkins, Diel, and O'Donnell)
Opportunity for Public Comment

IV. NEW BUSINESS

None.

V. COMMISSION/STAFF (INTERNAL) ITEMS

1. DEVELOPMENT PROJECT UPDATE

VI. PLANNING AND ZONING SCHEDULE:

1. SEPTEMBER 16, 2020 – 7:00 P.M. (VIA ZOOM)
2. OCTOBER 7 AND 21, 2020 – 7:00 P.M. (VENUE T.B.D.)

Staff Liaison: Jonathan Raiche; Phone: (314) 984-5926; Email: RaicheJD@kirkwoodmo.org

Kirkwood Planning and Zoning Commission: Chairman Jim Adkins, Commissioners Allen Klippel, Jim O'Donnell, James Diel, David Eagleton, Ron Evens, Tom Feiner, Sandy Washington, and Mary Lee Salzer-Lutz.

Accommodation: The City of Kirkwood is interested in effective communication for all persons. Persons requiring an accommodation to attend and participate in the meeting should contact the City Clerk at 314-822-5802 at least 48 hours before the meeting. With advance notice of seven calendar days, the City of Kirkwood will provide interpreter services at public meetings for languages other than English and for the hearing impaired. Upon request, the minutes from this meeting can be made available in an alternate format, such as CD by calling 314-822-5802.

RECOMMENDATIONS SUBMITTED TO COUNCIL

1. **ZONING, SUBDIVISION, SIGN CODE RE-WRITE**
January 29: P&Z recommended approval.
February 6: City Council scheduled public hearing for 2-27-20 at 6 p.m.
February 27: Public hearing held.
2. **PZ-15-20 MIXED USE/SITE PLAN REVIEW IN B-2-KIRKWOOD FLATS, 426 N KIRKWOOD**
July 14: P&Z recommended denial. Awaiting public hearing at the City Council.
August 14: City Council scheduled public hearing for October 22 at 6 p.m.
3. **PZ-27-20 ZONING CODE AMENDMENT, SITE PLAN REVIEW, AND SUBDIVISION (2 LOTS) – COMMERCE BANK, 350 NORTH KIRKWOOD ROAD**
August 19: P&Z recommended approval.
August 20: City Council scheduled public hearings for September 3.
4. **PZ-1-21 SPECIAL USE PERMIT (PHYSICAL FITNESS FACILITY)–RIVERNORTH STRENGTH, 10505 BIG BEND BOULEVARD, SUITES A & B**
August 19: P&Z recommended approval.
August 20: City Council scheduled public hearing for September 3.

STATUS OF APPROVALS

1. **PZ-24-18 SPECIAL USE PERMIT & SITE PLAN – BP, 10901 MANCHESTER**
Perf guar/fee, Water/Fire, and ARB prior to 4-5-21.
2. **PZ-13-19 COMMUNITY UNIT PLAN – EMMERSON-ESTATES THE BLUFFS AT LILY AVENUE**
Recorded copy of record plat provided 8-17-20.
3. **PZ-24-19 SPECIAL USE PERMIT, - NO LEASH NEEDED, 902 SOUTH KIRKWOOD**
Perf guar/fee, Water/Fire, and permit.
4. **PZ-08-20 SPECIAL USE PERMIT AND SITE PLAN REVIEW – AUDI KIRKWOOD**
Perf guar/fee, consolidation plat w/easements, MoDOT, MSD, ARB & permit by 9-19-20. Reminder letter sent 8-27-20.
5. **PZ-13-20 SITE PLAN – TOWNES AT GEYER GROVE, 11204-11224 BIG BEND**
Perf guar/fee; ARB, StLCo Dept of Transportation, MDNR, & MSD approval; Fire/Water; and consolidation plat prior to 1-16-21.
6. **PZ-23-20 FINAL B4 PLAN – GENERAL RETAIL AND SPECIAL USE PERMIT (RESTAURANT WITH DRIVE-THRU), 10463 MANCHESTER ROAD**
Perf. guarantee/fee, signal timing study, MSD, and Water/Fire prior to 4-16-21.
7. **PZ-24-20 FINAL B4 PLAN – FIRST COMMUNITY CREDIT UNION, 10357 MANCHESTER**
Perf guar/fee, ARB, MSD prior to 2-20-21



**CITY OF KIRKWOOD
PLANNING AND ZONING COMMISSION
Via Zoom Virtual Meeting
August 19, 2020**

PRESENT:

Jim Adkins, Chairman
James Diel, Vice Chairman
David Eagleton, Secretary/Treasurer
Allen Klippel
Jim O'Donnell
Ron Evens
Tom Feiner
Mary Lee Salzer-Lutz
Sandy Washington

ABSENT:

Pursuant to notice of meeting duly given, the Planning and Zoning Commission convened on Wednesday, August 19, 2020, at 7:00 p.m. via Zoom Virtual Meeting. Planning and Development Services Director Jonathan Raiche, Planner II Amy Lowry, and Administrative Assistant Patti Dodel also attended the meeting.

1. Chairman Adkins called the meeting to order at 7:00.

Planning and Development Services Director Jonathan Raiche stated for the record that under Section 610.015 of the Missouri Sunshine Law provides that members of the Planning and Zoning Commission who are not physically in the City Hall can participate and vote on all matters when an emergency exists and the nature of the emergency is stated in the minutes. So, let the minutes reflect that the U.S., and the World, is in a state of emergency due to the Coronavirus. The Missouri Governor and the County Executive directed all citizens to limit the number of attendees for meetings and gatherings to avoid the spread of the Coronavirus. Therefore, members of the Planning and Zoning Commission have elected to participate in this meeting electronically so that we are compliant with such Orders and for the public health and safety of each other and the general public. To make a comment during the public comment portions of the meeting, you will need to use the following methods. If you are accessing the meeting via the Zoom application/program, then you should click the hand icon on the bottom of your screen to "raise your hand". If you are accessing the meeting solely using a dial-in phone line, you will need to "raise your hand" by dialing *9. All individuals with raised hands will be called upon and unmuted one at a time. Please begin your comment by providing your name and address for the record. Also, please note, the chat feature of the Zoom meeting will not be monitored by Commissioners.

Chairman Adkins informed the audience of the procedure for making comments regarding items on the agenda requiring Site Plan Review approval and announced that all nine Commissioners were present.

2. Motion was made by Commissioner Eagleton and seconded by Commissioner O'Donnell to approve the minutes for the August 5, 2020, meeting as written.

Roll Call:

Chairman Adkins	"Yes"
Commissioner Klippel	"Yes"
Commissioner O'Donnell	"Yes"
Commissioner Diel	"Yes"
Commissioner Eagleton	"Yes"
Commissioner Evens	"Yes"
Commissioner Feiner	"Yes"
Commissioner Salzer-Lutz	"Yes"
Commissioner Washington	"Yes"

3. **PZ-2-21 SITE PLAN REVIEW – MULTI FAMILY, 134-138 WEST MADISON**

Submitted: 7-28-20 Automatic Recommendation: 11-25-20

Petitioner's Agent, Tyler Stephens

Opportunity for Public Comment

Planning and Development Services Director Jonathan Raiche stated the petitioner is proposing to construct a 12-unit multi-family building on the combined properties of 134 and 138 West Madison Avenue. The property at 134 West Madison Avenue is currently under contract, and the one-story building is occupied by a law firm. The building at 138 West Madison Avenue is a construction office for the Barclay condominium project immediately to the west, which is owned by the petitioner. The properties are located on a street that is not designated as a "commercial street" in the Envision Kirkwood 2035 Comprehensive Plan. The driveway to the underground parking garage for the Barclay would be shared with the proposed building for access to the 24 parking spaces. Elevations of the proposed building were submitted; however, the Architectural Review Board would review the architecture of the building.

Four modifications to the Zoning Code are being requested:

	Required	Provided
Density	1,200 s.f.	1,128 s.f.
Floor Area Ratio	2.5	2.57
Maximum Building Height	40'	50'-10.5"
Parking Stall Length*	19'	18'

The plans will be revised to meet the Zoning Code requirement for parking stall length.

Approval from the Urban Forestry Commission will be required for the removal of the street trees. A revised plan for the underground parking, floor plans for the third and fourth floors, a revised lighting plan, and an irrigation plan are required. It was noted that the front porch encroaches into the right-of-way. A public hearing will be held before the City Council.

In response to questions from Commissioners, Mr. Raiche responded that the Barclay was approved at a height of 49'-6" and The Madison (which is a mixed-use development allowed up to 60') was approved at 56'-5".

Tyler Stephens of CORE 10 Architecture stated the proposed building is a continuation of The Madison and Barclay. The first and second floors would contain four units each and the third and fourth floors, two units each. The roof-top terrace units have been selling first. The first floor units would have large porches. The trash enclosure area would be shared by the proposed building and Barclay. The transformer between the buildings has not been installed and would be up-sized to accommodate both buildings if this building is approved. The first and second floor units would be 1,930 to 1,980 square feet and the fourth floor units would be 3,115 square feet. The third floor units would be slightly larger than the fourth floor units. Mr. Stephens added that it's not economically feasible to construct a 40' tall building.

In accordance with Section 220.6 of the Zoning Code, Chairman Adkins asked if there was anyone in the audience who had comments concerning the site plan, and no one responded.

John Pennington, partner at Savoy Properties and residing at 354 East Bodley Avenue, stated he originally considered combining this property with the Barclay property to construct a mixed-use development at 60' in height; however, decided to construct two buildings.

Chairman Adkins appointed Commissioners Evens and Feiner to the Subcommittee, and a subcommittee meeting will be held via Zoom on August 27 at 8:45 a.m.

4. Planning and Development Services Director Raiche stated the Bluffs at Lily (PZ-13-19) provide a recorded copy of their subdivision plat; Starbucks (PZ-29-20) provided additional information; the mixed-use development submitted by Opus (PZ-28-20) is having a second Subcommittee Meeting on August 21; the City Council is holding public hearings on September 3 for RiverNorth Strength (PZ-1-21) and the Commerce Bank (PZ-27-20); and the City Council is holding a public hearing on Kirkwood Flats/The James (PZ-15-20) on October 22nd.

There being no further business, motion was made by Commissioner Eagleton and seconded by Commissioner Evens to adjourn at 8:06 p.m. The next meeting will be held on September 2, 2020, at 7 p.m. via Zoom.

Jim Adkins, Chair

David Eagleton, Secretary/Treasurer

Upon request, these minutes can be made available within three working days in an alternate format, such as CD, by calling 314-822-5822. Minutes can also be downloaded from the City's website at www.kirkwoodmo.org, then click on City Clerk, Boards & Commissions, Planning & Zoning Commission.

CITY OF KIRKWOOD

APPLICATION FOR PLANNING AND ZONING COMMISSION ACTION

DATE: 6/26/20

CASE NUMBER: PZ-28-20

PROJECT ADDRESS: 300 N. Kirkwood Road
 ZONING DISTRICT: B2 LOT SIZE: 1.439
 LOCATOR NUMBER: 23M142710

ACTION REQUESTED

- | | |
|--|--|
| <input type="checkbox"/> Zoning Change From _____ to _____
<input type="checkbox"/> Community Unit Plan, Type: _____
<input checked="" type="checkbox"/> Special Use Permit, Category: <u>Assisted Living</u>
<input type="checkbox"/> Subdivision Development, Number of Lots: _____
<input type="checkbox"/> B4 Development Plan
<input type="checkbox"/> B5 Development Plan | <input checked="" type="checkbox"/> Site Plan Review
<input type="checkbox"/> Right-of-Way/Easement Vacation
<input checked="" type="checkbox"/> Other: <u>Zoning Code Text Amendment</u>
Comments: _____

_____ |
|--|--|

PETITIONER INFORMATION

I (We) hereby certify that I (we) have legal interest in the hereinabove described property and that all information given herein is true and a statement of fact

Name (Print): Opus Development Company, LLC Signature: [Signature] Phone No.: 314-930-2005
 Mailing Address: 112 S. Hanley Road, Suite 100 City: St. Louis State: MO Zip: 63105
 E-mail Address: ryan.carlie@opus-group.com

Petitioner's Status: Corporation Partnership Individual
 Relationship of Petitioner to Property: Owner Tenant Option Holder (Attach Copy of Contract) Other

AGENT INFORMATION

Agent's Name: George Stock, P.E. Signature: [Signature] Phone No.: 636-530-9100
 Mailing Address: 257 Chesterfield Bus. Pkwy City: Chesterfield State: MO Zip: 63005
 E-mail Address: george.stock@stockassoc.com

(NOTE: The petitioner's agent, if listed, shall receive the official notice of public hearing)

PROPERTY OWNERS

Signature required or submit proof petitioner has legal interest in property.
 Name: Dennis Hoelzer on behalf of Commerce Bank Name: _____
 Signature: [Signature] Signature: _____
 Address: 8000 Forsyth Blvd. Address: _____
 City/State/Zip: Clayton, MO 63105 City/State/Zip: _____
 Phone: 314-746-3364 Phone: _____

FOR CITY USE ONLY

- Date Received: 6-26-2020 Total Received: \$ 2000 Agenda Date: _____
- B-4/B-5 Development Plan (Preliminary): \$1,000 + _____ Acres @ \$100/Acre or portion over one acre = \$ _____
 - CUP, Preliminary (Multi Family): \$1,000 + _____ Dwelling units @ \$20/Each = \$ _____ = \$ _____
 - CUP, Preliminary (Detached Single Family): \$1,000 + _____ Lots @ \$500/Lot = \$ _____
 - Letter of Credit Extension: \$100
 - Rezoning: \$1,000
 - Site Plan Review: \$1,000
 - Site Plan Review Amendment \$800 or Extension: \$300
 - Site Plan Review, Mixed Use in B2 Zoning District (Preliminary): \$1,000 (includes SPR fee) + \$25/acre or portion over one acre
 - Special Use Permit and Special Use Permit Amendments: \$1,000
 - Subdivision, Preliminary (Detached Single Family): _____ Lots @ \$500/Lot = \$ _____
 - Vacation, Easement: \$75
 - Vacation, Right-of-way: \$100
 - Zoning Code Amendment: \$1,000

Final Subdivision Plat/Community Unit Plan/B-4 or B-5 Development Plan

- Date Received: _____ Total Received: \$ _____ Agenda Date: _____
- B-4 and B-5 Development Plan (Final) or B4 Development Plan Amendment (when public hearing is not required): \$1,000
 - B-5 Development Plan Amendment (when public hearing is not required): \$500
 - CUP Amendment, Type A or Type C: Without public hearing \$500; With public hearing \$800
 - CUP Type C (Final): \$500 + 1-1/4% of \$ _____ = \$ _____
 - CUP Type A or C Time Extension on Final: \$300
 - Sidewalk Waiver on _____ feet @ \$30/Foot = \$ _____ = \$ _____
 - Site Plan Review, Mixed use in B2 Zoning District (Final): \$500
 - Site Plan, Mixed use in B2 Zoning District Amendment: \$300
 - Subdivision Plat or CUP Type A (Final): _____ Lots @ \$100/Lot = \$ _____ + 1-1/4% of \$ _____ = \$ _____
 - Subdivision Plat Development Plan Amendment: \$200

August 25th, 2020

Jonathan Raiche, AICP
City Planner, City of Kirkwood
139 S. Kirkwood Rd
Kirkwood, MO 63122

Re: Redevelopment of 300 N. Kirkwood Road

Dear Jonathan:

Please see below for Opus Development Company's response to comments received by Kirkwood City Staff on July 30th 2020 and Planning & Zoning Subcommittee on August 4th & 21st 2020.

1. Clarification regarding the number of employees, as well as the number of employees on site during a peak shift. The staff also requested confirmation that this was considered in the proposed parking rate for assisted living.

- **Response: The proposed development will employ approximately 55 full-time equivalent employees. The number of full-time equivalent employees on site during a peak shift will be 25-30. The proposed parking rate for assisted living accounts for staff.**

2. Revise ADA van spaces per Kirkwood's parking regulations.

- **Response: The Level 1 A.D.A. spaces are now designed to be 9' wide x 19' long. Note that this dimensional change resulted in the Retail Area Parking Stall count to drop from 31 to 30. For the Lower Level Parking, the A.D.A. spaces are now designed to be 9' wide x 19' long. See revised Architectural Site Plan and Lower Level Parking Plans dated 8-14-2020 enclosed. We meet the requirement.**

3. Clarification regarding the number of bike racks provided and the location, design, and spacing.

- **Response: We have added bikes racks as follows based on our residential portion being categorized as "Other" occupancy and retail portion being categorized as "General Retail":**
 - **The total number of Bike Racks required is 10 – (20 Bikes)**
 - "General Retail" requires 1 rack per 2,500 SF; $7,800/2,500 = 3$ racks
 - "Other" occupancy requires 1 rack per 20 parking spaces; $125 \text{ spaces}/20 = 7$ racks.
 - **The total number of Bike Racks provided is 16 – (32 Bikes)**
 - **Grouping A: At the Retail Parking area we have placed 12 racks - (24 Bikes)**
 - **Grouping B: At the Linear Park we have placed 4 racks – (8 Bikes)**
 - **We exceed the requirement.**

4. Revise sidewalk and planting areas along Kirkwood Road to be 8' each.

- **Response: Requested revisions were made and included on the enclosed plans.**

5. Add sidewalk along the Eastern boundary to connect E. Washington Ave. and E. Adams Ave.

- **Response: A 5' wide sidewalk has been added along the Eastern boundary. This will result in a reduction in the size of the planting area. There will still be room for smaller plantings and the 6' sight proof fence. This sidewalk will also be connected to the Linear Park via a pedestrian friendly crossing. Revisions were made and included on the enclosed plans.**

Respectfully submitted,

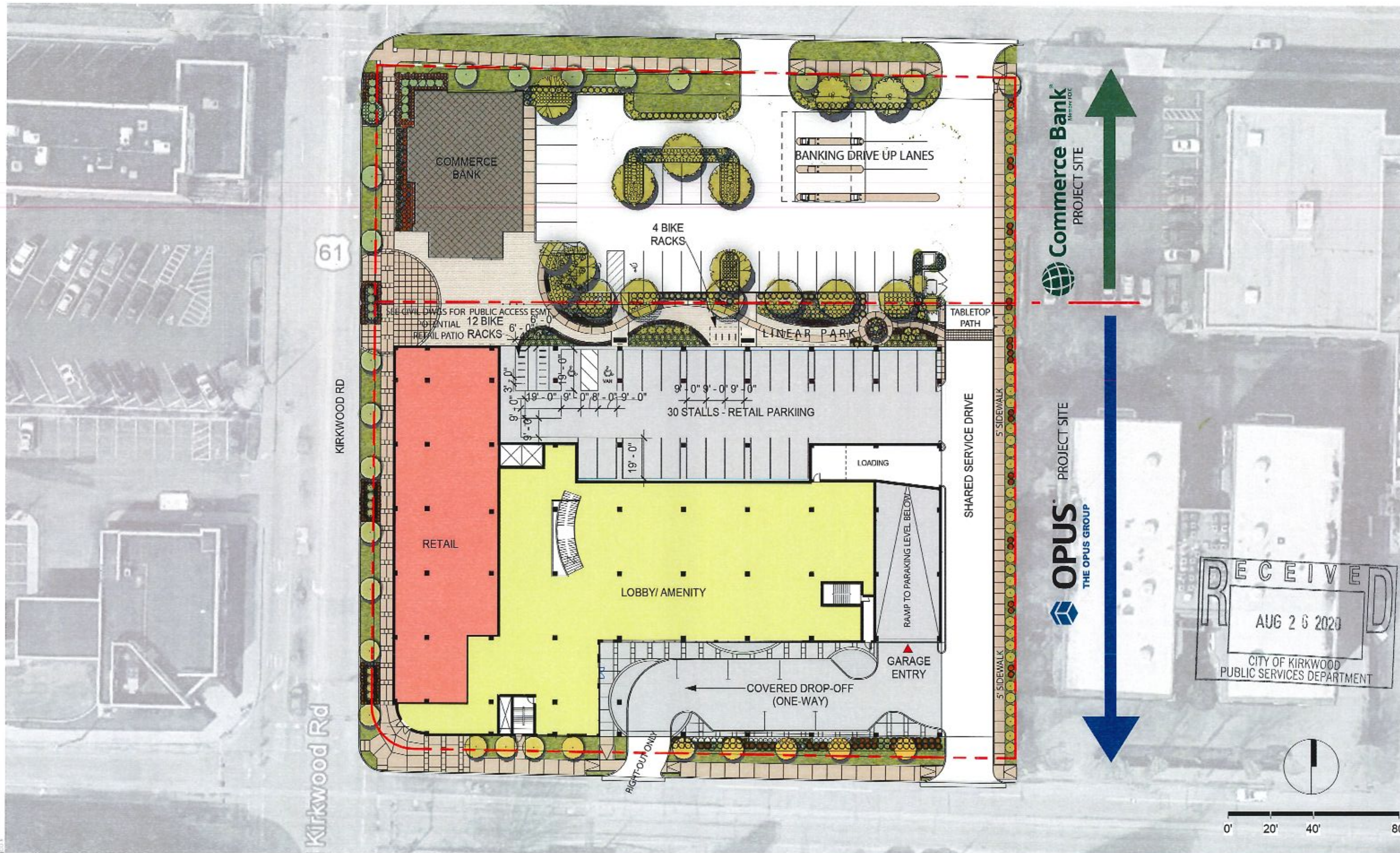
Opus Development Company, L.L.C.

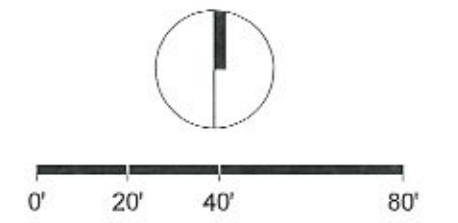
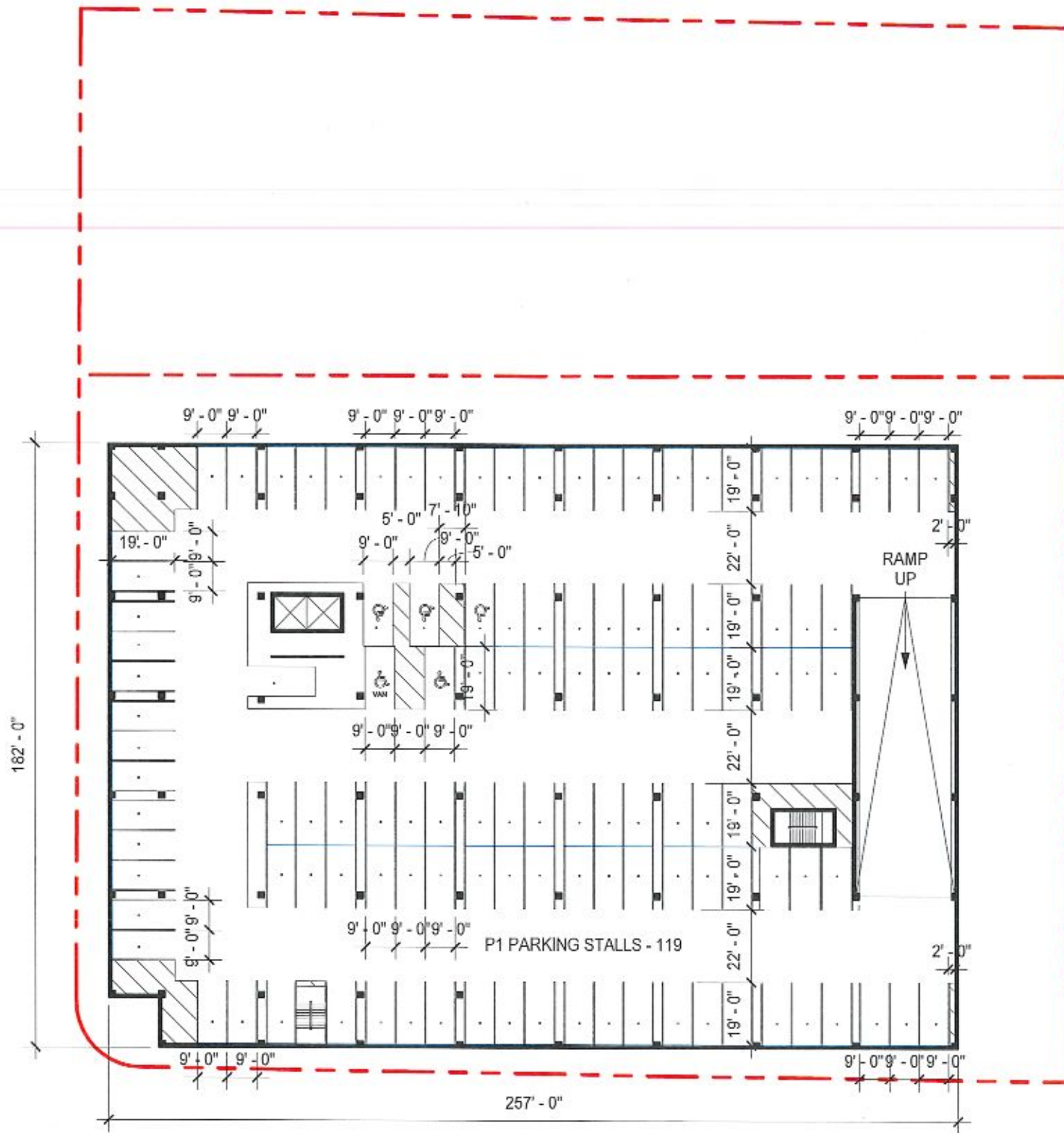


Ryan S. Carlie

Director

31724





31724

PRELIMINARY DEVELOPMENT PLAN
 A TRACT OF LAND BEING PART OF THE WEST 1/2 OF BLOCK 11 OF THE TOWN OF KIRKWOOD AS
 RECORDED IN PLAT BOOK 3, PAGE 57,
 CITY OF KIRKWOOD, ST. LOUIS COUNTY, MISSOURI

ABBREVIATIONS

C.O.	CLEARCUT
D.B.	DEED BOOK
FL	FLOORLINE
FT	FEET
IND	INDUSTRIAL
G	GAS
MIL	MARSH
N.F.	NOW OR FORMERLY
PL	PLAT BOOK
P.C.	PLACED
P.L.C.	POLYMER CONCRETE PIPE
P.S.	POSTAL SERVICE
R.C.	REINFORCED CONCRETE PIPE
S.	SQUARE
T	TELEPHONE CABLE
V.C.R.	VERTICALLY CLAY PIPE
W.	WATER
(60'W)	60'-0" WIDE

- NOTES:**
- EXISTING TOPOGRAPHY AND BOUNDARY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.
 - SUBJECT PROPERTY LIES WITHIN ZONE "C" AREAS AS SHOWN TO BE OUTSIDE 100-YEAR FLOODPLAIN AS INDICATED ON FLOOD MAPS 218B0388K, EFFECTIVE DATE OF AUGUST 2, 1985.
 - ALL EXISTING STRUCTURES AND PAVEMENTS THAT ARE TO BE REMOVED FROM THE SITE SHALL BE INDICATED ON CONSTRUCTION DOCUMENTS.
 - GRADING AND DRAINAGE PER CITY OF KIRKWOOD, ST. LOUIS CO. AND M.S.D. STANDARDS AND SPECIFICATIONS.
 - NO SLOPE SHALL EXCEED 3:1 FOR EARTH SLOPES. STEEPER SLOPES SHALL BE QUALIFIED BY A PROFESSIONAL GEOTECHNICAL ENGINEER.
 - TRASH ENCLOSURE SHALL BE CONSTRUCTED TO MATCH BUILDING MATERIAL.
 - CROSS ACCESS EASEMENT SHALL BE RECORDED WITH THE SUBDIVISION PLAT.
 - STORMWATER MANAGEMENT AND EROSION CONTROL SHALL BE PER CITY OF KIRKWOOD, ST. LOUIS COUNTY AND MSD REQUIREMENTS.

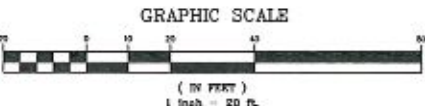
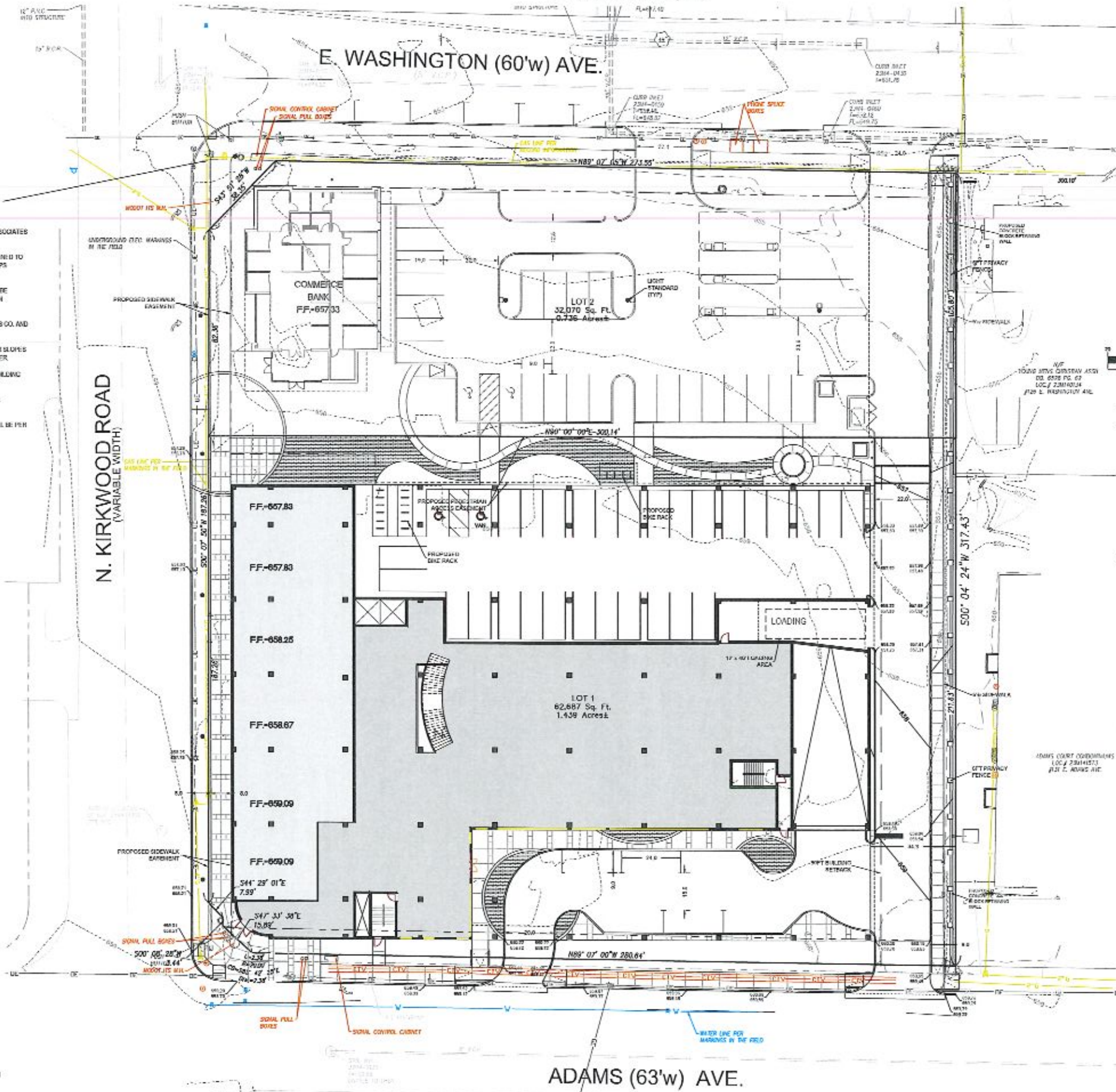
ST. LOUIS COUNTY BENCHMARK

REMARKS: 15116
 1.1" on the southeast corner of 3.0'x4.0' concrete base of signpost north of the west entrance to Commerce Bank building on 6000 North Kirkwood Road, roughly 27 feet east of the centerline of Kirkwood Road, 15 feet east of the east curb of Kirkwood Road, and 100 feet more or less north of the centerline of East Adams Avenue.

SITE BENCHMARK

1.1" on the centerline of 100' S. FROM THE SOUTHERN END OF E. WASHINGTON AVE AND 15' E. OF N. KIRKWOOD ROAD AS SHOWN HEREON.

PREPARED FOR:
 OPUS DEVELOPMENT, LLC
 112 S. HANLEY ROAD, FLOOR 1, SUITE 100
 ST. LOUIS, MO. 63105
 C/O MR. RYAN CARLIE
 & MR. JOSEPH KELLEY



- SITE INFORMATION:**
- PERTINENT DATA:**
 - 1.439 AC. (LOT 1)
 - OWNER: CLAYTON FINANCIAL CORPORATION
 - LOCATOR NO.: 25814210
 - PL. NO.: '10' MOD. USE
 - FIRE DISTRICT: KIRKWOOD FIRE DISTRICT
 - SCHOOL DISTRICT: KIRKWOOD SCHOOL DISTRICT
 - METROPOLITAN FIRE DISTRICT: METROPOLITAN FIRE DISTRICT
 - WATER SERVICE: KIRKWOOD WATER
 - GAS SERVICE: LACLELLE GAS CO.
 - TELEPHONE SERVICE: KIRKWOOD
 - PHONE SERVICE: AT&T
 - STREET ADDRESS: 300 N. KIRKWOOD RD.
 - ZIP CODE: 63122
 - FRAME PANEL: 251830320K
 - Parking:**
 - Sub Level for Residents and Employees: 119 spaces
 - Resident/Visitor Level 1: 0 spaces
 - Retail Under Building Level 1: 30 spaces
 - Building Area:**
 - Sub Level Parking P1: 40,569 sq ft
 - Level 1:
 - Retail: 7,408 sq ft
 - Resident Amenities, Service: 17,147 sq ft
 - Total Level 1: 24,555 sq ft
 - Level 2: 38,476 sq ft
 - Levels 3-5: 34,413 x 4 = 137,652 sq ft
 - Total Levels 2-5: 135,735 sq ft
 - Total Building (2-5 Levels): 150,570

Lot 1

Part of a tract of land as conveyed by Clayton Financial Corporation by instrument recorded in book 13553, Page 1069 of the St. Louis County Records, located in Block 11 of The Town (Now City) of Kirkwood, according to the plat thereof recorded in Plat Book 3, Page 57 of the St. Louis City, Missouri, (Formerly County) records being more particularly described as follows:

Commencing at a bound out corner, located at the northeast corner of a tract of land as conveyed to the Young Men's Christian Association by instrument recorded in book 6728, Page 62 of the above said records, said point also being the northeast corner of above said Clayton Financial Corporation tract, thence along the eastern line thereof, South 00 degrees 04 minutes 24 seconds West, 105.80 feet to the POINT OF BEGINNING of the herein described Lot, thence continuing along the west line of said Clayton Financial Corporation tract, South 00 degrees 04 minutes 24 seconds West, 211.65 feet to a found iron pipe located at the southwest corner of said Clayton Financial Corporation tract, said pipe also being located on the north right-of-way line of Adams Avenue, 63 feet wide, thence along said right-of-way line the following courses and distances: North 89 degrees 07 minutes 00 seconds West, 280.84 feet to a point of curvature to the right having a radius of 20.00 feet, an arc length of 2.78 feet and a chord which bears North 85 degrees 42 minutes 25 seconds West, 2.38 feet; North 47 degrees 33 minutes 38 seconds West, 15.89 feet; North 00 degrees 03 minutes 28 seconds East, 3.44 feet; and North 44 degrees 23 minutes 03 seconds West, 7.59 feet to the west right-of-way line of North Kirkwood Road, 72.5 feet wide; thence along said right-of-way line, North 00 degrees 07 minutes 30 seconds East, 107.25 feet, thence departing said right-of-way line, North 90 degrees 00 minutes 00 seconds East, 300.14 feet to the POINT OF BEGINNING.

Containing 62,686.65 square feet or 1.4391 acres, more or less.

PRELIMINARY DEVELOPMENT PLAN FOR:
KIRKWOOD MIX USE
LOT 1 - OPUS DEVELOPMENT
 300 N. KIRKWOOD RD
 CITY OF KIRKWOOD, MO
 63122

DATE: 01/09/20

GEORGE MICHAEL STOCK
 LICENSED PROFESSIONAL ENGINEER
 NUMBER: E-25116

GEORGE M. STOCK E-25116
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 000995

REVISIONS:

NO.	DESCRIPTION	DATE
1	City Comments	08/19/20
2	Coordination	08/19/20
3	City Submittal	08/26/20

DATE	A.F.	DATE	C.M.S.
02/21/2020		219	6654
2020-		23	M
02/21/20			

SHEET TITLE:
 SITE PLAN

SHEET NO.:
 C-1

STOCK & ASSOCIATES
 Consulting Engineers, Inc.

257 Chesapeake Business Parkway
 St. Louis, MO 63205 PH: (314) 533-1810
 531-9170 FAX: (314) 533-9138
 e-mail: general@stockinc.com
 Web: www.stockinc.com

PRELIMINARY DEVELOPMENT PLAN
 A TRACT OF LAND BEING PART OF THE WEST 1/2 OF BLOCK 11 OF THE TOWN OF KIRKWOOD AS
 RECORDED IN PLAT BOOK 3, PAGE 57,
 CITY OF KIRKWOOD, ST. LOUIS COUNTY, MISSOURI

ABBREVIATIONS

C.O.	CLEARWAY
OR	OPEN BOOK
F	FLUORESCENT
FL	FLOWLINE
FT	FEET
FD	FLOOD
C	CANAL
W.H.	WATER
W.P.	WATER PIPING
W.F.	WATER FLOWLINE
PL	PLAT BOOK
PC	PIPE
P.V.C.	POLYETHYLENE GLYCOL PIPE
AR	ASBESTOS
R.C.P.	REINFORCED CONCRETE PIPE
SS	SQUARE
T	TELEPHONE CABLE
K.C.P.	REINFORCED CLAY PIPE
W	WATER
(M/W)	RIGHT-OF-WAY WIDTH

LEGEND

⊙	IRON MARK	⊙	FIRE HYDRANT
⊙	FOUND IRON ROD	⊙	FIRE DEPARTMENT CONNECTION
⊙	FOUND IRON PIPE	⊙	WATER MANHOLE
⊙	RIGHT OF WAY MARKER	⊙	WATER MESH
⊙	UTILITY POLE	⊙	WATER VALVE
⊙	UTILITY POLE WITH LIGHT	⊙	POST INDICATOR VALVE
⊙	LIGHT STANDARD	⊙	CLEAN OUT
⊙	ELECTRIC METER	⊙	STORM MANHOLE
⊙	ELECTRIC MANHOLE	⊙	GRAVED MANHOLE
⊙	ELECTRIC FEEDER	⊙	STORMWATER INLET
⊙	ELECTRIC SERVICE BOX	⊙	SANITARY MANHOLE
⊙	GAS LINE	⊙	TRIP
⊙	GAS METER	⊙	DISH
⊙	GAS VALVE	⊙	TRAFFIC SIGNAL
⊙	TELEPHONE MANHOLE	⊙	PARKING MESH
⊙	TELEPHONE FEEDER	⊙	STREET SIGN
⊙	TELEPHONE SERVICE BOX	⊙	SPRINKLER
⊙	CABLE TV FEEDER	⊙	MAIL BOX

GENERAL NOTES:

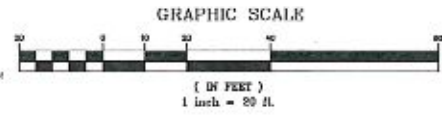
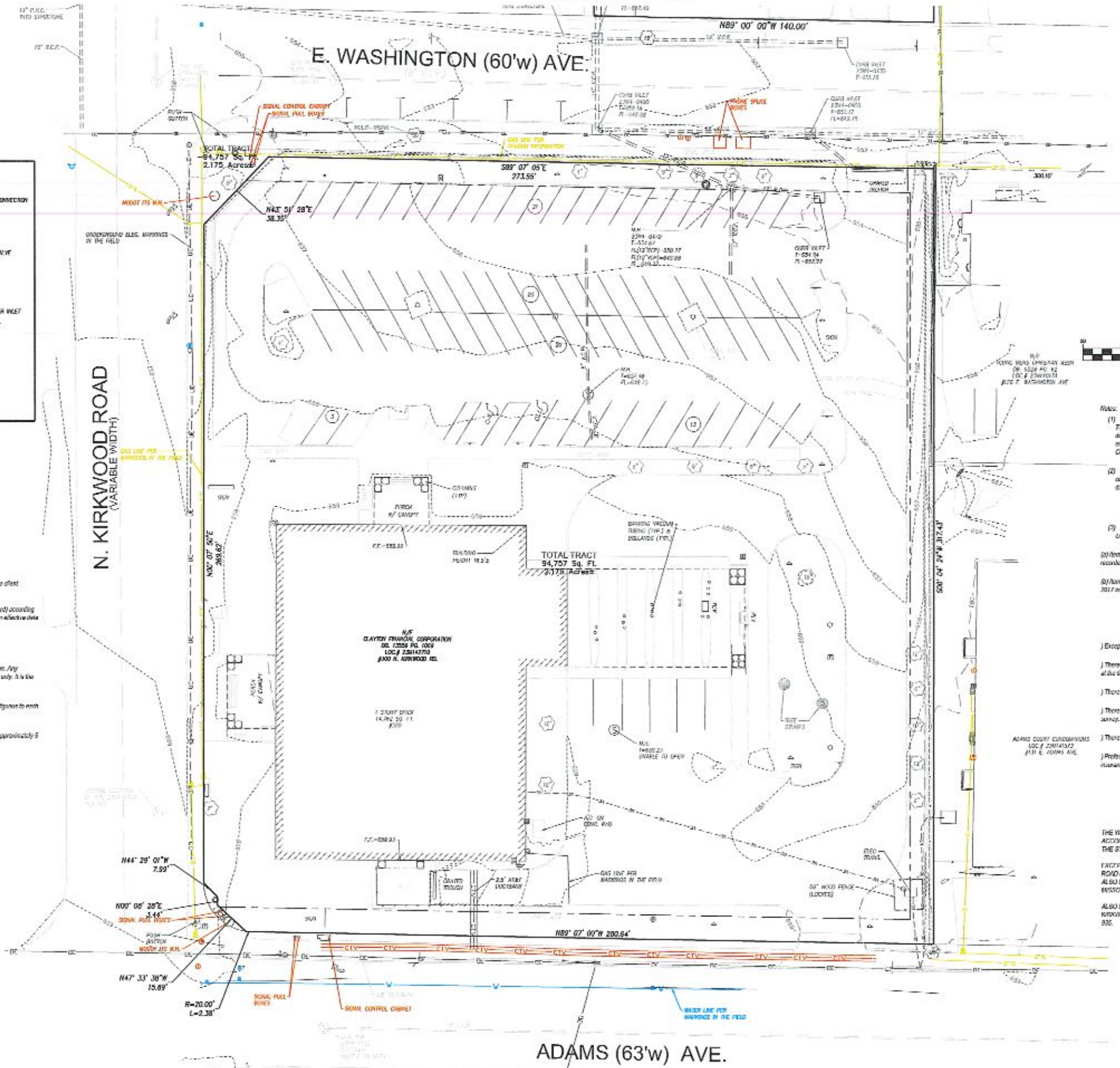
- 1) Subject property as shown is-7 GENERAL ZONING. Note: The above zoning provided by the City of Kirkwood and to verify the client should obtain a zoning endorsement from their life company.
- 2) Subject property is within Flood Zone X (area of minimal flood hazard) according to the National Flood Insurance (FEMA) Map Number 22103C0340N, with an effective date of 02/04/2015.
- 3) There are 74 regular and 2 handicapped parking stalls onsite.
- 4) Utilities shown herein are shown from record and/or survey information. Any location, size and type information should be considered as approximate only. It is the Contractor's responsibility to call Dig-It to verify utility locations.
- 5) The subject property(ies) described in the above commitment are contiguous to each other and the adjoining properties, without any gaps, gaps or overlaps.
- 6) Square footage of the building has been calculated from dimensions approximately 5 feet above grade for the first floor only.
- 7) Date of Survey: 08/10/2020 P.L. 2181

ST. LOUIS COUNTY BENCHMARK

BENCHMARK 1834E
 1" on the southwest corner of 3.5'x4.5' concrete base of signpost north of the west entrance to Commerce Bank addressed at 2200 North Kirkwood Road roughly 37 feet east of the centerline of Kirkwood Road, 10 feet east of the east side of Kirkwood Road, and 180 feet more or less north of the centerline of East Adams Avenue.

SITE BENCHMARK

1" OUT ON CONC. PAD 18" S. FROM THE SOUTHERN LINE OF E. WASHINGTON AVE AND 75' E. OF N. KIRKWOOD ROAD AT SIXTH INTERSECTION.



- Notes:**
- 1) Stock and Associates Consulting Engineers, Inc. used exclusively First American Title Insurance Company, Commitment No. NCS 203270 MPLS, with an effective date of December 20, 2019 at 8:00 a.m. for research of encumbrances and easements. No further research was performed by Stock and Associates Consulting Engineers, Inc.
 - 2) This is the estate or interest in the land described or referred to in the above commitment and covered therein in fee simple, and the benefit as of the effective date thereof vested in:
 Clayton Financial Corporation
 - 3) Title Commitment No. NCS-863870 MPLS with Schedule B Section 2 exceptions.
 - 4) Item No. 8. Subject to Easements, restrictions and setback lines as per plat recorded in Plat Book 3, Page 57 (St. Louis City Recording) "SHUBIN"
 - 5) Item No. 10 Subject to A Temporary Construction Easement recorded August 2, 2017 in Book 27615, Page 0865 "DIXIE DRIVEWAY"

- Except as shown herein there are no known encroachments on subject property.
- There was no evidence of recent earth moving work, building construction observed at the line of this survey.
- There are no known changes in street right of way lines.
- There was no evidence of recent site utility/street construction at the line of this survey.
- There were no markers designated onsite at the line of this survey.
- Professional Liability Insurance policy obtained by the surveyor, certificate of insurance to be furnished upon request.

PROPERTY DESCRIPTION

THE WEST 1/2 OF BLOCK 11 OF THE TOWN (NOW CITY) OF KIRKWOOD, ACCORDING TO 63' PLAT THEREON RECORDED IN PLAT BOOK 3, PAGE 57 OF THE ST. LOUIS CITY, MISSOURI, (FORMERLY COUNTY) RECORDS;

EXCEPTING THEREFROM THAT PORTION TAKEN FOR BROADWAY KIRKWOOD ROAD BY CAUSE NO. 103912 OF THE ST. LOUIS COUNTY CIRCUIT COURT; ALSO EXCEPTING THEREFROM THAT PART CONVEYED TO ST. LOUIS COUNTY, MISSOURI BY DEED RECORDED IN BOOK 7125, PAGE 236;

ALSO LESS AND EXCEPTING THAT PART CONVEYED TO THE CITY OF KIRKWOOD, ACCORDING TO INSTRUMENT RECORDED IN BOOK 22045, PAGE 88.

257 Chesapeake Business Center
 St. Louis, MO 63103 P. (314) 538-8000 FAX (314) 538-9000
 e-mail: general@stockand.com
 Web: www.stockand.com

STOCK & ASSOCIATES
 Consulting Engineers, Inc.

PRELIMINARY DEVELOPMENT PLAN FOR:
KIRKWOOD MIX USE
LOT 1 - OPUS DEVELOPMENT
 300 N. KIRKWOOD RD
 CITY OF KIRKWOOD, MO
 63122

DATE: 8/10/2020

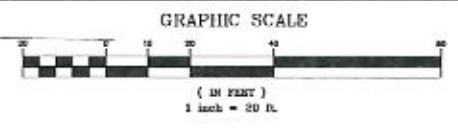
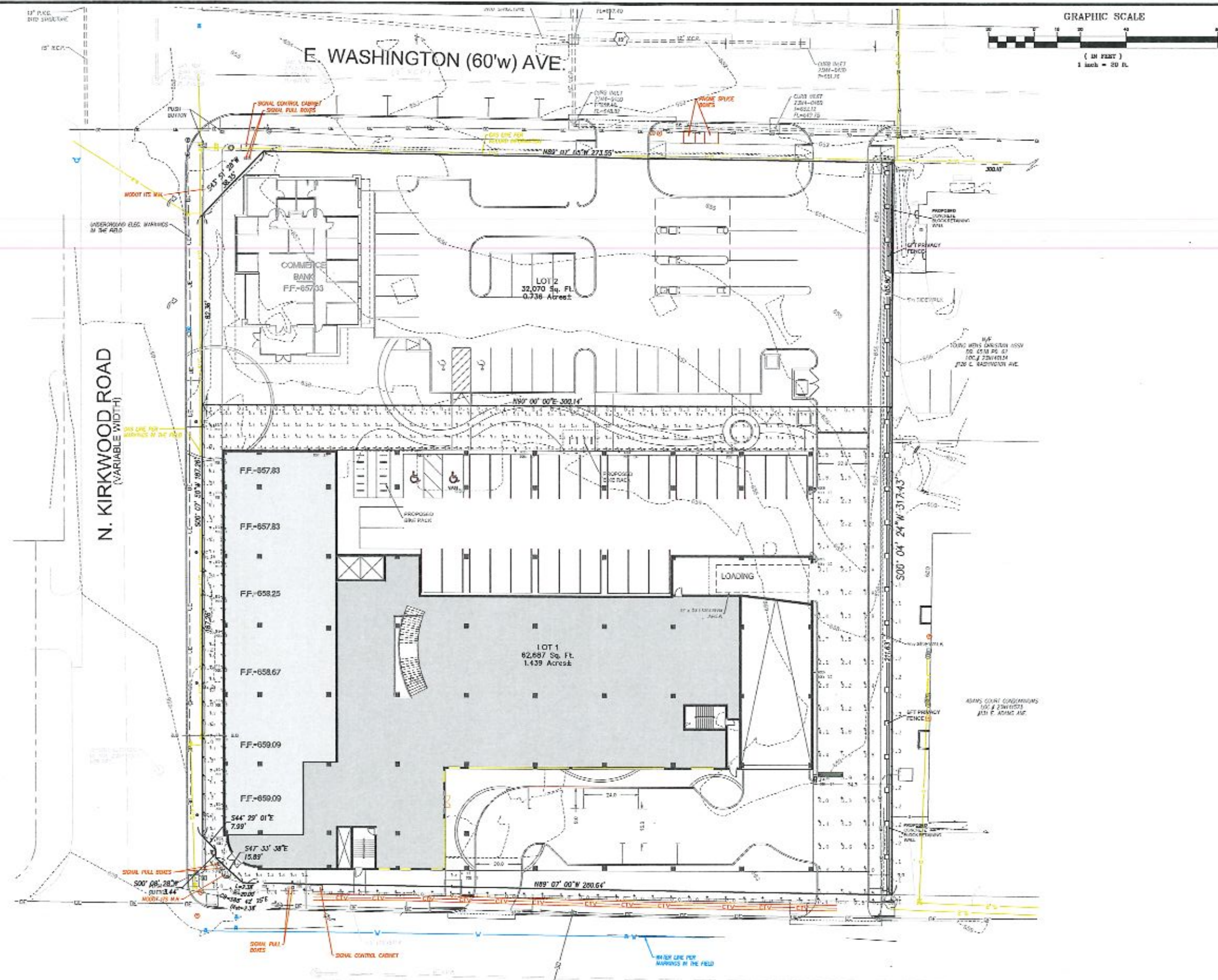
GEORGE M. STOCK E-25116
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 000995

REVISIONS:

NO.	DESCRIPTION	DATE
1	City Comments	08/18/20
2	Coordination	08/18/20
3	City Submitted	08/26/20

SHEET TITLE:
 EXISTING SURVEY

SHEET NO.:
 C-2



202 Descriptive Business Parkway
 St. Louis, MO 63107-1118 (314) 591-3100 FAX (314) 591-3100
 www.stockandassociates.com
 Mr. Michael Stock

Stock & Associates
 Consulting Engineers, Inc.

PRELIMINARY DEVELOPMENT PLAN FOR:
KIRKWOOD MIX USE
LOT 1 - OPUS DEVELOPMENT
 300 N. KIRKWOOD RD
 CITY OF KIRKWOOD, MO
 63122

DATE: 8/19/2020

GEORGE M. STOCK E-25116
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 000886

REVISIONS:

1	City Comments	08/19/20
2	Coordination	08/19/20
3	City Submittal	08/26/20

System	Qty	Label	Arrangement	Notes	Manufacturer	Model	Description
1	17	21	APRAX	N.A.	S. 999	393-DL-1200L-4000-007-22-02010-MK	
2	4	23A	23A	N.A.	S. 228	888-081-162-11-4-0729-2	
3	1	23B	23B	N.A.	S. 912	770-AT-92-180-2L-522-800	
4	5	23C	23C	N.A.	S. 232	122-AV-420-142-61-72	
5	1	23D	23D	N.A.	S. 920	788-07-100-120-91-71	

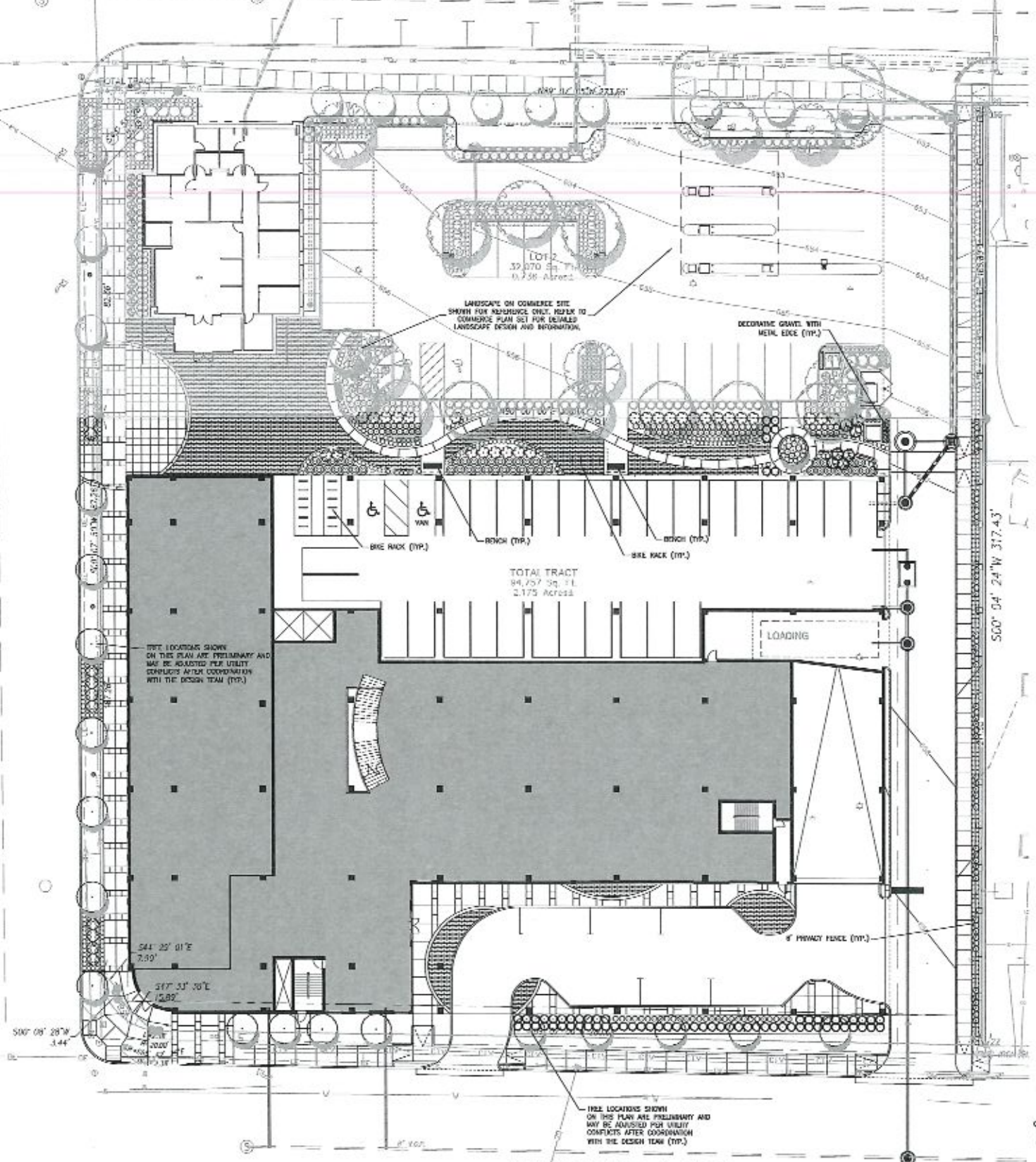
Label	Category	Units	Avg	Max	Min	Req/Min	Max/Min
LANDSCAPE SITE AND SWATHS	Illuminance	fc	7.78	7.8	0.4	3.58	18.00
PROPERTY DRIVE	Illuminance	fc	2.30	4.0	0.3	3.67	15.33
PROPERTY DRIVE 2	Illuminance	fc	9.29	9.5	0.3	N.A.	N.A.
PROPERTY DRIVE 3	Illuminance	fc	9.88	9.8	0.3	N.A.	N.A.
STAIRWELL	Illuminance	fc	3.20	15.0	0.3	N.A.	N.A.
STAIRWELL 2	Illuminance	fc	4.49	9.0	0.3	N.A.	N.A.

SHEET TITLE:
SITE
PHOTOMETRIC
PLAN

SHEET NO.: **LT-1**

E. WASHINGTON (60'w) AVE.

N. KIRKWOOD ROAD
(VARIABLE WIDTH)



ADAMS (63'w) AVE.

PLANT SCHEDULE

CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
☉	17	<i>Quercus robur</i> f. <i>fusiformis</i>	English Oak	As Shown	2" Cal. Min.	B&B

PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
⊙	132	<i>Buxus</i> x <i>'Green Velvet'</i>	Green Velvet Boxwood	As Shown	18" min.	Cont.
⊙	70	<i>Ilex</i> x <i>'nana'</i>	Yew	As Shown	24" min.	Cont.
⊙	10	<i>Cornus sericea</i> <i>'Cardinal'</i>	red twig dogwood	As Shown	24" min.	Cont.
⊙	28	<i>Cornus sericea</i> <i>'Flavescens'</i>	yellow twig dogwood	As Shown	24"-36" min.	Cont.
⊙	47	<i>Rhododendron</i> <i>'Grand's Rose'</i>	evergreen azalea	As Shown	24"-30" min.	Cont.
⊙	7	<i>Jasiperas chinensis</i> <i>'Speciosa'</i>	Chinese juniper	As Shown	4" HT. min.	Cont.

ORNAMENTAL GRASS/GROUND COVER

	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
⊙	4	<i>Pachyandra tenuifolia</i>	Japanese pachyandra	As Shown	1 gal.	Cont.
⊙	28	<i>Calamagrostis</i> x <i>scutellifera</i> <i>'Karl Foerster'</i>	Foerster's Feather Reed Grass	As Shown	2 gal.	Cont.
⊙	532	<i>Liriope spicata</i>	creeping liriope	As Shown	1 gal.	Cont.

LANDSCAPE NOTES:

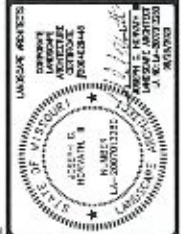
- LANDSCAPE CONTRACTOR TO VERIFY LOCATIONS OF UNDERGROUND UTILITIES BEFORE BEGINNING WORK.
- ALL LANDSCAPE SHALL COMPLY WITH THE CURRENT EDITION OF AISC 7.5.11 "MINIMUM STANDARD FOR HURSTON STOK."
- ALL PLANTS SHALL MEET THE REQUIREMENTS OF THE STATE AND FEDERAL LAW WITH RESPECT TO DISEASE AND INSECT PESTICIDES.
- WALCH AREAS WITH TRIPLE GROUND HARDWOOD MULCH 3" MIN. DEPTH.
- ALL LANDSCAPE SUBMITTALS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT.
- FORMAL LIMITS AND GROUPINGS OF A SPECIES OF TREE, SHRUB, OR ORNAMENTAL SHALL BE MATCHED FOR SIZE, FORM, AND COLOR.
- ALL BAGGERS IN PLANTING BEDS AND TREE PITS SHALL BE DISPOSED WITH PLANTING SOIL AS CALLED OUT IN THE SPECIFICATIONS.
- ALL TREES OUTSIDE OF PLANT BEDS SHALL BE PLANTED WITH A WINDY WING ORIGIN OTHER THAN DREXEL'S REPRESENTATIVE/LANDSCAPE ARCHITECT FOR ANY TREES THAT WILL NOT BE MATCHED FOR SPECIFIC HISTORIC REASONS.
- ALL LANDSCAPING SHALL BE INSTALLED AS SHOWN ON THE APPROVED PLAN.
- IF PLANNING, TREE TRUNKS MUST BE SMOOTH WITH MINIMAL BUCKLES.
- FREE DRINKS, OUTFIT RESTROOMS, TOILETS, TRASH OR ANY OTHER SIMILAR ITEMS SHALL BE REMOVED BEFORE PLANTING.
- A SPARK OUT EDGE SHALL BE CREATED AT ALL LOCATIONS WHERE PLANTING BEDS ARE ADJACENT TO GRASS AREAS UNLESS OTHERWISE NOTED.
- SIZE CIVIL PLANS FOR TYPE AND LOCATION OF DROGON CONTROL MATERIALS.
- DO NOT DISTURB EXISTING UTILITIES WITHIN WORK AREA. SELF PROTECT AND PLANNERS SHALL AVOID ANY EXISTING UTILITIES.
- THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLAN, ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT. ORIGINAL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. WRITTEN QUANTITIES TALES PRECEDENCE OVER GRAPHIC QUANTITIES. NOTIFY OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT OF DISCREPANCIES.
- THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES THE LANDSCAPE ARCHITECT MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DROGGED, OR OUTGROWING IN HEALTH AT THE TIME OF ON-SITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLAN AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
- THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT MAY ELECT TO UPDATE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION AVAILABILITY, OR TO FINANCIAL SHORTAGE AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL QUANTITIES WITH OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT PRIOR TO PURCHASING, SHIPPING OR STORAGE OF PLANT MATERIAL. SHANT CHANGES UNDER REQUEST TO OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT FOR APPROVAL. IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION, SET-STORING CHANGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
- THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBMITTING COMPLIANCE HAS BEEN SIGNED BY THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
- THE DEVELOPER, HIS SUCCESSORS AND AGENTS SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED LANDSCAPE PLAN OR FILE WITH THE PLANNING DEPARTMENT. ALL LANDSCAPING WILL BE INSTALLED AS CALLED OUT ON THE PLAN, PRIOR TO OCCUPANCY OF OCCUPANCY.
- PROTECT AND REINSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN CONTACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY LOCATED TO A DEPTH OF 6" - 12" AND MARKED FOR SPECIFICATION.
- ALL LANDSCAPING AREAS ARE TO HAVE SOIL PREPARATION FOR SPECIFICATIONS. (MINIMUM RATE OF 3 CU. YDS. OF ORGANIC MATTER PER 1000 S.F.). TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EXPOSED. CONTACT OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT FOR RELOCATION OF PLANTS IN QUESTIONED AREAS PRIOR TO INSTALLATION.

SITE INFORMATION:

- PROPOSED NET DRAINAGE - 1,433 AC. (LOT 1)
- LOT SIZE - 32,890 S.F.
- PROPOSED EXTERIOR SPACE - 3,161.3 S.F. (EAST BOUNDARY LINE & PARKING ALONG ADJACENT)
- PROPOSED INTERIORS AREA - 66,620.28 S.F.

- ALL EXISTING TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT SHOW SIGNS OF ACCIDENTALY CHIPPED OR INJURED BY THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT.
- ALL TREES ARE TO BE SAVED AND GRAFTED FOR A PERIOD OF 1 YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING BRANCHES AT THE END OF 1 YEAR FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- ALL TREES INSTALLED ABOVE RETAINING WALLS USING 600-090 MUST BE HUNG OVER TO PROTECT 600-090. IF 600-090 MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT PRIOR TO DRAIN WORK.
- PLACE PLANT MATERIAL IN SERVICE BEDS SO THAT ONCE PLANTS GROW TO FULL SIZE THEY ARE FULLY CONTAINED WITHIN THE SERVICE BED AREA AND DO NOT HANG OVER THE EXISTING LINE.
- REFER TO IRRIGATION PLANS FOR LAYOUT AND TYPES OF IRRIGATION DESIGNED FOR THE LANDSCAPE. IN NO CASE SHALL PROTECTION OF FINISHED GRADE BE REQUIRED FROM BUILDING OR WALL FOUNDATIONS AS STABILIZED BY THE GEOTECHNICAL REPORT. ALL IRRIGATION DISTRIBUTION LINES, HEADS AND CONTROLS SHALL BE KEPT OUTSIDE THE FINISHED GRADE FROM ALL BUILDING AND WALL FOUNDATIONS AS SHOWN ON THE GEOTECHNICAL REPORT.
- LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH INDIVIDUAL ZONES FOR TURF AND NON-TURF AREAS AND MUST INCLUDE A MONITORING PERMANENT DEVICE TO PREVENT OVERWATERING DURING WINTER. FERTILIZER TIME SHOULD BE SCHEDULED WITH AN AUTOMATIC FERTILIZER SYSTEM. IRRIGATION SYSTEM SHALL BE INSTALLED WITHIN 15 DAYS OF INSTALLATION.
- LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIALS.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE IN LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MINIMUM SLOPE MUST BE MAINTAINED FOR THE ENTIRE LENGTH OF THE PROJECT. ALL LANDSCAPE AREAS BETWEEN BUILDING AND CURBS SHALL DRAIN TOWARD THE CURB UNLESS OTHERWISE NOTED ON THE DRAWING. PLANT IN NO CASE SHALL THE GRADE, TREE TRUNKS OR OTHER LANDSCAPE MATERIALS SHOWN ADJACENT TO WALLS, FINISHED SLOPES ON LANDSCAPE AREAS SHALL BE 2% MINIMUM SLOPE SHALL BE 2% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE/LANDSCAPE ARCHITECT.
- SHRUB, BROOMRASTER AND SPERMATOPHYTES ARE TO BE CONTAINED BY A SHOW OUT THAT THERE IS NOT REQUIRED NEXT ADJACENT TO CURB, WALLS, WALLS OR ROAD. FINISHED GRADE SHALL BE 3" OF 2% MINIMUM SLOPE. ROAD SHALL NOT BE SCHEDULED TO SEPARATE MULTIPLE TYPES UNLESS SPECIFIED ON THE PLAN.
- ALL SHRUB BEDS ARE TO BE MULCHED WITH MIN. 3" DEPTH SHREDDED HARDWOOD CHIPS MULCH.
- IF SOIL WITH INADEQUATE NUTRIENTS TO EXISTING MATTER AREAS, OVERLAY EXISTING MATTER AREAS AT THE FULL PROFIT OF THE EXISTING.
- EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESEEDING WITH NEW SOIL TO MATCH EXISTING TURF SPECIES. DISTURBED MATTER AREAS SHALL NOT BE RESEEDING WITH NEW SOIL AND RESTORED WITH SPECIFIED SOIL MIX.
- CONTRACTOR SHALL OVER SEED ALL MOUNDING OR STRONG ACCESS PATHWAYS AND ROADS WITH SPECIFIED SOIL MIX UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL SEEDS SHOWN ON DRAWING ARE IN GRADE (4:1) SHALL RECEIVE EROSION CONTROL BARRIERS, PRIOR TO INSTALLATION, NOTIFY OWNER'S REPRESENTATIVE FOR APPROVAL OF LOCATION AND ANY ADDITIONAL COST IF A CHANGE ORDER IS NECESSARY.
- WHEN COWLED, ALL GRASSES SHALL BE WITH +/- 1/4" OF HURSTON GRASSES AS SHOWN ON THE PLAN.
- COLOR AND THE HEIGHTS OF CONE ARE NOT RESPONSIBLE FOR UTILITY CONTACTS OR DAMAGE TO UTILITIES FOR THIS LANDSCAPE DESIGN. FIELD VERIFY UTILITIES BEFORE BEGINNING WORK. EXTRA CAUTION SHALL BE TAKEN INSTALLING LANDSCAPE AREAS UTILITIES.

THE OPRUS GROUP
112 S. HANLEY RD., FLOOR 1 SUITE 100
ST. LOUIS, MO 63105



KIRKWOOD MIX USE
LANDSCAPE PLAN

320 N. NEWBOLD RD.
HARRISBURG, MO 63123

cole
CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE



DESIGNED BY JOR/JCH
DRAWN BY JCH
CHECKED BY JOR
DRAWING SCALE AS SHOWN
DATE 2/21/2020

Job Number 20-0005
Sheet Number L1.0



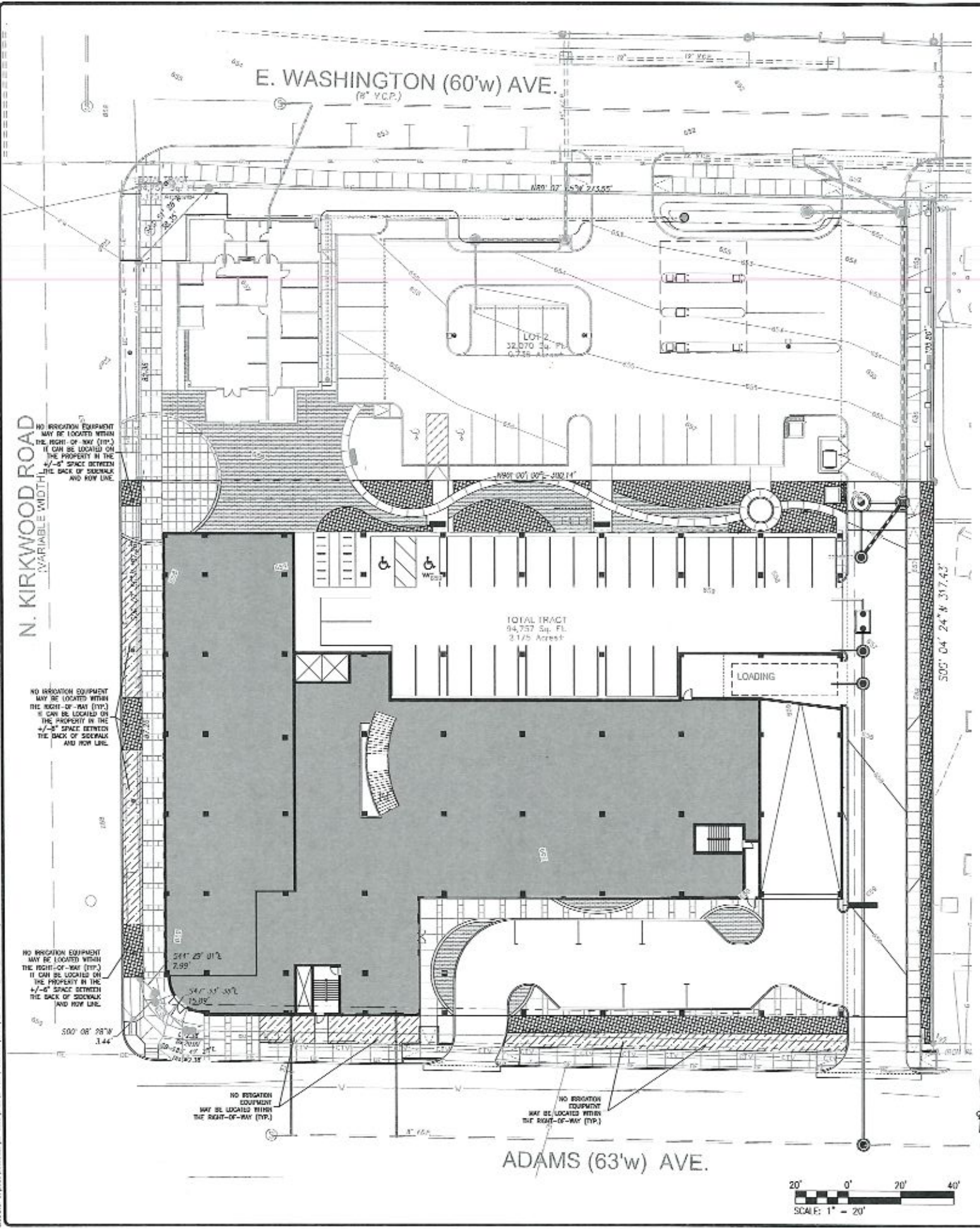
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 Plot By: JCH

LEGEND

-  SHRUB TYPE IRRIGATION
-  LAWN TYPE IRRIGATION

NOTES:

1. SEE IRRIGATION SPECIFICATIONS FOR MORE INFORMATION.
2. THIS DRAWING SHOWS GENERAL IRRIGATION DESIGN INTENT ONLY AND A FULL IRRIGATION DESIGN WILL NEED TO BE PROVIDED BY OTHERS.
3. REFER TO CIVIL DRAWINGS FOR ADDITIONAL UTILITY AND OTHER SITE RELATED INFORMATION.
4. PER CITY REQUIREMENTS, NO IRRIGATION EQUIPMENT MAY BE LOCATED WITHIN THE RIGHT-OF-WAY.



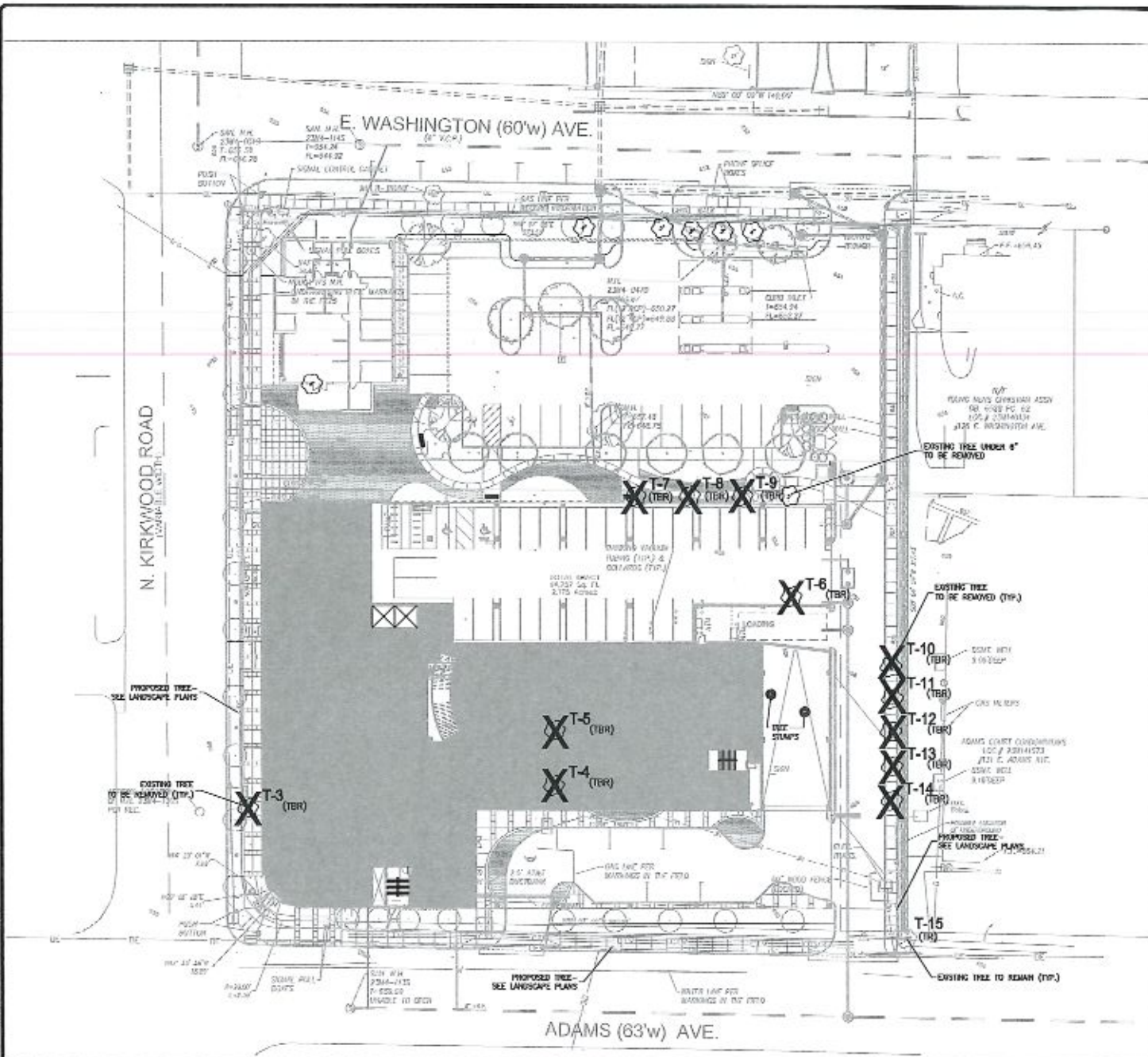
N. KIRKWOOD ROAD
(VARIABLE WIDTH)

E. WASHINGTON (60'w) AVE.
(6" V.C.P.)

ADAMS (63'w) AVE.



<p>DATE: 2/21/2020 DRAWN BY: JCH CHECKED BY: JCH DESIGN/CALC BY: JCH/JCH</p>	<p>NO. 1 DESCRIPTION EST. 2000</p>
<p>THE OPUS GROUP 112 S. HANLEY RD. FLOOR 1 SUITE 100 ST. LOUIS, MO 63105</p>	
	
<p>KIRKWOOD MIX USE</p> <p>300 N. 40th Street ST. LOUIS, MO 63112 APPROX. 03.03.22</p>	
<p>AREAS TO BE IRRIGATED</p>	
<p>cole CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE</p>	
<p>DATE: 2/21/2020 Job Number: 20-0005 Sheet Number: L1.1</p>	



KEY TO DRAWING	TREE COMMON NAME	TREE BOTANICAL NAME	DBH (INCHES)	SAVE Y/N/NO	PROTECTION METHODS	TREE SPECIES CLASS	REPLACEMENT VALUE	REPLACEMENT COST	COMMON NOTES	CANOPY SPREAD
T-1	PIN OAK	QUERCUS PAUNIFLORA	7 NO	NO	NOT ON TREE REPLACEMENT LIST	00	\$200	00	GOOD	00
T-4	CALLERY PEAR	PIRUS CALLERIANA	12 NO	NO	INVASIVE/NOT ON TREE MANUAL LIST	00	50	00	NO HAZ	00
T-5	CALLERY PEAR	PIRUS CALLERIANA	12 NO	NO	INVASIVE/NOT ON TREE MANUAL LIST	00	50	00	NO HAZ	00
T-8	PIN OAK	QUERCUS PAUNIFLORA	18 NO	NO	NOT ON TREE REPLACEMENT LIST	00	500	00	NO HAZ	00
T-7	CALLERY PEAR	PIRUS CALLERIANA	8 NO	NO	INVASIVE/NOT ON TREE MANUAL LIST	00	50	00	NO HAZ	00
T-8	CALLERY PEAR	PIRUS CALLERIANA	6 NO	NO	INVASIVE/NOT ON TREE MANUAL LIST	00	50	00	NO HAZ	00
T-9	CALLERY PEAR	PIRUS CALLERIANA	6 NO	NO	INVASIVE/NOT ON TREE MANUAL LIST	00	50	00	NO HAZ	00
T-10	WHITE PINE	PIRUS STROBUS	12 NO	NO		00	\$191	00	POOR	30
T-11	WHITE PINE	PIRUS STROBUS	6 NO	NO		00	\$132	00	POOR	10
T-12	WHITE PINE	PIRUS STROBUS	10 NO	NO		00	\$191	00	POOR	30
T-13	WHITE PINE	PIRUS STROBUS	12 NO	NO		00	\$202	00	POOR	30
T-14	WHITE PINE	PIRUS STROBUS	6 NO	NO		00	\$132	00	POOR	10
T-15	SHEDDING HEDDER	CARYA LACINIOSA	20 YES	NO	ON PRIVATE PROPERTY	00	50	00	POOR	30

PLANT SCHEDULE						
CANOPY TREES	QTY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	COMMENTS
	17	Quercus robur L. fastigiata	English Oak	As Shown	2" Cal. Min.	DBD
TOTAL TREES:	17					

TREE PROTECTION NOTES:

- MATERIALS**
- THE TREE PROTECTION ZONE (TPZ) IS A RESTRICTED AREA AROUND THE BASE OF THE TREE AT THE CRIP LINE WITH A MINIMUM RADIUS OF TEN (10) FEET. NO WORK, STORAGE, OR EQUIPMENT OPERATION SHALL BE PERFORMED IN THIS AREA. TREE PROTECTION: ORANGE CONES ARE TO BE PLACED AROUND THE TREE ON THE PAVED SURFACES.
 - WARNING SIGN: A WARNING SIGN SHALL BE WEATHER-PROOF AND PROMINENTLY DISPLAYED ON EACH FENCE AT 20 FOOT INTERVALS ON THE TREE PROTECTION FENCING. THE SIGN SHALL BE A MINIMUM 0.5 INCHES BY 11 INCHES AND CLEARLY STATE: "WARNING - TREE PROTECTION ZONE".
 - DURATION: THESE PROTECTIVE MEASURES SHALL BE ERECTED BEFORE CONSTRUCTION BEGINS AND REMAIN IN PLACE UNTIL FINAL INSPECTION OF THE PROJECT.
 - DURING CONSTRUCTION:
 - ALL NEIGHBORS' TREES THAT OVERHANG THE PROJECT SITE SHALL BE PROTECTED FROM IMPACT AND PROTECTION FENCING MAY BE REQUIRED.
 - THE APPLICANT SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY PUBLICLY-OWNED UTILITY LINES THAT ARE DAMAGED DURING THE COURSE OF CONSTRUCTION.
 - THE FOLLOWING TREE PRESERVATION MEASURES APPLY TO ALL TREES TO BE SAVED:
 - NO STORAGE OF MATERIAL, TOPSOIL, VEHICLES, OR EQUIPMENT SHALL BE PERMITTED WITHIN THE TPZ.
 - THE GROUND UNDER AND AROUND THE TREE CANOPY AREA SHALL NOT BE ALTERED.
 - TREES TO BE RETAINED SHALL BE IRRIGATED, AERATED, AND MAINTAINED AS NECESSARY TO ENSURE SURVIVAL.



* TREE VALUES CALCULATED USING THE REPLACEMENT COST METHOD FOUND IN THE BOOK "GUIDE FOR PLANT APPRAISAL" SIXTH EDITION. EACH TREE TO BE REMOVED WAS CALCULATED FOR REPLACEMENT USING ONE 2" CALIBER TREE.

** TREE SURVEY INFORMATION PROVIDED BY OTHERS

** WARNING SIGNS REQUIRED ON EACH FENCE AT 20' INTERVALS.

Underground facilities, structures and utilities have been plotted from available records, records and information and, therefore, do not necessarily reflect the actual existence, coordinates, size, type, number or location or depth of these facilities, structures and utilities.

The Contractor shall be responsible for verifying the actual location of all underground facilities, structures and utilities, either shown or not shown on these plans. The underground facilities, structures and utilities shall be located in the field prior to any grading, excavation or construction of improvements. Should the actual location, size or depth of any underground facilities, structures or utilities differ from those indicated on these plans, the Contractor shall immediately notify Cityplan Engineering prior to proceeding with the installation of any proposed improvements in the area where the difference exists. These provisions shall in no way absolve any party from complying with the underground facility safety and damage prevention Act, Chapter 21A, §2600.

I HEREBY CERTIFY THAT I HAVE VIEWED THE PREMISES AND PROVIDE THIS PROFESSIONAL OPINION REGARDING THE SURVIVABILITY OF SIGNIFICANT TREES ON THE SITE AND ABUTTING THE SITE AND THE APPROPRIATENESS OF PROPOSED TREE REPLACEMENT AND LANDSCAPING. ATTACHED IS A LANDSCAPE PLAN PREPARED BY ME OR UNDER MY DIRECTION.

CAROLYN J. CAIGES/ISA CERTIFIED ARBORIST #NW 4875A

ST. LOUIS
112 S. HANLEY RD., FLOOR 1 SUITE 100
ST. LOUIS, MO 63105

KIRKWOOD MIX USE
306 N. KIRKWOOD RD.
KIRKWOOD, MO 63122

TREE PRESERVATION PLAN

cole
ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE

DESIGN/CALC BY: C.J.G.
DRAWN BY: C.J.G.
CHECKED BY: JOR/C.J.G.
DRAWING SCALE: AS SHOWN
DATE: 2/21/2020
Job Number: 20-0005
Sheet Number: L2.0