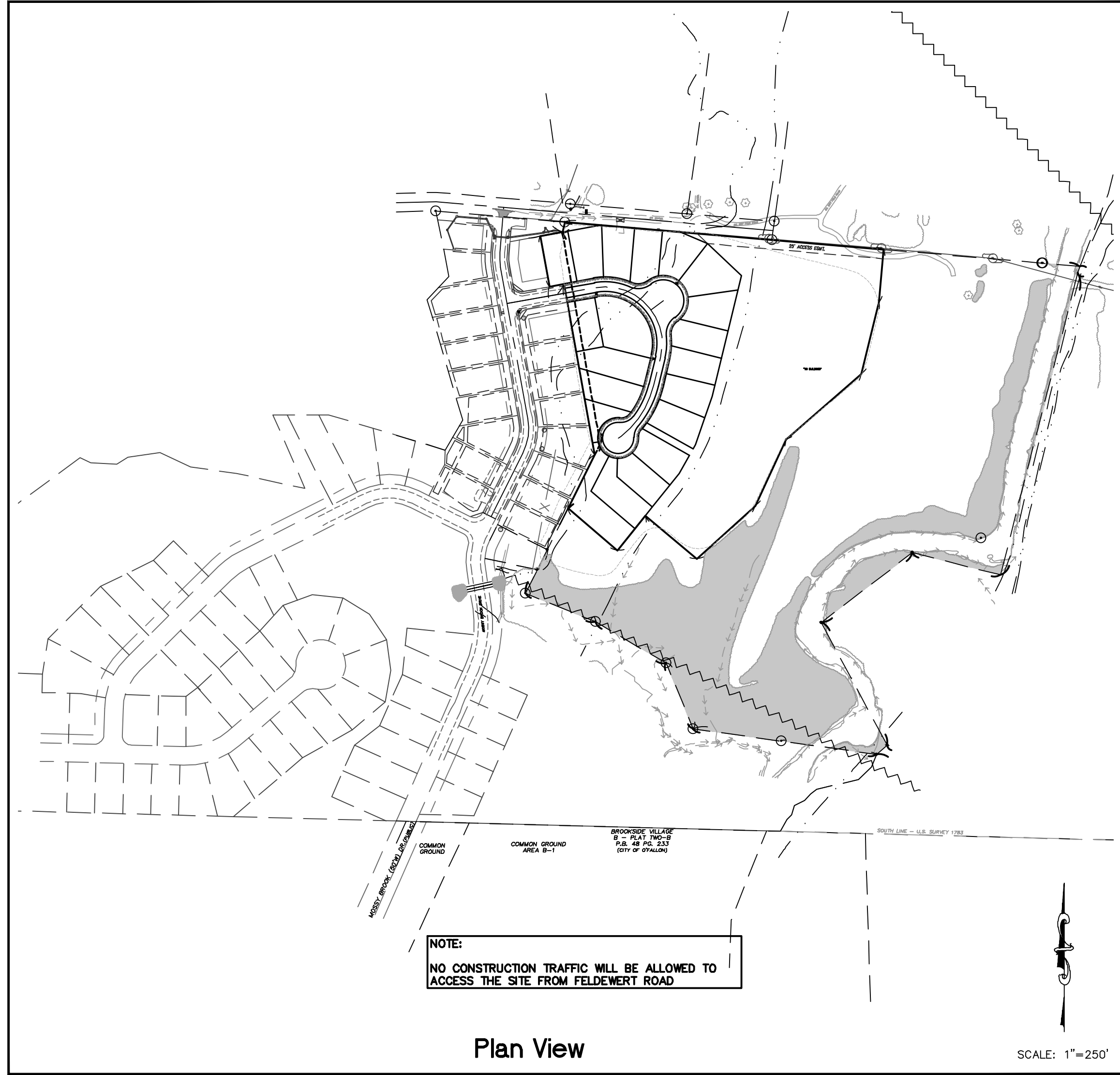


Drawing name: V:\2020224 Brookside Addition Civil\Drawings\Engineering\Improvements\2024 MP.dwg Printed on: Aug 30, 2024 8:13am Printed by: bmoher



Plan View

SCALE: 1"=250'

### Drawing Index

- 1.1 Cover Sheet
- 1.2 General Notes
- 2.1 Existing Conditions
- 3.1 Grading Plan
- 3.2 Borrow Area Details
- 3.3-3.5 SWPPP/SWPPP Details
- 4.1 Site Plan
- 5.1 Utility Plan
- 5.2 Low Pressure Sewer Detail
- 6.1 Street Profiles
- 7.1-7.2 Sanitary Profiles
- 8.1 Sanitary & Storm Profiles
- 8.2 Storm Profiles & Hydraulic Calculations
- 9.1 Drainage Area Map
- 10.1 Warping & Zone of Influence Sections
- 11.1 Landscape Plan
- 12.1 Streetlight Plan
- DTL-1 - DTL-2 Erosion Control Details
- DTL-3 - DTL-4 Sanitary Sewer Details
- DTL-5 - DTL-6 Storm Sewer Details
- DTL-7 - DTL-8 Water Main Details
- DTL-9 - DTL-10 Pavement Details
- DTL-11 Miscellaneous Details

### Benchmarks

PROJECT BENCHMARK: NOS BENCHMARK C-149  
ELEVATION = 545.45' (PUBLISHED NAVD 88 BASED ON GEOID 18)  
ELEVATION = 545.64' (OBSERVED NAVD 88 GEOID 12B) (ADOPTED)

"STANDARD DISK" 1.8 MILES EAST ALONG THE WABASH RAILROAD FROM THE STATION AT GILMORE, ST. CHARLES COUNTY, 80 FEET WEST OF A TOWNSHIP ROAD CROSSING, 48 FEET NORTH OF THE CENTERLINE OF THE TRACK, 12 FEET WEST OF THE RIGHT-OF-WAY FENCE CORNER, AND 2 FEET SOUTH OF THE RIGHT-OF-WAY FENCE.

SITE BENCHMARK: ELEVATION = 481.58' (NAVD 88)

"CROSS" CUT IN TOP OF SOUTH END OF RETAINING WALL, AT THE WEST SIDE OF DRIVEWAY AT 3125 FELDEWERT ROAD; 42 FEET WEST OF A MAILBOX FOR 3125 FELDEWERT ROAD, 51 FEET SOUTH OF A UTILITY POLE AND 61 FEET NORTHEAST OF A UTILITY POLE. (LOCATION SHOWN HEREON).

STATEMENT OF STATE PLANE COORDINATE THE STATE PLANE COORDINATES WERE DETERMINED ON JANUARY 15, 2020 USING TRIMBLE REAL-TIME KINEMATIC GPS HARDWARE FROM THE PROJECT SITE TO A CONTINUOUSLY OPERATING REFERENCE STATION (CORS) WITH AN ID OF MOOF AND A PID OF 0M4688 HAVING PUBLISHED MISSOURI STATE PLANE (EAST ZONE) 2011 COORDINATE VALUES OF NORTH (Y) = 324131.153 METERS AND EAST (X) = 232883.488 METERS. COMBINED GRID FACTOR = 0.999920230 (1 METER = 3.28083333 FEET)

### Project Data

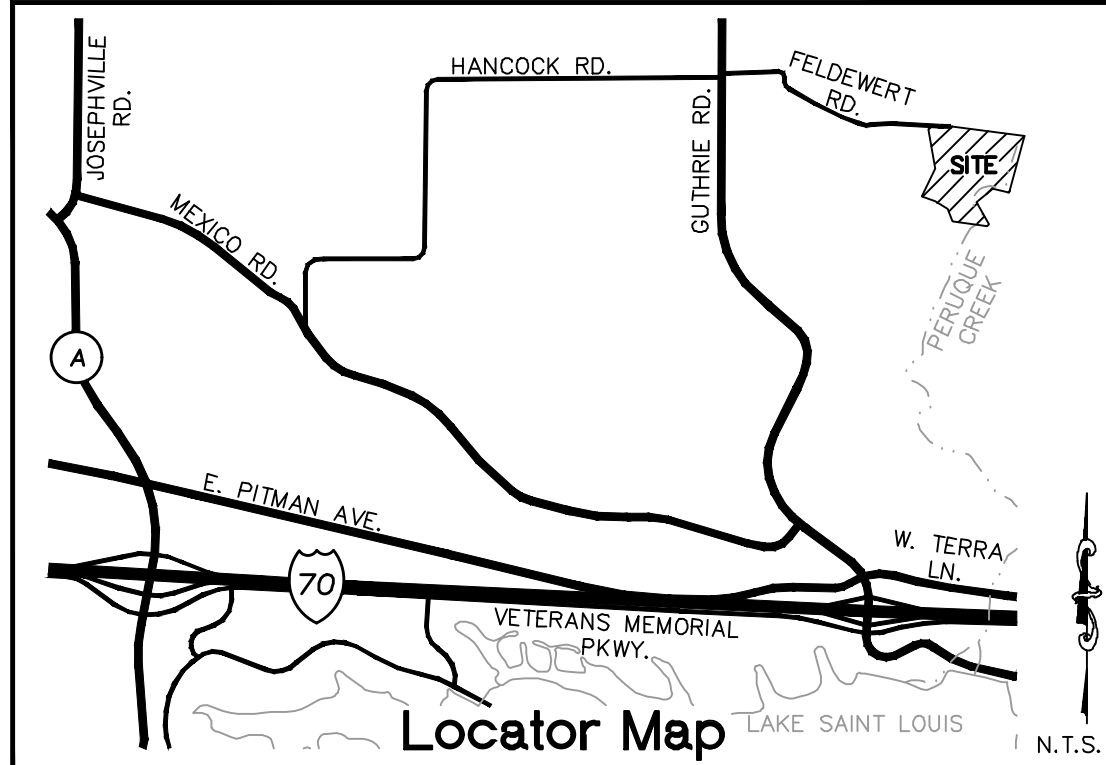
1. TOTAL SITE AREA: 12.68 ACRES
2. TOTAL DISTURBED: 12.49 ACRES
3. FLOOD PLAIN: SUBJECT TRACT IS LOCATED IN FLOOD ZONE "X" (UNSHADED), FLOOD ZONE "X" (SHADED), FLOOD ZONE "AE" AND FLOOD ZONE "AE" (FLOODWAY) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR ST. CHARLES COUNTY, MISSOURI AND INCORPORATED AREAS ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER 29183C02101 EFFECTIVE JANUARY 20, 2016, LOMR-F CASE NO. 21-07-1264A DATED OCTOBER 18, 2021, AND LOMR-F CASE NO. 24-07-0501A DATED AUGUST 14, 2024. FLOOD ZONE "X" (UNSHADED) IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. ZONE "X" (SHADED) IS DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE, AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. ZONE "AE" IS DEFINED AS SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD; BASE FLOOD ELEVATIONS DETERMINED. FLOOD ZONE "AE" (FLOODWAY) IS DEFINED AS FLOODWAY AREAS IN ZONE "AE".
- LOMR-F CASE NO. 24-07-0501A DATED AUGUST 14, 2024 REMOVES FUTURE LOTS 91, 92 & 93 FROM FLOODPLAIN. LOTS 7-14, 94-102, AND 106-109 WILL BE REMOVED BY A FUTURE LOMR-F.
- LIMITS OF FLOOD ZONE AREAS ARE SHOWN HEREON BY SCALING ONLY AND SHOULD BE CONSIDERED APPROXIMATE.
- O'FALLON BUILDING DEPARTMENT WILL REQUIRE AN ELEVATION CERTIFICATE FOR LOTS 10, 11, 12, 91-101, AND 106-109 TO VERIFY THAT THE BASEMENT FLOOR MEETS THE 2 FOOT MINIMUM ELEVATION ABOVE THE 100 YEAR BASE FLOOD ELEVATION.

4. TREE PRESERVATION CALCULATIONS:
  - EXISTING TREES = 0.00 ACRES
  - TREES REMOVED = 0.00 ACRES
  - TREES SAVED = 0.00 ACRES (100%)
  - TREES REQUIRED TO BE SAVED = 0.00 ACRES (20.0%)
5. ESTIMATED SANITARY SEWER FLOW = 7,030 GALLONS/DAY
6. EXISTING TOPOGRAPHY REFLECTS THE PROPOSED GRADING APPROVED BY ST. CHARLES COUNTY. THE TOPOGRAPHY AS SHOWN ON THIS PLAN DOES NOT ACCURATELY REFLECT THE CURRENT FIELD CONDITIONS OF THE SITE.

NOTE:  
SEE SEPARATE INITIAL SWPPP AND ROUGH GRADING PLANS DATED 8-15-2023 FOR SEDIMENT AND EROSION CONTROL DESIGN AND DETAILS

# A SET OF CONSTRUCTION PLANS FOR BROOKSIDE ADDITION PHASE 4

A TRACT OF LAND BEING PART OF A LARGER TRACT OF LAND DESCRIBED IN A DEED TO MILDRED WILSON RECORDED IN DEED BOOK 6725 PAGE 446 OF THE ST. CHARLES COUNTY RECORDS AND TRACT OF LAND BEING PART OF PARCEL "B" [FUTURE DEVELOPMENT AREA] OF "BROOKSIDE ADDITION PLAT ONE", A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN DOCUMENT NO. 2021R-081188 OF THE ST. CHARLES COUNTY, MISSOURI RECORDS, ALL LOCATED IN U.S. SURVEY 1783, TOWNSHIP 47 NORTH, RANGE 2 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI



Locator Map

### Zoning and Density Notes

1. GROSS AREA OF SITE: 12.689 ACRES
2. CURRENT ZONING: R-1 SINGLE FAMILY RESIDENTIAL
3. CURRENT OWNER: LOMBARDO HOMES OF ST. LOUIS, LLC  
4 RESEARCH PARK DRIVE, SUITE 130  
ST. CHARLES, MO 63304
4. DWELLING UNITS PROPOSED: 19 UNITS
5. PARKING:
  - SPACES REQUIRED: (2.0 SPACES/UNIT)(19 UNITS)=38 SPACES
  - TOTAL SPACES SHOWN: 38 GARAGE SPACES  
38 DRIVEWAY SPACES  
00 GUEST PARKING  
76 SPACES PROVIDED

### Conditions of Approval From Planning and Zoning

THE APPROVAL IS CONDITIONAL UPON THE FOLLOWING STAFF RECOMMENDATIONS BEING MET:

1. SHOW ALL LOT SETBACKS ON THE PLAN.
2. VERIFY THE LANDSCAPE CALCULATIONS ARE CORRECT.
3. PLEASE PROVIDE CLARIFICATION WITH REGARD TO THE FOLLOWING:
  - a. INTENDED CONSTRUCTION TIMELINE (BOTH TEMPORARY AND PERMANENT)
  - b. HOW WILL LOT 91 BE SERVICES FOR UTILITIES (WATER, SEWER, ETC.)
  - c. WHAT HAPPENS IF THE REST OF THE PROPOSED DEVELOPMENT DOES NOT OCCUR? HOW WOULD ACCESS TO LOT 91 BE COMPLETED PERMANENTLY, IN THAT SITUATION?
4. PROVIDE TRAFFIC CALMING FOR ALL STREETS OVER 600 FEET IN LENGTH AS REVIEWED AND APPROVED ON THE CONSTRUCTION PLANS.
5. PROVIDE APPROVAL LETTERS FOR ALL OTHER PERMITTING ENTITIES FOR THE SITE SUCH AS SCHOOL DISTRICT, FIRE DISTRICT, SANITARY CAPACITY FOR THE LIFT STATION, MODNR, ETC.
6. INDICATE WITH A NOTE IF STREETLIGHTS ARE TO BE PUBLIC OR PRIVATE.
7. PROVIDE A SCHOOL BUS TURN AROUND ON THE PROPOSED STREET OR PROVIDE APPROVAL OF THE PROPOSED LAYOUT FROM THE SCHOOL DISTRICT.
8. THE PREVIOUSLY APPROVED PLANS FOR THE BROOKSIDE ADDITION WILL NEED TO BE REVISED AS A PART OF THE REVIEW OF THIS PROPOSED 19 LOT ADDITION.
9. ADDRESS THE CONSTRUCTION PLAN COMMENTS.

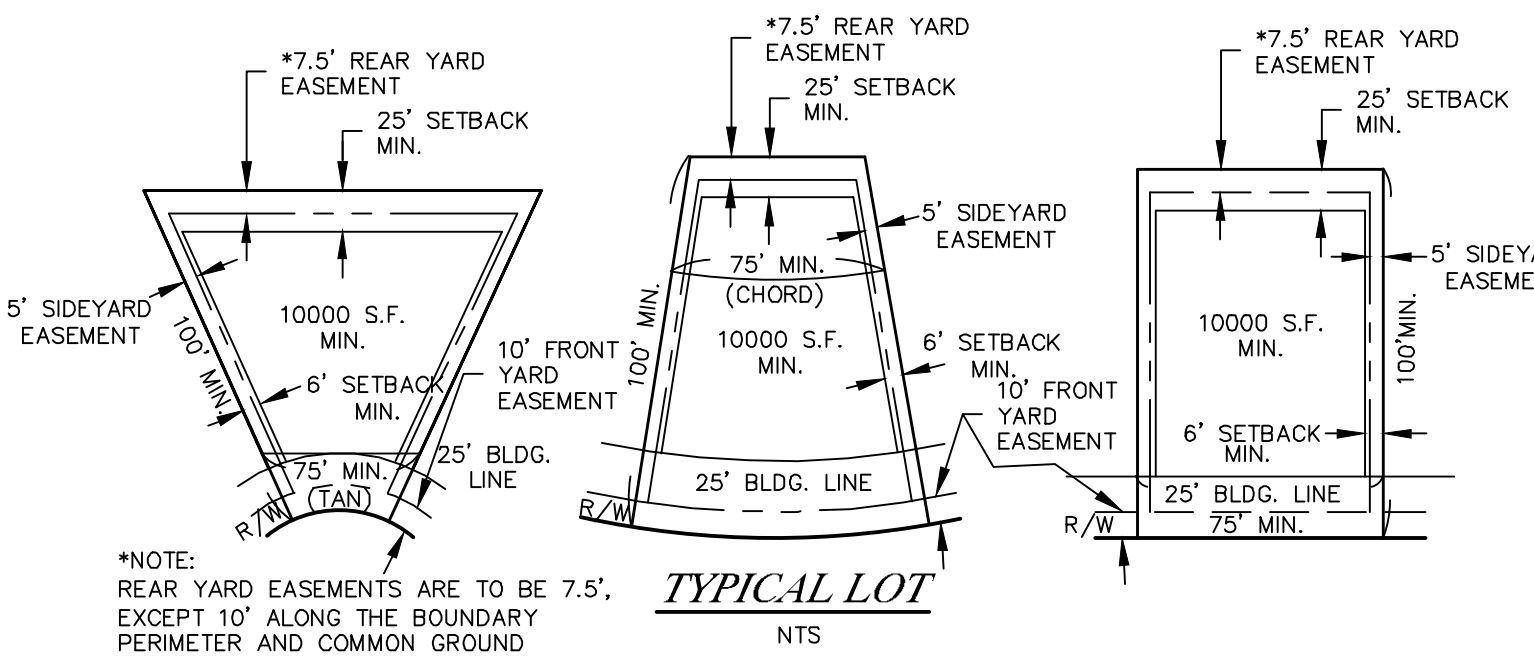
MUNICIPAL CODE REQUIREMENTS BEING PROVIDED IN CONJUNCTION WITH THE CONSTRUCTION SITE PLANS:

1. PROVIDE 10 FEET WIDE UTILITY EASEMENTS BEHIND ALL RIGHT-OF-WAY LINES AND SHOW ALL EASEMENTS REQUIRED ON ALL LOTS.
2. ALL SANITARY SEWERS APPEAR TO POSSIBLY BE GRINDER PUMPS/FORCE MAINS. PROVIDE A DETAIL ON THE PLAN.
3. NOTE THAT ALL LATERALS ARE TO BE SCHEDULE 40 PVC.
4. SHOW WATER METERS IN RIGHT-OF-WAY OR ADJACENT TO THE CITY.
5. PROVIDE USPS APPROVAL FOR MAILBOX KIOSK LOCATION.
6. PROVIDE EVIDENCE THAT DETENTION AND STORMWATER CLEANSING HAS BEEN PROVIDED FOR THIS DEVELOPMENT.
7. PROVIDE COPIES OF ALL GRADING AND PERMITS APPROVED BY ST. CHARLES COUNTY.
8. IN ALL AREAS OF SPECIAL FLOOD HAZARDS WHERE BASE FLOOD ELEVATION DATA HAS BEEN PROVIDED AS SET FORTH IN ARTICLE III, SECTION 415.070 OR ARTICLE IV, SECTION 415.140(A)(8) (ZONES A AND AE) OR AREAS THAT HAVE HAD FILL PLACED TO REMOVE IT FROM THE SPECIAL FLOOD HAZARD AREA, THE FOLLOWING PROVISIONS ARE REQUIRED: RESIDENTIAL CONSTRUCTION, NEW CONSTRUCTION OR SUBSTANTIAL IMPROVEMENT OF ANY RESIDENTIAL STRUCTURE SHALL HAVE THE LOWEST FLOOR, INCLUDING BASEMENT, ELEVATED TO TWO (2) FEET OR MORE ABOVE THE BASE FLOOD ELEVATION.
9. DEVELOPMENT LOCATED WITHIN AREAS OF SPECIAL FLOOD HAZARD ESTABLISHED IN ARTICLE III, SECTION 415.070 ARE AREAS DESIGNATED AS FLOODWAYS THAT ARE ADOPTED BASED ON THE PRINCIPLE THAT THE AREA CHOSEN FOR THE REGULATORY FLOODWAY MUST BE DESIGNED TO CARRY THE WATERS OF THE BASE FLOOD WITHOUT INCREASING THE WATER SURFACE ELEVATION OF THE ONE PERCENT (1%) CHANCE OF FLOOD IN ANY GIVEN YEAR. SINCE THE FLOODWAY IS AN EXTREMELY HAZARDOUS AREA DUE TO THE VELOCITY OF FLOOD WATERS WHICH CARRY DEBRIS, POTENTIAL PROJECTILES AND EROSION POTENTIAL, THE FOLLOWING PROVISION SHALL APPLY: PROHIBIT ENCROACHMENTS, INCLUDING FILL, NEW CONSTRUCTION, SUBSTANTIAL IMPROVEMENTS AND OTHER DEVELOPMENTS UNLESS CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER IS PROVIDED DEMONSTRATING THAT ENCROACHMENTS SHALL NOT RESULT IN ANY INCREASE IN FLOOD LEVELS DURING OCCURRENCE OF THE BASE FLOOD DISCHARGE.
10. NOTE ON PLANS THAT ALL LOWEST FLOOR ELEVATIONS ARE TO BE 2 FEET ABOVE BASE FLOOD ELEVATION.
11. NOTE THE REQUIREMENT ON THE PLANS THAT THE FIRST FIVE (5) MANHOLES DOWNSTREAM OF THE SEWER CONNECTION MUST BE EPOXY COATED.

### Legal Description

A TRACT OF LAND BEING PART OF A LARGER TRACT OF LAND DESCRIBED IN A DEED TO MILDRED WILSON RECORDED IN DEED BOOK 6725 PAGE 446 OF THE ST. CHARLES COUNTY RECORDS AND TRACT OF LAND BEING PART OF PARCEL "B" [FUTURE DEVELOPMENT AREA] OF "BROOKSIDE ADDITION PLAT ONE", A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN DOCUMENT NO. 2021R-081188 OF THE ST. CHARLES COUNTY, MISSOURI RECORDS, ALL LOCATED IN U.S. SURVEY 1783, TOWNSHIP 47 NORTH, RANGE 2 EAST OF THE FIFTH PRINCIPAL MERIDIAN, CITY OF O'FALLON, ST. CHARLES COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON PIPE FOUND AT THE NORTHEAST CORNER OF THE ABOVEMENTIONED PARCEL "B" [FUTURE DEVELOPMENT AREA]; SAID POINT ALSO BEING ON THE SOUTH LINE OF FELDEWERT ROAD (50 FEET WIDE) AND BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE WITH THE SOUTH LINE OF FELDEWERT ROAD AND THE EASTERLY PROLONGATION THEREOF, SOUTH 85°04'24" EAST A DISTANCE OF 859.76 FEET TO A POINT; THENCE, DEPARTING THE NORTH LINE OF THE AFORESAID WILSON TRACT WITH THE FOLLOWING COURSES AND DISTANCES: SOUTH 04°34'03" WEST, 142.62 FEET; SOUTH 13°55'05" WEST, 198.52 FEET; SOUTH 48°58'21" WEST, 268.70 FEET; SOUTH 24°50'32" WEST, 196.30 FEET; SOUTH 47°39'39" WEST, 212.27 FEET; NORTH 50°17'57" WEST, 181.16 FEET; SOUTH 38°50'01" WEST, 119.10 FEET AND NORTH 49°36'02" WEST, 174.53 FEET TO A POINT ON THE EAST LINE OF AFORESAID PARCEL "B" [FUTURE DEVELOPMENT AREA] AS PER "BROOKSIDE ADDITION PLAT ONE" AND BEING DISTANT NORTH 26°35'09" EAST, 124.03 FEET FROM THE NORTHEAST CORNER OF LOT 6 OF SAID BROOKSIDE ADDITION PLAT ONE; THENCE, WITH THE EAST LINE OF SAID PARCEL "B", NORTH 26°35'09" EAST, 160.28 FEET TO A POINT; THENCE LEAVING SAID EAST LINE AND PROCEEDING THE FOLLOWING COURSES AND DISTANCES: NORTH 10°11'23" WEST, 467.47 FEET; NORTH 79°48'37" EAST, 39.73 FEET; NORTH 10°11'23" WEST, 137.87; SOUTH 79°48'37" WEST, 60.78 FEET, NORTH 12°53'36" EAST, 27.97 FEET TO THE POINT OF BEGINNING AND CONTAINING 552,766 SQUARE FEET, OR 12.6898 ACRES MORE OR LESS, ACCORDING TO SURVEY PERFORMED BY THE STERLING COMPANY DURING THE MONTH OF OCTOBER, 2020 AND NOVEMBER 2022 UNDER ORDER NUMBER 22-09-284.



### Legend

EXISTING		PROPOSED
--- 542 ---	CONTOURS	(542)
X 536	SPOT ELEVATIONS	XXX.X
	CENTER LINE	
	BUILDINGS, ETC.	
X - X	TREE LINE	
	FENCE	X - X
	SILTATION CONTROL FENCE	X - X - X
	STORM SEWERS	
	SANITARY SEWERS	
EX CB	CATCH BASIN	AI NO
EX DO	AREA INLET	SI NO
EX MH	GRATED INLET	DO NO
	DOUBLE CURB INLET	MH NO
	STORM MANHOLE	FE NO
	SANITARY MANHOLE	CO
	FLARED END SECTION	
	CLEANOUT	T
	LATERAL CONNECTION	
	UTILITY OR POWER POLE	
	FIRE HYDRANT	
	TEST HOLE	
	PAVEMENT	
G	GAS MAIN & SIZE	(G) (G)
W	WATER MAIN & SIZE	(W) (W)
T	TELEPHONE	(T) (T)
UE	ELECTRIC (U) UNDERGROUND	(UE)
OHE	ELECTRIC (O) OVERHEAD	(OHE)
	TO BE REMOVED	TBR
	TO BE REMOVED & RELOCATED/REPLACED	TBRR
TC	TOP OF CURB	(TC)
	SWALE	
	LIGHT STANDARD	
	STREET SIGN	
P.S. ELEV	PARKING STALLS	P.S.
X	PARKING LIGHT	
	JURISDICTIONAL STREAM	

H.R. ~ DENOTES PROPOSED HANDICAP RAMP W/ TRUNCATED DOME  
TF ~ TOP OF FOUNDATION ELEVATION  
BF ~ BASEMENT FLOOR ELEVATION  
LS ~ LATERAL STATION FROM DOWNSTREAM MANHOLE

NOTE:  
AN "\*" WITH THE LOT NUMBER INDICATES A LOT WHICH IS MORE SUSCEPTIBLE TO STREET MOVEMENT.

ISSUE	DATE / REMARKS
1	1-19-2024 Initial Submittal
2	8-01-2024 City Comment Revisions
3	6-21-2024 City Comment Revisions
4	7-30-2024 City Comment Revisions
5	8-30-2024 City Comment Revisions

### Utility Contacts

#### Sanitary Sewers

City of O'Fallon  
100 N. Main St.  
O'Fallon, MO, 63366  
Contact: 636-240-2000

Bucket Creek Sanitary District  
3850 Highway  
O'Fallon, MO, 63368  
636-441-1244

#### Water

City of O'Fallon  
100 N. Main St.  
O'Fallon, MO, 63366  
Contact: 636-240-2000

Missouri American Water Co.  
727 Greig Rd.  
St. Louis, MO, 63141  
1-866-430-0820

Public Water Supply District No. 2  
P.O. Box 367  
O'Fallon, MO, 63366  
636-561-3737

#### Storm Sewer

City of O'Fallon  
100 N. Main St.  
O'Fallon, MO, 63366  
636-240-2000

#### Electric

Curve River Electric Co.  
P.O. Box 160  
Troy, MO, 63379-0160  
1-866-392-3709

Ameren Missouri  
200 Callahan Road  
Wentzville, MO, 63385  
636-639-8312

#### Gas

Spire Gas  
6400 Graham Road  
St. Louis, MO, 63134  
314-522-2297

#### Telephone

CenturyLink  
1151 Century Tel Dr.  
Wentzville, MO, 63385  
636-332-7261

#### Fire District

O'Fallon Fire Protection District  
111 Laura K Dr.  
O'Fallon, MO, 63366  
636-272-3493

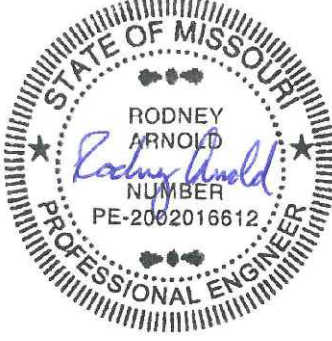
Wentzville Fire District  
209 West Pearce Blvd.  
Wentzville, MO, 63385

Cottleville Fire Protection District  
1388 Motherhead Rd.  
St. Charles, MO, 63304  
636-447-6655

New Melle Fire Protection District  
3705 Mill St.  
New Melle, MO, 63365  
636-828-5528

PROJECT TITLE  
**BROOKSIDE**  
**ADDITION**  
**PHASE 4**  
O'FALLON, MISSOURI

THE **STERLING** CO.  
ENGINEERS & SURVEYORS  
5055 New Baumgartner Road  
St. Louis, Missouri 63129  
Ph 314-487-0440 Fax 314-487-8944  
www.sterling-eng-survey.com  
Corporate Certificate of Authority #001348



Date: 8/30/2024  
RODNEY ARNOLD  
LICENSE # PE-2002016612  
Professional Engineer

Lombardo Homes of St. Louis, LLC  
4 Research Park Drive, Suite 130  
St. Charles, Missouri 63304  
Ph. (636) 265-2710  
Fax (636) 695-3195  
www.lombardohomesstlouis.com

COVER SHEET

P+Z No. 23-010457  
City No. 24-000568  
Date: 8/30/2024  
Job No. 22-09-284

Page No.

1.1

IMP

CITY OF O'FALLON  
COMMUNITY DEVELOPMENT DEPARTMENT  
ACCEPTED FOR CONSTRUCTION  
BY: DATE **NOVEMBER 18, 2024**  
PROFESSIONAL ENGINEER'S SEAL  
INDICATES RESPONSIBILITY FOR DESIGN