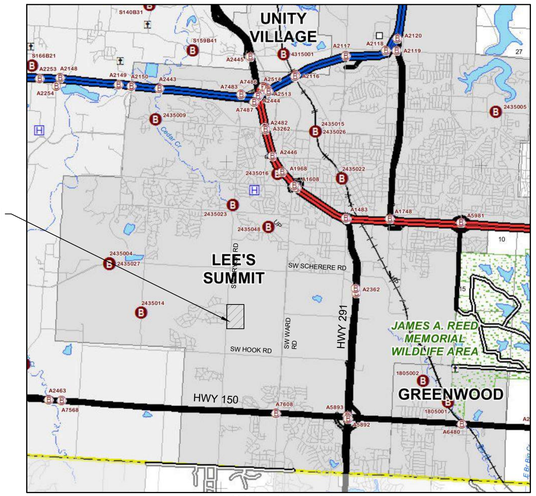
CONSTRUCTION PLANS
FOR
WHISPERING WOODS POOL
CITY OF LEE'S SUMMIT
JACKSON COUNTY, MISSOURI

PL2022225
PRCOM20226005

DESCRIPTION

PROPERTY DESCRIPTION
CONTAINING 105,623 SQUARE FEET OR 2.42 ACRES

TRACT C OF WHISPERING WOODS, 1ST PLAT, LOTS 1-33

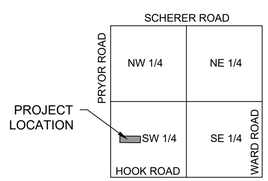


LOCATION MAP
N.T.S.

Sheet List Table	
Sheet Number	Sheet Title
C1.0	TITLE SHEET
C1.1	GENERAL NOTES
C2.0	OVERALL SITE PLAN
C2.1	SITE PLAN
C3.0	GRADING PLAN
C3.1	SPOT ELEVATION PLAN
C3.2	SIDEWALK RAMP PLAN
C3.3	EROSION CONTROL PLAN
C3.4	UTILITY PLAN
C4.0	DETAILS
C4.1	DETAILS
L1.0	LANDSCAPE PLAN

UTILITY SERVICE NUMBERS	
SPECTRUM	886-874-2389
EVERGY	816-220-5213
SPIRE GAS	816-399-9633
LEE'S SUMMIT PUBLIC WORKS	816-969-1800
CITY PLANNING & DEVELOPMENT	816-969-1600
FIRE DEPARTMENT	816-969-1300

CALL OR CLICK BEFORE YOU DIG
1-800-DIG-RITE or 811
1-800-344-7483
MISSOURI ONE CALL SYSTEM
mo1call.com



VICINITY MAP
N.T.S.

APPROVED:

City Engineer _____ Date _____

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

Digitally signed by Mike Weisenborn
Date: 2023.03.20 11:35:32-05'00'

DEVELOPER:

WHISPERING WOODS LAND, L.L.C.
803 P.C.A. ROAD
WARRENSBURG, MO 64093
AGENT: RICK FRYE
PHONE: 816.564.2230
FAX: 660.429.1801

MARK	REVISION	DATE	BY
Engineer: SD			
Technician: JS	Checked By: SD	Scale: 1" =	
	Date: 04-26-2022	T-R-S: 47N-32W-24	

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet C1.0

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL
LEE'S SUMMIT, MO
TITLE SHEET

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.
802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11
Sheet C1.0

LEE'S SUMMIT NOTES:

1. CONTRACTOR SHALL REFER TO THE CURRENT VERSION OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION (D&C) MANUAL.
2. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF LEE'S SUMMIT, MISSOURI.
3. LINEAL FOOT MEASUREMENTS SHOWN ON THESE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
4. NO GEOLOGICAL INVESTIGATION WAS PERFORMED ON THIS PROJECT.
5. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND ARE APPROXIMATE ONLY. THEY DO NOT CONSTITUTE ACTUAL FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
6. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES.
7. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT A LOCATION TO BE SELECTED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE, SUCH LOCATION TO BE ON THE SITE.
8. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING AL PHASES OF CONSTRUCTION, HE SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS AND FOLLOW THE EROSION CONTROL PLAN PREPARED BY THE DESIGN ENGINEER.
9. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
10. SUBGRADE SOIL FOR ALL CONCRETE STRUCTURES, REGARDLESS OF THE TYPE OR LOCATION, SHALL BE FIRM, DENSE AND THOROUGHLY COMPACTED AND CONSOLIDATED; SHALL BE FREE FROM MUCK AND MUD; AND SHALL BE SUFFICIENTLY STABLE TO REMAIN FIRM AND INTACT UNDER THE FEET OF THE WORKMAN OR MACHINERY ENGAGED IN SUBGRADE, LAYING REINFORCING STEEL, AND DEPOSITING CONCRETE THEREON. IN ALL CASES WHERE SUBSOIL IS MUCKY OR WORKS INTO MUD OR MUCK DURING SUCH OPERATION, A SEAL COURSE OF EITHER CONCRETE OR ROCK SHALL BE PLACED BELOW SUBGRADE TO PROVIDE A FIRM BASE FOR WORKING AND FOR PLACING THE FLOOR SLAB.
11. A MINIMUM HORIZONTAL DISTANCE OF TEN FEET (10') SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SANITARY SEWER LINES. AT ANY POINT WHERE SANITARY SEWER LINES CROSS WATER MAIN, THE SANITARY SEWER SHALL BE CONSTRUCTED OF CAST IRON PIPE OR PIPE ENCASED IN CONCRETE FOR A DISTANCE OF TEN FEET (10') IN EACH DIRECTION FROM THE CROSSING UNLESS THE WATER IS A MINIMUM OF EIGHTEEN INCHES (18") ABOVE THE TOP OF THE SANITARY SEWER LINE.
12. CONTRACTOR SHALL PROVIDE TESTING AND INSPECTION PER SECTION 3500 - SANITARY SEWERS CITY OF LEE'S SUMMIT, MISSOURI STANDARD SPECIFICATIONS.
13. DEVELOPMENT PLANS ARE APPROVED INITIALLY FOR ONE (1) YEAR, AFTER WHICH THEY AUTOMATICALLY BECOME VOID AND MUST BE UPDATED AND APPROVED BY THE CITY ENGINEER BEFORE ANY CONSTRUCTION WILL BE PERMITTED.
14. ALL SANITARY SEWER STUBS SHALL BE SURVEYED AND STAKED ON SITE BEFORE THE CONSTRUCTION OF SANITARY SERVICE STUBS.
15. THE CITY OF LEE'S SUMMIT PLAN REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH THE CITY OF LEE'S SUMMIT DESIGN CRITERIA AND THE CITY CODE. THE CITY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, OR DIMENSIONS AND ELEVATIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE CITY OF LEE'S SUMMIT THROUGH APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY OTHER THAN AS STATED ABOVE FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
16. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE CITY OF LEE'S SUMMIT) AND ONE (1) COPY OF THE APPROPRIATE CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
17. CONSTRUCTION OF THE IMPROVEMENTS SHOWN OR IMPLIED BY THIS SET OF DRAWINGS SHALL NOT BE INITIATED OR ANY PART THEREOF UNDERTAKEN UNTIL THE CITY ENGINEER IS NOTIFIED OF SUCH INTENT AND ALL REQUIRED AND PROPERLY EXECUTED BONDS AND PERMIT FEES ARE RECEIVED AND APPROVED BY THE CITY ENGINEER.
18. ALL STUB LINES SHALL BE LAID ON 2.00% MINIMUM GRADE UNLESS APPROVED OTHERWISE.
19. CONTRACTOR SHALL NOT BE ALLOWED TO WORK ON SATURDAYS, SUNDAYS, OR HOLIDAYS WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER.
20. RELOCATION OF ANY WATER LINE, SEWER LINE OR SERVICE LINE THEREOF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT HIS EXPENSE.
21. THE CONTRACTOR SHALL INSTALL AND PROPERLY MAINTAIN A MECHANICAL PLUG AT ALL CONNECTION POINTS WITH EXISTING LINES UNTIL SUCH TIME THAT THE NEW LINE IS TESTED AND APPROVED.
22. THE CONTRACTOR SHALL CONSTRUCT MANHOLES PLACING ECCENTRIC CONE SECTION IN SUCH A MANNER THAT MANHOLE COVERS ARE ADJACENT TO THE PROPOSED SIDEWALKS. IN LOCATIONS WHERE MANHOLES ARE NOT NEAR PROPOSED SIDEWALKS THE MANHOLE COVERS SHALL GENERALLY BE PLACED ON THE UPSTREAM SIDE OF THE MANHOLES WHENEVER POSSIBLE.
23. STUB LINES, LOCATIONS, AND MINIMUM BASEMENT FLOOR ELEVATIONS ARE LOCATED IN THE TABLE LABELED "TABLE OF SERVICE LOCATIONS."
24. CONSTRUCTION PERMITS WILL NOT BE ISSUED UNTIL THE CITY OF LEE'S SUMMIT RECEIVES A SEWER EXTENSION PERMIT FROM MDNR.
25. CONNECTIONS TO EXISTING MANHOLES SHALL BE CORE DRILLED AND CONNECTED WITH A WATERTIGHT FERNCO GASKET OR APPROVED EQUAL. THE GASKET IS TO BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
26. ALL AREAS WHERE UTILITIES ARE TO BE INSTALLED IN FILL SHALL BE COMPACTED TO 95% TO 18 INCHES ABOVE THE LINE THEN EXCAVATED FOR CONSTRUCTION OF THE LINE.
27. THE CONTRACTOR WILL BE RESPONSIBLE FOR TESTING OF MANHOLES AND PIPES TO THE CITY OF LEE'S SUMMIT DESIGN & CONSTRUCTION MANUAL REQUIREMENTS.
28. THE ENDS OF ALL SANITARY SEWER STUBS SHALL BE SURVEYED AND MARKED BEFORE CONSTRUCTION.
28. ALL UTILITY STREET CROSSINGS SHALL BE BACKFILLED WITH FLOWABLE FILL, OR AB-3. IF CONTRACTOR CHOOSES TO USE OTHER SUITABLE MATERIALS, EXTENSIVE SOIL TESTING REQUIREMENTS WILL BE REQUIRED.
30. TRENCH CHECKS SHALL BE USED FOR ALL SANITARY SEWER STUBS.

PROJECT NOTES:

1. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTORS 48 HOURS PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.
2. GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION.
3. PRIOR TO ORDERING PRECAST STRUCTURES: SHOP DRAWINGS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. UPON APPROVAL THESE SHALL BE SUBMITTED TO THE CITY OF LEE'S SUMMIT FOR REVIEW.
4. ALL WATER LINES, SANITARY SEWER LINES, AND STORM WATER DRAINAGE CROSSINGS SHALL BE IN PLACE OR A CASING PIPE PROVIDED FOR FUTURE INSTALLATION PRIOR TO BASE AND SURFACE ASPHALT COURSES.
5. SIDEWALKS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY UNLESS OTHERWISE NOTES. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HANDICAP RAMP CONSTRUCTION IN CURBS.
6. REFER TO GRADING AND EROSION CONTROL SHEETS IN STREET AND STORM PLANS.
7. SITE TOPOGRAPHY TAKEN FROM SURVEY COMPLETED BY R.L BUFORD & ASSOCIATES. CONTRACTOR TO VERIFY EXISTING CONDITIONS OF THE SITE THAT MAY NOT BE REPRESENTATIVE OF CONSTRUCTION PLANS.
8. PROTECT EXISTING TREES, SHRUBS, FENCE AND LANDSCAPING UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. REPLACE ANY FENCE, TREES, SHRUBS, LANDSCAPING ITEMS, OR OTHER VEGETATION NOT SCHEDULED FOR REMOVAL THAT ARE DAMAGED DURING CONSTRUCTION OPERATIONS WITHOUT ADDITIONAL COMPENSATION.
9. NO OIL/GAS WELLS ARE PRESENT ON PROPERTY, PER MoDNR.

LAND USE SCHEDULE:

TOTAL LOT AREA = 2.43 AC

TOTAL DISTURBED AREA = 0.47 AC

TOTAL BUILDING AREA = 0.016 AC

REQUIRED PARKING SPACES = 9

PROPOSED PARKING SPACES = 11

IMPERVIOUS COVERAGE = .293 AC = 12.06% OF TOTAL AREA

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

0 20
FEET

MARK	REVISION	DATE	BY

Engineer: SD | Checked By: SD | Scale: 1" = 20'
Technician: JS | Date: 04-26-2022 | T-R-S: 47N-32W-24

Sheet C1.1

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL

GENERAL NOTES

LEE'S SUMMIT, MO

SNYDER & ASSOCIATES | ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11

Sheet C1.1

WHISPERING WOODS POOL

OVERALL SITE PLAN

LEE'S SUMMIT, MO

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.
802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SHAWN DUKE - ENGINEER
MO PE#2013006489

MARK	REVISION	DATE	BY

Engineer: SD | Checked By: SD | Scale: 1" = 30'
Technician: JS | Date: 04-26-2022 | T-R-S: 47N-32W-24

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Project No: 120.0484.11

Sheet C2.0

CONTRACTOR TO CONNECT TO EXISTING SIDEWALK

: TO INSTALL TRUNCATED DOMES

20.0'

5.0'

20.0'

D

24.5'

C

24.0'

20.0'

D

CONTRACTOR TO CONNECT TO EXISTING SIDEWALK

CONTRACTOR TO INSTALL
4' WIDE DRAINAGE PLUME
WITH 1' CURB TAPER
AND 4' X 4' SCOURSTOP MAT

9.0' (TYP)

PROPOSED GOLF CART PARKING

5.0'

9.5'

17.5' (TYP)

CONTRACTOR TO INSTALL
4' WIDE DRAINAGE PLUME
WITH 1' CURB TAPER
AND 4' X 4' SCOURSTOP MAT

PORTION OF STREAM BUFFER WITH PROPOSED WAIVER FOR PARKING LOT CONSTRUCTION. AREA IS LOCATED INSIDE AREA OF STREAM THAT WAS DISTURBED DURING CONSTRUCTION OF ROAD AND BOX CULVERT.

PARKING RESERVED FOR GOLF CARTS ONLY SIGNAGE

PORTION OF STREAM BUFFER WITH
IMPLIED WAIVER DUE TO ROAD AND
BOX CULVERT CONSTRUCTION.

CONTRACTOR TO INSTALL
4' WIDE DRAINAGE PLUME
WITH 1' CURB TAPER
AND 4' X 4' SCOURSTOP MAT

100 YEAR FLOOD PLAIN BASED ON SNYDER & ASSOCIATES FLOOD MODEL OF MOUSE CREEK FOR WHISPERING WOODS 3RD PLAT ELEVATION = 953.92'

24.0'
SANITARY SEWER EASEMENT

4.0'

8.0'

20.0'

17.5'

8.0'

GATED ENTRANCE
CONTRACTOR TO INSTALL COMPLIANT PANIC TYPE HARDWARE
SWINGING IN DIRECTION OF TRAVEL

20.0'

18.0'

PROPOSED
BUILDING

38.0'

38.0'

61.9'

21.1'

24.0'

18.0'

POOL
30'X50'

70.0'

EMERGENCY EXIT
CONTRACTOR TO INSTALL
COMPLIANT PANIC TYPE HARDWARE
SWINGING IN DIRECTION OF TRAVEL

PROPOSED
RETAINING WALL
AVE. HEIGHT = 2.0'

108.0'

STREAM BUFFER LINE

100 YEAR FLOOD PLAIN PER FEMA FIRM MAP 29095C0531G
EFFECTIVE DATE: JANUARY 20, 2017

LEGEND:
PROPOSED:

= STANDARD ASPHALT PAVEMENT (SEE DETAIL SHEET)

= CONCRETE POOL DECK

= CONCRETE SIDEWALK

= 8" THICK KCMMB CONCRETE PAVING

= CG-1 CURB AND GUTTER

(11) = NUMBER OF PARKING STALLS

= PROPERTY BOUNDARY

SITE PLAN - CONSTRUCTION NOTES:

(A) PROPOSED ACCESSIBLE SIGNAGE AND STRIPING. SEE DETAIL SHEETS

(B) PROPOSED PAVEMENT MARKINGS

(C) PROPOSED CURB AND GUTTER

(D) PROPOSED CURB RAMPS

0 10
FEET

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
03/20/2023

MARK	REVISION	DATE	BY
Engineer: SD	Checked By: SD	Scale: 1" = 10'	
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet C2.1

STATE OF MISSOURI
SHAWN DUKE
NUMBER
PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL

SITE PLAN

LEE'S SUMMIT, MO

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11

Sheet C2.1

GRADING PLAN - GENERAL NOTES

A. UTILITY WARNING:
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

B. NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES, AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION, ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.

C. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AND/OR TOP OF PAVING SLAB (GUTTER), UNLESS OTHERWISE NOTED.

D. ALL STORM SEWER PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE FLARED END SECTION.

E. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE CUT OR FILLED. RE-SPREAD TO MINIMUM 8" DEPTH TO FINISH GRADES.

F. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.

G. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTH PRIOR TO WALL CONSTRUCTION TO DETERMINE ALL POSSIBLE CONFLICTS.

CONTRACTOR TO CONNECT TO EXISTING SIDEWALK

CONTRACTOR TO INSTALL TRUNCATED DOMES

CONTRACTOR TO INSTALL 4' WIDE DRAINAGE FLUME WITH 1' CURB TAPER AND 4' X 4' SCOURSTOP MAT

CONTRACTOR TO CONNECT TO EXISTING SIDEWALK

PROPOSED GOLF CART PARKING

CONTRACTOR TO INSTALL 4' WIDE DRAINAGE FLUME WITH 1' CURB TAPER AND 4' X 4' SCOURSTOP MAT

PORTION OF STREAM BUFFER WITH PROPOSED WAIVER FOR PARKING LOT CONSTRUCTION. AREA IS LOCATED INSIDE AREA OF STREAM THAT WAS DISTURBED DURING CONSTRUCTION OF ROAD AND BOX CULVERT.

PARKING RESERVED FOR GOLF CARTS ONLY SIGNAGE

PORTION OF STREAM BUFFER WITH IMPLIED WAIVER DUE TO ROAD AND BOX CULVERT CONSTRUCTION.

CONTRACTOR TO INSTALL 4' WIDE DRAINAGE FLUME WITH 1' CURB TAPER AND 4' X 4' SCOURSTOP MAT

PROPOSED RETAINING WALL AVE. HEIGHT = 2.0'

100 YEAR FLOOD PLAIN BASED ON SNYDER & ASSOCIATES FLOOD MODEL OF MOUSE CREEK FOR WHISPERING WOODS 3RD PLAT ELEVATION = 953.92'

GATED ENTRANCE
CONTRACTOR TO INSTALL COMPLIANT PANIC TYPE HARDWARE SWINGING IN DIRECTION OF TRAVEL

EMERGENCY EXIT
CONTRACTOR TO INSTALL COMPLIANT PANIC TYPE HARDWARE SWINGING IN DIRECTION OF TRAVEL

POOL 30'X50'

PROPOSED BUILDING

STREAM BUFFER LINE

100 YEAR FLOOD PLAIN PER FEMA FIRM MAP 29095C0531G EFFECTIVE DATE: JANUARY 20, 2017

LEGEND:

870 = EXISTING INDEX CONTOUR

870 = NEW INDEX CONTOUR

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
03/20/2023

0 10
FEET

MARK	REVISION	DATE	BY
Engineer: SD	Checked By: SD	Scale: 1" = 10'	
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	

Sheet C3.0

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL

GRADING PLAN

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.

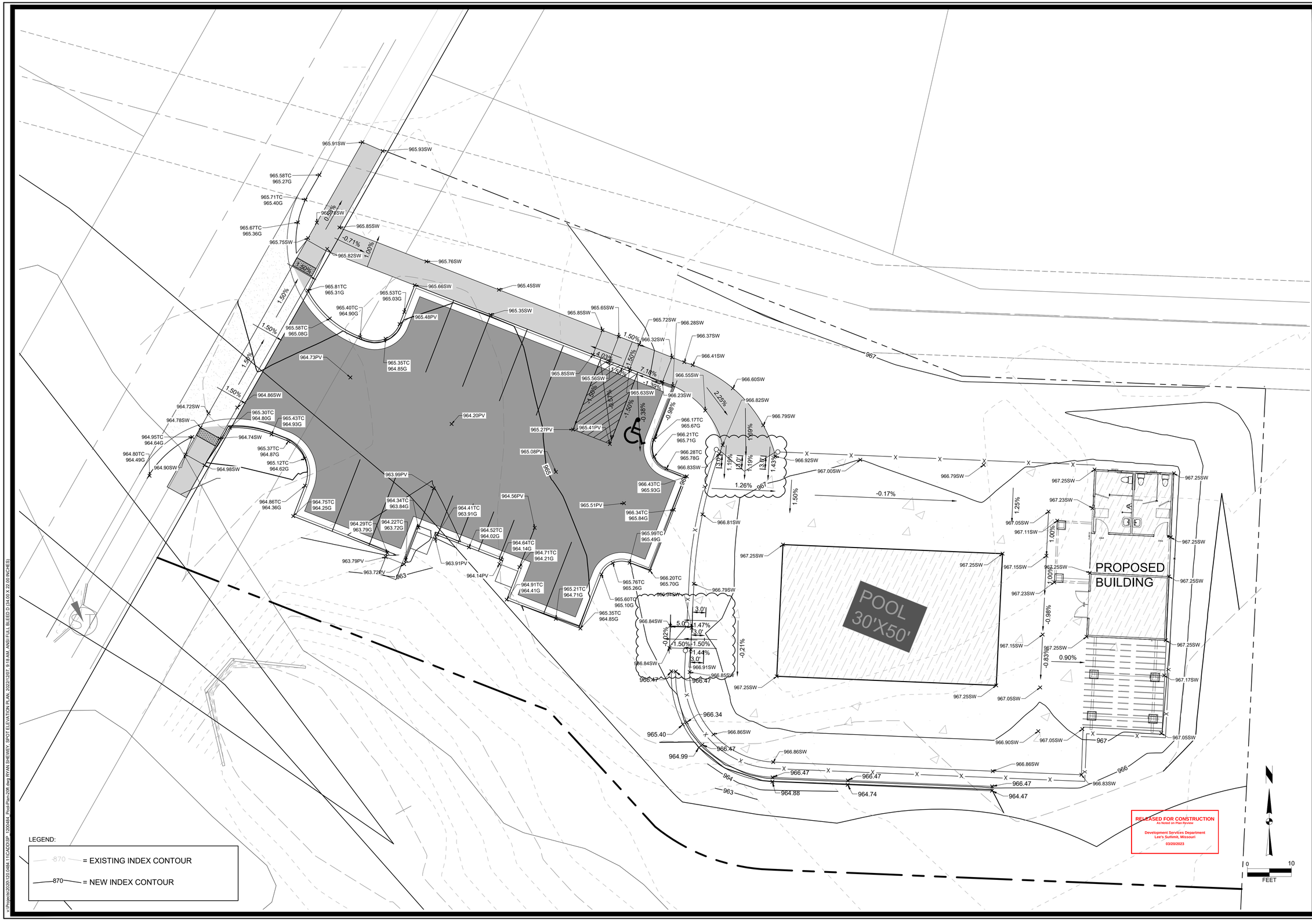
LEE'S SUMMIT, MO

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11

Sheet C3.0



LEGEND:

870 = EXISTING INDEX CONTOUR

870 = NEW INDEX CONTOUR

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

03/20/2023

v:\Projects\2020\120.0484.11\CADD\SP_1200484_Pool-Plan-20ft.dwg RYAN SHEWEY, SPOT ELEVATION PLAN, 2022/12/07, 9:18 AM, ANSI FULL BLEED D (34.00 X 22.00 INCHES)

MARK	REVISION	DATE	BY

Engineer: SD
Checked By: SD
Scale: 1" = 10'
Technician: JS
Date: 04-26-2022
T-R-S: 47N-32W-24

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet C3.1

SHAWN DUKE
NUMBER
PE-2013006489

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL

LEE'S SUMMIT, MO

SPOT ELEVATION PLAN

SNYDER & ASSOCIATES

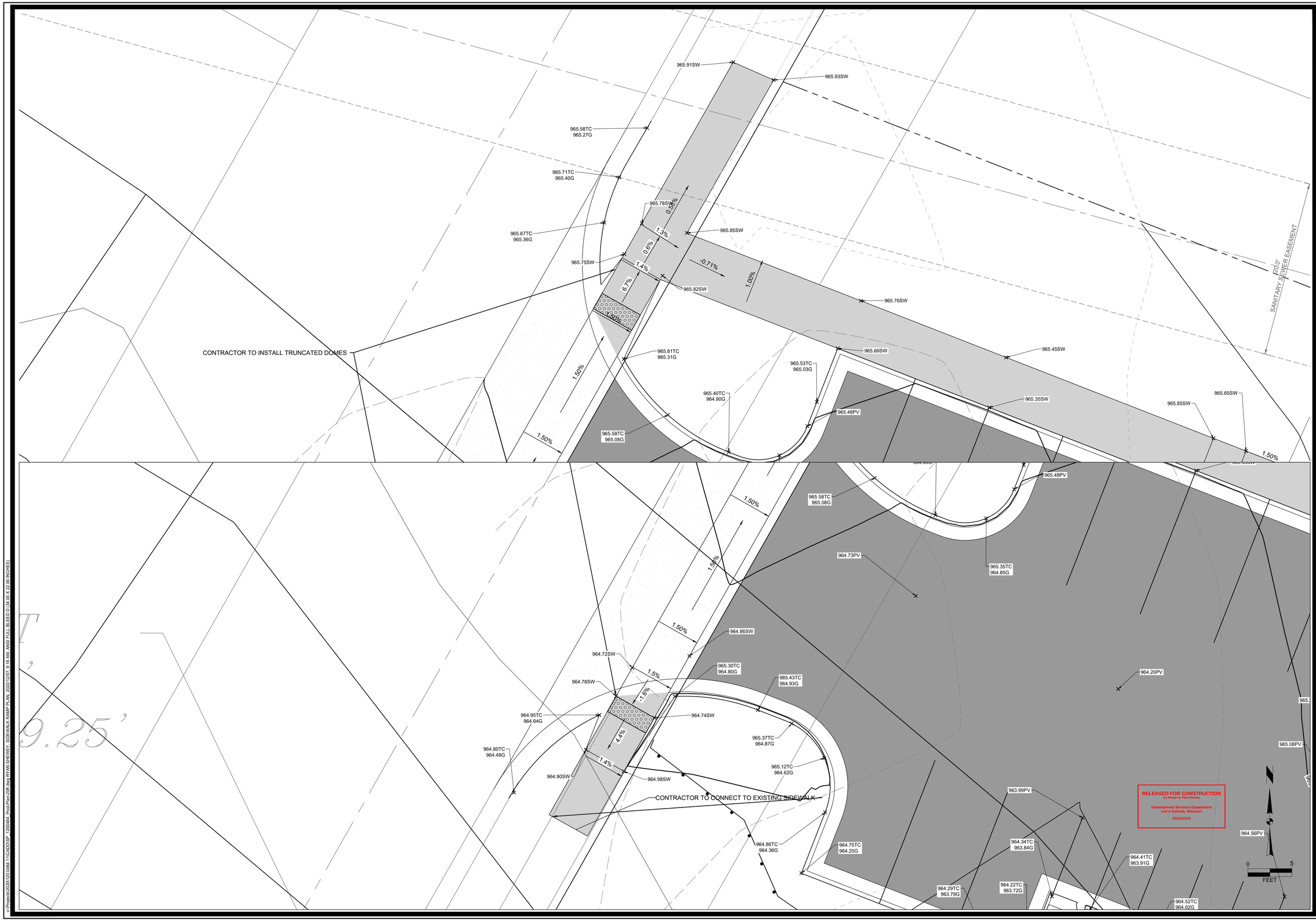
ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER
& ASSOCIATES

Project No: 120.0484.11

Sheet C3.1



MARK	REVISION	DATE	BY
Engineer: SD			
Checked By: SD	Scale: 1" = 5'		
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	Sheet C3.2

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

LEE'S SUMMIT, MO

WHISPERING WOODS POOL

SIDEWALK RAMP PLAN

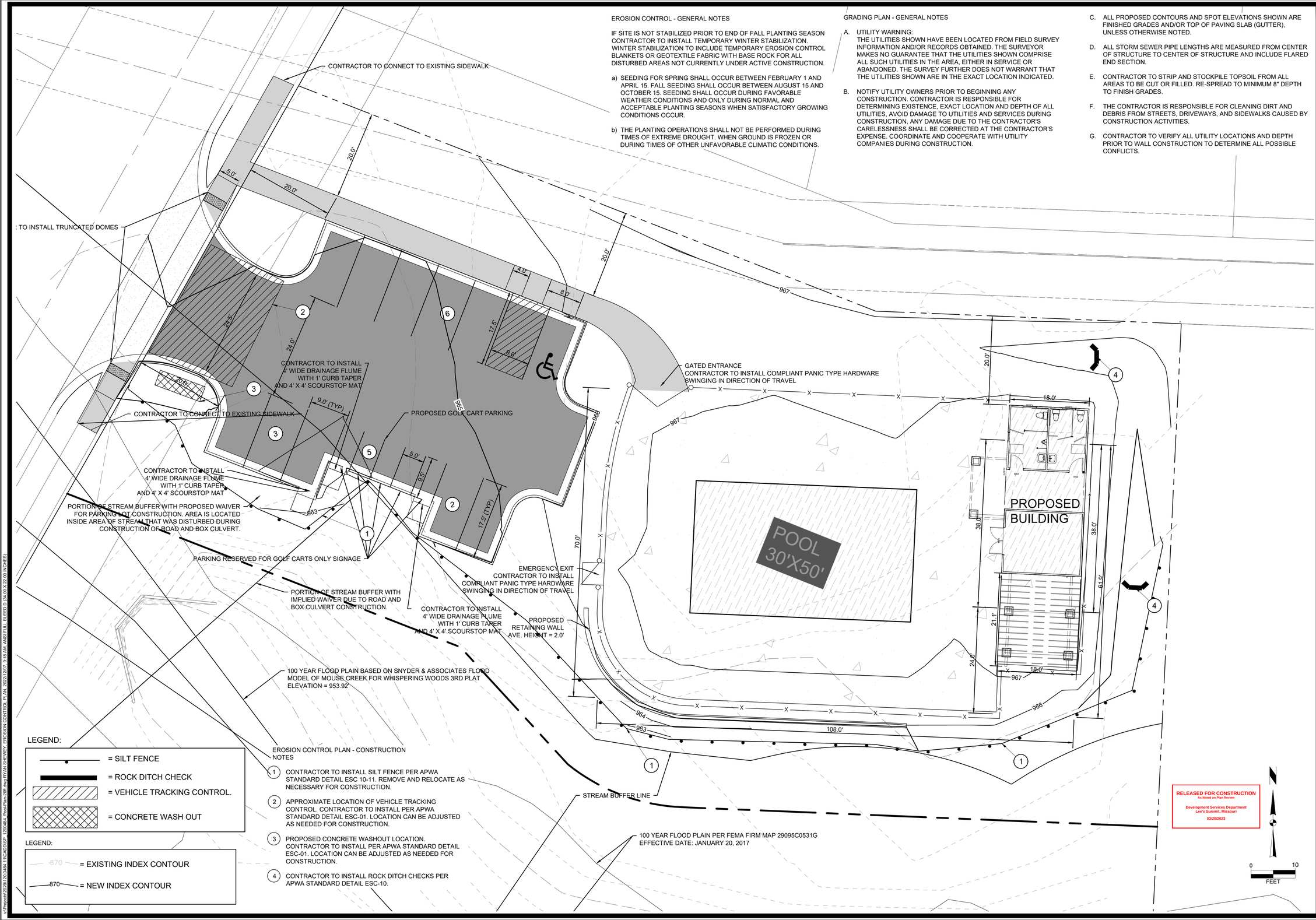
SNYDER & ASSOCIATES | ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11
Sheet C3.2

v:\Projects\2020\120.0484.11\CAD\SP - 120484 Pool-Plan-2offi..dwg RYAN SHEVEY, SIDEWALK RAMP PLAN, 2022/12/07, 9:18 AM, ANSI FULL BLEED D (34.00 X 22.00 INCHES)



EROSION CONTROL - GENERAL NOTES

IF SITE IS NOT STABILIZED PRIOR TO END OF FALL PLANTING SEASON CONTRACTOR TO INSTALL TEMPORARY WINTER STABILIZATION. WINTER STABILIZATION TO INCLUDE TEMPORARY EROSION CONTROL BLANKETS OR GEOTEXTILE FABRIC WITH BASE ROCK FOR ALL DISTURBED AREAS NOT CURRENTLY UNDER ACTIVE CONSTRUCTION.

a) SEEDING FOR SPRING SHALL OCCUR BETWEEN FEBRUARY 1 AND APRIL 15. FALL SEEDING SHALL OCCUR BETWEEN AUGUST 15 AND OCTOBER 15. SEEDING SHALL OCCUR DURING FAVORABLE WEATHER CONDITIONS AND ONLY DURING NORMAL AND ACCEPTABLE PLANTING SEASONS WHEN SATISFACTORY GROWING CONDITIONS OCCUR.

b) THE PLANTING OPERATIONS SHALL NOT BE PERFORMED DURING TIMES OF EXTREME DROUGHT. WHEN GROUND IS FROZEN OR DURING TIMES OF OTHER UNFAVORABLE CLIMATIC CONDITIONS.

GRADING PLAN - GENERAL NOTES

A. UTILITY WARNING:
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

B. NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES, AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION, ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.

C. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AND/OR TOP OF PAVING SLAB (GUTTER), UNLESS OTHERWISE NOTED.

D. ALL STORM SEWER PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE FLARED END SECTION.

E. CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE CUT OR FILLED. RE-SPREAD TO MINIMUM 8" DEPTH TO FINISH GRADES.

F. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.

G. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTH PRIOR TO WALL CONSTRUCTION TO DETERMINE ALL POSSIBLE CONFLICTS.

MARK	REVISION	DATE	BY
Engineer: SD	Checked By: SD	Scale: 1" = 10'	
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	

Sheet C3.3

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

SHAWN DUKE - ENGINEER
MO PE#2013006489

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

WHISPERING WOODS POOL

EROSION CONTROL PLAN

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.

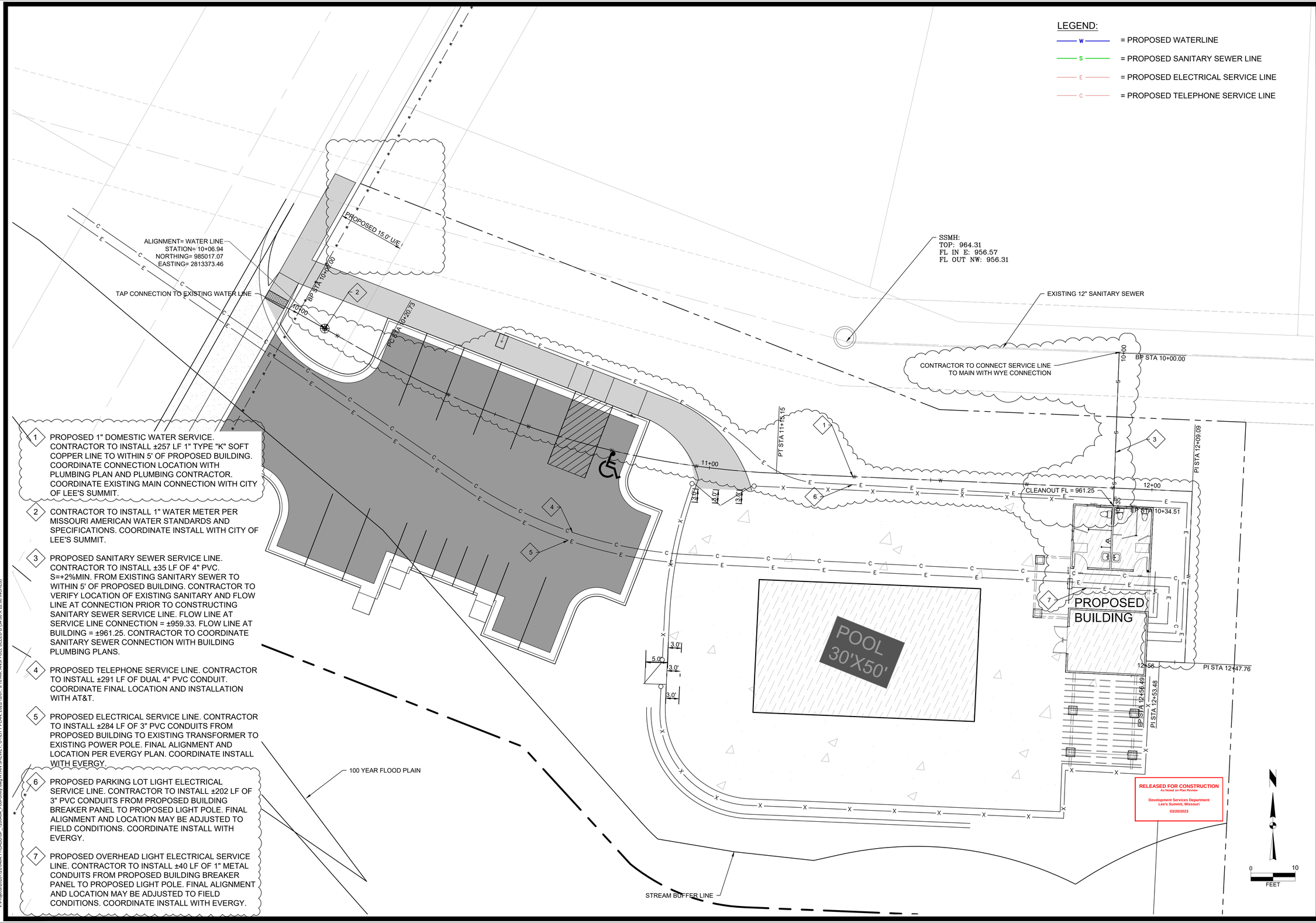
LEE'S SUMMIT, MO

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11

Sheet C3.3



1 PROPOSED 1" DOMESTIC WATER SERVICE. CONTRACTOR TO INSTALL ±257 LF 1" TYPE "K" SOFT COPPER LINE TO WITHIN 5' OF PROPOSED BUILDING. COORDINATE CONNECTION LOCATION WITH PLUMBING PLAN AND PLUMBING CONTRACTOR. COORDINATE EXISTING MAIN CONNECTION WITH CITY OF LEE'S SUMMIT.

2 CONTRACTOR TO INSTALL 1" WATER METER PER MISSOURI AMERICAN WATER STANDARDS AND SPECIFICATIONS. COORDINATE INSTALL WITH CITY OF LEE'S SUMMIT.

3 PROPOSED SANITARY SEWER SERVICE LINE. CONTRACTOR TO INSTALL ±35 LF OF 4" PVC. S=+2%MIN. FROM EXISTING SANITARY SEWER TO WITHIN 5' OF PROPOSED BUILDING. CONTRACTOR TO VERIFY LOCATION OF EXISTING SANITARY AND FLOW LINE AT CONNECTION PRIOR TO CONSTRUCTING SANITARY SEWER SERVICE LINE. FLOW LINE AT SERVICE LINE CONNECTION = ±959.33. FLOW LINE AT BUILDING = ±961.25. CONTRACTOR TO COORDINATE SANITARY SEWER CONNECTION WITH BUILDING PLUMBING PLANS.

4 PROPOSED TELEPHONE SERVICE LINE. CONTRACTOR TO INSTALL ±291 LF OF DUAL 4" PVC CONDUIT. COORDINATE FINAL LOCATION AND INSTALLATION WITH AT&T.

5 PROPOSED ELECTRICAL SERVICE LINE. CONTRACTOR TO INSTALL ±284 LF OF 3" PVC CONDUITS FROM PROPOSED BUILDING TO EXISTING TRANSFORMER TO EXISTING POWER POLE. FINAL ALIGNMENT AND LOCATION PER EVERGY PLAN. COORDINATE INSTALL WITH EVERGY.

6 PROPOSED PARKING LOT LIGHT ELECTRICAL SERVICE LINE. CONTRACTOR TO INSTALL ±202 LF OF 3" PVC CONDUITS FROM PROPOSED BUILDING BREAKER PANEL TO PROPOSED LIGHT POLE. FINAL ALIGNMENT AND LOCATION MAY BE ADJUSTED TO FIELD CONDITIONS. COORDINATE INSTALL WITH EVERGY.

7 PROPOSED OVERHEAD LIGHT ELECTRICAL SERVICE LINE. CONTRACTOR TO INSTALL ±40 LF OF 1" METAL CONDUITS FROM PROPOSED BUILDING BREAKER PANEL TO PROPOSED LIGHT POLE. FINAL ALIGNMENT AND LOCATION MAY BE ADJUSTED TO FIELD CONDITIONS. COORDINATE INSTALL WITH EVERGY.

MARK	REVISION	DATE	BY
Engineer: SD	Checked By: SD	Scale: 1" = 10'	
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet C3.4

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

LEE'S SUMMIT, MO

WHISPERING WOODS POOL

UTILITY PLAN

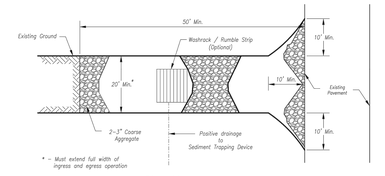
SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

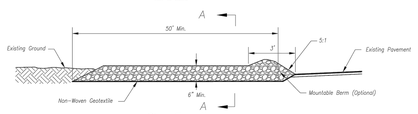
SNYDER & ASSOCIATES

Project No: 120.0484.11

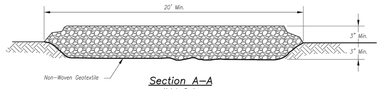
Sheet C3.4



Plan View
Not to Scale



Side Elevation
Not to Scale



Section A-A
Not to Scale

Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

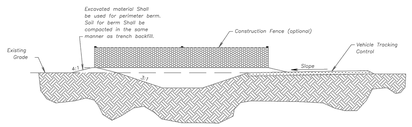
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be ≤5:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

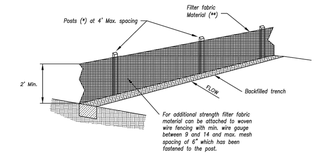
1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water-tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.

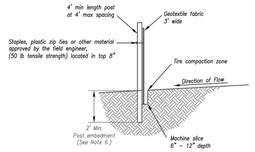


CONCRETE WASHOUT

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control. Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

AMERICAN PUBLIC WORKS ASSOCIATION		
Kansas City Metro Chapter APWA	KANSAS CITY METRO CHAPTER	
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01	ADOPTED: 10/24/2016





(*) POSTS
- MIN. LENGTH 4'
- HARDWOOD 1 ⅜" x 1 ⅜"
- NO.2 SOUTHERN PINE 2 ⅜" x 2 ⅜"
- STEEL 1.33 LB/FT

(**) - Geotextile Fabric shall meet the requirements of AASHTO M288

Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

SILT FENCE DETAILS
Not to Scale

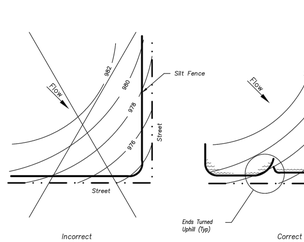
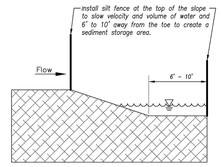
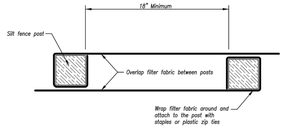


Figure A

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of silt fence.
2. Repair as necessary to maintain function and structure.



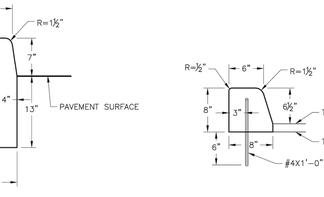


JOINING FENCE SECTIONS
Not to Scale

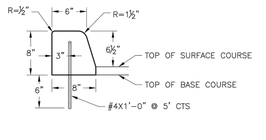
SILT FENCE LAYOUT
Not to Scale

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

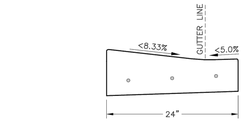
AMERICAN PUBLIC WORKS ASSOCIATION		
Kansas City Metro Chapter APWA	KANSAS CITY METRO CHAPTER	
SILT FENCE	STANDARD DRAWING NUMBER ESC-03	ADOPTED: 10/24/2016



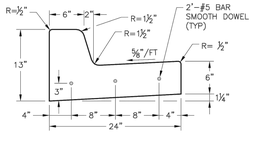
STRAIGHT CURB
(TYPE C-1)



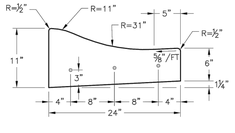
DOWELLED CURB
(TYPE DC)



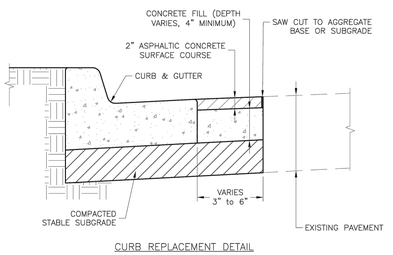
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



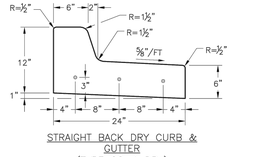
STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



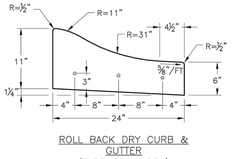
ROLL BACK CURB & GUTTER
(TYPE CG-2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)

GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH .3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

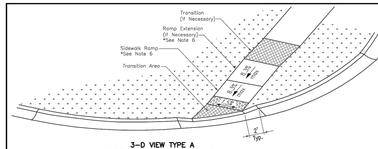
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB & GUTTER DETAIL

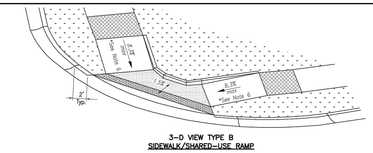
Project No:
Sheet Name:

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #

GEN-4

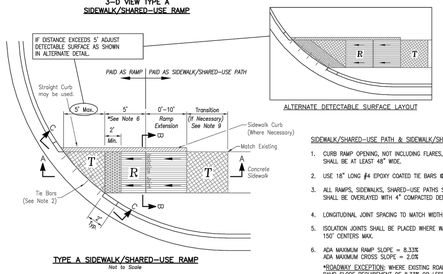


3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP



3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP

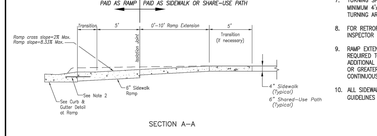
LEGEND
- R - SIDEWALK RAMP
- TS - TURNING SPACE
- DETECTABLE WARNING SURFACE
- T - TRANSITION



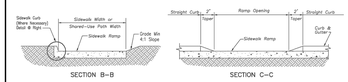
TYPE A SIDEWALK/SHARED-USE RAMP
Not to Scale

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGTUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
ADA MAXIMUM CROSS SLOPE = 2.0%
*ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5% SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



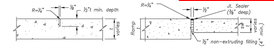
SECTION A-A



SECTION B-B
SECTION C-C

TYPE A & B SIDEWALK RAMP
Not to Scale

SIDEWALK CURB DETAIL
Not to Scale



JOINT DETAILS
Not to Scale

CURB & GUTTER DETAIL AT RAMP
Not to Scale

TYPE B SIDEWALK/SHARED-USE RAMP
Not to Scale

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
ADA RAMP RETROFIT DETAIL

Project No:
Sheet Name:

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #

GEN-3A

MARK	REVISION	DATE	BY

Engineer: SD
Technician: JS
Checked By: SD
Date: 04-26-2022
Scale: 1" = 20'
T-R-S: 47N-32W-24

Sheet C4.0

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL

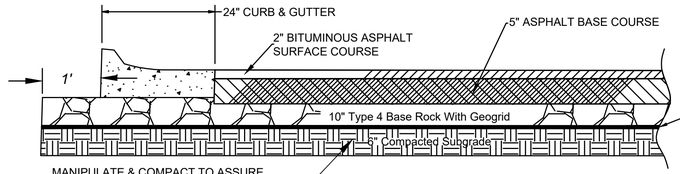
DETAILS

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

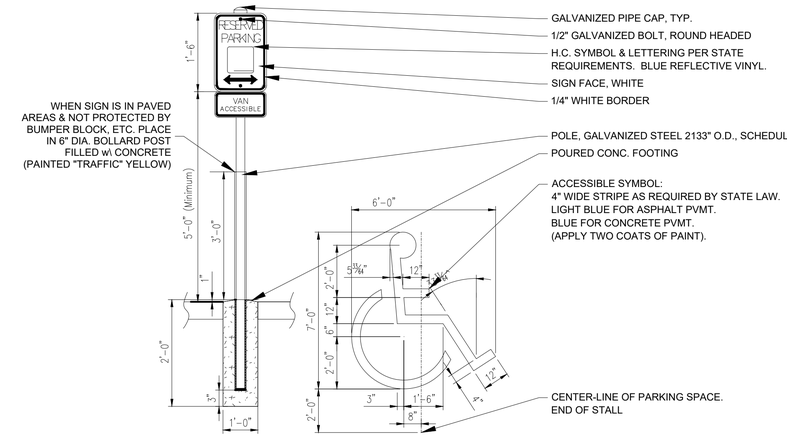
SNYDER & ASSOCIATES

Project No: 120.0484.11
Sheet C4.0



ASPHALT SECTION

NO SCALE

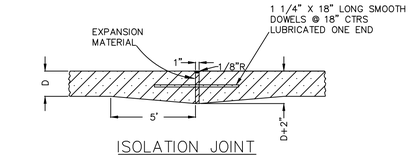


ELEVATION LOGO DETAIL (PLAN)

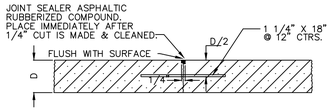
NO SCALE NO SCALE

ACCESSIBLE SIGN & SYMBOL DETAILS

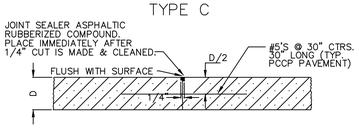
NO SCALE



ISOLATION JOINT
TYPE A



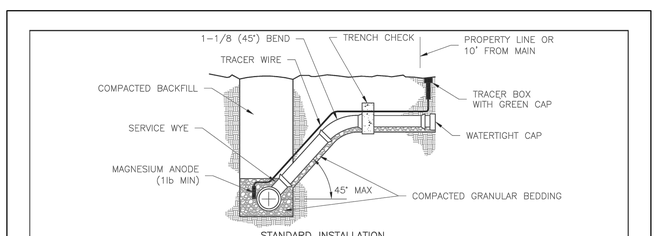
TRANSVERSE CONTRACTION JOINT
TYPE C



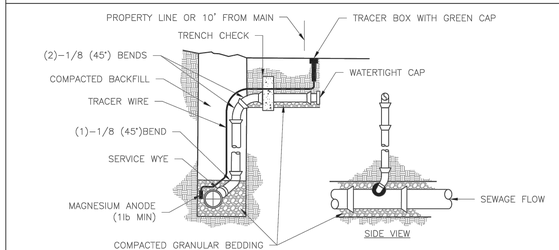
LONGITUDINAL JOINT
TYPE F

JOINT PAVING DETAILS

NOT TO SCALE



STANDARD INSTALLATION
NOT TO SCALE

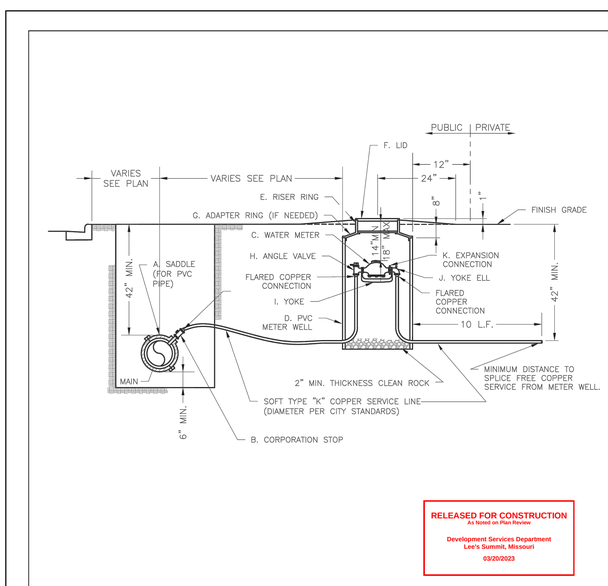


VERTICAL RISER
NOT TO SCALE

NOTES:

1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN, WHICHEVER IS GREATER. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.
2. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
3. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
8. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.

LEE'S SUMMIT MISSOURI	Date: 12/2015
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063	Drawn By: MJF
	Checked By: DL
SANITARY SEWER STUB DETAIL	SAN-1



RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

NOTES:

1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A-K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

LEE'S SUMMIT MISSOURI	Date: 06/2015
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063	Drawn By: JN
	Checked By: DL
SERVICE CONNECTION WITH METER WELL	WAT-11

MARK	REVISION	DATE	BY
Engineer: SD	Checked By: SD	Scale: 1" = 20'	
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet C4.1

SHAWN DUKE
NUMBER PE-2013006489
STATE OF MISSOURI
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL

DETAILS

LEE'S SUMMIT, MO

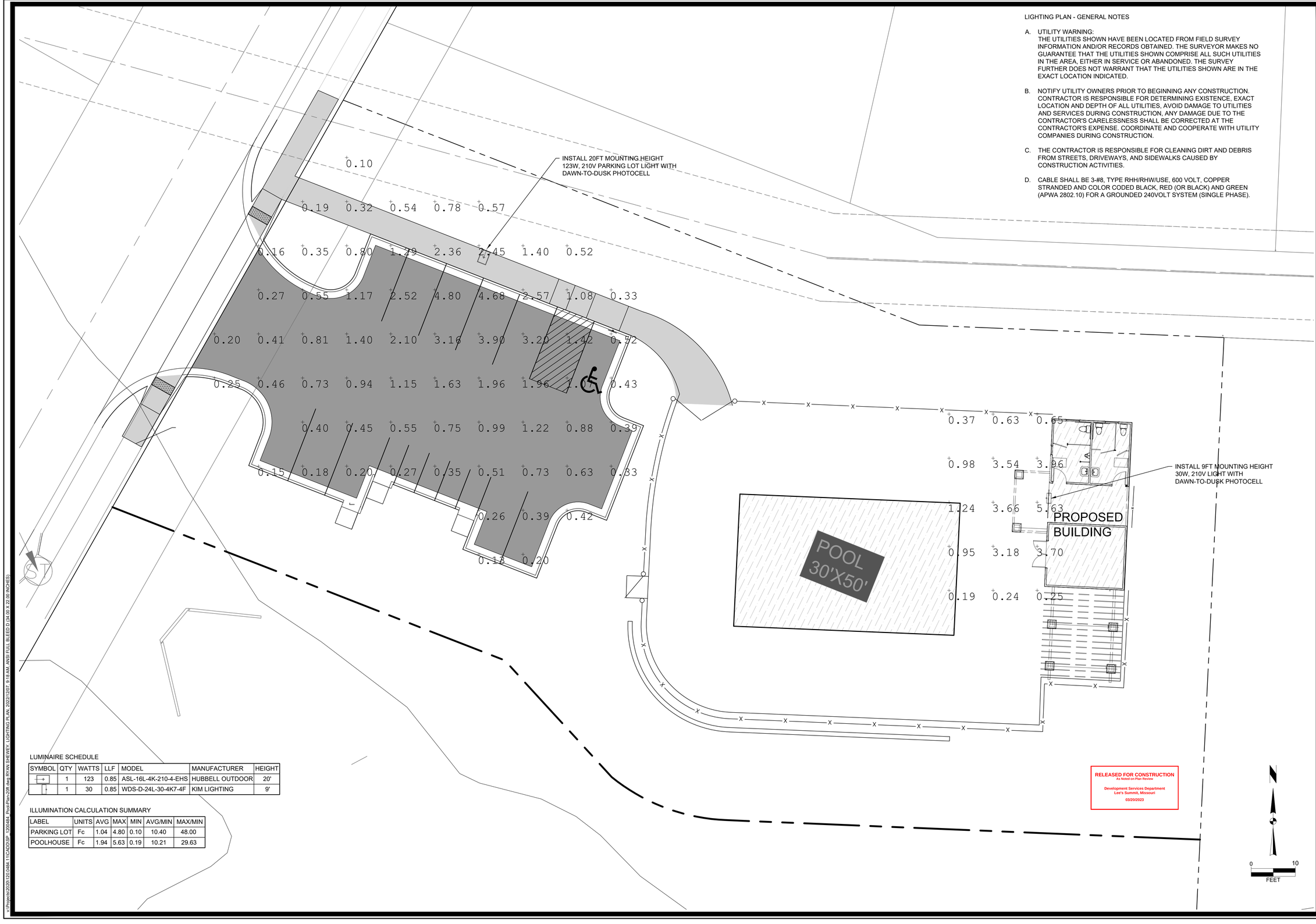
SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.

802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11

Sheet C4.1



LIGHTING PLAN - GENERAL NOTES

A. UTILITY WARNING:
THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.

B. NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES, AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION, ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.

C. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES.

D. CABLE SHALL BE 3-#8, TYPE RHH/RHW/USE, 600 VOLT, COPPER STRANDED AND COLOR CODED BLACK, RED (OR BLACK) AND GREEN (APWA 2802.10) FOR A GROUNDED 240VOLT SYSTEM (SINGLE PHASE).

LUMINAIRE SCHEDULE

SYMBOL	QTY	WATTS	LLF	MODEL	MANUFACTURER	HEIGHT
	1	123	0.85	ASL-16L-4K-210-4-EHS	HUBBELL OUTDOOR	20'
	1	30	0.85	WDS-D-24L-30-4K7-4F	KIM LIGHTING	9'

ILLUMINATION CALCULATION SUMMARY

LABEL	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PARKING LOT	Fc	1.04	4.80	0.10	10.40	48.00
POOLHOUSE	Fc	1.94	5.63	0.19	10.21	29.63

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

MARK	REVISION	DATE	BY
Engineer: SD	Checked By: SD	Scale: 1" = 10'	
Technician: JS	Date: 04-26-2022	T-R-S: 47N-32W-24	

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet C5.0

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

WHISPERING WOODS POOL
LEE'S SUMMIT, MO

LIGHTING PLAN

SNYDER & ASSOCIATES
ENGINEERS & PLANNERS, INC.
802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

Project No: 120.0484.11
Sheet C5.0

BUFFER AREA = 4,285 S.F.
STREET FRONTAGE = 80 FT

LANDSCAPE REQUIRED	LANDSCAPE PROVIDED
1 SHADE TREE PER 1,000 S.F. = 4.29 TREES	5 TREES
1 ORNAMENTAL TREE PER 500 S.F. = 8.57 TREES	9 TREES
1 EVERGREEN TREE PER 300 S.F. = 14.28 TREES	15 TREES
1 SHRUB PER 200 S.F. = 21.43 SHRUBS	22 SHRUBS
1 STREET TREE PER 30 FT STREET FRONTAGE = 3 STREET TREES	3 STREET TREES
1 SHRUB PER 20 FT STREET FRONTAGE = 4 STREET SHRUBS	4 STREET SHRUBS
2 SHRUBS PER 5000 S.F. OPEN AREA = 3.63 SHRUBS	4 OPEN AREA SHRUBS
1 TREE PER 5000 S.F. OPEN AREA = 1.81 TREES	2 OPEN AREA TREES
12 SHRUBS PER 40 FT PARKING LOT SCREENING	14 SCREENING SHRUBS

POOL
30'X50'

PROPOSED
BUILDING

SHADE TREES	QUANTITY	SIZE
COMMON HACKBERRY	3	3" CAL.
SKYLINE HONEY LOCUST	2	3" CAL.

ORNAMENTAL TREES	QUANTITY	SIZE
FLOWERING DOGWOOD	4	3" CAL.
SERVICEBERRY	4	3" CAL.
CRAB APPLE	6	3" CAL.

EVERGREEN TREES	QUANTITY	HEIGHT
BALD CYPRUS	5	8 FT
EASTERN RED CEDAR	5	8 FT
EASTERN WHITE PINE	5	8 FT

SHRUBS	QUANTITY	SIZE
AMERICAN HAZELNUT	10	24" B&B
ARROWWOOD VIBURNUM	8	24" B&B
FRAGRANT SUMAC	9	24" B&B
MEADOW WILLOW	9	24" B&B
NINEBARK	8	24" B&B

= AREA TO BE SODDED

0 10
FEET

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

MARK	REVISION	DATE	BY

Engineer: SD
Checked By: SD
Technician: JS
Date: 04-26-2022
Scale: 1" = 10'
T-R-S: 47N-32W-24

Snyder & Associates Engineers & Planners, Inc.
Missouri State Certificate of Authority #2006008544

Sheet L1.0

STATE OF MISSOURI
SHAWN DUKE
NUMBER PE-2013006489
PROFESSIONAL ENGINEER

SHAWN DUKE - ENGINEER
MO PE#2013006489

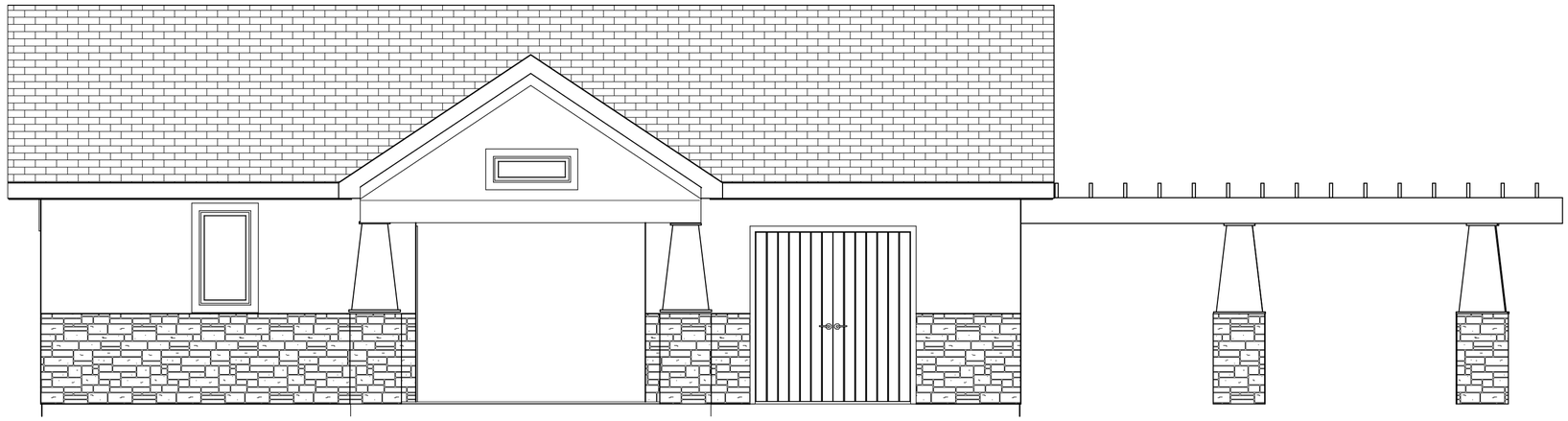
WHISPERING WOODS POOL

LANDSCAPE PLAN

SNYDER & ASSOCIATES | ENGINEERS & PLANNERS, INC.
802 FRANCIS STREET
ST. JOSEPH, MISSOURI 64501
816-364-5222 | www.snyder-associates.com

SNYDER & ASSOCIATES

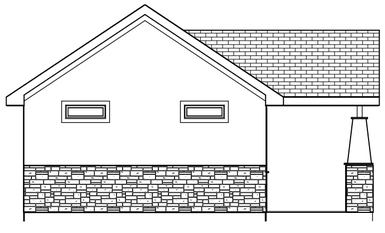
Project No: 120.0484.11
Sheet L1.0



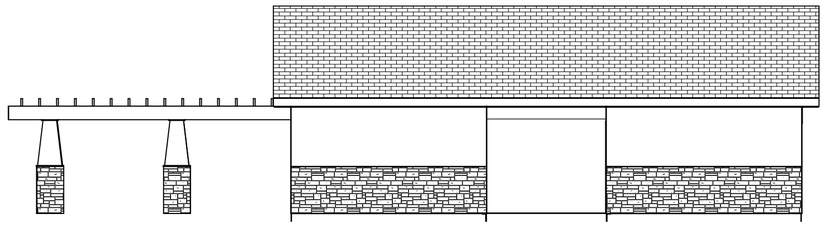
FRONT EL.

SIDING STUCCO AND STONE ALL SIDES

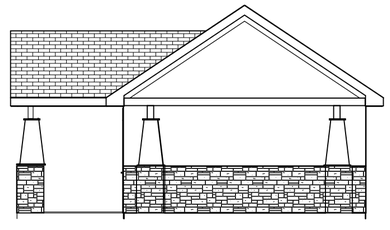
COLORS TO BE EARTHTONES



LEFT EL.
1/8 = 1-0



REAR EL.
1/8 = 1-0



RIGHT EL.
1/8 = 1-0

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116

STATE OF MISSOURI
DAVID E. MEZGER
PE-2018009531
PROFESSIONAL ENGINEER

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
03/20/2023

BUILD IN ACCORDANCE WITH
2018 INTERNATIONAL
BUILDING CODE AND LOCAL
CODES.

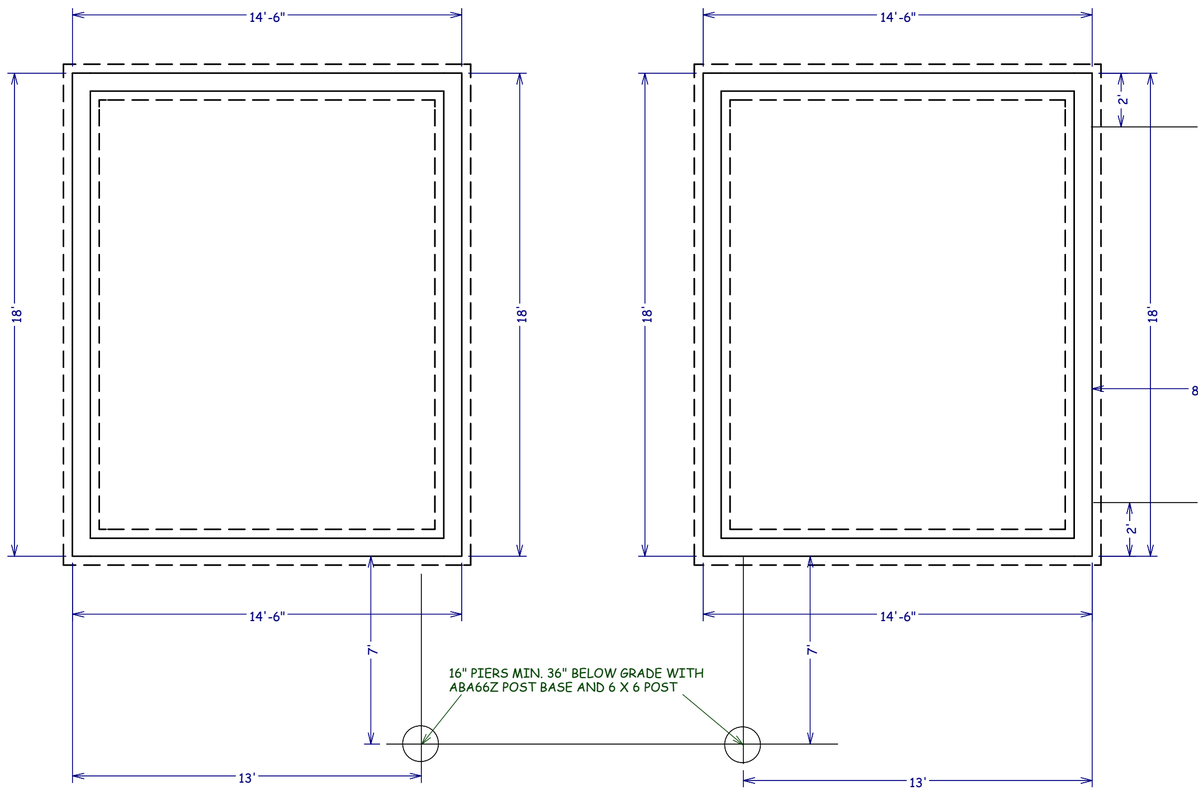
POOL HOUSE
1901 SW RIVER RUN DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
5-27-22

PLAN NO.
3781

SHEET NO.
1 OF 5



FOUNDATION PLAN

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116

STATE OF MISSOURI
DAVID E. MEZGER
PE-2018009531
PROFESSIONAL ENGINEER

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

BUILD IN ACCORDANCE WITH
2018 INTERNATIONAL
BUILDING CODE AND LOCAL
CODES.

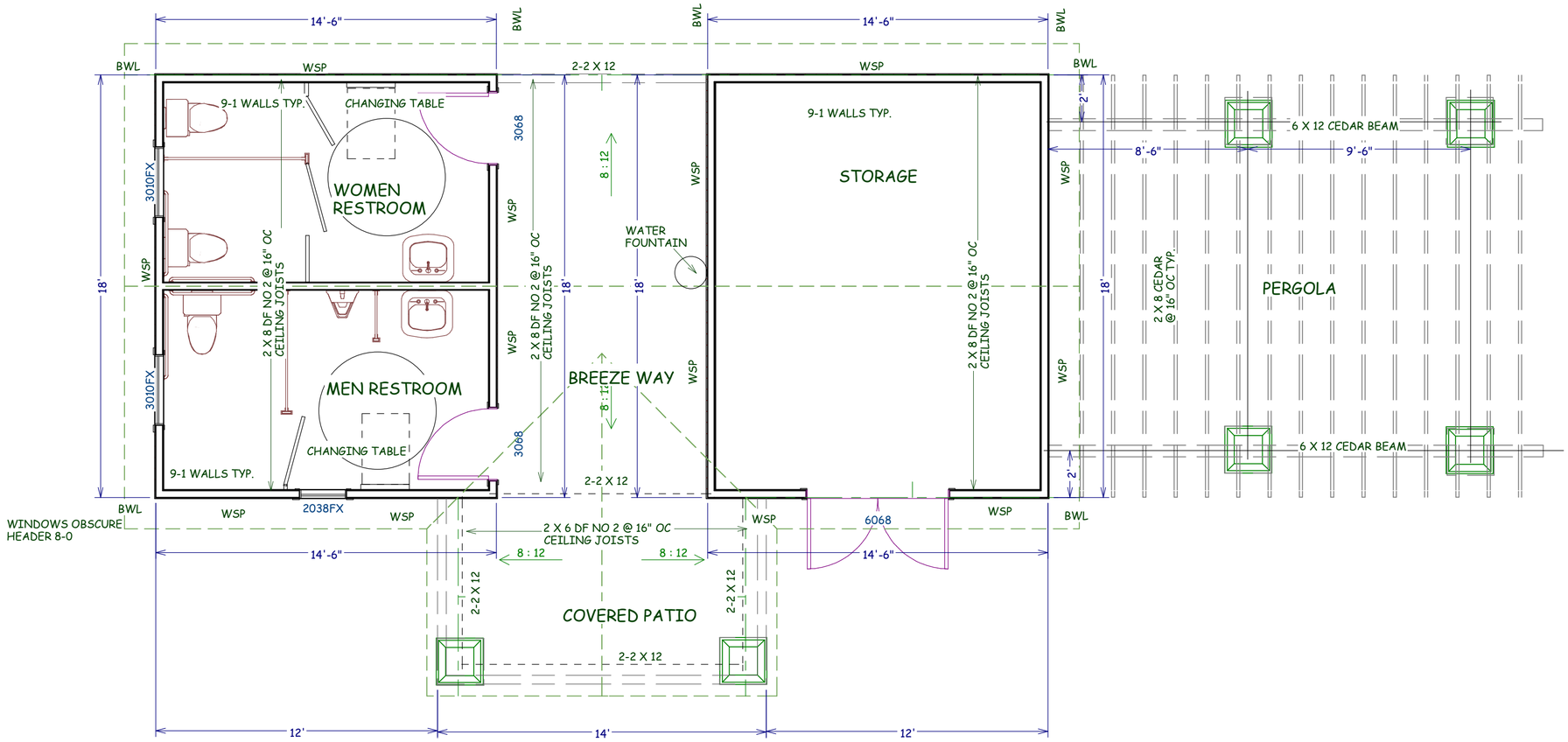
POOL HOUSE
1901 SW RIVER RUN DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
5-27-22

PLAN NO.
3781

SHEET NO.
2 OF 5



MAIN FLOOR
POOL HOUSE
522 SF FINISHED

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116

STATE OF MISSOURI
DAVID E. MEZGER
PE-2018009531
PROFESSIONAL ENGINEER

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE AND LOCAL CODES.

POOL HOUSE
1901 SW RIVER RUN DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
5-27-22

PLAN NO.
3781

SHEET NO.
3 OF 5

ENERGY CONSERVATION CODE
THE FOLLOWING VALUES ARE NEEDED.

R-15 IN WALLS

R-49 IN ATTICS

R-38 IN VAULTS
R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF PF AREA

R-19 IN FLOORS OVER UNCONDITIONED SPACES

R-10 IN CRAWL SPACE WALLS

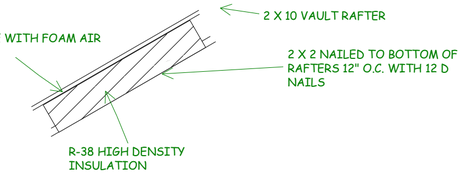
BASEMENT WALLS R-13 CAVITY OR R-10 CONTINOUS

SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT

A WINDOW U FACTOR OF .35 OR BETTER

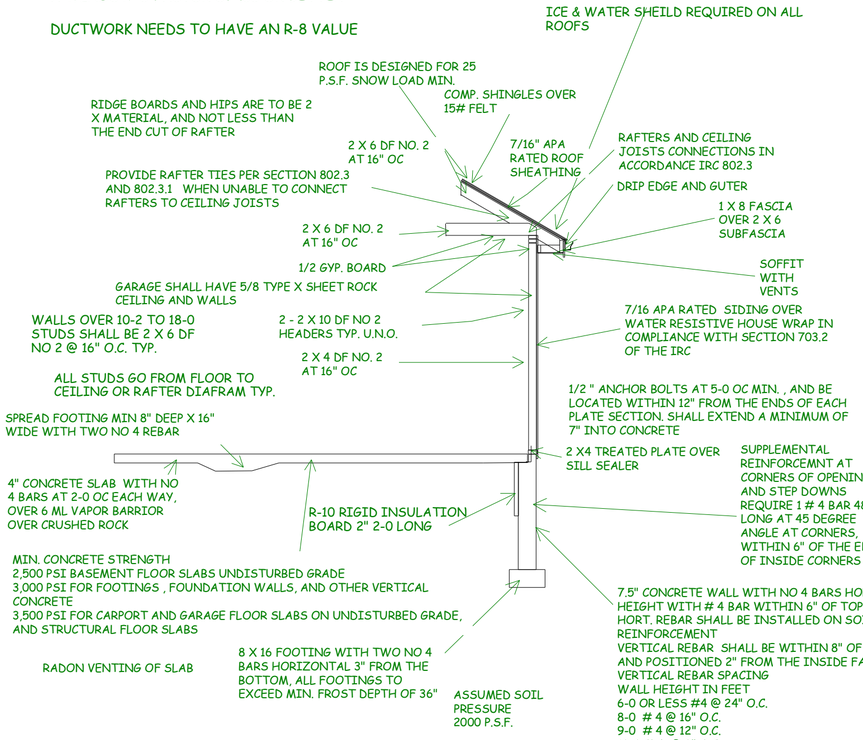
DUCTWORK NEEDS TO HAVE AN R-8 VALUE

VAULT INSULATION DETAIL



INTERCONNECTED HARD WIRED SMOKE DETECTORS SHALL BE INSTALLED IN EACH BEDROOM AND OUTSIDE OF EACH BEDROOM

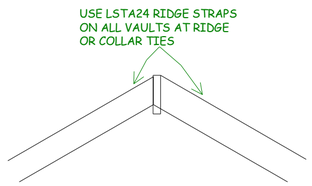
ALL PLUMBING IF EXISITING SHALL BE CAPPED AND AIR TESTED PRIOR TO ROUGH-IN INSPECTION FOR LEAK VERIFICATION



ALL POINT LOADS SHALL HAVE A MINIMUM OF 2 STUDS UNLESS NOTED OTHERWISE

ALL REBAR
GRADE 40 TYP.

ALL CONCRETE EXPOSED TO WEATHER GARAGE SLABS FOOTINGS WALLS AND FLATWORK MUST HAVE 6% AIR ENTRAINMENT



ALL STAIRS
MAX. RISE 7-3/4"
MIN. RUN 10"

TYPICAL WALL SECTION

PIER PADS

TYP. U.N.O. 3-0 X 3-0 X 12" PEIR PADS MIN. WITH # 4 REBAR, 6 EACH WAY

STUDS OVER 10-0 SHALL HAVE BLOCKING ALONG WALL MAX OF 6-0 O.C.

WINDOW SAFETY GLAZING PER 308

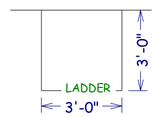
SAFETY GLAZING REQUIRED ALONG WALKING SURFACES AND STAIRS LOCATED WITHIN 36 INCHES HORIZONTALLY OF THE STEPS. SAFETY GLAZING REQUIRED IF EXPOSED SINGLE PANEL IS IN EXCESS OF 9 SQUARE FEET OR THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FINISHED FLOOR.

SAFETY GLAZING REQUIRD WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE, SAFETY OR TEMPERED GLAZING IS REQUIRED.

WINDOWS ARE TO HAVE FALL PROTECTION PER IRC 312.2

WINDOW EGRESS REQUIREMENTS

BEDROOM WINDOW EGRESS MINIMUM FOR A DOUBLE HUNG WINDOW IS 34 INCH CLEAR WIDTH MIN. AND 24 INCH CLEAR HEIGHT MIN. WITH A CLEAR OPENABLE AREA OF 5.7 SQUARE FEET MIN.
A CASEMENT OR SLIDER WINDOW MINIMUMS ARE 20 INCH CLEAR WIDTH MINIMUM AND 41 INCH CLEAR HEIGHT MINIMUM. WITH A MINIMUM 5.7 SQUARE FOOT OF OPENABLE AREA.
OPENING OF EGRESS WINDOW NOT MORE THAN 42" FROM THE FLOOR



EGRESS WINDOW WELL AS NEEDED PER SECTION 308 MIN 3-0 X 3-0 WITH LADDER

OVERHEAD GARAGE DOORS MUST MEET DASMA 115 MPH OR IRC 2018 REQUIRMENTS

1. DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE EQUIPPED WITH SOLID WOOD OR STELL DOORS NOT LESS THAN 1-3/8" THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1

2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR ANY DWELLING IN COMPLIANCE WITH IRC M 1505

3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315

4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3

5. DECK SHALL BE BUILT PER TABLES 507.2 , 507.2.1, 507.3, 507.6, 507.5.1(1)&(2), 507.5, AND 507.6

6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR ROOF DIAPHRAGMS R602.3

7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2

8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND ROOF BEAMS R802.3.1. R802.11

9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING UNFINISHED BASEMENTS) N1102.1

10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1

11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE IMPLEMENTED OCTOBER 1, 2012 KCBRC N1102.4.1.2 N1103.2.2

12. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE (E.G. CAN LIGHTS IN ATTIC) SHALL BE IC- RATED, LEAKAGE- RATED AND SEALED TO THE GYPSUM WALLBOARD N1102.4.4

13.PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1

14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE RATE N1103.2.2.1

15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC N1103.2.2

16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4

17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR M1507.2

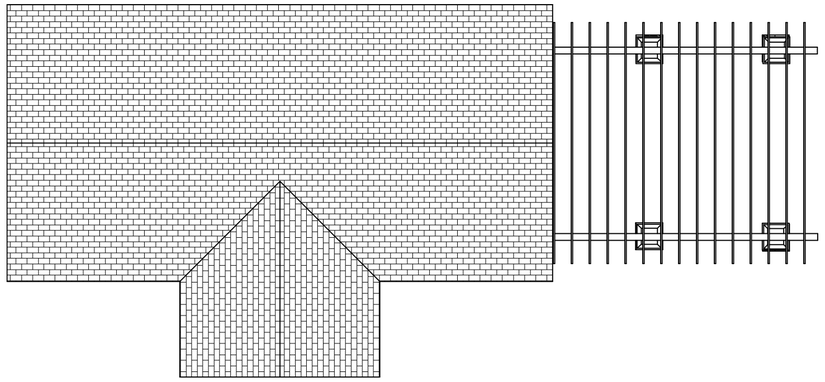
18. MAKEUP AIR SYSTEM REQUIRED FOR KITHCHEN EXHAUST HOODS THAT EXCEED 400 CFM M1503.4

19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS RETURN AIR PLENUMS

20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE M1601.6

21. A CONCRETE- ENCASED GROUNDING ELECTRODE ('UFER' GROUND) CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1

22. COMPLIANCE WITH THE REQUIRMENT AND SHOW CONNECTION AS NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11 AMENDED RAYMORE CODE



ROOF PLAN
1/8 = 1-0
ROOF PITCHES 8/12
16" SOFFITS TYP.
RAFTERS 2 X 6 DF NO 2 @ 16" O.C.
HIPS AND RIDGES 2 X 8 DF NO 2

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE AND LOCAL CODES.

POOL HOUSE
1901 SW RIVER RUN DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
5-27-22

PLAN NO.
3781

SHEET NO.
4 OF 5

Review and Approval
Structural Only

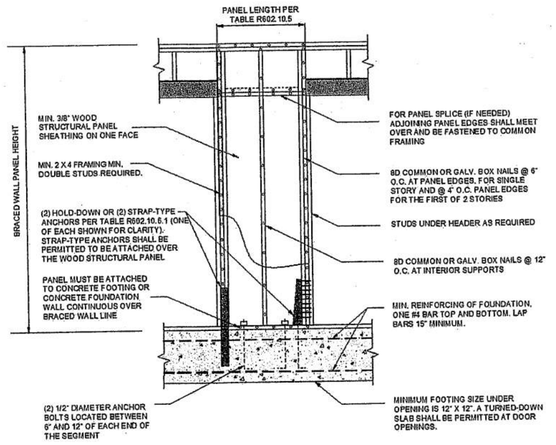
David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116

STATE OF MISSOURI
DAVID E. MEZGER
PE-2018009531
PROFESSIONAL ENGINEER

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

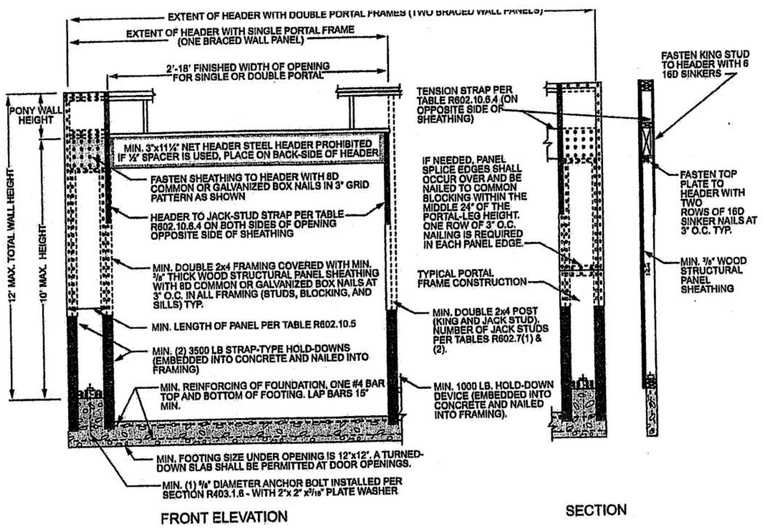
TABLE R602.10.3(1)
BRACING REQUIREMENTS BASED ON WIND SPEED

• EXPOSURE CATEGORY B • 30-FOOT MEAN ROOF HEIGHT • 10-FOOT WALL HEIGHT • 2 BRACED WALL LINES			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a]			
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing[a] (feet)	Method LIB[b]	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB	Methods CS-WSP, CS-G, CS-PF
≤ 115		10	3.5	3.5	2.0	2.0
		20	6.5	6.5	3.5	3.5
		30	9.5	9.5	5.5	4.5
		40	12.5	12.5	7.0	6.0
		50	15.0	15.0	9.0	7.5
		60	18.0	18.0	10.5	9.0
		10	7.0	7.0	4.0	3.5
		20	12.5	12.5	7.5	6.5
		30	18.0	18.0	10.5	9.0
		40	23.5	23.5	13.5	11.5
		50	29.0	29.0	16.5	14.0
		60	34.5	34.5	20.0	17.0
		10	NP	10.0	6.0	5.0
		20	NP	18.5	11.0	9.0
		30	NP	27.0	15.5	13.0
		40	NP	35.0	20.0	17.0
		50	NP	43.0	24.5	21.0
		60	NP	51.0	29.0	25.0



25.4 mm.

FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL



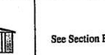
4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

TABLE R602.10.4
BRACING METHODS

METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA[a]	
				Fasteners	Spacing
Intermittent Bracing Methods	**LIB** Let-in-bracing	1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16″ stud spacing		Wood: 2-8d common nails or 3-8d (2½″ long x 0.113″ dia.) nails	Wood: per stud and top and bottom plates
				Metal strap: per manufacturer	Metal: per manufacturer
	DWB Diagonal wood boards	¾″ (1″ nominal) for maximum 24″ stud spacing		2-8d (2½″ long x 0.113″ dia.) nails or 2 - 1¾″ long staples	Per stud
	WSP Wood structural panel (See Section R604)	⅜″		Exterior sheathing per Table R602.3(3)	6″ edges 12″ field
				Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
	BV-WSP[e] Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	7/16″	See Figure R602.10.6.5	8d common (2½″ × 0.131) nails	4″ at panel edges 12″ at intermediate supports 4″ at braced wall panel end posts
	SFB Structural fiberboard sheathing	½″ or 25/32″ for maximum 16″ stud spacing		1½″ long × 0.12″ dia. (for ½″ thick sheathing) 1¾″ long × 0.12″ dia. (for 25/32″ thick sheathing) galvanized roofing nails	3″ edges 6″ field
	GB Gypsum board	½″		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7″ edges (including top and bottom plates) 7″ field
				Nails or screws per Table R702.3.5 for interior locations	
	PBS Particleboard sheathing (See Section R605)	⅜″ or ½″ for maximum 16″ stud spacing		For ⅜″, 6d common (2″ long × 0.113″ dia.) nails For ½″, 8d common (2½″ long × 0.131″ dia.) nails	3″ edges 6″ field
	PCP Portland cement plaster	See Section R703.7 for maximum 16″ stud spacing		1½″ long, 11 gage, 7/16″ dia. head nails or ⅞″ long, 16 gage staples	6″ o.c. on all framing members
	HPS Hardboard panel siding	7/16″ for maximum 16″ stud spacing		0.092″ dia., 0.225″ dia. head nails with length to accommodate 1½″ penetration into studs	4″ edges 8″ field
	ABW Alternate braced wall	⅜″		See Section R602.10.6.1	See Section R602.10.6.1

TABLE R602.10.4—continued
BRACING METHODS

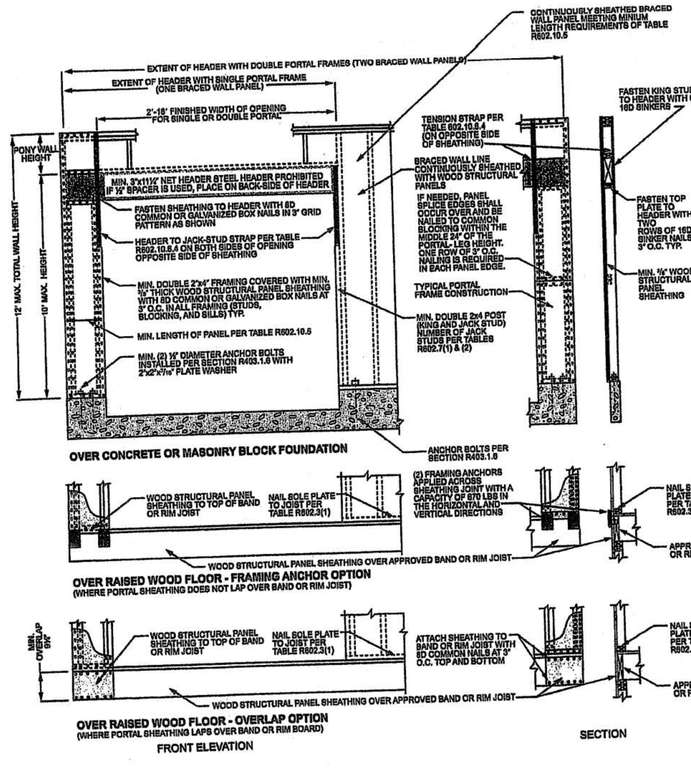
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA[a]	
				Fasteners	Spacing
Intermittent Bracing Methods	**PFH** Portal frame with hold-downs	⅜″		See Section R602.10.6.2	See Section R602.10.6.2
	PFG Portal frame at garage	7/16″		See Section R602.10.6.3	See Section R602.10.6.3
Continuous Sheathing Methods	**CS-WSP** Continuously sheathed wood structural panel	⅜″		Exterior sheathing per Table R602.3(3)	6″ edges 12″ field
				Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
	CS-G[b,c] Continuously sheathed wood structural panel adjacent to garage openings	⅜″		See Method CS-WSP	See Method CS-WSP
	CS-PF Continuously sheathed portal frame	7/16″		See Section R602.10.6.4	See Section R602.10.6.4
	CS-SFB[d] Continuously sheathed structural fiberboard	½″ or 25/32″ for maximum 16″ stud spacing		1½″ long × 0.12″ dia. (for ½″ thick sheathing) 1¾″ long × 0.12″ dia. (for 25/32″ thick sheathing) galvanized roofing nails	3″ edges 6″ field

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m², 1 mile per hour = 0.447 m/s.
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D_0, D_1 and D_2.
b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D_0, D_1 and D_2 roof covering dead load shall not exceed 3 psf.
c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.7(1). A full-height clear opening shall not be permitted adjacent to a Method CS-G panel.
d. Method CS-SFB does not apply in Seismic Design Categories D_0, D_1 and D_2.
e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D_0 through D_2 only.

TABLE R602.10.5
MINIMUM LENGTH OF BRACED WALL PANELS

METHOD (See Table R602.10.4)		MINIMUM LENGTH[a] (inches) Wall Height 8 feet	9 feet	10 feet	11 feet	12 feet	CONTRIBUTING LENGTH (inches)
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP		48	48	48	53	58	Actual[b]
GB		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actual
LIB		55	62	69	NP	NP	Actual[b]
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48
	SDC D_0, D_1 and D_2, ultimate design wind speed < 140 mph	32	32	34	NP	NP	
CS-G		24	27	30	33	36	Actual[b]
CS-WSP, CS-SFB	Adjacent clear opening height (inches)						Actual[b]
	≤ 64	24	27	30	33	36	
	68	26	27	30	33	36	
	72	27	27	30	33	36	
	76	30	29	30	33	36	
	80	32	30	30	33	36	
	84	35	32	32	33	36	
	88	38	35	33	33	36	
	92	43	37	35	35	36	
	96	48	41	38	36	36	
	100	—	44	40	38	38	
	104	—	49	43	40	39	
	108	—	54	46	43	41	
	112	—	—	50	45	43	
	116	—	—	55	48	45	
	120	—	—	60	52	48	
	124	—	—	—	56	51	
	128	—	—	—	61	54	
	132	—	—	—	66	58	
	136	—	—	—	—	62	
	140	—	—	—	—	66	
	144	—	—	—	—	72	
METHOD (See Table R602.10.4)		Portal header height 8 feet	9 feet	10 feet	11 feet	12 feet	
PFH	Supporting roof only	16	16	16	Note c	Note c	48
	Supporting one story and roof	24	24	24	Note c	Note c	
PFG		24	27	30	Note d	Note d	1.5 × Actual[b]
CS-PF	SDC A, B and C	16	18	20	Note e	Note e	1.5 × Actual[b]
	SDC D_0, D_1 and D_2	16	18	20	Note e	Note e	Actual[b]

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.
NP = Not Permitted.
a. Linear interpolation shall be permitted.
b. Use the actual length where it is greater than or equal to the minimum length.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.
d. Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.
e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

BRACE WALL DETAILS
WIND SPEED 115 MPH
WIND EXPOSURE A
SEISMIC DESIGN CAEGORY A

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116

STATE OF MISSOURI
DAVID E. MEZGER
PE-2018009531
PROFESSIONAL ENGINEER

RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
03/20/2023

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL BUILDING CODE AND LOCAL CODES.

POOL HOUSE
1901 SW RIVER RUN DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
5-27-22

PLAN NO.
3781

SHEET NO.
5 OF 5