10849 INDIAN HEAD INDUSTRIAL BOULEVARD. ST. LOUIS, MISSOURI 63132 314.426.6212 MAIN



218 CHESTERFIELD TOWNE CENTER CHESTERFIELD, MISSOURI 63005 636.530.6900 MAIN

INVERNESS PHASE 3

SITE IMPROVEMENT CONSTRUCTION PLANS



10407 BAUR BLVD. SUITE B ST. LOUIS, MISSOURI 63132 314.996.0300 MAIN



4118 SHREWSBURRY AVE. ST. LOUIS, MISSOURI 63319 1 (800) 887.4173 EMERGENCY



100 NORTH MAIN O'FALLON, MISSOURI 63366 636-240-2000 MAIN



100 WATER DRIVE O'FALLON, MISSOURI 63368 636.561.3737 MAIN



1901 CHOUTEAU AVE. ST. LOUIS, MISSOURI 63103 1 (800) 552.7583 MAIN



ST. LOUIS, MISSOURI 63114 1 (855) 391,7941 / 1 (877) 611,5527



280 INTERSTATE DRIVE WENTZVILLE. MISSOURI 63385 636.327.3800 MAIN



12405 POWERSCOURT DR. ST. LOUIS, MO 63131 1 (314) 965.0555 MAIN

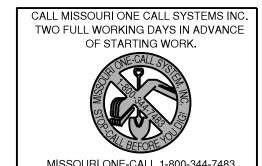


111 LAURA K DRIVE O'FALLON, MO 63366 (636) 272-3493

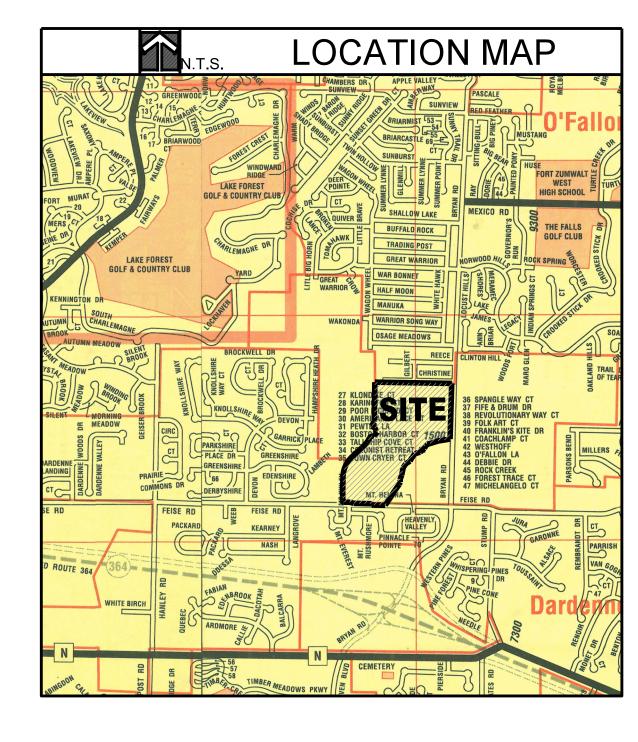
EXISTING LAND USE AND ZONING: R1-D PLANNED UNIT DEVELOPMENT

TOTAL ACREAGE OF SITE: 48.70 ACRES

FEMA MAP: ST CHARLES COUNTY MO & INCORPORATED AREAS MAP# 29183C0240G, PANEL 240 OR 525 DATE: JANUARY 20, 2016 THE 106.4 AC SITE IS IN ZONE X (AREA OF MINIMAL FLOOD HAZARD)



THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND FIELD MARKINGS PROVIDED BY THE MEMBER UTILITIES OF THE MISSOURI ONE CALL SYSTEM (1-800-DIG-RITE), AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, CAPACITY, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES, NOR THE ABILITY TO SERVE THE EXISTING OR INTNEDED USES OF THIS OR ADJACENT SITES.THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.



GEOTECHNICAL ENGINEER'S NOTE

Neither SCI Engineering, Inc. (SCI) nor the undersigned has prepared any part of these plans. The signature and seal are intended to confirm our review and professional opinion that these plans and revisions, through the date given below, comply with the *Geotechnical Report* dated April 2021 for the project, and are compatible with the soil and geologic conditions at the site, as anticipated from the exploration data.

Conditions may vary from those encountered during the exploration or can change due to construction activities, weather, or other conditions. Therefore, SCI must be involved during the construction of this project to observe the actual subsurface conditions and implementation of our recommendations relative to construction. Construction means and methods shall be left to the Contractor.

In concept, the basin embankments indicated appear feasible; however, the global stability of the embankments must be analyzed.

SCI ENGINEERING, INC.



CITY OF O'FALLON **ENGINEERING DIVISION** ACCEPTED FOR CONSTRUCTION BY DATE: MARCH 10, 2022
POFESSIONAL ENGINEER'S SEAL INDICATES RESPONSIBILITY FOR DESIGN

X X X **EXISTING CONDITIONS** X X X **OVERALL SITE PLAN VILLAGE A SITE PLAN** X X X X X X **VILLAGE B SITE PLAN** $X \mid X \mid X$ OVERALL GRADING PLAN **VILLAGE A GRADING PLAN** X X X **VILLAGE B GRADING PLAN** X X X **EXISTING DRAINAGE AREA MAP** X X X VILLAGE S PROPOSED DRAINAGE AREA MAP X X X VILLAGE B PROPOSED DRAINAGE AREA MAP X X X **STORMWATER BASIN** X X X X X X STREET PROFILES X X X STREET PROFILES X X X WARPINGS X X X WARPINGS X X X WARPINGS X X X **SANITARY SEWER** X X X **SANITARY SEWER** X X X **SANITARY SEWER** X X X C23 **STORM SEWER** X X X **STORM SEWER** X X X C25 STORM SEWER X X X C26 **STORM SEWER** X X X X X X **HYDRAULICS** C28 **SEWER INFLUENCE** X X X X X X **VILLAGE A - EMERGENCY OVERFLOW** X X X VILLAGE B - EMERGENCY OVERFLOW X X X C32 **EMERGENCY OVERFLOW SECTIONS** X X X C33 **OUTFALL STRUCTURE DETAILS** X X X **EROSION AND SILITATION CONTROL PLAN EROSION AND SILITATION CONTROL DETAILS** X X X **OVERALL WATER PLAN** X X X **VILLAGE A WATER PLAN** X X X **VILLAGE B WATER PLAN** X X X **WATER DETAILS** X X X **CONSTRUCTION DETAILS** X X X PUMP STATION PLAN X X X **PUMP STATION PROFILE** X X X **PUMP STATION DETAILS** X X X **PUMP STATION DETAILS** X X X **PUMP STATION DETAILS** X X X**PUMP STATION DETAILS** X X XC52 **PUMP STATION DETAILS** X X XC53 **PUMP STATION DETAILS** X X X**PUMP STATION DETAILS** X X X C55 **PUMP STATION DETAILS** X X X C56 **PUMP STATION DETAILS** X X X **PUMP STATION DETAILS** X X X

GENERAL INFORMATION

BENCHMARK:

NGS BENCHMARK F-149 ELEV 542.80 (NAVD88): LOCATION: CITY OF O'FALLON, MO. APPROXIMATELY 12 MILES WEST OF THE CITY OF THE CITY OF ST. CHARLES AND 7.5 MILES EAST OF WENTZVILLE AND IN FRONT OF THE CITY OF O'FALLON MUNICIPAL CENTER. TO REACH THE STATION FROM THE INTERSECTION OF THE I-70 BRIDGE OVER CR-K / SR-M (MAIN STREET), GO NORTH 0.6 MILES ON MAIN STREET TO THE STATION ON THRE RIGHT AT THE SOUTHEAST CENTER OF THE ENTRANCE TO THE CITY OF O'FALLON MUNICIPAL BUILDING. THE STATION IS A STANDARD CGS DISK STAMPED -- F 149 1935-- AND SET IN A 4-INCH SQUARE CONCRETE MONUMENT PROJECTING 3 INCHES ABOVE THE GROUND. THE STATION IS 78.4 FEET SOUTH OF THE BRICK CITY OF O'FALLON MUNICIPAL BUILDING ENTRANCE SIGN, 61.2 FEET SOUTHWEST OF A LIGHT STANDARD, AND 25.7 FEET NORTHEAST OF A LIGHT STANDARD.

- 1. ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS INCLUDING TRENCH BACKFILLS WITHIN AND OFF THE ROAD RIGHT-OF-WAY SHALL BE COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (ASTM D-1557). ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- 2. ALL FILLED PLACES IN PROPOSED AND EXISTING PUBLIC STREETS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP TO 90 PERCENT MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-180 COMPACTION TEST" (ASTM D-1557). PAVED AREAS IN CUTS SHALL MEET THE SAME COMPACTION REQUIREMENTS. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING OPERATIONS.
- 3. THE CITY SHALL BE NOTIFIED AT ENGINEER@DARDENNEPRAIRIE.ORG A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF STREET, SEWER, AND/OR
- 4. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER AT ENGINEER@DARDENNEPRAIRIE.ORG TO REQUEST INSPECTION OF THE SITE AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE O FTHE CONSTRUCTION OF THE PROPOSED STREETS AND STORM WATER FACILITIES AND AT LEAST FOURTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION WORK WITHIN THE PUBLIC RIGHTS-OF-WAY.
- 5. CONTRACTOR SHALL CONTACT THE CITY ENGINEER AT
- ENGINEER@DARDENNEPRAIRIE.ORG AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCED OF THE FOLLOWING:
 - a. COMMENCEMENT OF GRADING
 - b. COMPLETION OF ROUGH GRADING c. COMMENCEMENT OF INSTALLATION OF WATER QUALITY TREATMENT
 - **FACILITIES** d. COMPLETION OF FINSIH GRADING
 - e. COMPLETION OF ALL RE-ESTABLISHMENET OF GROUND COVER AND CONSTRUCTION WORK, WHICH DISTURBS GROUND COVER

SANITARY SEWER ESTIMATED FLOW				
PHASE 3 OFALLON MO	115 LOTS	42,550 gpd		
100 GALLONS PER DAY PER PER	SON X 3.7 PERSON = 3	70 GALLONS PER HOUSEHOLD		

AE	BBREVIATIONS		LEGEND
ATG	ADJUST TO GRADE	UC	EXISTING UNDERGROUND CABLE TV
Al	AREA INLET	——UT——	EXISTING UNDERGROUND TELEPHONE
BF	BASEMENT FLOOR	——UE——	EXISTING UNDERGROUND ELECTRIC
E	CENTERLINE	——OU——	EXISTING ONDERGROOND ELECTRIC EXISTING OVERHEAD UTILITY WIRES
CC	CONCRETE COLLAR	——G——	EXISTING OVERTICAL OTHER WINES
СО	CLEAN OUT		EXISTING GAS MAIN EXISTING WATER MAIN
CI	CURB INLET	——F——	PROPOSED FORCE MAIN
CMP	CORRUGATED METAL PIPE		
DCI	DOUBLE CURB INLET	——F—	EXISTING FORCE MAIN
ESMT	EASEMENT		BUILDING LINE
EP	END OF PIPE		EXISTING SANITARY SEWER
ED	ENERGY DISSIPATOR		PROPOSED SANITARY SEWER
EX	EXISTING	— - 0 —	EXISTING STORM SEWER
FF	FINISHED FLOOR		PROPOSED STORM SEWER
FH	FIRE HYDRANT	510	EXISTING CONTOUR
FE	FLARED END	520	PROPOSED CONTOUR
FL	FLOWLINE		EXISTING TREE LINE
2GISI	2 GRATE INLET WITH SIDE INTAKE		PROPOSED TREE LINE
LIP	LEAVE IN PLACE		SILTATION CONTROL
MH	MANHOLE		EX HIGH WATER OR DITCH
MAX	MAXIMUM		GRADE BREAK
MIN	MINIMUM	<u> S</u>	PROPOSED STREET SIGN / STOP SIG
N/F	NOW OR FORMERLY	with the second second	EXISTING STREET SIGN
PVC	POLYVINYLCHLORIDE (PLASTIC PIPE)		SWALE
RCP	REINFORCED CONCRETE PIPE	<u>~</u>	DIRECTION OF SHEET FLOW
R/W	RIGHT OF WAY	• • • • • • • •	CLEARING AND GRADING LIMITS
STA	STATION		FIRE HYDRANT
T	TOP		VALVE
TBR	TO BE REMOVED	<u> </u>	LATERAL
TBRBO	TO BE REMOVED BY OTHERS	12345	ADDRESS
TBR&R	TO BE REMOVED BY CITIERS TO BE REMOVED AND REPLACED	\odot	TREE
TF			SANITARY SEWER DESIGNATOR
	TOP OF FOUNDATION		STORM SEWER DESIGNATOR
TYP	TYPICAL	A_R	AIR RELIEF VALVE
UIP	USE IN PLACE	—————————————————————————————————————	AIR RELIEF VALVE & C.O.
UP	UTILITY POLE	+	PROPOSED STREET LIGHT (TYP)
W	WIDE		PROPOSED GRADING LIMITS (TYP)

X X X

X X X

TIMOTHY J MEYER Professional Engineer MO E-24665