XISTING	LEGEND	NEW
	SANITARY SEWER MANHOLE	
-0-	STREET SIGN	
~		
▲ WV	WATER VALVE	
▲ WM	WATER METER	
▲ GV	GAS VALVE	
▲ GM	GAS METER	
- <b>P</b> P	POWER POLE	
X	LIGHT POLE	
TB/CM	TELEPHONE OR CABLE BOX	
$\leftarrow$	GUY WIRE	
EB/EM	ELECTRIC BOX OR METER	
— X — X—	FENCE	— x — x-
0	BOLLARD	
$\langle + \rangle$	TREE	
$\bigcirc$	AREA INLET	
$\bigcirc$	MANHOLE	) ()
	IDENT. OF NEW OR MOD. DRAINAGE STRUCT.	$\langle \mathbf{x} \rangle$
=====	STORM SEWER	<u></u>
S	SANITARY SEWER	
$\triangle$	SITE BENCHMARK	
•	FOUND PIPE/PIN	
×	FOUND CUT CROSSS	
0	FOUND MONUMENT AS NOTED	
· · · · · ·	SWALE	
	ROCK	
W	WATER LINE	
— G ———	GAS LINE	
UE	UNDERGROUND ELECTRIC	
OE	OVERHEAD ELECTRIC	
UT	TELEPHONE	
	PROPERTY LINE	
	RIGHT OF WAY	
	CONCRETE PAVEMENT	
	CONCRETE CURB	
	EASEMENT	
—460 — —	MAJOR CONTOUR	<b></b> (460) <b></b>
-454	MINOR CONTOUR	(454)
	SILT FENCE	
	CONSTRUCTION LIMITS	

## **H&S GENERAL NOTES:**

- 1. BOUNDARY AND TOPOGRAPHIC PERFORMED BY HORNER 63103.
- 2. DO NOT SCALE DRAWINGS. USE DIMENSIONS SHOWN. AN IMMEDIATELY TO THE ENGINEER.
- 3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMIT COST OF THESE PERMITS SHALL BE INCLUDED IN THE CON
- 4. SITE DIMENSIONS ARE TO FACE OF CURB, PROPERTY LINE OTHERWISE NOTED. ALL DIMENSIONS AND RADII TO OR
- 5. DO NOT DISTURB ANY UTILITIES UNLESS NOTED OTHERWI
- 6. USE OF EXPLOSIVES AND BURNING ON-SITE WILL NOT BE
- 7. CONSTRUCTION SIGNS, LIGHTS, AND BARRICADES SHALL TO MAINTAIN A SAFE WORK SITE CONDITION AS DIRECTED AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRA LATEST EDITION.
- 8. ALL CONSTRUCTION ACTIVITIES TO COMPLY WITH APPLICA
- 9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE
- 10. ALL GROUND SURFACES DISTURBED BY CONSTRUCTION CONDITION.
- 11. FOR CONSTRUCTION STAKING PURPOSES, THE CONTRAC THE ELECTRONIC DRAWINGS FOR THE SITE PLAN AND GRA
- 12. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING OF MEANS APPROVED BY THE CONSTRUCTION MANAGER.
- 13. ALL INSTALLATIONS AND CONSTRUCTION SHALL CONFORI DRAWINGS. HOWEVER, IF THE DEVELOPER CHOOSES TO M AND/OR SPECIFICATIONS DURING CONSTRUCTION, HE/SHE OWN RISK. WITHOUT ANY ASSURANCE THAT THE CITY ENG INSTALLATION OR CONSTRUCTION. IT SHALL BE THE RESP NOTIFY THE CITY OF ANY CHANGES FROM THE APPROVED I REQUIRED TO CORRECT THE INSTALLED IMPROVEMENTS S ENGINEERING DRAWINGS. THE DEVELOPER MAY REQUEST INSPECTION DIVISION REGARDING ANY FIELD CHANGES AP
- 14. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY TO OF WORKERS ON THE SITE.
- 15. SURVEYING AND SUBMITTING AS-BUILTS TO THE CITY OF O'FALLON OR UTILITY COMPANIES PER THEIR REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 16. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO THE CITY FOR APPROVAL PRIOR TO CONSTRUCTION.
- 17. CONSTRUCTION WORK SHALL ONLY BE ALLOWED DURING THE FOLLOWING HOURS: OCTOBER 1 - MAY 31

OCTOBER 1 - MAY 31 7:00 A.M. TO 7:00 P.M.	MONDAY - SUNDAY
JUNE 1 - SEPTEMBER 30	
6:00 A.M. TO 8:00 P.M.	MONDAY - FRIDAY
7:00 A.M. TO 8:00 P.M.	SATURDAY AND SUNDAY

CONSTRUCTION WORK DONE OUTSIDE THESE HOURS REQUIRES PRIOR WRITTEN APPROVAL FROM THE CITY ADMINISTRATOR OR CITY ENGINEER.

18. CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION FENCING AROUND ALL UNCOMPLETED WORK AT THE END OF EACH WORK DAY TO PREVENT CHILDREN AND PETS FROM WANDERING INTO CONSTRUCTION AREAS.

# **H&S GRADING, SEDIMENT & EROSION CONTROL NOTES:**

- 1. SEDIMENT AND EROSION CONTROL SHALL NOT BE LIMITED TO THE MEASURES SHOWN ON THE PLANS. THE CONTRACTOR. WITH THE APPROVAL OF THE CITY INSPECTOR. SHALL UTILIZE BEST MANAGEMENT PRACTICES TO PREVENT SEDIMENT FROM ENTERING ADJACENT PROPERTIES, ROADWAYS, STORM SEWERS AND DRAINAGEWAYS.
- 2. ALL TRUCKING OPERATIONS SHALL FOLLOW THE APPROVED TRUCKING HAUL ROUTE. CONCRETE TRUCKS SHALL HAVE PROPER WASHOUTS, AS APPROVED BY THE CITY. COUNTY AND STATE ROADS SHALL BE CLEANED AND KEPT CLEAR OF MUD, SEDIMENT, AND ANY OTHER DEBRIS AT ALL TIMES THROUGHOUT CONSTRUCTION.
- 3. ALL ON-SITE TRASH, LITTER, DISCARDED BUILDING MATERIALS, OTHER CONSTRUCTION SITE WASTES AND DEBRIS, EITHER EXISTING OR FROM CONSTRUCTION, MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.
- 4. CONTRACTOR SHALL PROVIDE THE CITY INSPECTOR INFORMATION CONCERNING STORAGE AND HANDLING OF ALL HAZARDOUS AND TOXIC SUBSTANCES BROUGHT ONTO THE SITE. THE CONTRACTOR WILL ADHERE TO APPLICABLE FEDERAL AND STATE REGULATIONS CONCERNING STORAGE AND DISPENSERS, SPILL PREVENTION CONTROL AND COUNTERMEASURE PLANS FOR CLEAN-UP.
- SOFT SOILS IN THE BOTTOM AND BANKS OF ANY EXISTING OR FORMER POND SITES OR TRIBUTARIES OR ANY SEDIMENT BASINS, TRAPS, OR OTHER ESC MEASURES SHOULD BE REMOVED, SPREAD OUT AND PERMITTED TO DRY SUFFICIENT TO BE USED AS FILL. NONE OF THIS MATERIAL SHOULD BE PLACED IN PROPOSED PUBLIC RIGHT-OF-WAY LOCATIONS OR ON ANY STORM SEWER LOCATION. ANY OTHER WET SOILS THAT ARE OUTSIDE THE OPTIMUM MOISTURE RANGE TO OBTAIN THE PROPER COMPACTION SHALL BE AIR DRIED SUFFICIENTLY BEFORE USE AS FILL.
- 6. ALL EXCAVATIONS, GRADING, OR FILLING SHALL HAVE A FINISHED GRADE NOT TO EXCEED A 3:1 SLOPE (33%).
- TEMPORARY SILTATION CONTROL MEASURES (STRUCTURAL) SHALL BE MAINTAINED UNTIL VEGETATIVE COVER IS ESTABLISHED AT A DENSITY SUFFICIENT TO PROVIDE EROSION CONTROL ON THE SITE.
- 8. CONTRACTOR SHALL PROVIDE DUST CONTROL, AS DETERMINED BY THE CITY OF O'FALLON.
- 9. UPON COMPLETION OF STORM SEWERS, SILTATION CONTROL SHALL BE PROVIDED AROUND ALL OPEN SEWER INLETS AND SHALL REMAIN UNTIL THE DISTURBED DRAINAGE AREAS HAVE BEEN PROPERLY STABILIZED.
- 10. WHERE NATURAL VEGETATION IS REMOVED DURING GRADING, VEGETATION SHALL BE RE-ESTABLISHED IN SUCH A DENSITY AS TO PREVENT EROSION.

	H&\$	S GRADING NOTES:
R & SHIFRIN, 401 S. 18TH ST., ST. LOUIS, MO	1.	NO GRADING OR EXCAVATION ACTIVITIES SHALL BE PERFORMED ON THE SITE NECESSARY PERMITS HAVE BEEN SECURED AND EROSION AND SEDIMENT CO HAVE BEEN INSTALLED ON AND ADJACENT TO THE PROJECT SITE.
ANY DISCREPANCY SHALL BE REPORTED	2.	EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF T ADDITIONAL EROSION AND SEDIMENTATION CONTROL MAY BE REQUIRED AS D
MITS TO ACCOMPLISH THIS WORK. THE ONTRACT AMOUNT.		CITY ENGINEER OR HIS/HER DESIGNATED REPRESENTATIVE.
NE OR FACE OF BUILDING UNLESS R FROM CURB LINES ARE TO FACE OF CURB. WISE.	3.	DAMAGE TO STREETS AND PROPERTIES DUE TO SOIL EROSION OR SILTATION PREVENTED BY ERECTING SILT FENCE BARRIERS, TEMPORARY BASINS OR BY DEVICES TO EFFECT SOIL STABILIZATION. SEE IMPROVEMENT PLAN. THE CON INSPECT AND MAKE ALL NECESSARY REPAIRS TO EROSION CONTROL MEASUR PERIODS OF PRECIPITATION, AND / OR AS DIRECTED BY THE CITY OF O'FALLON EROSION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR IF
E PERMITTED.		
L BE INSTALLED AT LOCATIONS NECESSARY ED/APPROVED BY THE CITY OF O'FALLON,	4.	WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED, VEGETATION DENSITY TO PROVIDE EFFECTIVE EROSION CONTROL MUST BE RE-ESTABLISHI
RAFFIC CONTROL DEVICES (M.U.T.C.D.),	5.	ALL TRENCHES BENEATH OR ADJACENT TO NEW PAVEMENT OR SIDEWALKS SI BACKFILLED TO SUBGRADE ELEVATION WITH COMPACTED 3/4" MINUS CRUSHE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE
CABLE OSHA REGULATIONS.		PROCTOR TEST.
HE CITY OF O'FALLON STANDARDS.	6.	ELEVATIONS AND CONTOURS SHOWN ARE TO TOP OF FINISHED GROUND OR F UNLESS OTHERWISE NOTED.
N SHALL BE RESTORED TO THEIR ORIGINAL	7.	CARE SHALL BE EXERCISED IN COMPACTION OF BACKFILL MATERIALS OVER T
CTOR SHALL BE PROVIDED WITH A COPY OF RADING UPON REQUEST.	1.	STRUCTURES OR PIPES IN ORDER TO PREVENT DAMAGE TO THE WATERPROO JOINTS, SEALS AND/OR THE PIPES AND STRUCTURES THEMSELVES.
WATER OR ANY OTHER NECESSARY	8.	CONTRACTOR SHALL MINIMIZE THE TRACKING OF MUD/DIRT AND DERBIES ON AND SHALL CLEAN THE ROADWAY OF MUD/DIRT AND DERBIES AT THE END OF DAY.
RM TO THE APPROVED ENGINEERING MAKE MINOR MODIFICATIONS IN DESIGN E SHALL MAKE SUCH CHANGES AT HIS/HER IGINEER WILL APPROVE THE COMPLETED	9.	ALL FILLED PLACES UNDER PROPOSED STORM SEWERS AND/OR PAVED AREA MINIMUM COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE COMPACTION TEST AASHTO T-180 OR AS DIRECTED BY THE SOILS ENGINEER.
SPONSIBILITY OF THE DEVELOPER TO D DRAWINGS. THE DEVELOPER MAY BE S SO AS TO CONFORM TO THE APPROVED ST A LETTER FROM THE CONSTRUCTION APPROVED BY THE CITY INSPECTORS.	10.	ALL FILL PLACED IN PROPOSED ROADS SHALL AT A MINIMUM BE COMPACTED FOR THE FILL UP TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE ST COMPACTION TEST AASHTO T-99 OR AS DIRECTED BY THE SOILS ENGINEER. A BE VERIFIED BY THE SOILS ENGINEER CONCURRENT WITH GRADING AND BACK OPERATIONS.
TOILET FACILITIES TO SERVE THE NUMBER	11.	ALL LOW PLACES, WHETHER ON-SITE OR OFF-SITE SHOULD BE GRADED TO PR DRAINAGE. CONTRACTOR TO PROVIDE COPIES OF TEMPORARY EASEMENT FO ADJACENT PROPERTIES AS REQUIRED.
O'FALLON OR UTILITY COMPANIES PER		

- 12. ALL MUD AND DEBRIS FROM THE CONSTRUCTION SITE SHALL BE KEPT OFF CITY MAINTAINED STREETS.
- 13. SOD SHALL BE USED IN SWALES UNLESS VELOCITIES ARE EXCESSIVE (GREATER THAN 5FPS OR WHERE VELOCITIES ARE LESS THAN 2 FPS CAUSING DEPOSITION OF SOIL PARTICLES) THEN CONCRETE SWALES MAY BE USED. SOD PLACED ON SLOPES STEEPER THAN 10% SHOULD BE STAKED.
- 14. CONTRACTOR TO PROVIDE ALL AS-BUILTS REQUIRED BY THE CITY.
- 15. GRADING EARTHWORK QUANTITIES MUST BE VERIFIED BY CONTRACTOR AND SHOULD NOT BE ASSUMED TO BALANCE.
- 16. NO GRADED AREAS ARE TO REMAIN BARE FOR OVER 14 DAYS WITHOUT BEING SEEDED AND MULCHED.

THE CLIENT IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. LOCATION, RELOCATION AND CONNECTION OF THE UTILITIES SHALL BE COORDINATED WITH THE UTILITY COMPANIES.

## **BENCHMARK INFORMATION:** SITE BENCHMARK

BENCHMARK ELEV = 579.46 - A BENCH TIE ON 26" TREE AND BEING LOCATED 52.4' FROM THE NORTHEAST COR 14.1' WEST OF TREE.

- TE UNTIL ALL ONTROL MEASURES
- THE CONTRACTOR. DIRECTED BY THE
- N SHALL BE BY UTILIZING SIMILAR ONTRACTOR SHALL URES FOLLOWING ON. ADDITIONAL IF SO DIRECTED.
- ON IN SUFFICIENT HED WITHIN 30 DAYS.
- SHALL BE HED LIMESTONE. IE MODIFIED
- R PAVED SURFACE,
- THE TOP OF DOFING MEMBRANES,
- NTO THE ROADWAY OF EACH WORKING
- EAS SHALL BE AT A HE MODIFIED
- D FROM THE BOTTOM STANDARD ALL TESTS SHALL CKFILLING
- **ROVIDE POSITIVE** FOR WORK ON

# **GENERAL UTILITY NOTES:**

- EXISTING UTILITY.
- 2.

4.

- 7. CONTRACTOR.

1. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE AGENCY (AS SHOWN ON COVER SHEET) PRIOR TO THE COMMENCEMENT OF ANY WORK WHICH WILL AFFECT ANY

ALL STORM SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARD CONSTRUCTION SPECIFICATIONS FOR DRAINAGE FACILITIES, LATEST EDITION.

3. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THIS WORK SHALL BE COMPLETED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROTECT ALL SUCH UNDERGROUND UTILITIES DURING ALL PHASES OF WORK.

LOCATE EXISTING UNDERGROUND UTILITIES AND SEWERS IN THE AREAS OF WORK BEFORE STARTING OPERATIONS. WHEN UTILITIES OR SEWERS ARE TO REMAIN IN PLACE. PROVIDE ADEQUATE MEANS OF PROTECTION DURING OPERATIONS. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT THE CONSTRUCTION MANAGER AND UTILITY OWNER IMMEDIATELY FOR DIRECTIONS. COOPERATE WITH THE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO THE SATISFACTION OF THE UTILITY OWNER. REMOVALS OR RELOCATIONS BY UTILITY COMPANIES ARE TO BE INITIATED AND COORDINATED BY THE CONTRACTOR

WHERE SEWER, WATER LINES OR OTHER UTILITY LINES CROSS OVER OR UNDER EACH OTHER, PROVIDE CONCRETE ENCASEMENT OF THE TOP PIPE IF THE CLEARANCE IS LESS THAN 24 INCHES. ENCASEMENT SHALL EXTEND TO A MINIMUM DISTANCE OF 5 FEET ON BOTH SIDES OF THE CROSSING. WATER MAINS SHALL NOT BE INCASED IN CONCRETE. A MINIMUM OF 18 INCHES OF CLEARANCE SHALL BE MAINTAINED AROUND WATER DISTRICT UTILITIES.

ALL EXISTING UTILITY ACCESS COVERS SUCH AS MANHOLES, VALVE BOXES, VAULT COVERS, METER COVERS AND OTHER SURFACE APPURTENANCES SHALL BE ADJUSTED TO THE PROPER FINISH GRADE ELEVATION IN ACCORDANCE WITH THE REQUIREMENTS OF THE AFFECTED UTILITY COMPANY OR SERVICE PROVIDER.

DESIGN OF SHORING FOR UTILITY AND SEWER TRENCHES IS THE RESPONSIBILITY OF THE

FOR SEWERS WITH A DESIGN GRADE OF LESS THAN ONE PERCENT (1%), FIELD VERIFICATION OF THE STORMSEWER GRADE WILL BE REQUIRED FOR EACH INSTALLED REACH OF SEWER, PRIOR TO ANY SURFACE RESTORATION OR INSTALLATION OF ANY SURFACE IMPROVEMENTS.

9. ALL STORM SEWER LIDS SHALL HAVE THE CITY LOGO PER CITY REQUIREMENTS.

### **UTILITY INFORMATION:**

THE UNDERGROUND STRUCTURES, UTILITIES AND EASEMENTS HAVE BEEN PLOTTED FROM READILY AVAILABLE RECORDS AND AVAILABLE MAPS AS WELL AS FIELD OBSERVED MARKINGS AT THE TIME OF THE FIELD VISIT. LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO ANY CONSTRUCTION.

RNER OF 2429 SUNDANCE DR HOUSE, 11.8' EAST OF 12" TREE AND $12^{\prime}$ $12^{\prime}$ $12^{$	
#2429 HOUSE CORNER REFERENCE TIE BENCH TIE ON 26" TREE CONTROL POINT #104 ELEV.=579.46'	CITY OF O'FALLON 100 N. MAIN ST. O'FALLON, MO 63366
	P+Z No. Approval Date City No.
Call Before you DIG TOLL FREE	Page No.
1-800-344-7483 MISSOURI ONE-CALL SYSTEM INC. MODOT (314) 340-4100	C1.1

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