

GENERAL NOTES

- 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, and shall be located prior to any grading and/or construction of improvements.
- Erosion control shall not be limited to what is shown on the plans. The contractor shall take whatever means necessary to prevent siltation from entering adjacent roadways, properties, ditches and silted up all storm drainage systems on site and in receiving channels. Such control might include channeling runoff into sediment basins, channeling runoff into areas where an extra row of straw bales are used. A silt fence might be considered, if necessary.
- No area shall be cleared without permission of the developer.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and City/County and State roads will be adequately protected.
- Soil preparation and re-vegetation shall be performed according to Appendix A of the Model Sediment and Erosion Control Regulations for Urban Development. Graded areas that are to remain bare for over 2 weeks are to be seeded and mulched per DNR requirements.
- Where natural vegetation is removed during grading, vegetation shall be reestablished in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations.
- Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The unsuitable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.
- Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory rollers or high speed impact type drum rollers acceptable to the Soils Engineer. The rollers shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- The developer must supply the City construction inspectors with soil reports prior to or during soil testing.
- The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.
- The Soils Engineer shall notify the Contractor of rejections of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
- All Areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 85 percent of the maximum density as determined by the Modified AASHTO T-180 Compaction Test (ASTM-D1557). Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
- The sequence of operation in the fill areas will be: fill, compact, verify acceptable soil density, and repetition of the sequence.
- The surface of the fill shall be finished so that it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.
- All fill placed under proposed storm and sanitary sewer, proposed road, and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with the grading and backfilling operations. Ensure the moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
- Rip rap shown at flared ends will be evaluated in the field after installation for effectiveness and field modified if necessary to reduce erosion on and off site.
- Soft soil in the bottom and banks of any existing or former pond site should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on storm sewer locations.
- If straw bales or silt fences are destroyed by heavy rains, vandalism, etc., they are to be replaced immediately by contractor.
- When grading operations are completed or suspended for more than thirty (30) days, permanent grass must be established at sufficient density to provide erosion control on the site. Between permanent grass seeding periods, temporary cover shall be provided according to the Designated Official's recommendation. Refer to Appendix A of St. Charles Soil and Water Conservation District - Model Sediment and Erosion Control Regulations.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.
- The total yardage of this project is based on a 15% ± shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions (types and moisture content), weather conditions, and the percentage of compaction actually achieved at the time of the year grading is performed. As a result, adjustments in final grade may be required. If adjustments need to be made, the contractor shall contact St. Charles Engineering and Surveying, Inc. prior to completion of the grading.
- The vertical grading tolerance shall be plus or minus 0.2 feet for all rough grading.
- The Contractor shall prevent all storm/surface water, mud or construction debris from entering the sanitary sewer system.
- The most stringent of the above requirements shall apply.
- All utilities shall be located underground.
- No slopes shall be steeper than 3 (horizontal) to 1 (vertical).
- Ensure sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAC) along with required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans, the ADAAC guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.
- All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB point (or equivalent as approved by City and MoDOT).
- All proposed fencing requires a separate permit through the Planning Division.
- Any proposed playground areas will need a separate permit from the Building Division.
- All sign locations and sizes must be approved separately through the Planning Division.
- All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.
- Brick shall not be used in the construction of storm sewer structures.*
- Brick shall not be used in the construction of sanitary sewer structures.*
- Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City standards.*

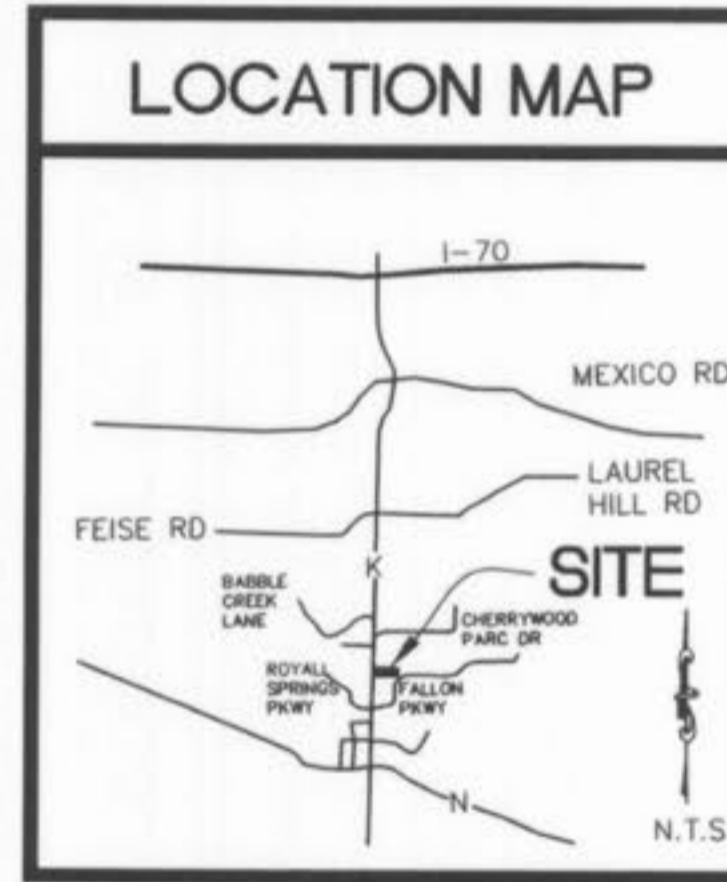
ADDITIONAL GRADING NOTES

All trash and debris on-site, either existing or from construction, must be removed and properly disposed of off-site.
 Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be properly disposed of off-site.
 Soft soils in the bottom and banks any existing or former pond sites or tributaries or any sediment basins or traps should be removed, spread out and permitted to dry sufficiently 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.
 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.
 All finished grades (areas not to be disturbed by future improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 1 pound per 1,000 square feet when seeded.

IMPROVEMENT PLAN ABC DAYCARE

A TRACT OF LAND BEING PART OF THE
SOUTHWEST QUARTER OF SECTION 4,
TOWNSHIP 46 NORTH, RANGE 3 EAST
CITY OF O'FALLON, ST. CHARLES COUNTY, MO

AS-BUILT



DEVELOPMENT NOTES

- Owner:
B & L Real Estate
499 Rosslare
Weldon Spring, MO 63304
(636) 939-0710
- Prepared For:
B & L Real Estate
499 Rosslare
Weldon Spring, MO 63304
(636) 939-0710
- Area of Tract = 2.214 Acres
- Zoning - C-2 Commercial District
- Proposed Use - Daycare Center
- Setback Requirements:
-Front Yard Setback Twenty-five (25) feet
-Rear Yard Setback Ten (10) feet
-Side Yard Setback No Side Yard Setback required
if against C-zoning; Twenty-five (25) feet if
against residential zoning, plus a 15' transition strip
- All utilities are located underground.
- Parking Calculations:
One space for each 10 pupils plus 1 for each employee
156 Maximum pupils, 20 employees
23 Parking Spaces Existing
13 Parking Spaces Provided
36 Parking Spaces Total

9. Pavement shall be 3" Type C mix over 8" Type 1 aggregate.

10. Utilities
 -Water: St. Charles County Water District #2
 -Sanitary: Duckett Creek Sanitary District
 -Electric: Ameren UE
 -Gas: St. Charles Gas Company
 -School: Fort Zumwalt
 -Fire: O'Fallon Fire Protection District

11. According to FIRM Map Panel Number 29183C0239 E Dated August 2, 1996, the eastern portion of this site is in the 100 year flood plain.

12. All Sanitary Sewer Construction must meet the current standards and specifications of the Duckett Creek Sanitary District.

13. All Storm Sewer Construction must meet the current standards and specifications of the City of O'Fallon.

14. The USGS Benchmark is a brass vertical mark disk stamped "F 149 1935" set in a 6 inch square concrete monument, elevation 542.80.

LEGEND	
	SANITARY STRUCTURE
	STORM STRUCTURE
	TEST HOLE
	POWER POLE
	LIGHT STANDARD
	CURB INLET
	DOUBLE CURB INLET
	GRATE INLET (EXISTING)
	AREA INLET (EXISTING)
	DOUBLE AREA INLET
	FLARED END SECTION
	END PIPE
	ENERGY DISSIPATOR
	MANHOLE
	REINFORCED CONCRETE PIPE
	CORRUGATED METAL PIPE
	CAST IRON PIPE
	POLYVINYL CHLORIDE
	VITRIFIED CLAY PIPE
	GUY WIRE
	SIGN
	POST
	WATER METER
	WATER VALVE
	WATER SHUT OFF
	GAS VALVE
	DOWNSPOUT
	C.O. CLEAN OUT
	T.B.R. TO BE REMOVED
	T.B.R.&R. TO BE REMOVED & RELOCATED
	T.B.P. TO BE PROTECTED
	T.B.A. TO BE ABANDONED
	B.C. BASE OF CURB
	T.C. TOP OF CURB
	T.W. TOP OF WALL
	TYP. TYPICAL
	U.N.O. UNLESS NOTED OTHERWISE
	U.I.P. USE IN PLACE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	TREE LINE
	SAN. SEWER (EXISTING)
	SAN. SEWER (PROPOSED)
	STORM DRAIN (EXISTING)
	STORM DRAIN (PROPOSED)
	PHONE BOX
	IRON PIPE
	WATER LINE, SIZE
	HYDRANT
	CONCRETE PAVEMENT
	PLACED RIP-RAP UNDERLAIN FABRIC
	SWALE

INDEX

- TITLE SHEET
- FLAT PLAN
- GRADING PLAN
- ~~DETAILS AND DRAINAGE AREA MAP~~
- ~~DETAILS~~

THE EXISTING SEWER LENGTHS, SIZES, FLOW LINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF AS-BUILT PLANS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ST. CHARLES ENGINEERING AND SURVEYING, INC.
Michael Newell Meiners 2/27/06
 MICHAEL NEWELL MEINERS
 MISSOURI PROFESSIONAL ENGINEER NUMBER E-22483



The Contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The Contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or City of O'Fallon and/or MoDOT. The Contractor's responsibilities include all design and implementation as required to prevent erosion and depositing of silt. The Owner and/or the City of O'Fallon and/or MoDOT may at their option direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement shall be removed immediately. Any depositing of silts or mud in new or existing storm sewers or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or City of O'Fallon and/or MoDOT.

LEGAL DESCRIPTION:

A tract of land being part of the Southwest quarter of Section 4, Township 46 North, Range 3 East, St. Charles County, Missouri and being more particularly described as follows:

Commencing at an old stone marking the Southeast corner of the Southwest quarter of the Southwest quarter of Section 4, Township 46 North, Range 3 East; thence North 00°32'41" East, 32.09 feet to an iron pipe; thence North 89°44'52" West, 670.43 feet to a found iron pipe marking the TRUE POINT OF BEGINNING of a tract of land herein described; thence North 89°44'52" West, 525.35 feet to the eastern right of way state Highway K; thence along said right of way North 12°52'59" East, 11.71 feet to a point; thence North 16°18'25" West, 172.67 feet to a point; thence South 89°44'52" East, 570.51 feet to a point; thence South 00°13'50" East, 176.94 feet to the TRUE POINT OF BEGINNING and containing 2.214 acres.

CITY FILE NUMBER 2104

OWNER/DEVELOPER

B and L REAL ESTATE
 499 Rosslare
 Weldon Spring, Missouri 63304
 (636) 939-0710

ENGINEERS AUTHENTICATION

The responsibility for the professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in the project and specifically excludes revisions after this date unless reauthenticated.

ORDER NO.
040257
 DATE
1/23/06

2/24/06 REVISE PER CITY COMMENTS

TITLE SHEET
ABC DAYCARE
AS-BUILT

ST. CHARLES ENGINEERING & SURVEYING, INC.
 801 S. FIFTH STREET, SUITE 202
 ST. CHARLES, MO 63301
 TEL: (636) 947-0607 FAX: (636) 947-2448



CL HIGHWAY "K"

CL HIGHWAY "K"

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE OR NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD 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.

N/F TWIN RIVERS SUBDIVISION
LOT 1
P.B. 33 Pg. 126
C-2 ZONING

N/F CHERRYWOOD PARK SUBDIVISION
PLAT TWO P.B. 33 Pg. 118
R-4 ZONING

TRANQUILITY LANE
N/F KAPLAN LUMBER COMPANY, INC.
1004/1448
R-1 ZONING

DEMOLITION PLAN

N/F TWIN RIVERS SUBDIVISION
LOT 1
P.B. 33 Pg. 126
C-2 ZONING

TRANQUILITY LANE
N/F KAPLAN LUMBER COMPANY, INC.
1004/1448
R-1 ZONING

FLAT PLAN AND LANDSCAPE PLAN

REQUIRED LANDSCAPE PLANTING SCHEDULE
1 TREE PER 40' OF STREET FRONTAGE: 172/40 = 4.3 TREES
1 TREE PER 3000SF OF OPEN SPACE 54,056/3000 = 18.0 TREES
TOTAL TREES REQUIRED: 18 + 4.3 = 22 TREES
TOTAL TREES PROVIDED: 11 + 12 + 2 + 2 = 27 TREES

EXISTING LANDSCAPE PLANTING SCHEDULE

SYM	QTY	SPECIES TYPE	SIZE
⊙	*	Ground Cover Shrubs	VARIES
⊙	11	Flowering Tree	6' HEIGHT
⊙	12	Pine	6' HEIGHT
⊙	2	Japanese Red Maple	6' HEIGHT

PROPOSED LANDSCAPE PLANTING SCHEDULE

SYM	QTY	SPECIES TYPE	SIZE
⊙	2	Pine	6' HEIGHT

AS-BUILT

Call BEFORE you DIG
TOLL FREE
1-800-344-7483
MIDWEST ONE-CALL SYSTEM, INC.

2/24/06 REVISE PER CITY COMMENTS

DEMOLITION AND FLAT PLAN
ABC DAYCARE
IMPROVEMENT PLANS

ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448

S E S



ORDER NO.
040257
DATE
1/23/06

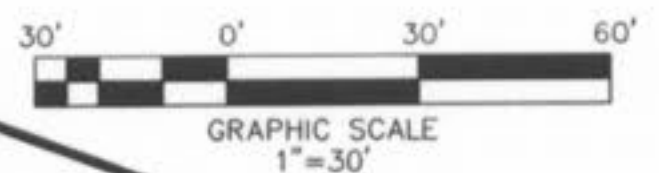
CITY FILE NUMBER 2104

CL HIGHWAY "K"

N/F TWIN RIVERS SUBDIVISION
LOT 1
P.B. 33 Pg. 126
C-2 ZONING

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE OR NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD 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.

N/F CHERRYWOOD PARC SUBDIVISION
PLAT TWO P.B. 33 Pg. 118
R-4 ZONING



Call BEFORE you DIG
TOLL FREE
1-800-344-7463
MISSOURI ENGINEERS, INC.

TRANQUILITY LANE
N/F KAPLAN LUMBER COMPANY, INC.
1004/1448
R-1 ZONING

GRADING PLAN

2/24/06 REVISE PER CITY COMMENTS

GRADING PLAN
ABC DAYCARE
IMPROVEMENT PLANS

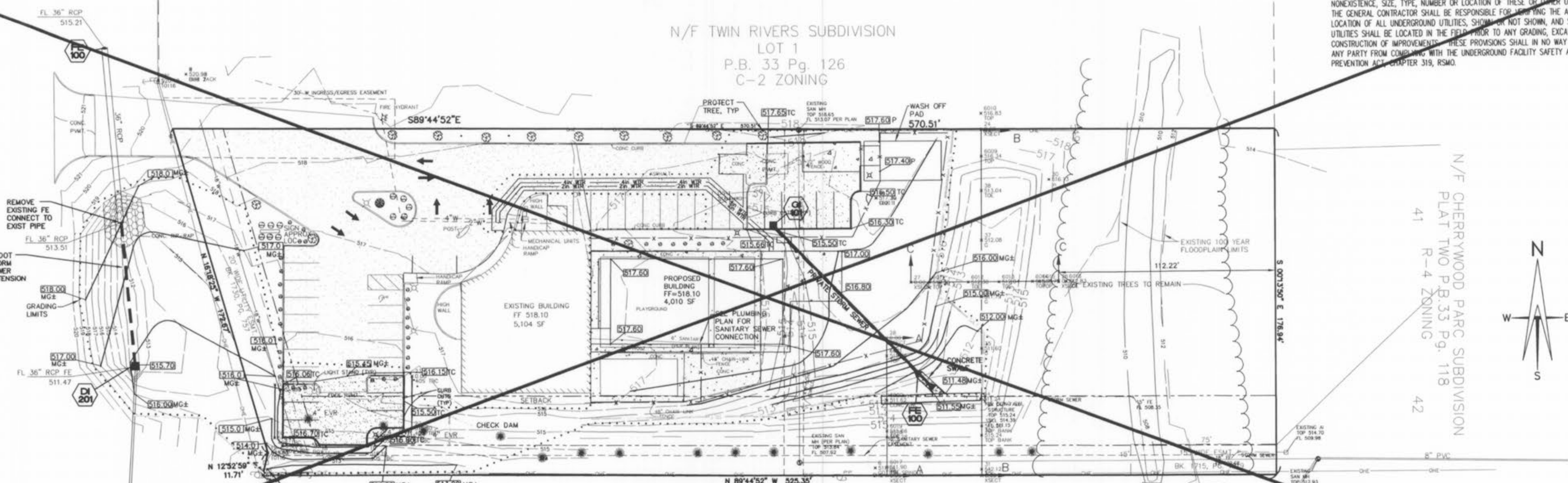
ST. CHARLES ENGINEERING & SURVEYING, INC.
801 S. FIFTH STREET, SUITE 202
ST. CHARLES, MO 63301
TEL: (636) 947-0607 FAX: (636) 947-2448

S E S

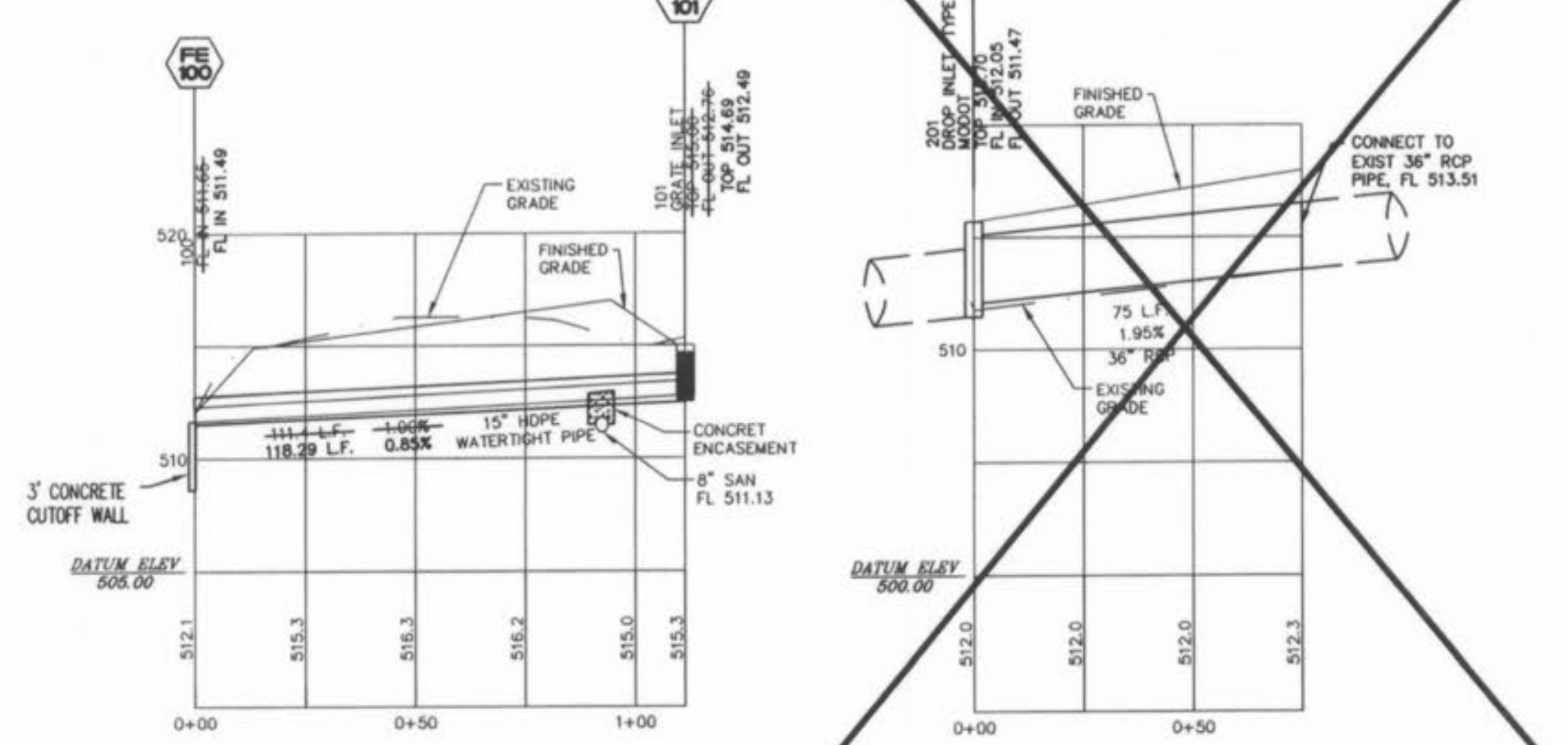


ORDER NO.
040257
DATE
1/23/06
3

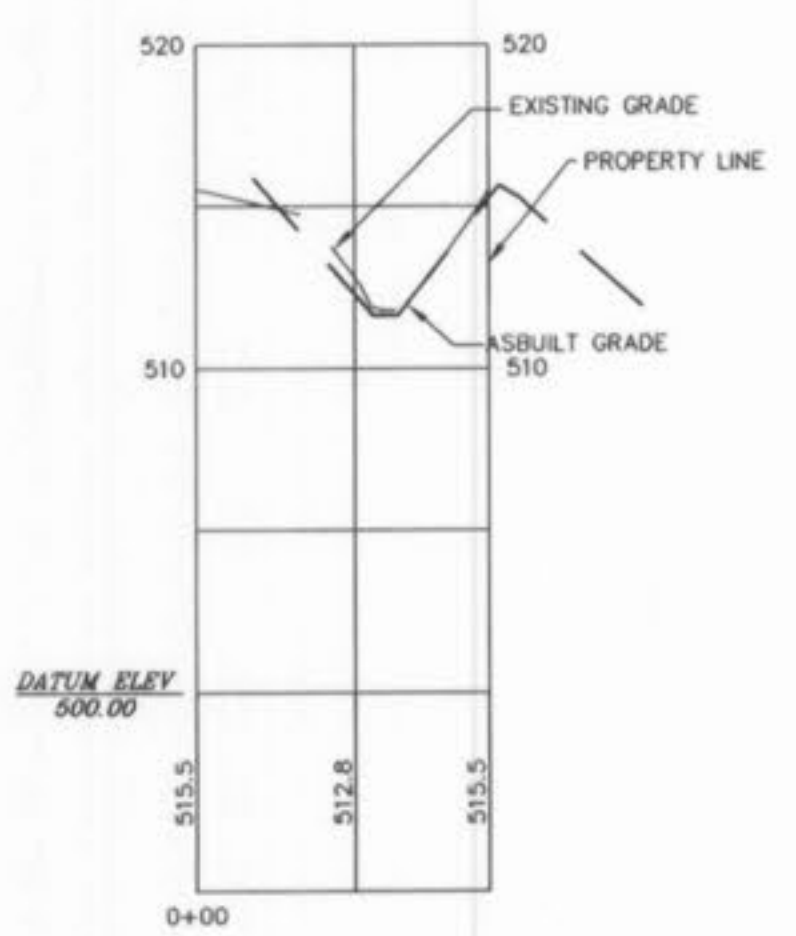
CITY FILE NUMBER 2104



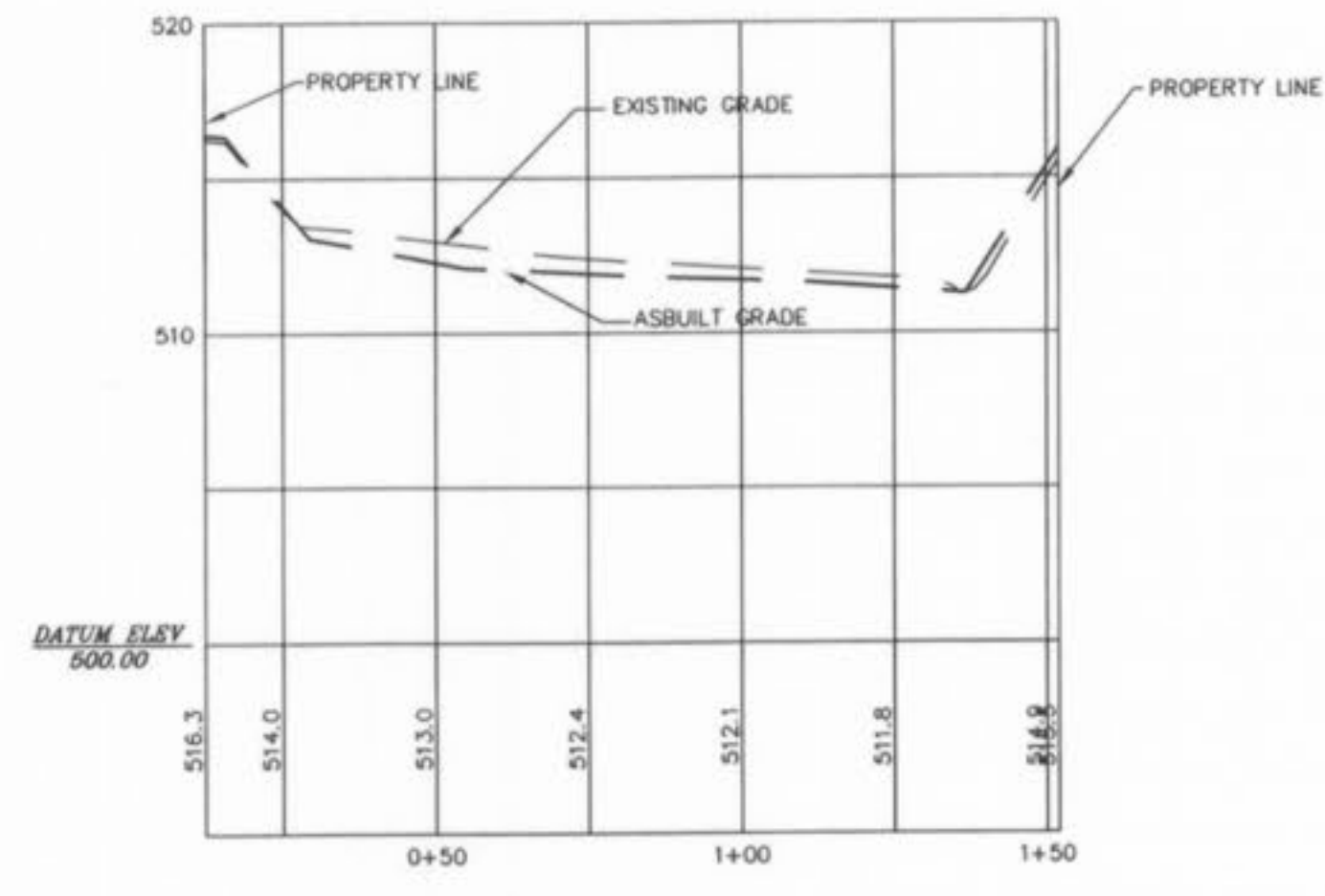
AS-BUILT



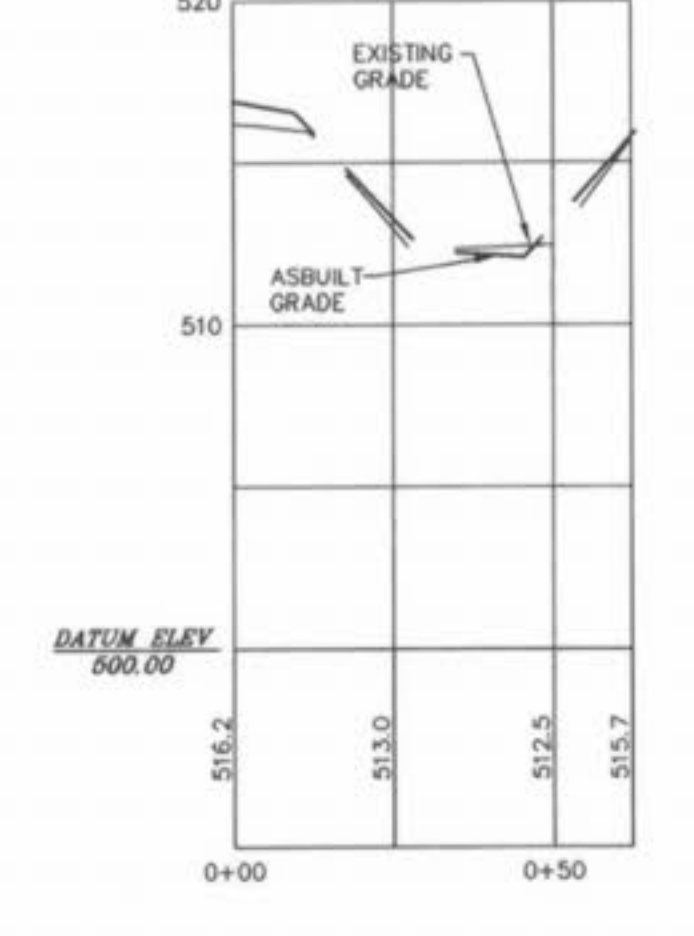
STORM SEWER PROFILE



CROSS SECTION A-A



CROSS SECTION B-B



CROSS SECTION C-C

DETENTION BASIN PROFILES

VERT. SCALE:
6
30
HORIZ. SCALE:

040257.mxd.dwg