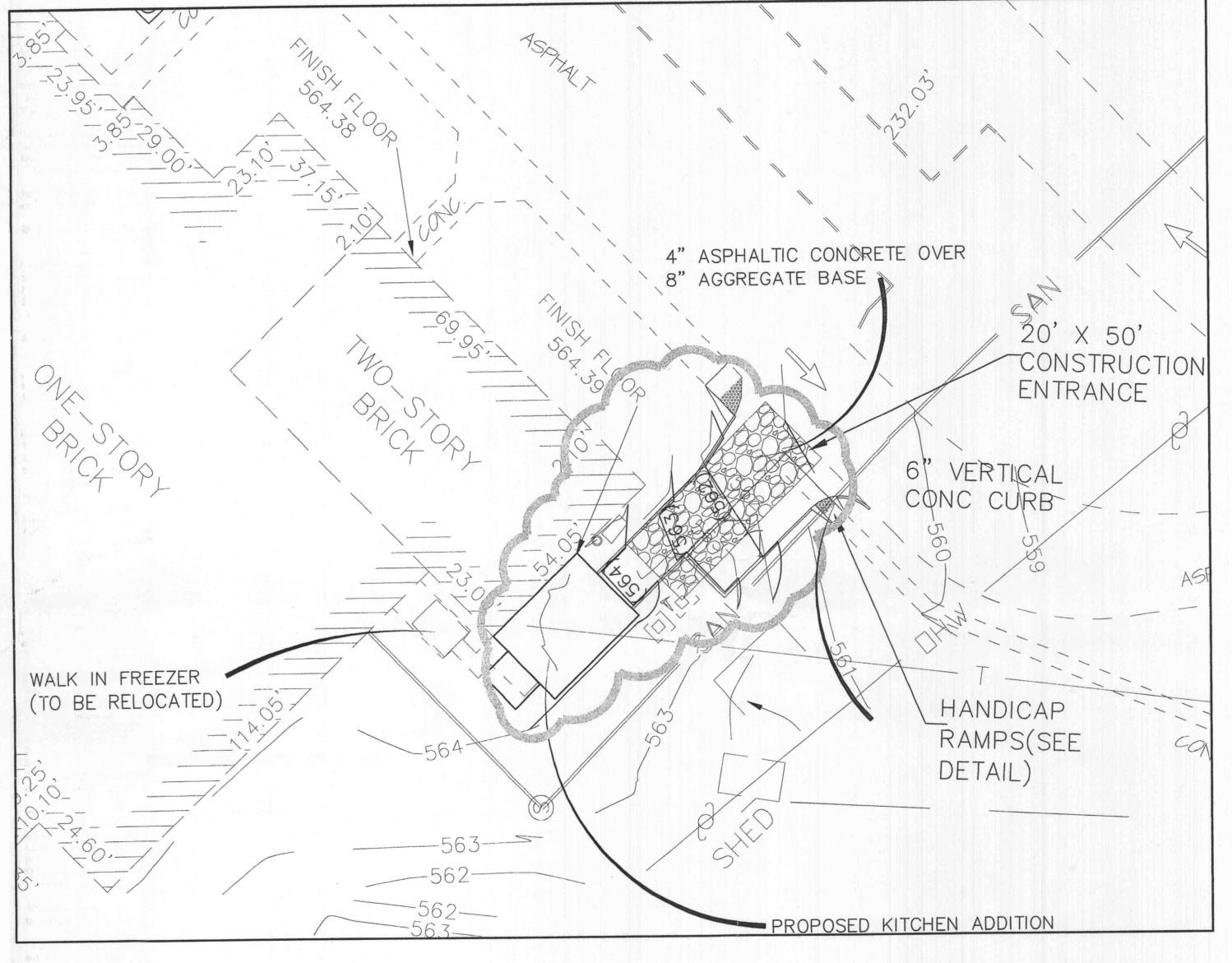


GENERAL NOTES

- 1. 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 or construction of the improvements.
- 2. All trench backfills under paved areas shall be granular backfill, and shall be compacted to 90% of the maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test. (A.S.T.M.-D-1557). All other trench backfills may be earth material (free of large clods or stones). All trench backfills shall be water jetted.
- 3. No area shall be cleared without the permission of the Project Engineer
- 4. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- 5. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre-construction conditions.
- 6. All construction and materials shall conform to the current construction standards of the City of O'Fallon.
- 7. Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer. 8. No slopes shall exceed 3(H): 1(V).
- 9. 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 siltaion 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 the City of O'Fallon and/or MODOT. The Contractor's responsibilities include all design and implementation as required to prevent erosion and the 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 silts or mud on new or existing pavement or 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 the City of O'Fallon and/or MODOT.
- 10. Erosion control systems shall not be limited to what is shown on the plan. Whatever means necessary shall prevent siltation and erosion from entering natural streams and adjacent roadways, properties and ditches.
- 11. Developer must supply the city construction inspectors with soil reports prior to or during site soil testing. The soil report will be required to contain the following information on soil test curves (Protector reports) for projects within the city.
- * Maximum dry density
- * Optium moisture content
- * Maximum and minimum allowable moisture content
- * Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Modified AASHTON T-180 Compaction test" (A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Protector Test ASSHTO T-99, Method C" (A.S.T.M.-D-698). Proctor type must be designated on
- * Curve must have at least 5 density points with moisture content and sample locations listed on document.
- * Specific gravity
- * Natural moisture content
- * Liquid limit
- * Plastic limit
- 12. Brick shall not be used in the construction of storm sewer structures. 13. All proposed utilities are to be bored under existing City of O'fallon
- 14. All sign locations and sizes must be approved seperately through the
- 15. All sign post and backs and bracket arms shall be painted black using Carboline Rustbond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City and Modot).
- 16. All utilities will be located underground (electric, gas, water, telephone,
- 17. All sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with current approved "American with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information and the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer. (Ensure at least (1) 8' wide handicapped access aisle is provided and curb ramps do not project into handicap access aisle.)
- 18. Rip rap shown at flared ends will be evaluated in the field after installation for effectiveness and field modified if necesary to reduce erosion on and off site.
- 19. All fill placed under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% 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 grading and backfilling operations.
- 20. All paving to be in accordance with St. Charles County standards and specifications except as modified by the City of O'Fallon ordinances.

A SET OF CONSTUCTION PLANS FOR MOUNT HOPE ELEMENTARY SCHOOL A TRACT OF LAND BEING PART OF SECTION 13, TOWNSHIP 47 NORTH, RANGE 2 EAST, AND PART OF SECTION 18, TOWNSHIP 47 NORTH, RANGE 2 EAST OF THE FIFTH PRINCIPAL MERIDIAN ST. CHARLES COUNTY, MISSOURI



DEVELOPMENT NOTES

VEGETATIVE ESTABLISHMENT For Urban Development Sites 1. Area of Prposed Addition: Approximately 600 sq. ft. APPENDIX A

Seeding Rates:

Permanent: Tall Fescue - 30 lbs./ac.

Smooth Brome - 20 lbs./ac. Combined Fescue @ 15 lbs./ac. and Brome @ 10 lbs./ac.

Wheat or Rye - 150 lbs./ac. (3.5 lbs. per 1,000 square foot)

Seeding Periods:

Fescue or Brome - March 1 to June 1

August 1 to October 1 Wheat or Rye - March 15 to November 1 March 15 to September 15

Mulch Rates: 100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)

Fertilizer Rates:

30 lbs./ac. Nitrogen 30 lbs./ac. Phosphate

30 lbs./ac. Potassium 600 lbs./ac. ENM* Lime

- 120 lbs./ac. (2.75 lbs. per 1,000 square foot)

* ENM =: effective neutralizing material as per State evaluation of quarried rock.

- 11.78 Acres Total area of property:
- Current zoning: Proposed use:
 - Elementary School Ft. Zumwalt School District
- Required building & parking setbacks: Front yard-25 feet
- Side yard-6 feet Rear yard-25 feet Parking-10 feet
- Parking Requirements & Provisions: Proposed building addition will not necessitate parking spaces. No additional bicycle racks are required.
- Landscape requirements: No additional landscape, trees, or shrubs are proposed building addition.
- Total: 513,288.52sq.ft.=100% Buildings: 5,7401.66sq.ft.=11.18% Pavement: 83,839.17sq.ft.=16.33% Greenspace: 372,047.69sq.ft.=72.49%
- According to the Flood Insurance Rate Map of the City of O'Fallon, Missouri, (community panel number 290316 0230 E, dated August 2, 1996). This tract lies within Zone X. Zone X is defined as an area of minimal flood
- 6. This property is served by the following utilities: 800-552-7583 AmerenUE 800-201-4102 SBC Telephone Company City of O'Fallon Water 636-561-3737 636-441-1244 City of O'Fallon Sewers 314-621-6960 Laclede Gas Company

- Bicycle parking shall be loacated in close proximity to building entrance in nighty visible, well lighted areas. Bicycle parking facilities shall be securely anchored to the ground so that they cannot be easily removed and shall be of sufficient strength to resist vandalism and theft.
- Graded areas that are to remain bare for over two weeks are seeded and mulched. (per DNR requirements)
- 10. The moisture content of the soil in the 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 to verify soil stability at the discretion of the City of O'Fallon.
- site soil testing. The soil report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:
- 2. Optimum moisture content
- 3. Maximum and minimum allowable moisture content
- Compaction Test" (A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Proctor Test ASSHTO T-99, Method C" (A.S.T.M.-D-698). Proctor type must be designated on document.
- sample locations listed on document.
- 7. Natural moisture content.
- 8. Liquid limit. 9. Plastic limit.
- Be advised that if this information is not provided to the City's activities to proceed on any project site.

- Corrections will need to be made if not in compliance with City standards.
- 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
- 11. Developer must supply City Construction inspectors with soil reports prior to or during
- 4. Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Modified AASHTO T-180
- 5. Curve must have at least 5 density points with moisture content and
- 6. Specific gravity.
- Construction Inspector the City will not allow grading or construction

- 8. Lighting values will be reviewed on site prior to final occupancy inspection.
- 1. Maximum dry density



REFERENCE BENCHMARK: ELEV (USGS DATUM) 459.35 CUT SQUARE ON THE NORTHWEST CORNER OF THE HEADWALL OF A 4'X7' CONCRETE BOX. MISSOURI STATE HIGHWAY P STATION 506+64 - 20.5' LEFT



-OHW- -OVERHEAD ELECTRIC LINE

_EGEND

GRATE INLET

O -UTILITY POLE

FIRE HYDRANT

● -GUY WIRE

-WATER VALVE

-GAS LINE

2FF 2 6 2006

DECEMED

1. A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer

2. The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied

there from, all in accordance with the plans and notes as interpreted by the

3. The Contractor shall notify the Soils Engineer at least two days in advance of

4. All areas shall be allowed to drain. All low points shall be provided with temporary

5. A sediment control plan that includes monitored and maintained sediment control

mulched. Care should be exercised to prevent soil from damaging adjacent property

basins and/or straw bales should be implemented as soon as possible. No graded

area is to be allowed to remain bare over the winter without being seeded and

6. Any existing trash and debris currently on this property must be removed and

tributaries 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

8. 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

9. Compaction equipment shall consist of tamping rollers, pneumatic—tired rollers,

vibratory roller, or high speed impact type drum rollers acceptable to the Soils

Engineer. The roller shall be designed so as to avoid the creation of a layered fill

10. 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. Intering reports showing fill quality will be made to the Owner at regular

shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall

7. Soft soil in the bottom and banks of any existing or former pond sites or

1 inch = 20 ft.

GRADING NOTES:

the start of the grading operation.

concurrent with the grading and back filling operations.

and silting up existing downstream storm drainage system.

without proper blending of successive fill layers.

EMENT

Fort Zumwalt School District

ACI/ Frangkiser & Hutchens

Ibrahim Engineering Corp.

Consulting Engineer, Inc.

Mechanical / Electrical Engineer

Structural Engineer

Thomas Berkeley

Civil Engineer

Bax Engineering

11. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or notification from the Soils Engineer of its acceptance prior to the placement of

additional fill. 12. All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. 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. 13. 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. 14. All erosion control systems shall be inspected and the necessary corrections made within 24 hours of any rainstorm resulting in a 1/2" of rain or more.

15. No slope shall be steeper than 3(Horizontal):1(Vertical). All slopes shall be sodded

or seeded and mulched. 16. Any contaminated soil encountered during excavation shall be hauled and placed

as directed by the owners environmental engineering representative. 17. The location of and details for all siltation control devices (silt fences and sediment basins) must follow the "St. Charles County Soil and Water

Conservation District Erosion and Sediment Control" guidelines. 18. Phase II Storm water guidelines require that this site provide long term postconstruction BMP's such as; low impact design, source controls and treatment controls that protect water quality and control run off to the maximum extent

-800-DIG-RITE



09/22/06 PER CITY COMMENTS ISCLAIMER OF RESPONSIBILITY

DRAWING ISSUE / REVISION

I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any respon sibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

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COVER SHEET