### **GENERAL NOTES**

- 1. BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK AND ASSOCIATES.
- 2. LOT WILL BE CREATED WITH A RESUBDIVISION PLAT.
- 3. ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED.
- 4. NO GRADE SHALL EXCEED 3:1 SLOPE.
- 5. ALL SLOPES TO BE STABILIZED IMMEDIATELY AFTER GRADING.
- 6. ALL UTILITIES SERVING SITE ARE UNDERGROUND.
- 7. ALL OUTSIDE TRASH CONTAINERS, HVAC UNITS, ELECTRIC, TELEPHONE AND GAS METERS, SATELLITE DISHES, AND ROOFTOP MECHANICAL APPARATUS SHALL BE THOROUGHLY SCREENED WITH MATERIALS AND/OR LANDSCAPING TO CONCEAL THE VISIBILITY OF SUCH ITEMS FROM THE VIEW OF RIGHTS-OF-WAY AND/OR ADJACENT PROPERTIES AS REVIEWED AND APPROVED BY THE PLANNING DIVISION, SECTION 400.278
- 8. PARKING CALCULATIONS:
- BUILDING 1 15,120 S.F.
- 10 SPCS. FOR THE FIRST 2,000 S.F. OF FLOOR AREA 1 SPACE / 400 S.F. OF REMAINING FLOOR AREA
- 15,120-2,000 = 13,120; 13,120/400 = 43 SPCS REQUIRED 43 SPACES REQUIRED
- PARKING PROVIDED = 64 SPACES (INCLUDING H.C. SPACES) H.C. SPACES = 4 PROVIDED
- COVERAGE CALCULATIONS: 15,120 BUILDINGS 43,863 S.F. (52%) PAVEMENT
- TOTAL LANDSCAPE AREA = 25,131 S.F. (30%)SITE ACREAGE = 84,114.36 S.F. 10. LANDSCAPE CALCULATIONS
- LENGTH OF STREET FRONTAGE = 580 FT. REQUIRED - 1 TREE FOR EVERY 40 FT. OF STREET FRONTAGE REQUIRED - 15 PROVIDED - 15
- LANDSCAPED OPEN AREA = 25.131 SQ.FT. REQUIRED - 1 TREE FOR EVERY 3000 SQ. FT. OF LANDSCAPED AREA REQUIRED - 9 PROVIDED - 9
- 11. STORM WATER DIFFERENTIAL RUNOFF CALCULATIONS EXISTING AREAS
- IMPERVIOUS AREAS = 0.00 Ac. PERVIOUS AREAS = 1.93 Ac.
- $(4.20cfs/Ac \times 0.00Ac.) + (2.00 cfs/Ac. \times 1.93Ac.) = 3.86 cfs$
- PROPOSED AREAS IMPERVIOUS AREAS = 1.35 Ac.
- PERVIOUS AREAS = 0.58 Ac.
- $(4.20cfs/Ac \times 1.35Ac.) + (2.00 cfs/Ac. \times 0.58Ac.) = 6.83 cfs$ DIFFERENTIAL = 6.83cfs - 3.86cfs
- DIFFERENTIAL = 2.97cfs90% OF DIFFERENTIAL TO BE DIVERTED TO AREA DETENTION TO NORTH OF MEXICO ROAD.
- 2.) ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM

CONSTRUCTION MANAGER.

- 3.) BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK & ASSOCIATES.
- 4.) ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS AS REQUIRED BY THE CITY OF O'FALLON.
- 5.) ALL GRADED AREAS INDICATED SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES, SEEDING AND MULCHING AS INDICATED.
- 6.) PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION MANAGER FOR SPECIFIC INSTRUCTIONS
- RELEVANT TO THE SEQUENCING OF WORK. 7.) GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING PER SILTATION SPECIFICATIONS. ADDITIONAL SILTATION CONTROL DEVICES MAY BE REQUIRED AS DIRECTED BY THE CITY OF O'FALLON OR THE
- 8.) ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.
- 9.) GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- 10.) PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS, CONTRACTOR TO GRADE ALL AREAS TO REQUIRED SUBGRADE.
- 11.) NO GRADE SHALL EXCEED 3:1 SLOPE. (UNLESS OTHERWISE SPECIFICALLY NOTED)
- 12.) ALL FILL PLACED UNDER PROPOSED STORM AND SANITARY SEWER LINES 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 TEST SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.

### UTILITY CONTACTS

WATER SERVICE

ELECTRIC SERVICE

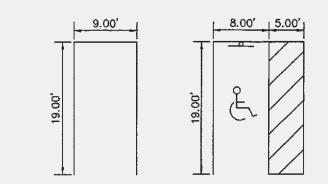
FIRE PROTECTION

SEWER SERVICE

- = ST. CHARLES COUNTY WATER DISTRICT #2 P.O. BOX 967 O'FALLON, MO 63366 PH. (314) 561-3737 FAX (314) 625-3712 CONTACT: JEFF BLECKMAN OR DAVE RENDLEMAN
- TELEPHONE SERVICE = GTE TELEPHONE COMPANY ENGINEERING 680 PARR ROAD WENTZVILLE, MO 63385 PH. (314) 332-7823 FAX (314) 332-6711
  - CONTACT: GREG MARSH = ST. CHARLES GAS COMPANY 1 WESTBURY SQUARE BUILDING D ST. CHARLES, MO 63301 PH. (314) 946-2422 FAX (314) 946-3208 CONTACT: RICH NELKE
  - = UNION ELECTRIC COMPANY WENTZVILLE DISTRICT 200 CALLAHAN ROAD WENTZVILLE, MO 63385 PH. (314) 639-8312 CONTACT: JOHN CLARK
  - = TCI CABLEVISION CONSTRUCTION DEPARTMENT 4160 OLD MILL PARKWAY ST. PETERS, MO 63376 PH. (314) 441-7737 EXT. 3314 CONTACTS: STEVE COLEMAN, JOHN DANOWSKI
  - = O'FALLON FIRE PROTECTION DISTRICT 119 EAST ELM STREET O'FALLON, MO 63366-2600 PH. (314) 272-3493 PH. (314) 240-5312 FAX (314) 272-7857

CONTACT: DAVID HOUSE, FIRE CHIEF

= CITY OF O'FALLON ENGINEERING 138 SOUTH MAIN STREET O'FALLON, MO 63366 PH. (314) 240-2000 CONTACT: COLLEEN KRAMME



### TYPICAL PARKING STALLS

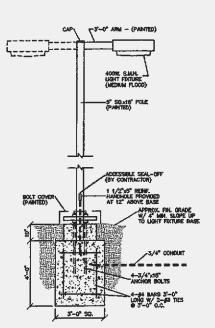


2 LB. STEEL CHANNEL

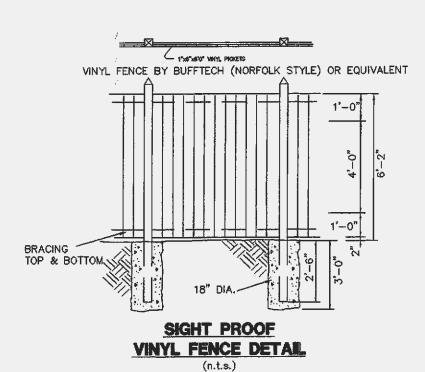
\$300 FINE

SECTION A-A 6.00' SECTION B-B

HANDICAP RAMP DETAIL







(AT TRASH ENCLOSURE)

### WATER LINE NOTES

- 1.) ALL MATERIALS AND METHODS OF CONSTRUCTION FOR WATER MAINS TO MEET REQUIREMENTS OF THE ST. CHARLES COUNTY PUBLIC WATER SUPPLY DISTRICT NO. 2 "WATER DISTRIBUTION SYSTEM SPECIFICATIONS".
- 2.) WATER MAINS SHALL BE POLY VINYL CHLORIDE (PVC) CLASS 200, SDR 21 PIPE CONFORMING TO A.S.T.M. SPECIFICATION D2241. THE PIPE SHALL BE PRESSURE RATED FOR A HYDROSTATIC WORKING PRESSURE OF 200 PSI AT 73.4 DEGREES F AND SHALL MEET ALL APPLICABLE REQUIREMENTS AS SET FORTH UNDER COMMERCIAL
- 3.) DUCTILE IRON PIPE MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL THE REQUIREMENTS OF U.S.A. STANDARD A2151 (A.W.W.A. C-151-65). THE PIPE SHALL BE FURNISHED WITH MECHANICAL, PUSH ON, OR FLANGE JOINTS AS REQUIRED. THE INTERIOR SURFACE OF PIPE SHALL BE COATED WITH A CEMENT-MORTAR LINING IN ACCORDANCE WITH U.S.A. STANDARD A 21.4 (A.W.W.A. C 104). AFTER DRYING, THE CEMENT LINING SHALL BE SEAL COATED WITH SIMILAR A.W.W.A. APPROVED BITUMINOUS VARNISH. ALL FITTINGS AND BENDS SHALL BE CONSTRUCTED OF CAST OR DUCTILE IRON.
- 4.) WATER MAIN TRACER TAPE TO BE INSTALLED WITH ALL WATER MAIN AND SHALL CONSIST OF THREE INCH WIDE TAPE MADE OF BONDED LAYER PLASTIC WITH A METALLIC FOIL CORE. TAPE SHALL BE "TERRA TAPE D" AS MANUFACTURED BY THE GRIFFOLYN COMPANY OF HOUSTON, TEXAS, OR APPROVED EQUAL.
- 5.) WATER MAIN LOCATOR WIRE SHALL BE INSTALLED WITH ALL WATER MAIN, FITTINGS, AND VALVE INSTALLATION AND SHALL CONSIST OF A STANDARD ELECTRIC SERVICE WIRE, A SINGLE NO. 12 U.L. APPROVED COPPER WIRE OF THE SOLID OR STRAND
- 6.) ALL VALVES FOR EXTERIOR USE SHALL BE BURIED GATE VALVES WITH A VALVE BOX AND TWO INCH SQUARE NUT ATTACHMENT FOR MANUAL OPERATION WITH STANDARD VALVE WRENCH. GATE VALVES SHALL BE IRON BODIED WITH BRASS OR BRONZE MOUNTED DOUBLE DISC GATE. GATE VALVES SHALL BE OF THE NON-RISING STEM TYPE, OPENED BY TURNING COUNTER-CLOCKWISE. THE VALVE STEM SHALL HAVE DOUBLE "O" RING SEALS AND TERMINATE AT TOP WITH TWO INCH SQUARE NUT. GATE VALVE CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE LATEST GOVERNING SPECIFICATIONS OF THE A.S.T.M. AND A.W.W.A. ALL GATE VALVES FOR USE SHALL BE "MUELLER" OR APPROVED EQUAL.
- 7.) VALVE BOXES FOR USE SHALL BE THE SCREW-TYPE, EXTENSION SLEEVE KIND, OR P.V.C. PIPE. ALL BOXES SHALL BE FITTED WITH A RECESSED COVER
- 8.) FIRE HYDRANTS SHALL BE MUELLER "CENTURION" OR THE AMERICAN DARLING MODEL NO. "B-84-B". HYDRANTS SHALL BE TRAFFIC MODEL TYPE WITH A WORKING PRESSURE OF 150 PSI IN FULL COMPLIANCE WITH A.W.W.A. STANDARD SPECIFICATIONS C-502 OF THE LATEST REVISION. HYDRANTS TO BE THREE-WAY WITH TWO HOSE CONNECTIONS AND ONE PUMPER CONNECTION AND SHALL HAVE 5 1/4" VALVE OPENINGS. HYDRANTS TO BE YELLOW IN COLOR.
- 9.) CONCRETE FOR THRUST BLOCKING AT BENDS, TEES, VALVES, HYDRANTS, ETC.,
- SHALL BE 3,500 PSI COMPRESSIVE STRENGTH AT 28 DAYS. 10.) BEFORE WATER MAINS SHALL BE ACCEPTED AND PUT INTO SERVICE THEY SHALL BE TESTED FOR TWO HOURS ON EACH SEGMENT BETWEEN END POINTS AT A TEST PRESSURE OF AT LEAST 50% IN EXCESS OF NORMAL MAXIMUM OPERATING PRESSURE, NOT TO EXCEED 200 PSI. WATER MAINS SHALL BE STERILIZED AND FLUSHED IN ACCORDANCE WITH ST.
- 11.) ALL WATER LINES AND SERVICE LINES SHALL HAVE A MINIMUM OF 42" OF COVERAGE.

CHARLES COUNTY PUBLIC WATER SUPPLY DISTRICT NO. 2 "WATER DISTRIBUTION SYSTEM

12.) VERTICAL CLEARANCE BETWEEN SEWERS AND WATER MAINS SHALL BE A MINIMUM OF 2' - 0".

### **EARTHWORK NOTES:**

SPECIFICATIONS".

BULK CUT... 18,023 ......± CUBIC YARD BULK FILL 2,116 (W/15% SHRINKAGE) ± CUBIC YARD THE ENGINEER HAS CALCULATED THE ABOVE QUANTITIES OF EARTHWORK TO BE REGARDED AS AN ESTIMATE OF THE BULK MOVEMENT OR REDISTRIBUTION OF SOILS ON THIS PROJECT. AS AN ESTIMATE, THESE QUANTITIES ARE INTENDED FOR GENERAL USE, AND THE ENGINEER ASSUMES NO LIABILITY FOR

COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR SHORTAGES OF

- THE QUANTITIES ESTIMATED FOR EACH OF THE IMPROVEMENT ITEMS LISTED ABOVE ARE BASED UPON THE HORIZONTAL AND VERTICAL LOCATION OF THE STOCK AND ASSOCIATES CONSULTING ENGINEERS.
- THE ENGINEER'S EARTHWORK ESTIMATE DOES NOT INCLUDE ANY OF THE FOLLOWING ITEMS REQUIRING EARTHWORK THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT: MISCELLANEOUS UNDERGROUND CONDUITS INCLUDING SEWER LINES AND WATER MAINS LESS THAN TWENTY-FOUR INCHES IN DIAMETER, STANDARD MANHOLES: PROCESS OR TRANSFER PIPING: ELECTRICAL OR TELEPHONE CONDUITS; BASES FOR LIGHT STANDARDS; BUILDING FOOTINGS AND FOUNDATIONS, ETC.
- THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL SIZE OF THE FIELD EXCAVATIONS MADE FOR THE INSTALLATION OF UNDERGROUND STRUCTURES, AND AS SUCH, THE ACTUAL QUANTITIES OF EARTHWORK FROM SUCH ITEMS MAY VARY FROM THE ESTIMATE SHOWN ABOVE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR COSTS INCURRED DUE TO REMOVAL OF UNSUITABLE MATERIAL WHICH MUST BE REMOVED FROM SITE. THE ABOVE QUANTITIES ARE AN ESTIMATE AND SHOULD BE CONSIDERED AS

ST. LOUIS COUNTY WATER COMPANY

METER BOX FOR 1 1/2 "-2" & 2 1/2 " SERVICES

WITH 2' CUSTOM NETER SETTER

3/4 " GRAV, PIPE DRIVEN INTO GROUND 3 FT, AND BANGED TO RESERS FOR SUPPORT

29ETER SETTER

ist be staked and banded in each adequate support run at right angles from meter and mut over 42° belov fooished

CTED SQUARE, 4'X4' AND 3 1/2' I

S. HETTE BOX TO BE LOCATED IN AMEA OTHER VALUE SUBJECT VALUE OF STANDARD PRECAST TRAPEZUIDAL SIDES

VALVE TO BE LOCATED AS NEAR

NO A MIN. DF 6" FROM

E NADE BEFORE METER PIT AND ETE AND PROPERTY LINE VALVE

### SUCH. IT IS THE GRADING CONTRACTORS RESPONSIBILITY TO PREPARE A QUANTITY TAKEOFF AND NOTE ANY DISCREPENCIES TO THE ENGINEER. EARTHWORK QUANTITIES INCLUDE VOLUMES FOR THE DETENTION BASIN AND BACKFILL AND THE DENTISTRY BASEMENT AND DRIVE (NO WALL BACKFILL INCLUDED).

## SANITARY SEWER NOTES

- 1.) ALL MATERIALS AND METHODS OF CONSTRUCTION FOR SANITARY SEWERS TO MEET REQUIREMENTS OF THE CITY OF O'FALLON, BILL NO. 1830, ORDINANCE NO. 1810 SECTION 4: SPECIFICATIONS FOR INSTALLATION OF SEWER MAINS, SERVICE AND TESTING.
- 2.) ALL MANHOLES SHALL BE 48" DIA. PRE-CAST CONCRETE PER ASTM C-478.
- 3.) ALL LATERAL SEWER CONSTRUCTION METHODS TO CONFORM TO LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF O'FALLON PLUMBING
- 4.) ALL TRENCHES UNDER AREAS TO BE PAVED SHALL BE GRANULARLY FILLED WITH 3/4" MINUS CRUSHED LIMESTONE. BACKFILL SHALL BE PLACED IN ACCORDANCE WITH THE CITY OF O'FALLON SPECIFICATIONS.
- 5.) CONTRACTOR TO START LAYING PIPE AT DOWNSTREAM MANHOLE AND WORK UPSTREAM.
- 6.) TAILSTAKE ELEVATIONS AND WYE LOCATIONS ARE SHOWN ON THE SANITARY SEWER PROFILES.
- 7.) CLEANOUTS SHALL BE LOCATED AT ALL HORIZONTAL AND VERTICAL CHANGES IN DIRECTION OF FLOW OF BUILDING LATERALS AND ANY SANITARY LATERAL OF 100 FEET OR LONGER.
- 8.) VERTICAL CLEARANCE BETWEEN SEWER AND WATER MAINS SHALL BE A MINIMUM OF 2' - 0".
- 9.) ALL TRENCH BACKFILLS UNDER PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY AND RAILROAD SHALL BE GRANULAR BACKFILLED. TRENCH BACKFILLS UNDER PAVED AREAS. OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILL ALSO IN LIEU OF THE COMPACTED EARTH BACKFILL
- 10.) JETTING IS NOT AN ACCEPTABLE METHOD OF ACHIEVING BACKFILL COMPACTION. ALL BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 90 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.
- 11.) USE AASHTO T-180 COMPACTION TEST FOR ALL SPECIFIED FILLS AND BACKFILLS.
- 16.) ADJUSTMENT OF MANHOLE TO GRADE:
- If a manhole is to be raised: Manholes may be raised using courses of brick or approved grade ring(s), provided the total adjustment of the manhole does not exceed 12-inches (including the existing rings or courses of brick). For manholes which will exceed the maximum of 12-inches, the transition section of the structure shall be removed and the bottom section raised using the same material as the existing structure.
- If a manhole is to be lowered: manholes may be lowered by removing the transition section, and lowering the existing bottom section by sawcutting the existing cast—in—place concrete, removing the required courses of brick, or removing the precast riser section

### STORM SEWER NOTES

- 1.) ALL CONCRETE SHALL BE REINFORCED, AND CONFORM TO A.S.T.M. DESIGNATION C76 CLASS III UNLESS NOTED.
- 2.) ALL STORM SEWER STRUCTURES WITHIN PROJECT SITE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF O'FALLON STANDARD CONSTRUCTION SPECIFICATIONS.
- 3.) TYPE "C" BEDDING IS REQUIRED FOR PIPES IN

ST. LOUIS COUNTY WATER COMPANY

DETECTOR CHECK VAULT FOR 4',6',8' FIRE SERVICES

BY VATER CIT

- 4.) ALL TRENCHES UNDER AREAS TO BE PAVED AND UNDER EXISTING PAVING SHALL BE GRANULARLY FILLED WITH 3/4" MINUS CRUSHED LIMESTONE ONLY. BACKFILL SHALL BE PLACED IN ACCORDANCE WITH THE CITY OF O'FALLON STANDARD CONSTRUCTION SPECIFICATIONS.
- 5.) ALL TRENCH BACKFILLS UNDER PAVEMENT WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILLED. TRENCH BACKFILLS UNDER PAVED AREAS. OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL BE GRANULAR BACKFILL ALSO IN LIEU OF THE COMPACTED EARTH BACKFILL
- 6.) JETTING IS NOT AN ACCEPTABLE METHOD OF ACHIEVING BACKFILL COMPACTION. ALL BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 90 PERCENT OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY.

### SILTATION NOTES

seeding, mulching or matting shall be used.

All slopes or drainage channels, once constructed to final grade, shall be seeded and mulched per specifications within seven (7) days.

4. Slit fences shall be installed immediately around each storm

5. All siltation control devices shall remain in place until

upslope areas have been permanently stabilized.

sewer structure once final construction of each individual structure is complete.

Siltation Control Schedule implementation

1. Perimeter siltation control and construction entrances to be

Begin placing aggregate base in parking areas once area has reached final grade to prevent erosion.

3. Place silt fence around each storm sewer structure as it is

4. Immediately seed areas upon reaching final grade that are to

Temporary roads shall follow the contour of the natural

Grades should be sufficient to provide drainage, but should

not exceed 4 percent.

Roadbeds shall be at least 24 feet wide.

Drainage ditches shall be provided as needed.

4. All cuts and fills shall be 3:1 or flatter to the extent

The roadbed or parking surface shall be cleared of all vegetation, roots and other objectionable material.

7. A 10-inch course of 2" MINUS aggregate shall be applied

All roadside ditches, cuts, fills and disturbed areas adjacent to

parking areas and roads shall be stabilized with appropriate temporary or permanent vegetation according to the applicable standards and specifications.

Vegetation

Temporary Access Roads and Parking Areas Specifications

terrain to the extent possible. Slopes should not exceed 10

- Hay Bale Siltation Control Specifications Inspection of siltation control devices shall take place once every seven days and within 24 hours of any 0.5"/24 hour rain Sheet Flow Applications
- Bales shall be placed in a single row, lengthwise on the contour, with both ends of adjacent bales tightly abutting one 2. Any disturbed areas which will remain unworked for 45 days or more shall be stabilized with seeding and mulching per specifications within 7 days. If seasonal conditions prohibit
  - All bales shall be either wire-bound or string-tied. Straw bales shall be installed so that buildings are oriented around the sides rather than along the tops and bottoms of the bales (in order to prevent deterioration of the bindings).
  - The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conf 4 inches against the uphill side of the barrier (See detail
  - 4. Each bale shall be securely anchored by at least two 2"X2" tee stakes driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes shall be driven 18" minimum into the ground to securely anchor the bales.
  - The gaps between bales shall be chinked (filled by wedging) with straw to prevent water from escaping between the bales. (Loose straw scattered over the area immediately uphill from a straw bale barrier tends to increase barrier efficiency).
  - e made promptly as needed. Straw bale barriers shall be removed when they have served their usefulness, but not before the upstope areas have been permanently stabilized.

inspection shall be frequent and repair or replacement shall

- Bales shall be placed in a single row, lengthwise, oriented perpendicular to the contour, with ends of adjacent bales tightly abutting one another.
- The remaining steps for installing a straw bale barrier for sheet flow applications apply here, with the following
- 3. The barrier shall be extended to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale (figure 3) to assure that sediment—laden runoff will flow either through or over the barrier but
- Hay bale barriers shall be inspected immediately after each rainfall and at least dally during protonged rainfall. Close attention shall be paid to the repair of damaged fence,
- immediately after grading or the completion of utility installation within the right-of-way. Filter fabric may be applied to the roadbed for additional stability in accordance with fabric manufacturer's specifications. 3. Necessary repairs to barriers or replacement of silt fence shall be accomplished promptly.

end runs and undercutting beneath fence.

- Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one—half the height of the barrier.
- Any sediment deposits remaining in place after the straw bale arrier is no longer required shall be dressed to conform to Both temporary and permanent roads and parking areas may require periodic top dressing with new gravel. Seeded areas adjacent to the roads and parking areas should be checked periodically to Silt Fence Specifications

### Silt Fence to be woven geotextile fabric Mirafi 100X or equal.

- ensure that a vigorous stand of vegetation is maintained. Roadside ditches and other drainage structures should be checked regularly to ensure that they do not become clogged with silt or other Fabric to be supported by metal tee post with spade base spaced on 5' centers with w6 x w6/10 x 10 gage welded wire fence. See detail this sheet.
  - 3. Fabric shall be entrenched and backfilled. A trench shall be excavated a minimum of 6 inches deep for the length of the fence. The excavated soil shall be backfilled against the fence. See detail this sheet.
  - 4. Fence height shall be a minimum of 4 feet in height, with the fabric installed on the fence on the upstream side.
  - Silt fences shall be used only on sheet flow conditions. 6. Silt fences shall be installed around all storm sewer
  - 1. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
  - 2. Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales. 3. Necessary repairs to barriers or replacement of bales shall be accomplished promptly,
  - 4. Sediment denosits should be removed after each rainfall. The must be removed when the level of deposition reaches approximately one—half the height of the barrier.
  - Any sediment deposits remaining in place after the silt fence barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

4. Straw Bales shall be inspected periodically for

shall be replaced.

SECTION A-A

5. Attachment of Geotextile

deterioration. Bales which have rolled or failed

Fabric to be in accordance with the manufacturer's

# 11/15/00 Revised per City of O'fallon 10/10/00 Revised per City of O'fallon NO. DATE BY DESCRIPTION

STOCK & ASSOCIATES

CONSULTING ENGINEERS, INC. 425 NORTH NEW BALLAS ROAD

FAX (314) 432-8171

e-mail: general@stockassoc.com

PROJECT TYPE

ALL CONSTRUCTION WORK, UNLESS NOTED OTHERWISE, BY:

BUILDING

NEW SHELL DNLY.

NEW.....

EXISTING.....

DRAWINGS/SPECIFICATIONS BY

■ WALGREENS' CONSULTANT

LANDLORD'S CONSULTANT

☐ VALGREENS' CONTRACTOR

LANDLURD'S CONTRACTOR

STORE

NEW.....

REMODELING....

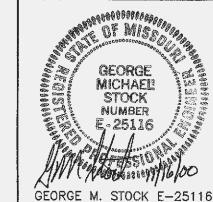
RELOCATION....

DTHERS.....

CERTIFICATION AND SEAL

REVISIONS

HEREBY CERTIFY THAT THIS PLAN AND SPECIFI-CATION WAS PREPARED BY ME OR UNDER MY DIREC' SUPERVISION AND THAT AM A DULY REGISTERED **ENGINEER** UNDER THE LAWS OF THE STATE OF MISSOURI AS SIGNIFIED BY MY HAND



Walgreens MEXICO & BRYAN O'FALLON, MO.

DRAWING TITLE SPECIFICATION SHEET

NUMBER DRAWN CONSTRUCTION REVIEWED G.M.S.

DRAWING NO.

SILTATION CONTROL HAY BALE DETAIL (n.t.s.)

Tee Post w/spade base S/12:0 SECTION B-B SECTION A-A

SILTATION CONTROL SILTFENCE DETAIL (n.t.s.)

2" x 2" tee stake 2 per bale drive \$5.45 \$5.45 \$5.50 PLAN VIEW SECTION B-B

GENERAL NOTES: 1. Do not scale drawing. Follow Dimensions 2. Siltation Control Devices to remain in place until adequate vegetative growth insures no further erosion of the soil. 3. Siltation Fences shall be inspected periodically for damage and for the amount of sedimentation which has accumulated. Removal of sediment will be required when it reaches 1/2 of th height of the siltation fence