GENERAL NOTES

- 1.) 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.
- 2.) ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM
- 3.) BOUNDARY AND TOPOGRAPHIC INFORMATION BY OTHERS.
- 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 OFFICE OF THE DEVELOPER 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.
- 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.

AREAS. CONTRACTOR TO GRADE ALL AREAS TO REQUIRED SUBGRADE.

- 10.) PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED
- 11.) NO GRADE SHALL EXCEED 3:1 SLOPE.
- 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.
- 13.) FEMA MAP 29183C0430 E DATED 8/2/96 ZONE "X" AND OTHER AREAS.
- 14.) ALL SLOPES TO BE STABILIZED IMMEDIATELY AFTER GRADING.
- 15.) ALL UTILITIES SERVING SITE ARE UNDERGROUND.
- 16.) ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER 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.
- 17.) ALL FILLED PLACES IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP TO 90% 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 TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- 18.) THE SEDIMENT CONTROL PLAN SHOULD BE IMPLEMENTED BEFORE
- 19.) EROSION CONTROL SHALL NOT BE LIMITED TO WHAT IS SHOWN ON THE PLAN. WHATEVER MEANS NECESSARY SHALL BE TAKEN TO PREVENT SILTATION AND EROSION FROM ENTERING NATURAL STREAMS AND ADJACENT ROADWAYS, PROPERTIES, AND DITCHES.
- 20.) EXISTING SITE CURRENTLY HAS NO TREES ON-SITE, THEREFORE NO REQUIREMENTS FOR TREE PRESERVATION ORDINANCE.

SANITARY SEWER NOTES

- 1.) ALL MATERIALS AND METHODS OF CONSTRUCTION FOR SANITARY SEWERS TO MEET REQUIREMENTS OF THE DUCKETT CREEK SEWER DISTRICT.
- 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 DUCKETT CREEK SEWER DISTRICT.
- 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.

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
- 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 WRE, A SINGLE NO. 12 U.L. APPROVED COPPER WRE OF THE SOLID OR STRAND YPE WITH INSULATION FOR 600 VOLTS.
- 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 HAVING THE WORD "WATER" CAST IN THE TOP.
- 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. CHARLES COUNTY PUBLIC WATER SUPPLY DISTRICT NO. 2 "WATER DISTRIBUTION SYSTEM
- 11.) ALL WATER LINES AND SERVICE LINES SHALL HAVE A MINIMUM OF 42" OF COVERAGE.
- 12.) VERTICAL CLEARANCE BETWEEN SEWERS AND WATER MAINS SHALL BE A MINIMUM OF 2' - 0".

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
- 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.

EARTHWORK NOTES

- BULK FILL 30,255 x 1.15 = 34,793 + CUBIC YARD (INCLUDES 15% SHRINKAGE) 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 IMPROVEMENTS AS PROPOSED ON THE SITE ENGINEERING PLANS PREPARED BY 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, STRIPPING OF TOPSOIL, 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 FROM SITE. THE ABOVE QUANTITIES ARE AN ESTIMATE AND SHOULD BE CONSIDERED AS SUCH. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO PREPARE A QUANTITY TAKEOFF AND NOTE ANY DISCREPANCIES TO THE ENGINEER.

LEGAL DESCRIPTION

A tract of land being all of Lot 2 of O'Fallon Corporate Center, a subdivision according to the plat thereof recorded in Plat Book 33 Pages 28 through 32 of the Recorder of Deeds Office in St. Charles County, Missouri and being more particularly described as follows:

Beginning at the Southwesterly corner of above said Lot 2, said point also being located at the Point of Intersection of the

Southeasterly line of Lloyd King Drive, 60 feet wide, with the Northeasterly line of Missouri State Highway 40; thence along last said Southeasterly line the following courses and distances; thence North 13 degrees 05 minutes 42 seconds West 111.53 feet to a point on a curve to the left for which the radius point bears North 76 degrees 27 minutes 59 seconds West 281.74 feet; thence along last said curve to the left an arc distance of 236.55 feet to a point of tangency; thence North 34 degrees 34 minutes 20 seconds West 59.56 feet to a point of curvature to the right, said curve having a radius of 223.24 feet; thence along last said curve to the right an arc distance of 277.85 feet to a point of compound curvature to the right, said curve having a radius of 33.00 feet; thence along last said curve an arc distance of 55.67 feet to a point of tangency. said point also being located on the Southwesterly line of Natoli Drive, 60 feet wide; thence along last said Southwesterly line the following courses and distances; thence South 46 degrees 36 minutes 29 seconds East 157.92 feet to a point of curvature to the left, said curve having a radius of 530.00 feet; thence along last said curve an arc distance of 186.83 feet to a point of tangency; thence South 66 degrees 48 minutes 20 seconds East 568.14 feet to a point of curvature to the right, said curve having a radius of 898.38 feet; thence along last said curve to the right an arc distance of 345.20 feet to a point of compound curvature to the right, said curve having a radius of 220.00 feet; thence along last said curve to the right an arc distance of 217.34 feet; thence departing last said curve North 78 degrees 05 minutes 56 seconds West 12.00 feet to a point of curvature to the right for which the radius point bears North 78 degrees 05 minutes 58 seconds West 208.00 feet; thence along last said curve an arc distance of 187.34 feet to a point of reverse curvature to the left, said curve having a radius of 292.00 feet; thence along last said curve to the left an arc distance of 144.80 feet; thence departing last said curve South 57 degrees 37 minutes 55 seconds West 51.21 feet to a point on the Northeasterly line of above said Missouri State Highway 40, said point also being located on a curve to the right for which the radius point bears North 26 degrees 53 minutes 48 seconds East 17,138.76 feet; thence along last said Northeasterly line the following courses and distances; thance along last said curve an arc distance of 145.55 feet; thence North 27 degrees 23 minutes 00 seconds East 10.00 feet to a point on a curve to the right for which the radius point bears North 27 degrees 23 minutes 00 seconds East 17,128.76 feet; thence along last said curve to the right an arc distance of 49.71 feet; thence South 27 degrees 32 minutes 58 seconds West 10.00 feet to a point on a curve to the right for which the radius point bears North 27 degrees 32 minutes 58 seconds East 17,138.76 feet; thence along last said curve an arc distance of 300.05 feet; thence North 28 degrees 33 minutes 08 seconds East 5.00 feet to a point on a curve to the right for which the radius point bears North 28 degrees 33 minutes 08 seconds East 17,133.76 feet; thence along last said curve an arc distance of 49.73 feet; thence South 28 degrees 43 minutes 08 seconds West 5.00 feet to a point on a curve to the right for which the radius point bears North 28 degrees 43 minutes 08 seconds East 17,138.76 feet; thence along last said curve an arc distance of 49.74 feet; thence North 28 degrees 53 minutes 08 seconds East 15.00 feet to a point on a curve to the right for which the radius point bears North 28 degrees 53 minutes 08 seconds East 17,123.76 feet; thence along last said curve an arc distance of 39.76 feet; thence South 29 degrees 01 minutes 06 seconds West 15.00 feet to a point on a curve to the right for which the radius point bears North 29 degrees 01 minutes 06 seconds East 17,138.76 feet; thence along last said curve an arc distance of 290.33 feet to the Point of Beginning and containing 14.6 acres more or less according to calculations performed by Stock & Associates Consulting Engineers, Inc. during

SILTATION CONTROL NOTES

SILTATION CONTROL GENERAL NOTES

- 1. Installation of all perimeter sediment control shall be implemented as the first step of grading and within seven (7) days of grubbing
- 2. Inspection of siltation control devices shall take place once every seven days and within 24 hours of any 0.5"/24 hour rain event. Any siltation control in need of repair shall occur
- 3. All slopes or drainage channels, once constructed to final grade, shall be seeded and mulched per specifications within seven (7) days.
- 4. Silt fences shall be installed immediately around each storm sewer structure once final construction of each individual structure is complete.
- 5. All siltation control devices shall remain in place until upslope areas have been permanently stabilized.

SILTATION CONTROL SCHEDULE IMPLEMENTATION Perimeter siltation control and construction entrances to be

- 2. 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 be permonently seeded.

TEMPORARY ACCESS ROADS AND PARKING AREAS SPECIFICATIONS

- Temporary roads shall follow the contour of the natural terrain to the extent possible. Slopes should not exceed 10
- 2. Grades should be sufficient to provide drainage, but should not exceed 4 percent.
- 3. Roadbeds shall be at least 24 feet wide.
- 4. All cuts and fills shall be 3:1 or flatter to the extent
- 5. Drainage ditches shall be provided as needed.
- 6. The roadbed or parking surface shall be cleared of all vegetation, roots and other objectionable material.
- 7. An 8-inch course of 2" MINUS aggregate shall be applied immediately after grading or the completion of utility installation within the right-of-way. Filter fabric (Mirafi 500X) may be applied to the roadbed for additional stability in

accordance with fabric manufacturer's specifications.

VEGETATION

OFFSITE AREAS: 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.

Refer to drawings for areas which shall be stabilized with appropriate temporary or permanent vegetation according to the applicable standards and specifications.

MAINTENANCE

PLAN VIEW

SECTION A-A

SECTION B-B

SILTATION CONTROL

(n.t.s.)

HAY BALE DETAIL

2 PER BALE DRIVE

4" min. —

EXISTING GROUND

Seeded areas adjacent to the roads and parking areas should be checked periodically to 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

BALES OF STRAW

EXISTING GROUND

COMPACTED

SHEET FLOW APPLICATIONS: 1. Bales shall be placed in a single row, lengthwise on the contour, with both ends of adjacent bales tightly abutting one

STRAW BALE SILTATION CONTROL SPECIFICATIONS

- 2. All bales shall be either wire-bound or string-tied. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales
- 3. 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 conform to the ground level on the downhill and shall be built up to 4 inches against the uphill side of the barrier (See detail

(in order to prevent deterioration of the bindings).

- 4. Each bale shall be securely anchored by at least two stakes or rebars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or rebars shall be driven deep enough
- into the ground to securely anchor the bales. 5. 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). 6. Inspection shall be frequent and repair or replacement shall
- be made promptly as needed. 7. Straw bale barriers shall be removed when they have served their usefulness, but not before the upslope areas have been

permanently stabilized. CHANNEL FLOW APPLICATIONS:

this sheet).

- 1. Bales shall be placed in a single row, lengthwise, oriented perpendicular to the contour, with ends of adjacent bales tightly abutting one another.
- 2. 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 to assure that sedimentladen runoff will flow either through or over the barrier but

MAINTENANCE 1. Straw bale barriers shall be inspected immediately after each

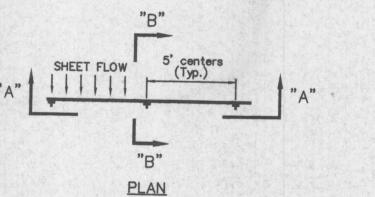
- rainfall and at least daily during prolonged rainfall. 2. Close attention shall be paid to the repair of damaged fence, end runs and undercutting beneath fence.
- 3. Necessary repairs to barriers or replacement of silt fence
- shall be accomplished promptly.
- 4. Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately one-half the height of the barrier.
- 5. Any sediment deposits remaining in place after the straw bale barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

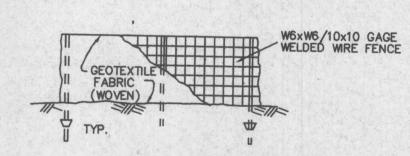
SILT FENCE SPECIFICATIONS

- 1. Silt Fence to be woven geotextile fabric Mirafi 100X or equal.
- 2. 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
- 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.
- 5. Silt fences shall be used only on sheet flow conditions.
- 6. Silt fences shall be installed around all storm sewer

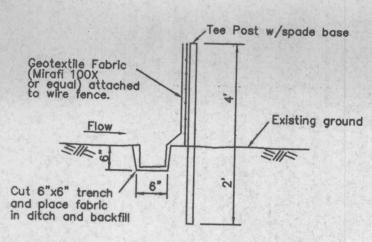
MAINTENANCE

- 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 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. 5. 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.





SECTION A-A



SECTION B-B SILTATION CONTROL SILTFENCE DETAIL (n.t.s.)

GENERAL NOTES:

recommendation.

- 1. Do not scale drawing. Follow Dimensions 2. Additional siltation control shall be provided as directed by the City of Maryland Heights. 3. Siltation Control Devices to remain in place until
- adequate vegetative growth insures no further erosion of the soil. 4. 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 silitation fence. 5. Straw Bales shall be inspected periodically for deterioration. Bales which have rolled or failed shall be replaced as directed by the Department. 6. Attachment of Welded Wire Fence and Geotextile

Fabric to be in accordance with the manufacturer's

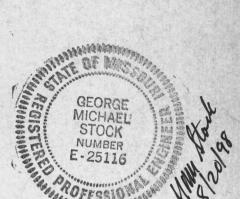
GRAY DESIGN GROUP, INC.

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Fax 314,646,0100 Telephone 314.646.0400



General Contractor: CLAYCO CONSTRUCTION

MCNEALY-BUMBERRY ENGINEERING Civil Engineer: STOCK & ASSOCIATES **HVAC Design Build:** C & R Mechanical Company

Structural Engineer:

Plumbing Design Build: Electrical Design Build: Aschinger Electric

Fire Protection:

CLAYCO

CONSTRUCTION

COMPANY

ROLMAR FAMILIE **PARTNERSHIP**

Job: 98-1634