

MISSOURI STATE HIGHWAY 'K'
(VARIABLE WIDTH)

SEDIMENTATION CALCULATION FOR BASIN
 TRIBUTARY AREA = 18.22 ACRES
 RUNOFF COEFFICIENT = 0.60
 SEDIMENT STORAGE = 120 C.F. PER YEAR
 TOTAL SEDIMENT STORAGE = 120 x 18.22 = 2186 C.F. PER YEAR

THE SEAL OF STANLEY F. VISNOVSKY ON THIS DRAWING APPLIES ONLY TO THE CIVIL ENGINEERING SHOWN. IT DOES NOT APPLY NOR IS ANY RESPONSIBILITY TAKEN FOR GEOTECHNICAL (INCLUDING BUT NOT LIMITED TO SOILS STABILITY), STRUCTURAL, HVAC, PLUMBING, ELECTRICAL, FIRE PROTECTION, TRAFFIC ENGINEERING, SURVEYING (BOUNDARY AND TOPOGRAPHIC), OR ARCHITECTURAL (BUILDING OR LANDSCAPE).

B.M. STATE HIGHWAY JOB NO. 6-U-K-562
 PROJECT NO. R6-431 (SHEET 5)
 ON SOUTHEAST CORNER OF HEADWALL
 HIGHWAY ROUTE 'K' AT STATION 54+55.62' LEFT.
 ELEV. = 510.64

SCALE: 1" = 50'

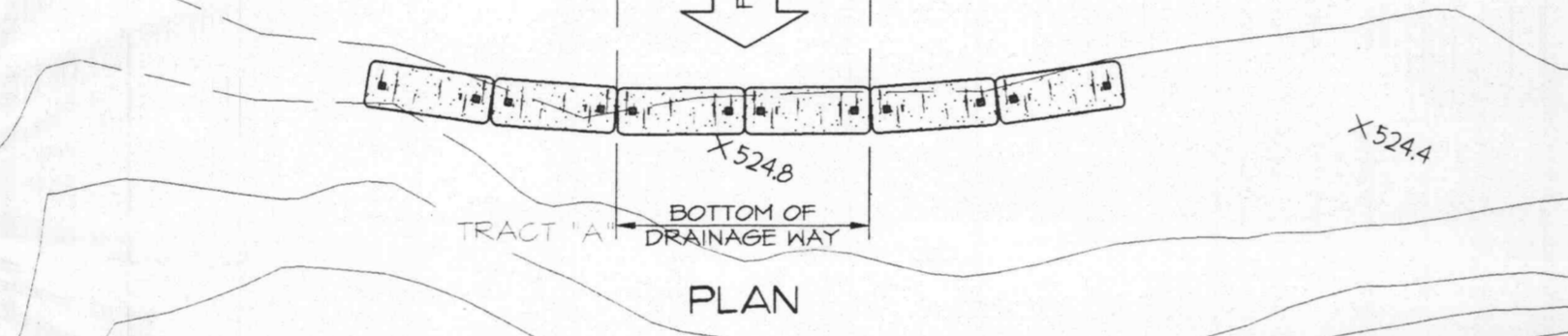
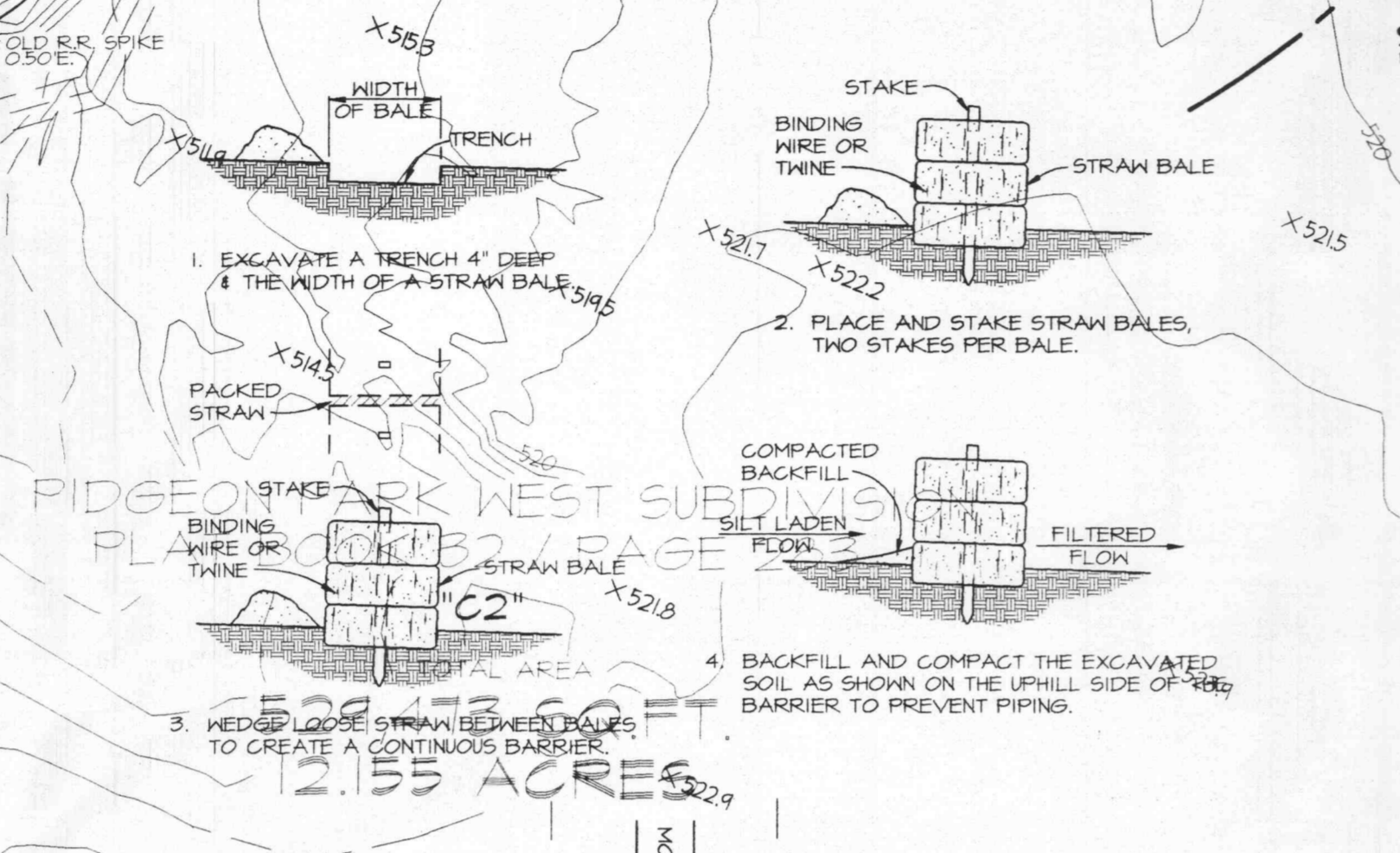
LEGEND

NEW IMPROVEMENTS

CONTOUR	500'
SPOT ELEVATION	500.00
STORM SEWER	—
SANITARY SEWER	—
MANHOLE	•
CURB INLET	•
CLEAN OUT	•
DOWNSPOUT	•
CONCRETE PAVEMENT	▭
HEAVY DUTY ASPHALT PAVEMENT (ALL OTHER ASPHALT PAVEMENT TO BE STANDARD DUTY UNLESS OTHERWISE NOTED)	▭
SILTATION CONTROL (STRAM BALE BARRIER - SEE DETAIL THIS SHIT.)	▭
TO BE REMOVED	T.B.R.
USE IN PLACE	U.I.P.
ADJUST TO GRADE	A.T.G.
CORRUGATED PLASTIC PIPE	C.F.P.
SMOOTH INTERIOR CORRUGATED PLASTIC PIPE	S.I.C.P.

EX. 100 YR. FLOOD PLAIN
 BASE FLOOD ELEV. 502.0
 MAP NO. 240316, PANEL 0116 - 12/15/92

SITE B.M.
 IRON ROD PT#14
 ELEV. = 508.56



EROSION CONTROL NOTES:

- NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 30 DAYS OF FINAL GRADING.
- SHOULD CONSTRUCTION STOP FOR LONGER THAN 15 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
- CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- ALL EXISTING STRUCTURES, FENCINGS, TREES, AND ETC. WITHIN CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OFF SITE. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES AND LOWES SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASIN BEFORE IT IS 50%.
- SEDIMENT BASIN OUTLET STRUCTURE & CMP SIZED TO INCLUDE EMERGENCY SPILLWAY FOR 10 YR. STORM.

GRADING AND DRAINAGE NOTES

- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCINGS, TREES, & ETC. WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OFF SITE. BURNING ON SITE IS NOT PERMITTED.
- ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADINGS AND BE INSTALLED ACCORDINGLY.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- SICP - SMOOTH INTERIOR CORRUGATED PLASTIC PIPES & FITTINGS SHALL BE: A.D.S.-N12 MFD. BY ADVANCED DRAINAGE SYSTEMS, INC. 3300 RIVERSIDE DRIVE, COLUMBUS, OHIO 43221 (614) 451-3051

BULK CUT (TO SUBGRADE) 115,470 CY
 BULK FILL (TO SUBGRADE) AUTUMN CHASE PLAT. 106,151 CY
 * 12% ASSUMED SHRINKAGE FACTOR R-4 / PAGE 381

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 EXCAVATED MATERIALS OR SHORTAGES OF FILL.

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 HEIDEMAN & ASSOCIATES, INC.

THE ENGINEER'S EARTHWORK ESTIMATE INCLUDES ONLY THOSE IMPROVEMENT ITEMS LISTED ABOVE. UNLISTED ITEMS REQUIRING EARTHWORK THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT INCLUDE, BUT ARE NOT LIMITED TO, MISCELLANEOUS UNDERGROUND CONDUITS INCLUDING SEWER LINES AND WATER MAINS, STANDARD MANHOLES, PROCESS OR TRANSFER PIPING, ELECTRICAL OR TELEPHONE CONDUITS, BASES FOR LIGHT STANDARDS, BUILDINGS, 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 ESTIMATED QUANTITY OF UNSUITABLE MATERIALS TO BE REMOVED FROM THE SITE IS SHOWN ABOVE AND IS BASED UPON SITE CONDITIONS READILY APPARENT TO THE ENGINEER. ACTUAL QUANTITIES REMOVED IN THE FIELD MAY VARY, AND THE ENGINEER ASSUMES NO RESPONSIBILITY FOR COSTS INCURRED DUE TO THE VARIANCE.

SHRINKAGE FACTOR USED TO DETERMINE THE REQUIRED BULK FILL WILL VARY ON EACH PROJECT DUE TO SPECIFIC SOIL CHARACTERISTICS. THE SHRINKAGE FACTOR USED FOR THIS PROJECT IN PARTICULAR IS AS INDICATED ABOVE, AND MAY BE AN ASSUMED VALUE IN THE ABSENCE OF A DETAILED SOILS INVESTIGATION.

NO EARTH SLOPE TO BE GREATER THAN 3' HORIZONTAL TO 1' VERTICAL.

BEFORE LEAVING SITE, CONTRACTOR TO BE RESPONSIBLE FOR REMOVAL OF SILT FROM DETENTION BASIN & RESTORING GRADES TO DESIGN ELEVATIONS.

H.I. & M.F.D. BY HANCOX INC.
 1202 BOX 1047
 FINDLAY, OH. 45834-1047
 1-800-591-4920

SICP SHALL BE INSTALLED PER MANUFACTURER'S GUIDELINE FOR HEAVY DUTY DRAINAGE APPLICATIONS.

FRENCH DRAIN SHALL BE INSTALLED IF DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS.

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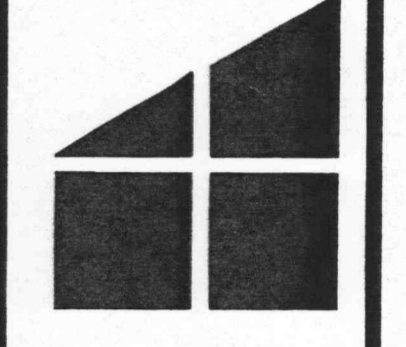
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Heideman & Associates, Inc.
 13545 Barrett Parkway Drive
 Suite 200
 St. Louis, Missouri 63021
 Phone: 314-822-2217
 Fax: 314-822-7858



Erosion Control / Grading Plan
LOWE'S OF O'FALLON
 O'Fallon, Missouri

DATE	REVISION	DESCRIPTION
11/24/98	PRELIM. DTD	PRELIMINARY DRAINAGE
12/23/98	CON. REVIEW	CONTRACTOR REVIEW
3/1/99	REVISED RET. WALL	REVISED RETAINING WALL
4/6/99	REV. ENTRANCES	REVISED ENTRANCES
5/28/99	CON. REVIEW	CONTRACTOR REVIEW
6/10/99	REVISED GRADES	REVISED GRADES
7/9/99	CON. REVIEW	CONTRACTOR REVIEW
7/12/99	REV. SAN. SEWER	REVISED SANITARY SEWER
8/6/99	CON. REVIEW	CONTRACTOR REVIEW
8/30/99	CON. REVIEW	CONTRACTOR REVIEW
9/22/99	CON. REVIEW	CONTRACTOR REVIEW
DATE	11-10-98	
CHECKED BY	SEV	DPB
DRAWN BY	SEV	DPB
SHEET NO.	C-4	
JOB NO.	98293	