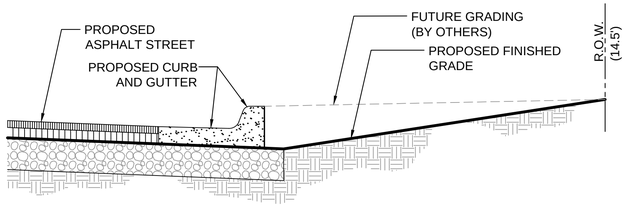


GENERAL PAVEMENT SECTION DIMENSIONS:

RESIDENTIAL ADDITION

1. ESTANCIA STREET
   6 INCH ASPHALT PAVING ON 5 INCH CRUSHED ROCK BASE

2. ESTANCIA CT
   5 INCH ASPHALT PAVING ON 5 INCH CRUSHED ROCK BASE

3. SOLANO STREET & SOLANO COURT
   5 INCH ASPHALT PAVING ON 5 INCH CRUSHED ROCK BASE

1 TYPICAL ROAD CROSS SECTION DETAIL

SCALE: NTS

NOTE: ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE SUBSIDIARY TO EARTHWORK ITEMS.

2 TYPICAL RIP RAP DETAIL

SCALE: NTS

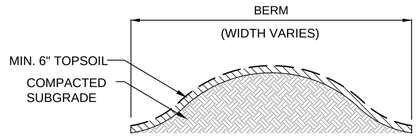
NOTE:
1. CONTRACTOR SHALL USE CHOICE MATERIAL FOR CLAY LINER >PI-16.
2. PERMEABILITY TEST OF THE IN PLACE LINER MATERIAL SHALL BE PERFORMED BY A GEOTECHNICAL SOILS ENGINEER AT LOCATIONS DETERMINED BY THE PROJECT INSPECTOR (2 TEST PER POND). THE CLAY LINER MATERIAL SHALL MEET OR EXCEED A PERMEABILITY RATING VALUE OF $1x10^{-6}$ CM/SEC. ALL COST ASSOCIATED WITH THIS WORK SHALL BE SUBSIDIARY TO EARTHWORK ITEMS.

1. OVER EXCAVATE 24" OF SOIL ON SIDE SLOPES.
2. CONSTRUCT 24" CLAY LINER. PLACE IN 4, 6" LIFTS.
3. COMPACT TO 2% ABOVE OPTIMUM ASTM D698 95% RELATIVE MAX DENSITY.

1. OVER EXCAVATE 12" OF SOIL.
2. CONSTRUCT 12" CLAY LINER. PLACE IN 2, 6" LIFTS. TOP 6" CLAY LIFT TO BE BLENDED WITH BENTONITE. BENTONITE TO BE PLACED @ A RATE OF 20 LB/SY.
3. COMPACT TO 2% ABOVE OPTIMUM ASTM D698 95% RELATIVE MAX DENSITY.

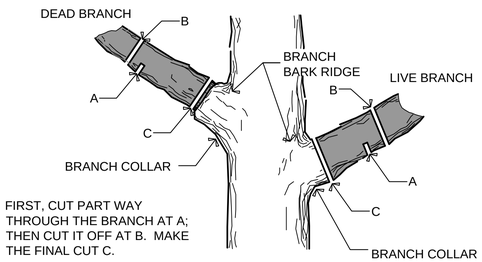
3 TYPICAL BENTONITE DETAIL

SCALE: NTS



4 TYPICAL BERM SECTION

SCALE: NTS



FIRST, CUT PART WAY THROUGH THE BRANCH AT A; THEN CUT IT OFF AT B. MAKE THE FINAL CUT C.

5 TREE TRIMMING DETAIL

SCALE: NTS

NOTES:

1. NOTIFY MKEC PROJECT ENGINEER PRIOR TO COMMENCEMENT OF EASEMENT CLEARING & GRUBBING OPERATIONS. CONTRACTOR SHALL HAVE LIMITS OF REMOVAL DEFINED WITH FLAG & LATH. MKEC PROJECT ENGINEER WILL PROVIDE JUDGEMENT CALLS FOR TREES IN QUESTION. PROVIDE MKEC 24-HOUR NOTICE.

2. TREES MAY BE BURNED ON SITE. REGULATORY & PERMITTING APPROVALS SHALL BE SECURED BY CONTRACTOR.

3. TRIMMING OF BRANCHES SHALL NOT BE DONE WITH A BACKHOE!

GENERAL GRADING NOTES

1. THIS IS DESIGN GRADING. ALL GRADES SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT TRANSITIONS AT THE TOP OF SLOPES WHERE PROPOSED GRADES MEET EXISTING ARE NOT ACCEPTABLE. SURVEY STAKES FOR POND GRADING ARE FOR GENERAL GRADING PURPOSES ONLY. NOT ALL SLOPES ARE CONSTANT AND THEREFORE THE GRADING PLANS SHALL BE REFERRED TO FOR FINAL GRADE SHAPING. ALL BERMS & POND EDGES SHALL BE FINAL GRADED/SHAPED WITH A TRACK DOZER, NOT A BLADE. THE GRADING SHALL BE APPROVED BY MKEC'S LANDSCAPE ARCHITECT PRIOR TO THE ADDITION OF THE TOPSOIL LAYER.

2. A 6" LAYER OF TOPSOIL SHALL BE STRIPPED IN ALL AREAS OF CUT AND FILL AND SAVE BACK FOR TOPSOIL REPLACEMENT IN RESERVES (BERMS AND DRAINAGE WAYS), AND STREET R/W FOR CURB BACKFILL.

3. TOPSOIL SHALL BE REPLACED AT A DEPTH OF 6" IN ALL RESERVE AREAS, AS INDICATED IN DETAILS. EXCESS TOP SOIL MAY BE WASTED IN BERMS, BY INCREASING TOP SOIL THICKNESS. THE FINISHED GRADE SHOWN ON THE PLANS INDICATES THE SURFACE ELEVATION AFTER THE TOPSOIL LAYER HAS BEEN PLACED.

4. AS THE PROJECT NEARS COMPLETION, THE CONTRACTOR SHALL RIP (SCARIFY) ALL HAUL ROADS WITH AN AGRICULTURAL IMPLEMENT INTENDED FOR SUCH PURPOSES TO A DEPTH OF 18". MULTIPLE PASSES MAY BE NECESSARY TO THOROUGHLY ALLEVIATE COMPACTION.

6 TYPICAL SWALE SECTION

SCALE: NTS

7 LITTORAL SHELF

SCALE: NTS

MKEC
Wichita, KS • 316-684-9600

STORMWATER DRAIN #406
ESTANCIA ADDITION
PHASE 2

GRADING DETAILS

PROJECT NO.	468-85071
DATE	JULY 2017
SCALE	N/A

DESIGNED	DRAWN	CHECKED
MLP	MLP	GJA

NO.	REVISION	DATE

SHEET NO.

02 OF 18