

MAIN ORCHARD

Lots 1 Thru 6

MASTER DRAINAGE PLAN

Part of the NE 1/4 Section 6, Township 47 North, Range 31 West
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

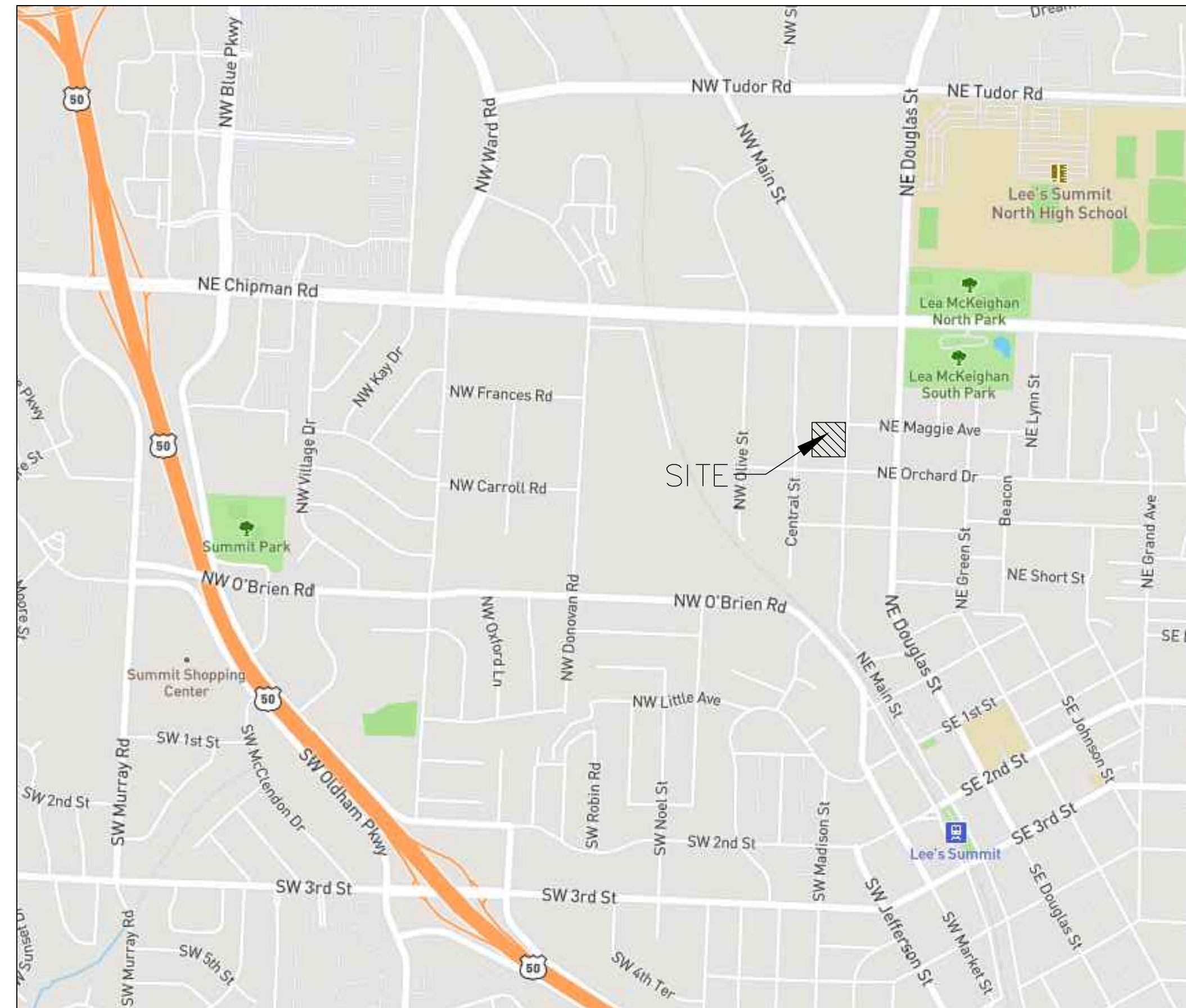
CONSTRUCTION AND DESIGN NOTES:

SANITARY SEWERS:

- SANITARY SEWER PIPE SHALL BE POLY VINYL CHLORIDE (PVC), SDR-26, UNLESS NOTED OTHERWISE IN THESE PLANS.
- HOUSE SEWER LATERALS SHALL BE 4 INCH PVC, SDR-26. LATERALS SHALL BE CONSTRUCTED USING A TOP ORIENTED "WYE" AT THE SEWER STATION SHOWN IN THESE PLANS. LATERALS SHALL BE LAID AT A GRADE OF 2.0% FROM THE SEWER MAIN TO THE STREET RIGHT-OF-WAY LINE OR EASEMENT LINE AS REPRESENTED BY THE LATERAL LENGTH SHOWN IN THESE PLANS. THE ELEVATION SHOWN FOR THE END OF THE LATERAL IN THESE PLANS IS APPROXIMATE. THE ACTUAL ELEVATION SHALL BE DETERMINED BY THE FLOW LINE ELEVATION OF THE SEWER MAIN, THE FITTINGS AND GRADE OF THE SEWER LATERAL.
- THE CONTRACTOR SHALL MAINTAIN A LOG OF THE "AS BUILT" STATION AND LENGTH OF EACH HOUSE LATERAL AND SHALL PROVIDE ENGINEERING SOLUTIONS, L.L.C. WITH A COPY OF SAID LOG UPON COMPLETION OF SEWER CONSTRUCTION.
- ALL MANHOLES INSTALLED IN THE STREET RIGHT-OF-WAY SHALL BE FINISHED 1/2" PER FOOT ABOVE THE NEAREST ADJACENT BACK OF CURB
- A STAKE SHALL BE PLACED AT THE END OF EACH WYE CONNECTION WITH THE END ELEVATION WRITTEN ON THE STAKE
- FILL AREAS SHALL HAVE 3 FEET OF COMPACTED FILL IN PLACE PRIOR TO TRENCHING
- A TRENCH CHECK CONSISTING OF FLOWABLE FILL MUST BE INSTALLED ON EVERY PRIVATE LATERAL.

GENERAL NOTE:

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- TRENCH CHECKS SHALL BE INSTALL AT ALL SANITARY WYES LOCATION.



UTILITY COMPANIES:

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.

KCP&L ~ 298-1196
SPIRE ~ 969-2200
SOUTHWESTERN BELL TELEPHONE ~ 761-5011
COMCAST CABLE ~ 795-1100
CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200
CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

LEGEND:

- B/L - BUILDING SET-BACK
- C/A - COMMON AREA
- D/E - DRAINAGE EASEMENT
- FND. - FOUND
- L/E - LANDSCAPE EASEMENT
- L.N.A. - LIMITS OF NO ACCESS
- R/W - RIGHT OF WAY
- SAN - SANITARY SEWER LINE
- S/W - SIDEWALK
- U/E - UTILITY EASEMENT
- W - WATER LINE
- ST - STORM SEWER LINE

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE DESIGNED IN ACCORDANCE TO AASHTO STANDARDS.

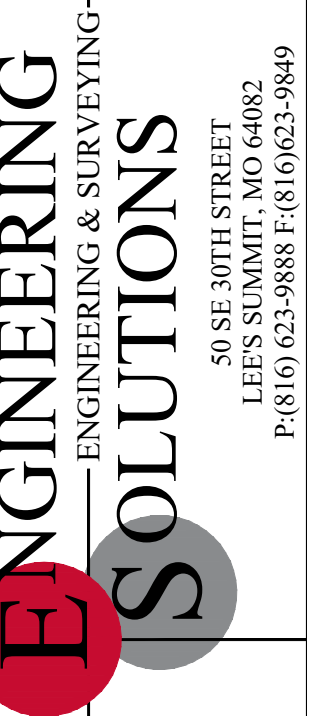
CITY OF LEE'S SUMMIT, MISSOURI

APPROVED: _____ DATE: _____

BY: _____
CITY ENGINEER

INDEX OF SHEETS:

- C.001 ~ COVER SHEET
- C.050 ~ ESC PHASE 1 - Pre Clearing Plan
- C.051 ~ ESC PHASE 2 - Inactive Area Stabilization Plan
- C.052 ~ ESC PHASE 3 - Final Restoration Plan
- C.053 ~ ESC - Standard Details
- C.100 ~ SITE PLAN
- C.200 ~ MASTER DRAINAGE PLAN SHEET 1 OF 3 GRADING PLAN
- C.201 ~ MASTER DRAINAGE PLAN SHEET 2 OF 3 SPOT ELEVATIONS
- C.202 ~ MASTER DRAINAGE PLAN SHEET 3 OF 3 DRAINAGE AREA MAP



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Project: 510 NW MAIN ST
LS, MO
Issue Date: December 11, 2019

MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lee's Summit, Jackson County, Missouri

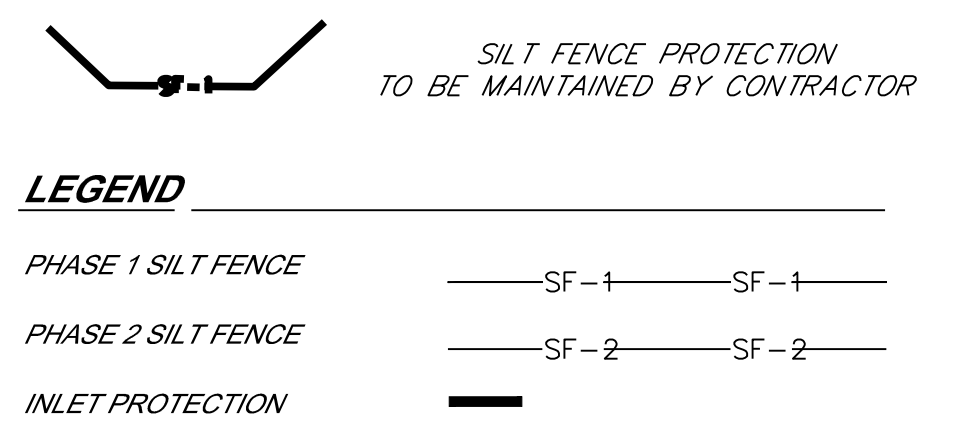
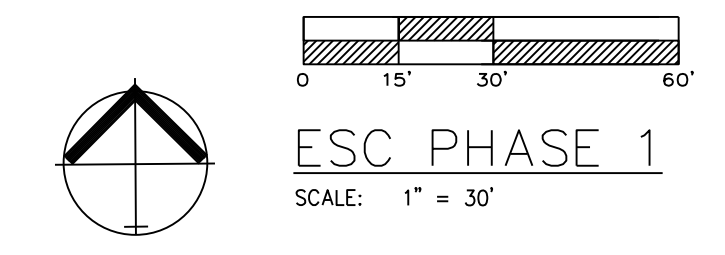
Cover Sheet
Construction Plans for:
MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

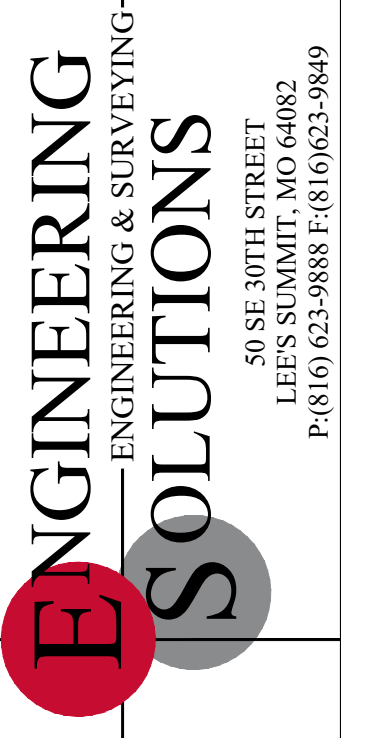
12-27-19 City Comments

1-13-20 Revised



DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APMA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

NOTES: The Land Disturbance Plans indicates the Final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.



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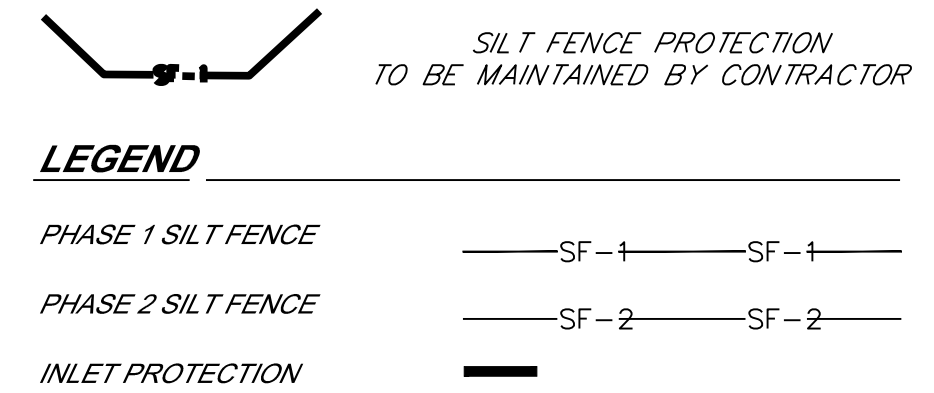
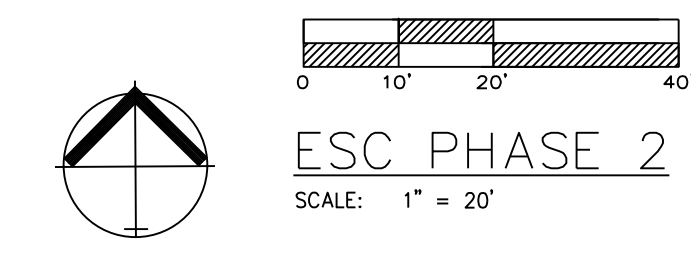
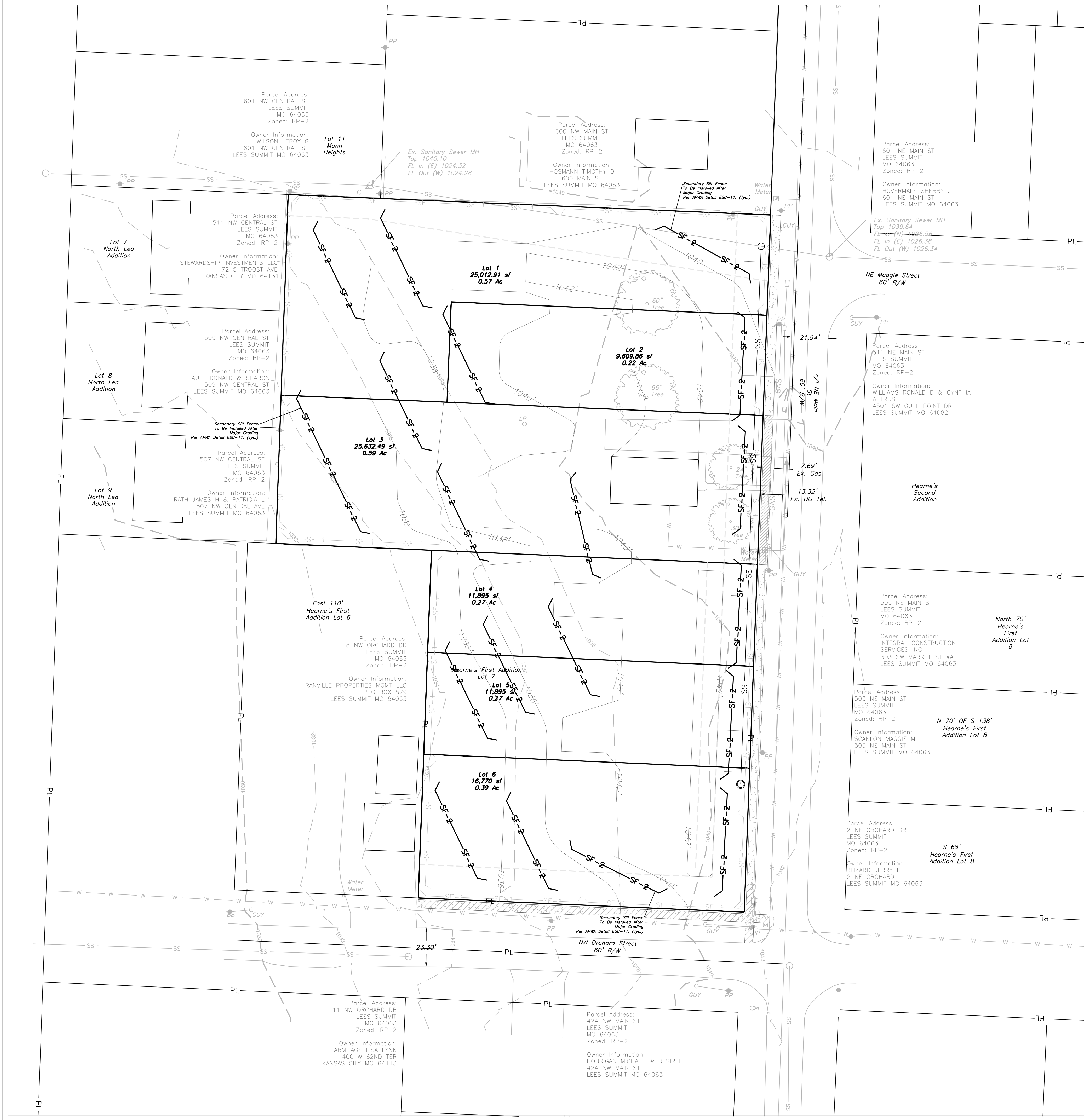
Project: 510 NW MAIN ST
LS, MO
Issue Date: December 11, 2019

Section 6, Township 47 North, Range 31 West
Lees Summit, Jackson County, Missouri

ESC PHASE 1
Construction Plans for:
MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lees Summit, Jackson County, Missouri

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS
12-27-19 City Comments
1-13-20 Revised



DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

EROSION CONTROL DESCRIPTION:
 1.) SILT FENCE SHALL BE PLACED AT THE PERIMETER OF THE GRADING AND AT INTERMEDIATE AREAS THROUGHOUT THE SITE AS SHOWN ON THE PLAN. INLET SEDIMENT TRAPS SHALL BE PLACED SURROUNDING ALL STORM INLETS

2.) INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLAN

EROSION CONTROL PROCEDURE:
 1.) SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE PERIMETER OF THE GRADED AREAS PRIOR TO BEGINNING OF CLEARING OR DEMOLITION OPERATIONS. THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLANS AS GRADING PROGRESSES.

TEMPORARY CONSTRUCTION ENTRANCE NOTES:

- A.) INSTALLATION**
- 1.) AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC STREETS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED
 - 2.) REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE AND CROWN FOR POSITIVE DRAINAGE.
 - 3.) IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2% CONSTRUCT A 8 TO 8 INCH HIGH RIDGE WITH 3H: 1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
 - 4.) INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS
 - 5.) PLACE STONE TO DIMENSIONS AND GRADES AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE
 - 6.) DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE
 - 7.) IF WET CONDITIONS ARE ANTICIPATED PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY
- B.) TROUBLESHOOTING**
- 1.) CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
 - INADEQUATE RUNOFF CONTROLS TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROADS
 - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES
 - SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC
 - PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50 FOOT LENGTH AS NECESSARY
- C.) INSPECTION AND MAINTENANCE**
- 1.) INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER ANY RAIN EVENT
 - 2.) RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL
 - 3.) TOP DRESS WITH CLEAN 2 AND 3 INCH STONE AS NEEDED
 - 4.) IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADWAY. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY
 - 5.) REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED

MAINTENANCE:
 TO MAINTAIN THE EROSION AND SEDIMENT CONTROLS, THE FOLLOWING PROCEDURES WILL BE PERFORMED:
SEDIMENT CAPTURE DEVICES: SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC FENCES, WHEN THE DEPTH OF ACCUMULATED SEDIMENT REACHES ABOUT ONE-THIRD THE HEIGHT OF THE STRUCTURE.
STORM SEWER INLETS: ANY SEDIMENT IN THE STORM SEWER INLETS WILL BE REMOVED AND DISPOSED OF PROPERLY.
TEMPORARY CONTROLS: ALL TEMPORARY CONTROLS WILL BE REMOVED AFTER THE DISTURBED AREAS HAVE BEEN STABILIZED.

INSPECTION PROCEDURES:
 INSPECTIONS WILL BE DONE BY THE RESPONSIBLE PERSON(S) AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS EACH STORM EVENT PRODUCING ANY AMOUNT OF RAINFALL. AREAS THAT HAVE BEEN RESEEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS. DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED SHALL HAVE ALL POLLUTION CONTROL MEASURES INSPECTED FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE. LOCATIONS WHERE STORM WATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE PERMITTEE SHALL PROMPTLY NOTIFY THE SITE CONTRACTORS RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION CONTROL DEVICES OF DEFICIENCIES.

IF THE EXISTING GROUND COVER IS NATURAL GRASS, DISTURBED AREAS SHALL BE TEMPORARILY SEEDDED WITH WHEAT/TYRFE AT A RATE OF 1.5 POUNDS PER 1000 SQUARE FEET. PERMANENT SEEDING SHALL CONSIST OF 90% IN THREE EQUAL PARTS OF THIN BLADE, TURF-TYPE, TALL FESCUE AND 10% BLUEGRASS SEED AT A RATE OF 10 POUNDS PER 1000 SQUARE FEET. BOTH TEMPORARY AND PERMANENT SEEDING AREAS SHALL BE MULCHED AND WATERED TO MAINTAIN THE PROPER MOISTURE LEVEL OF THE SOIL TO ESTABLISH GRASS. NEW GRASS SHALL BE WATERED AND MAINTAINED UNTIL IT REACHES A HEIGHT OF 3 INCHES. ANY BARE AREAS SHALL BE RESEEDDED.

ALL EROSION CONTROL DEVICES SHALL BE REMOVED BY GENERAL CONTRACTOR AFTER SITE STABILIZATION IS COMPLETE AND APPROVED BY ENGINEER.

THE DEVELOPER WILL DESIGNATE A QUALIFIED PERSON OR PERSONS TO PERFORM THE FOLLOWING INSPECTIONS:
STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

STRUCTURAL CONTROLS: FILTER FABRIC FENCES AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.
DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.
CONSTRUCTION ENTRANCE: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

A LOG OF EACH INSPECTION SHALL BE KEPT. THE INSPECTION REPORT IS TO INCLUDE THE FOLLOWING MINIMUM INFORMATION: INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS RELATIVE TO THE EFFECTIVENESS OF THE POLLUTION CONTROL DEVICES, ACTIONS TAKEN OR NECESSARY TO CORRECT DEFICIENCIES, AND LISTING OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE INSPECTION REPORT SHALL BE SIGNED BY THE PERMITTEE OR BY THE PERSON PERFORMING THE INSPECTION IF DULY AUTHORIZED TO DO SO.



ENGINEERING & SURVEYING SOLUTIONS
 50 SE 30TH STREET
 LEES SUMMIT, MO 64082
 P: (816) 623-9888 F: (816) 623-9849

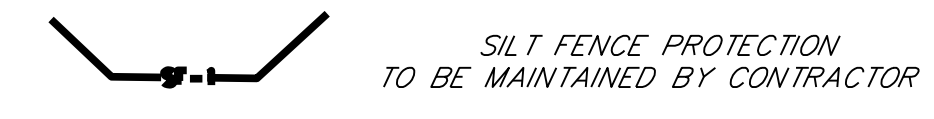
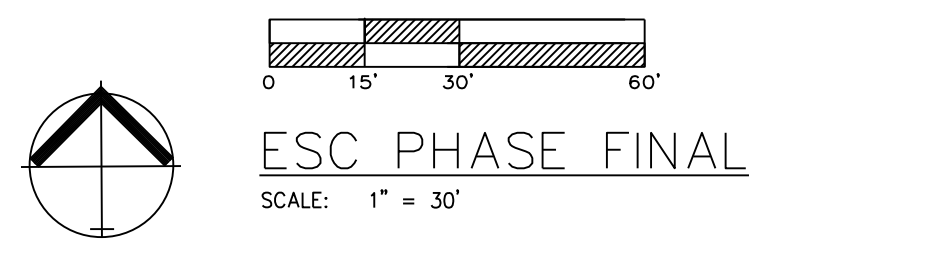
Professional Registration
 Missouri
 Engineering 2005002186-D
 Surveying 2005003819-D
 Kansas
 Engineering E-1695
 Surveying LS-218
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

Project: 510 NW MAIN ST
 LS, MO
Issue Date: December 11, 2019

ESC PHASE 2 Construction Plans for:
MAIN ORCHARD
 Section 6, Township 47 North, Range 31 West
 Lees Summit, Jackson County, Missouri

Matthew J. Schlicht
 MO PE 2006019708
 KS PE 19071
 OK PE 25226
 NE PE E-14335

REVISIONS
 12-27-19 City Comments
 1-13-20 Revised
 C.051



NOTES: The Land Disturbance Plans indicates the Final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

SEED AND MULCH NOTES:

All areas disturbed by construction activities shall be seeded and mulched. Seeding shall be done before the proposed seedbed becomes eroded, crusted over, or dried out and shall not be done when the ground is frozen, or covered with snow. The seed shall comply with the requirements of the Missouri Seed Law and the Federal Seed Act. Also, it shall contain no seed of any plant on the Federal Noxious Weed List. Other weed seeds shall not exceed one percent by weight of mix.

Seed and Fertilizer Rate:

Mix I - Rye Grass / Blue Grass -----
100 lbs. per Acre

Mix II - Tall Fescue / Blue Grass ----- 195
lbs. per Acre

Lime ----- 2000
lbs per Acre (50 lbs. per 1000 sq. ft.)

Fertilizer ----- 800
to 1200 lbs per Acre (25 lbs per 1000 sq. ft.)

During the dates December 15th through May 31 ALL lime fertilizer, seed and mulch shall be applied to finished slopes of disturbed areas. During the months of June, July, October and November 1st through December 15th, lime fertilizer, seed and mulch shall be applied at the following rates:

Lime - 100% of specified quantity
Fertilizer - 75% of the specified quantity
Seed - 50% of the specified quantity
Mulch - 100% of the specified quantity

Mulch shall be Vegetative type, cereal straw from stalks of oats, rye, or barley, or approved equal. The straw shall be free of prohibited weed seed and relatively free of all other noxious and undesirable seed. Mulch shall be applied at the rate of 2 tons per acre, (70 to 90 lbs per 1000 sq. ft.). Mulch shall be embedded by a mulch anchoring tool or disk type roller having flat serrated disks spaced not more than 10 inches apart and cleaning scrapers shall be provided.

ONCE SITE IS 90% VEGETATED ALL ESC DEVICES SHALL BE REMOVED AND ANY DISTURBED AREAS SHALL BE RESTORED



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
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Project: 510 NW MAIN ST
LS, MO
Issue Date: December 11, 2019

MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lees Summit, Jackson County, Missouri

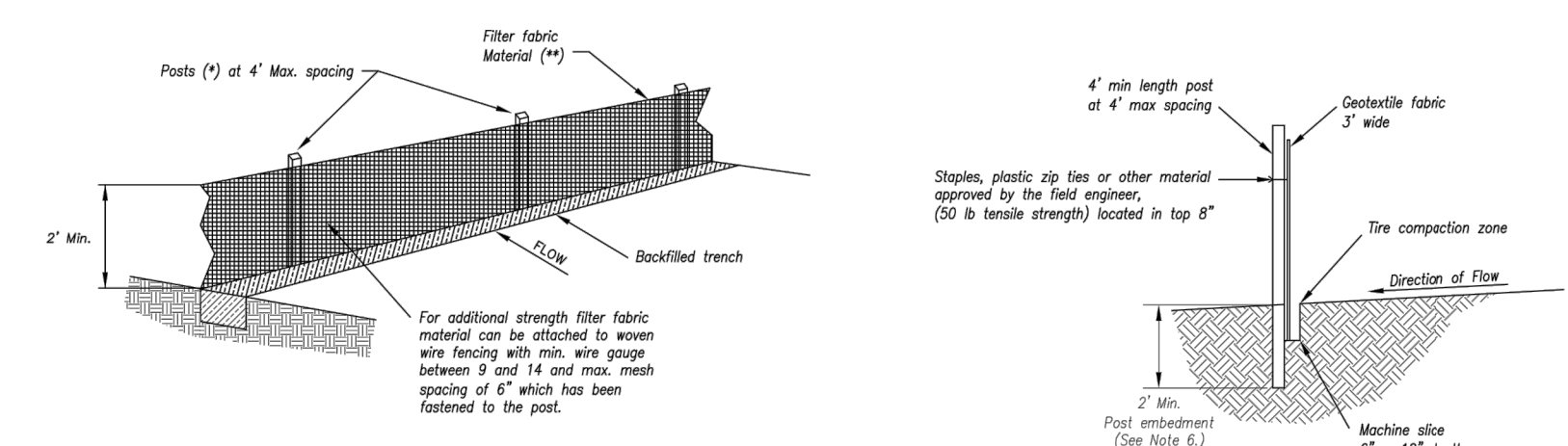
ESC PHASE FINAL
Construction Plans for:
MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lees Summit, Jackson County, Missouri

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

12-27-19 City Comments

1-13-20 Revised



- (*) EGGSIS
- MAX LENGTH 4'
 - HARDWOOD 1 3/4" x 1 3/4"
 - NO.2 SOUTHERN PINE 2 1/2" x 2 1/2"
 - STEEL 1.53 LB/FT

(**) - Geotextile Fabric shall meet the requirements of AASHTO M288

- Notes:
1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
 2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
 3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
 4. Attach fabric to upstream side of post.
 5. Install posts a minimum of 2' into the ground.
 6. Trenching will only be allowed for small or difficult installations, where sloping machines cannot be reasonably used.

- Maintenance:
1. Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
 2. Repair as necessary to maintain function and structure.

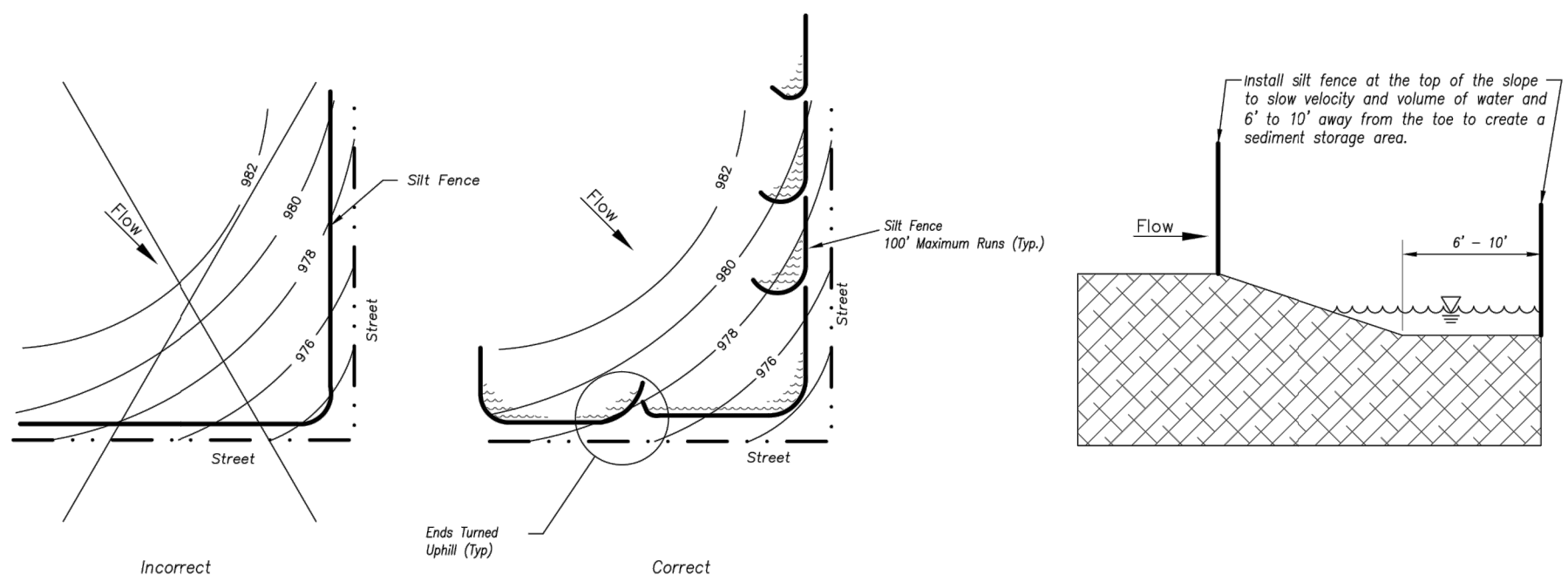
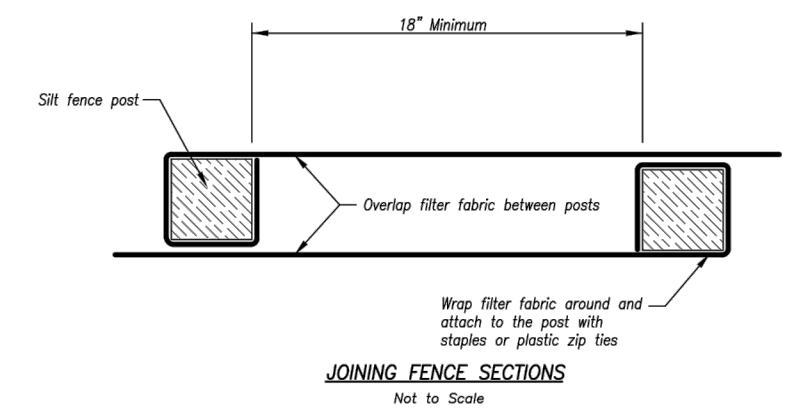


Figure A

SILT FENCE LAYOUT
Not to Scale



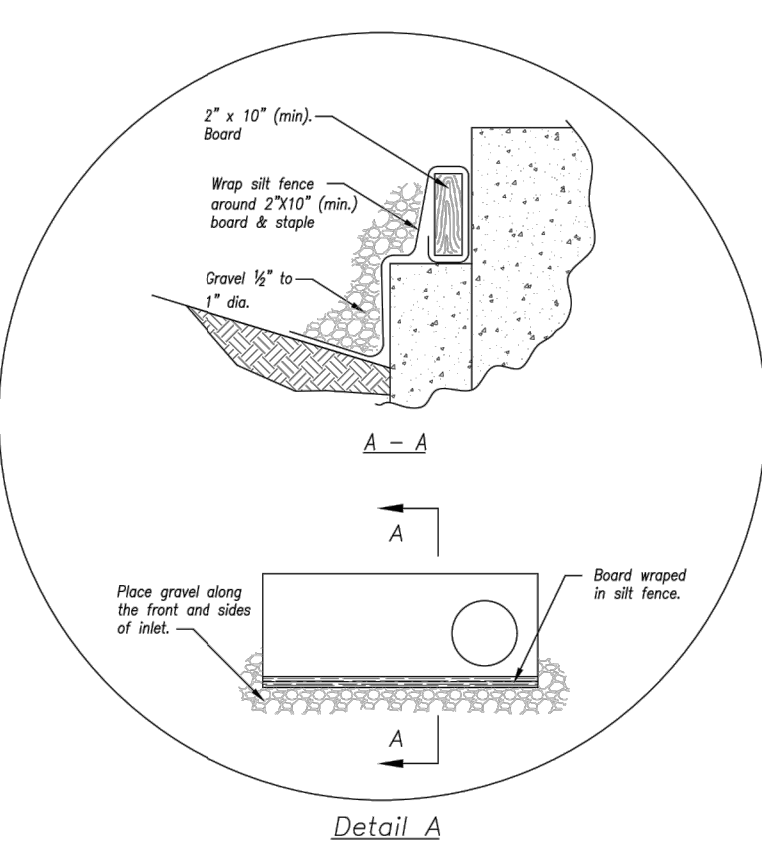
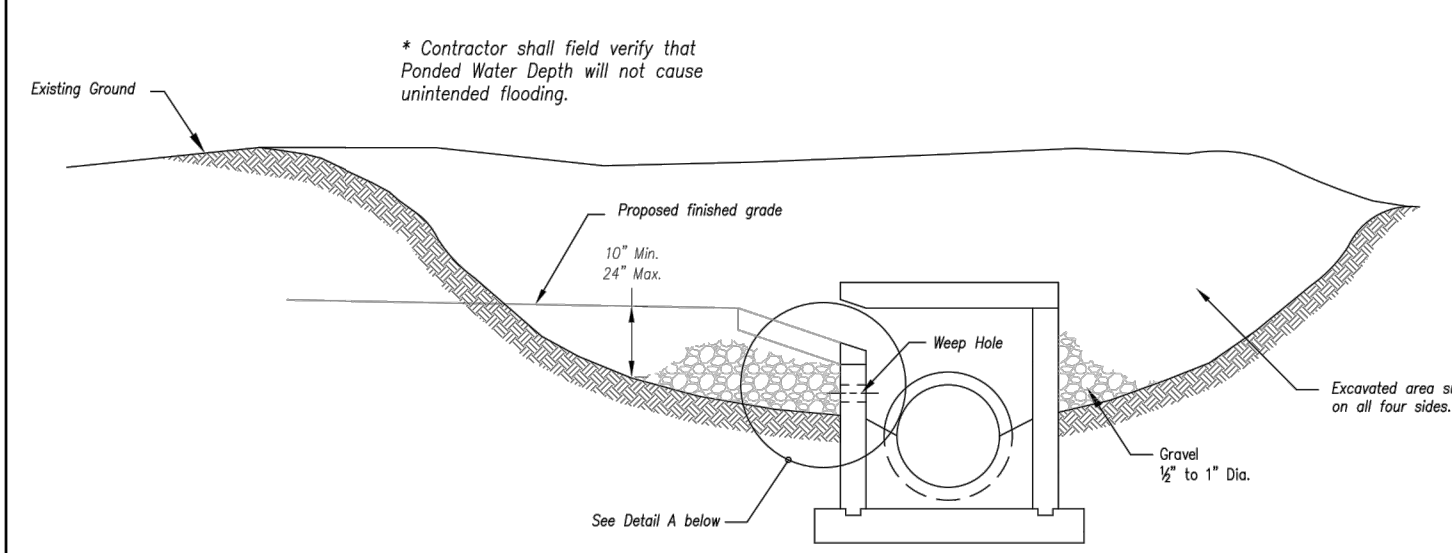
JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-03 ADOPTED 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

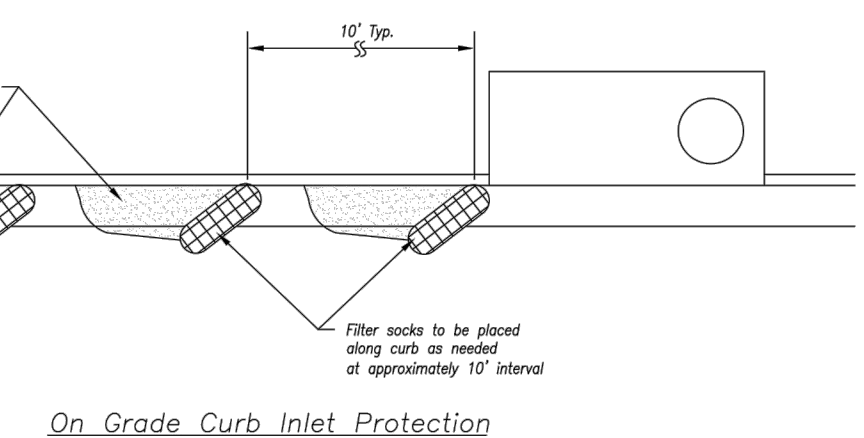


EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

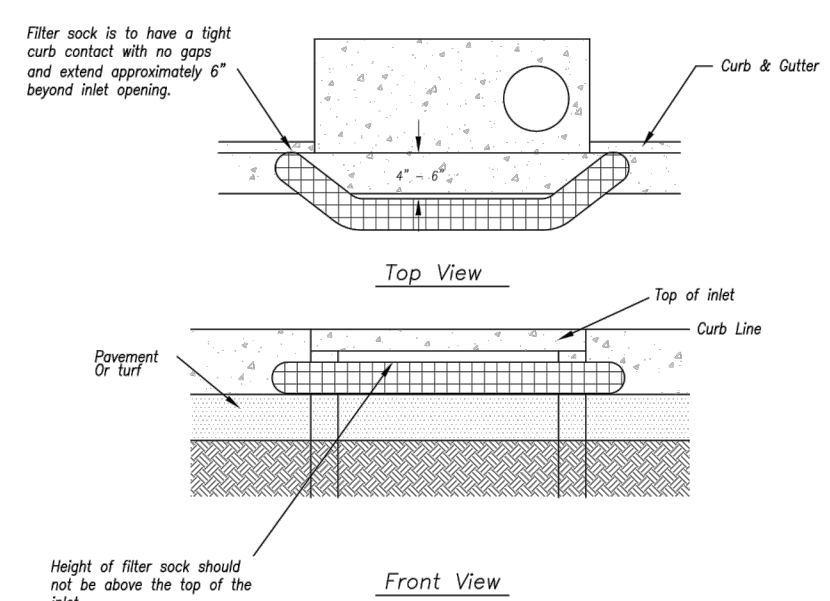
- Notes:
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2' x 10' (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
 2. When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Stone weirs are not approved for curb inlet use.
 3. Contractor to field verify ponding water shall not create a traffic hazard.

- Maintenance:
1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
 2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
 3. Repair or replace as necessary to maintain function and integrity of installation.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.



On Grade Curb Inlet Protection



Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-06 ADOPTED 10/24/2016

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Missouri
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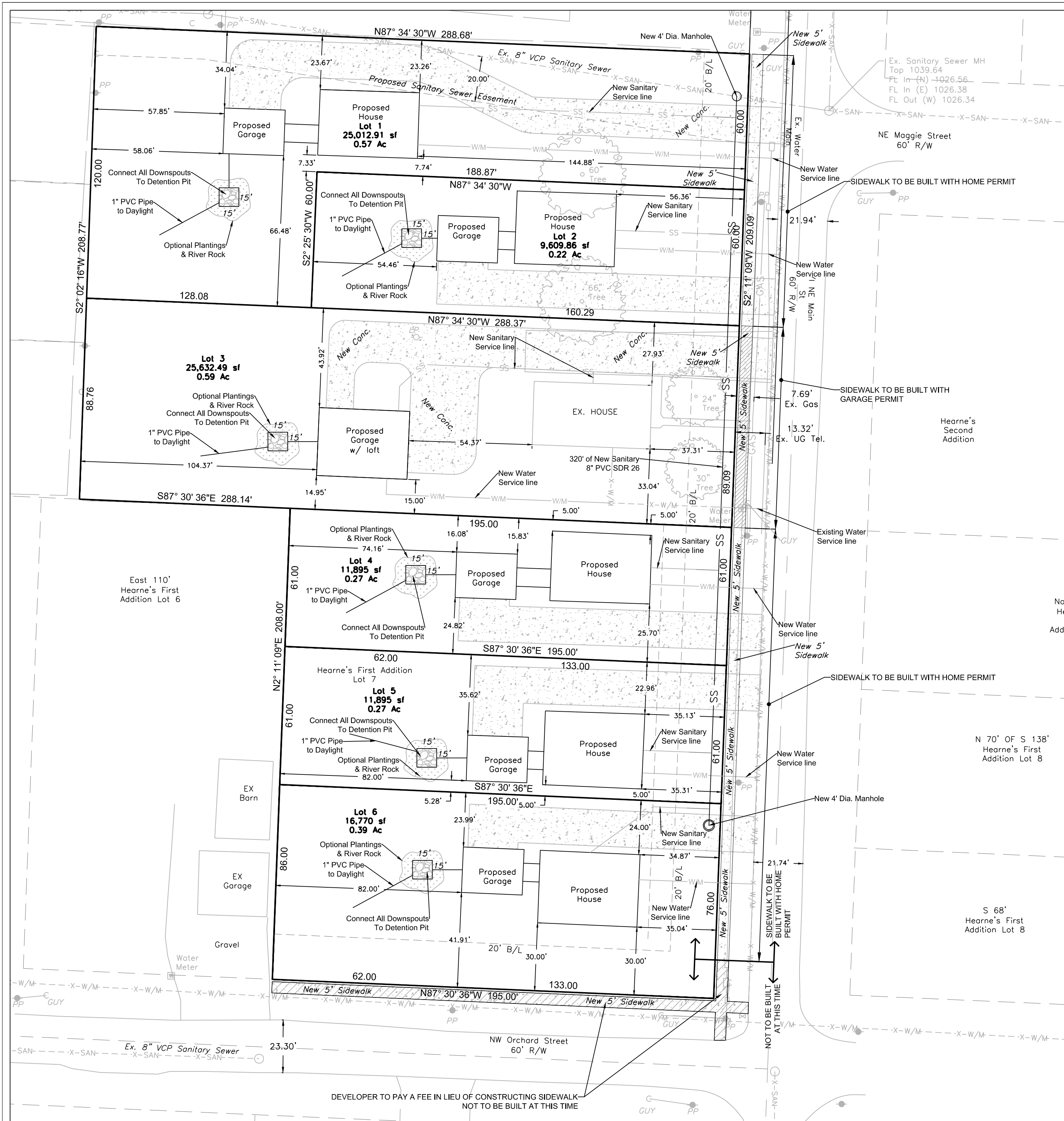
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ESC DETAILS
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REVISIONS
12-27-19 City Comments
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Site Data Table :

Lot Area:	100815.83 Sq. Ft. (2.31 Ac.)
Lots:	6
Density:	2.60 Lots/Acre
Current Impervious Area	3,842 sq. ft (3.8% of Site)
New Impervious Area	28,434 sq. ft (28.2% of Site)

Current Zoning: Planned 2-Family Residential
 Proposed Zoning: Planned 2-Family Residential

Sanitary Sewer Service
 Sanitary Sewer service will be connected to the main line being constructed the east of the development

Water Service
 Water Service will be extended to the lots from the existing City of Lee's Summit water along the west side of Main Street.

Storm Sewer
 Individual Storm Detention will be provided by each builder per detail this sheet.

SURVEY AND PLAT NOTES:

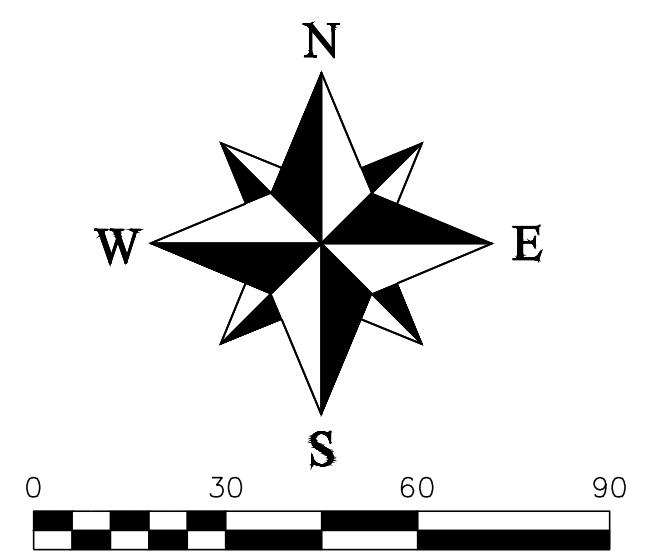
THE SUBJECT PROPERTY SURVEYED LIES WITHIN A FLOOD ZONE DESIGNATED ZONE (X). AREAS LOCATED OUTSIDE THE 100 YEAR FLOOD PLAIN, PER F.E.M.A. MAP, COMMUNITY PANEL NO. 29095C0417 G EFFECTIVE DATE: JANUARY 20, 2017.

OIL - GAS WELLS
 ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

UTILITIES:
 THE INFORMATION CONCERNING THE EXISTENCE, LOCATION, SIZE OR TYPE OF MATERIALS OF UNDERGROUND UTILITIES SHOWN HEREON, WHICH ARE NOT VISIBLE FROM THE SURFACE, HAS BEEN COMPILED FROM THE RECORDS OF THE VARIOUS UTILITY COMPANIES OR OTHER SOURCES OF INFORMATION AND HAS NOT BEEN VERIFIED IN THE FIELD BY THIS COMPANY. WHERE RECORD MEASUREMENTS WERE NOT AVAILABLE, THE LOCATION OF THESE UNDERGROUND LINES WAS SCALED FROM THE COMPANY'S RECORDS. THIS INFORMATION IS NOT TO BE CONSTRUED AS ACCURATE, COMPLETE NOR EXACT. ANY INFORMATION CONCERNING UNDERGROUND UTILITIES SHOWN HEREON MUST BE CONFIRMED BY THE DESIGN PROFESSIONAL PRIOR TO DESIGNING ANY IMPROVEMENTS WHICH MAY BE AFFECTED BY THIS INFORMATION OR BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.

SURVEYOR'S GENERAL NOTES:

- This survey is based upon the following information provided by the client or researched by this surveyor.
 - Final Plat of HEARNE'S 1ST ADDITION
 - Final Plat of HEARNE'S ADDITION LOTS 18A B C
 - Final Plat of W T HEARNE'S 2ND ADDITION
 - Final Plat of NORTHVIEW ADDITION
- This survey meets or exceeds the accuracy standards of a (SUBURBAN) Property Boundary Survey as defined by the Missouri Standards for Property Boundary Surveys.
- No Title report was furnished
- Bearings shown hereon are based upon bearings described in the legal description
- This company assumes no responsibility in the location of existing utilities within the subject premises. This is an above-ground survey. The underground utilities, if shown, are based on information provided by the various utility companies and these locations should be considered approximate. There may be additional underground utilities not shown on this drawing. Dig Rite Ticket #150071203, 150071179, 150071171
- Subsurface and environmental conditions were not surveyed or examined or considered as a part of this survey. No evidence or statement is made concerning the existence of underground or overhead conditions, containers or facilities that may affect the use or development of this property. No attempt has been made to obtain or show data concerning existence, size, depth, conditions, capacity or location of any utility existing on the site, whether private, municipal or public owned.



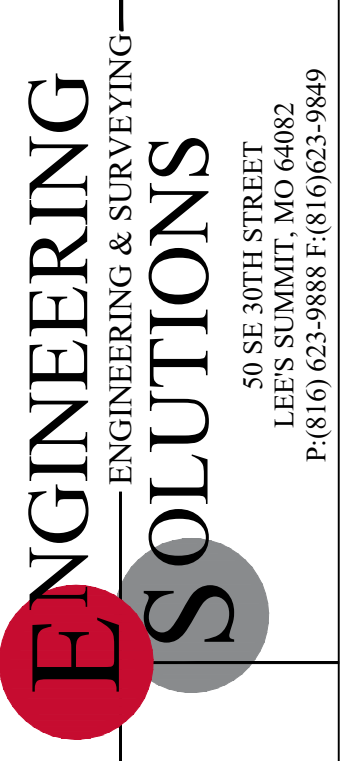
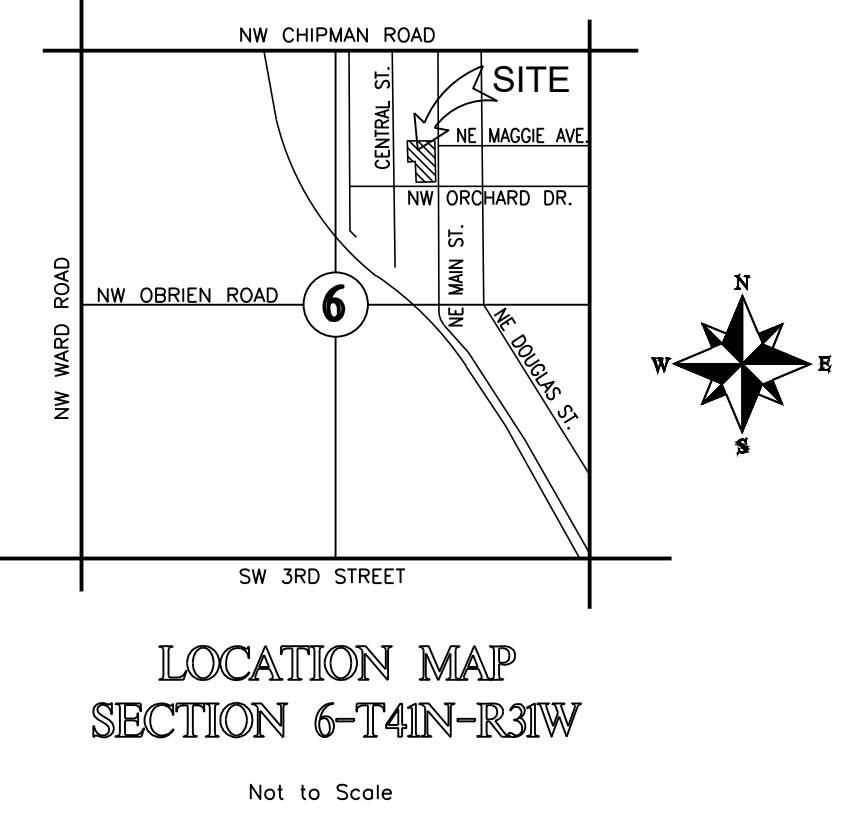
LEGEND

- These standard symbols will be found in the drawing.
- Set 1/2" Rebar & Cap
 - ⊙ Found Survey Monument (As Noted)
 - ⊕ Exception Document Location
 - X-X-X- Existing Fence Line - Chain Link
 - X-W/M- Existing Water Line
 - X-SAN- Existing Sanitary Sewer Main
 - X-STM- Existing Storm Sewer
 - GAS- Existing Gas Line
 - UT- Existing Underground Telephone
 - E- Existing Underground Electric
 - 10.30- Existing Contours
 - 10.35- Proposed Contours

PLAT BOUNDARY DESCRIPTION

All that part of the Northwest Quarter of the Northeast Quarter of Section 6, Township 47, Range 31, Lee's Summit, Jackson County, Missouri, described as follows: Beginning at the Northeast corner of Lot 7 HEARNE'S ADDITION to the City of Lee's Summit, said point being in the West line of Main Street; thence North along the West line of Main Street 208.75 feet; thence West 289.3 feet, more or less, to the Northeast corner of Lot 7, NORTH LEA ADDITION, a subdivision in Lee's Summit; thence South along the East lines of Lots 7, 8 and 9 in said Addition to the Southeast corner of Lot 9; thence East 289.3 feet, more or less, to the point of beginning.

AND
 All of Lot 7, Hearne's Addition, a subdivision as recorded in the Office of the Recorder, Jackson County, Missouri



Professional Registration
 Missouri
 Engineering 2005002186-D
 Surveying 200500319-D
 Kansas
 Engineering E-1695
 Surveying LS-218
 Oklahoma
 Engineering 6254
 Nebraska
 Engineering CA2821

Project: MAIN ORCHARD
 Section 6, Township 47 North, Range 31 West
 Lee's Summit, Jackson County, Missouri

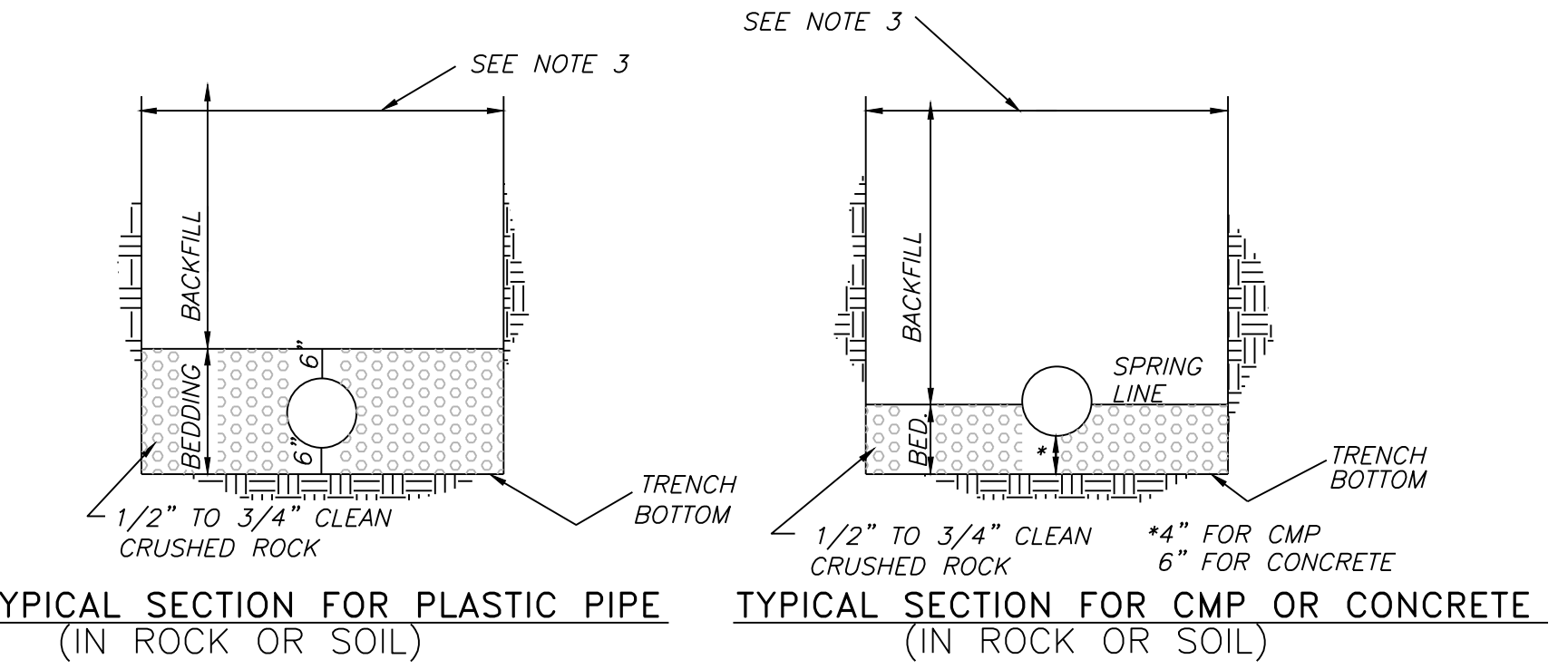
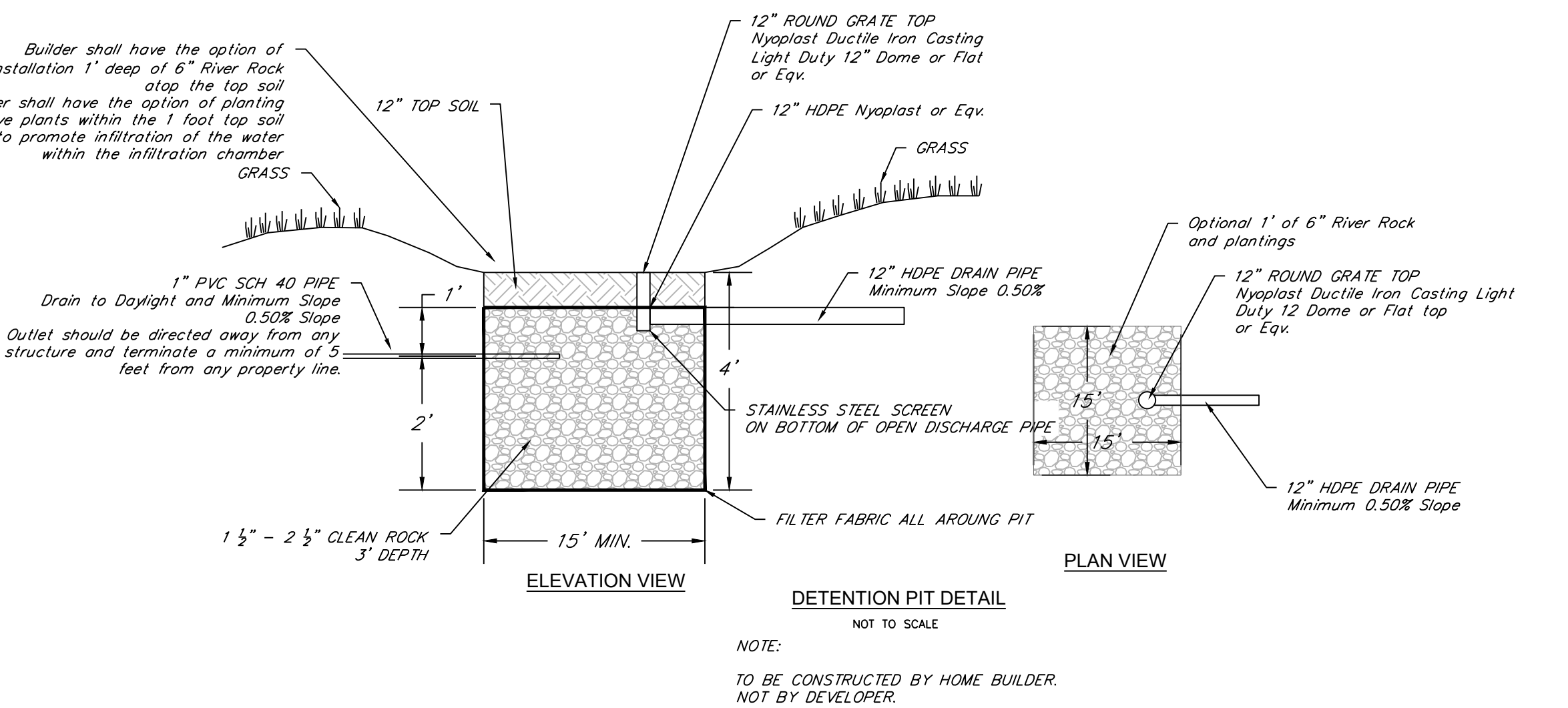
Site Plan
 Construction Plans for:
 MAIN ORCHARD
 Section 6, Township 47 North, Range 31 West
 Lee's Summit, Jackson County, Missouri

Project: 510 NW MAIN ST
 LS, MO
 Issue Date: December 11, 2019

Matthew J. Schlicht
 MO PE 2006019708
 KS PE 19071
 OK PE 25226
 NE PE E-14335

REVISIONS

12-27-19	City Comments
1-13-20	Revised

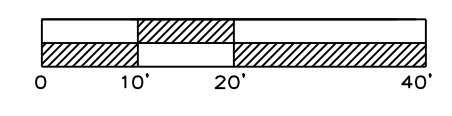
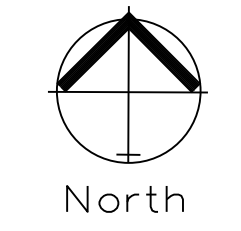


- NOTES:**
- BACKFILL SHALL BE JOB EXCAVATED MATERIAL FREE FROM DEBRIS AND STONES COMPACTED TO 90% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. FOR BACKFILL UNDER PAVEMENT (EXISTING OR PROPOSED), SEE SD-9 AND SD-11.
 - TRENCH BANKS MAY BE CUT BACK ON SLOPES IN ACCORDANCE WITH CURRENT OSHA REGULATIONS, BUT ONLY IN AREAS WHERE THE INCREASED TRENCH WIDTH WILL NOT INTERFERE WITH SURFACE FEATURES. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.
 - MINIMUM AND MAXIMUM WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.

UNDERGROUND PIPE INSTALLATION FOR STORM SEWER LINES



NOTE:
THIS GRADING PLAN REPRESENTS THE PROPOSED GRADING OF THE LOTS. ALL GRADING TO BE DONE BY HOME BUILDER. NOT BY DEVELOPER.



GRADING PLAN
SCALE: 1" = 20'

Master Drainage Plan 1 of 3:
Grading Plan
Construction Plans for:
MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lee's Summit, Jackson County, Missouri

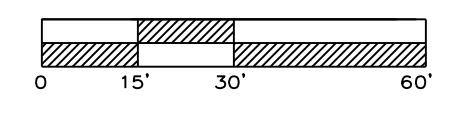
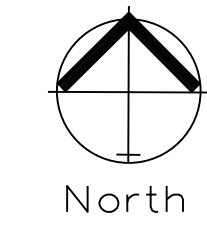
Project:
510 NW MAIN ST
LS, MO
Issue Date:
December 11, 2019

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering S254
Nebraska
Engineering CA2821

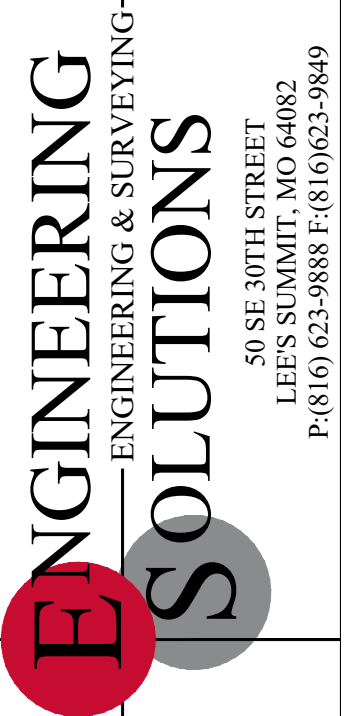
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NE PE E-14335

REVISIONS

12-27-19	City Comments
1-13-20	Revised



SPOT ELEVATIONS
SCALE: 1" = 30'



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Project: 510 NW MAIN ST
LS, MO
Issue Date: December 11, 2019

MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Master Drainage Plan 2 of 3:
Spot Elevations
Construction Plans for:
MAIN ORCHARD
Section 6, Township 47 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14325

REVISIONS

12-27-19	City Comments
1-13-20	Revised