

**RELEASED FOR
CONSTRUCTION**
As Noted on Plans Review

Development Services Department
Lee's Summit, Missouri
02/17/2022

<p>FREELAND and KAUFFMAN, INC.</p> <p>ENGINEERS</p> <p>209 WEST STONE AVENUE GREENVILLE, SOUTH CAROLINA 29609</p> <p>864-282-9039</p> <p>NC LICENSE NO. C-532</p>	
DRAWN BY:	BAC
CHECKED BY:	TMB
DATE:	07/23/2021
	

- 1) Monuments set as shown
- 2) Address – 710 SE 7th Terrace, Lee's Summit, MO 64063
- 3) Flood Zone X – Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) 29183C0185G effective 1/20/2016 and 29189C0205G effective 1/20/2016
- 4) There are 60,209 square feet in Lot 2
- 5) Vertical datum is NAVD 88 (See Benchmark Note)
- 6a) No zoning letter provided
- 6b) No zoning letter provided
- 7a) There is no building on property
- 8) Substantial features are shown
- 9) There is no designated parking on property
- 10) There were no division or party walls designated by the client.
- 11a) Utilities as shown
- 13) The names of adjoining property owners are shown as of the date of the survey from the Assessor's records online.
- 14) Site is approximately 0.2 miles east of SE Missouri 291 Highway along SE 7th Terrace.
- 16) There is no new construction on or adjacent to site, however, there is a "Final Development Plan, Concept Development Plan, for Lawn & Leisure Addition – Lot 1 and Chapman Plaza II – Lot 1 & Lot 2", by Hamilton & Sterrett, Inc., Engineers, Land Surveyors & Planners, Signed & Sealed by Leslie R. Hamilton, MO E–22616, dated March 13, 2015. Plans depict proposed parking, building and detention.
- 17) There was no evidence of changes in street right of way lines, and none made available to the surveyor by the controlling jurisdiction. There is no evidence of recent street or sidewalk construction or repairs observed during the process of conducting the field work.

Description:
 Lot 2, CHAPMAN PLAZA II, a subdivision in Lee's Summit, Jackson
 County, Missouri, according to the recorded plat thereof.

- 8) Rights of way, and easement, together with abutter's rights of direct access to State of Missouri, Doc# 882977 in Bk 1820 pg 1 – property has direct access along the South line of Lot 2 to Se Blue Parkway, as shown, temporary easement mentioned for landscaping should be no longer in effect.
- 9) Electric line easement to Missouri Public Service Company Doc# 907336 in Bk 1884 pg 30, as shown
- 10) Boundaries, building lines, easements and dedications on Chapman Plaza II, Doc# 2010E122508, as shown
- 11) Easement for storm drainage, Doc# 2011E0088607, as shown
- 12) Easement for storm drainage, Doc# 2011E0088608, as shown



"MINOR PLAT, CHAPMAN PLAZA II, LOTS 1,
2 AND 3, SECTIONS 8 & 9 TOWNSHIP 47,
RANGE 31, LEE'S SUMMIT, JACKSON
COUNTY, MISSOURI"
Recorded as Document No.2010E0122508

NGS PID JE0065 DESIGNATION X 205
NAVD 88 ELEV. = 1046.10
Bench Mark Disk Stamped X 205 1946
Set in Massive Structure, 0.6 miles south
along the Missouri Pacific Railroad from
the station at Lee's Summit, 19.1' west
of the west rail of the main track, set in
the top of the west end of the
northwest abutment of an overpass over
U.S. Highway 50.

TBM "A" - NAVD 88 Elev. = 1014.38
Found Iron Rod w/cap LS 371 D at
northwest corner of Lot 2, Chapman
Plaza II.

TBM "B" - NAVD 88 Elev. = 1017.76
Found Iron Rod w/cap LS 371 D at
southeast corner of Lot 2, Chapman
Plaza II.


	AREA INLET/CURB INLET
	MANHOLE
	GRATED MANHOLE
	GUY WIRE
	UTILITY POLE
	WATER VALVE
	WATER METER
	FIRE HYDRANT
	SIGN
	BENCHMARK
	WATER LINE
	GAS LINE
	OVERHEAD ELECTRIC
	OVERHEAD ELECTRIC TELEPHONE CABLE
	UNDERGROUND TELEPHONE

This is to certify that the map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standards Detail Requirements for ALT/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6a, 6b, 7a, 8, 9, 10, 11a, 13, 14, 16 & 17 of Table A thereof.

The fieldwork was completed on April 29, 2021

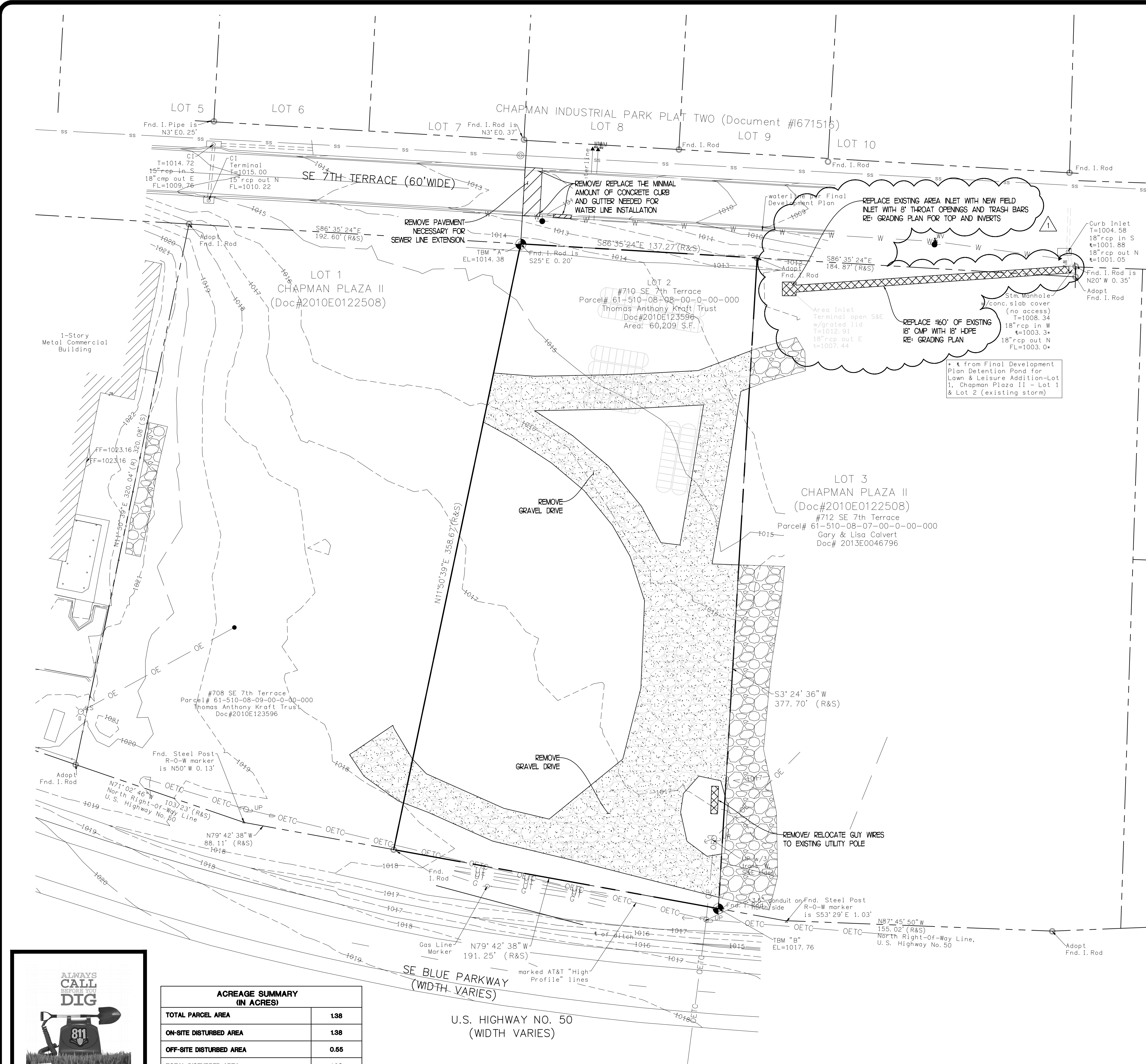
PRELIMINARY

MARK WILEY MO PLS 2437



ALTA/NSPS SURVEY
LOT 2, CHAPMAN PLAZA II
NE 1/4, SECTION 8, TOWNSHIP 47 NORTH,
RANGE 31 WEST
City of Lee's Summit, Jackson County, Missouri

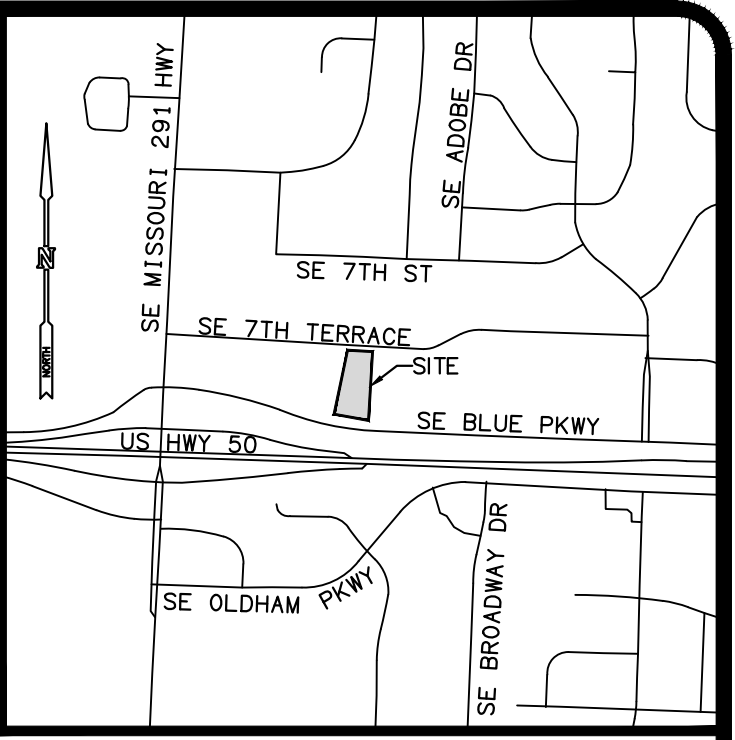
[illegible]



LEGEND

SYMBOL	DESCRIPTION (TO BE REMOVED)
[Pattern]	GRAVEL DEMO
[Pattern]	ASPHALT/ CONCRETE DEMO
[Pattern]	UTILITY/STORM DEMO

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DEMOLITION PLAN NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
2. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
3. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF NEW CONSTRUCTION SHALL BE RAZED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET, ARCHITECTURAL PLANS AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS, AND FOOTINGS.
5. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
6. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.
7. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE AUTHORITIES.
8. UTILITY CONTACTS ARE LISTED ON THE COVER SHEET.
9. EROSION AND SEDIMENTATION CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE INSTALLED PRIOR TO INITIATION OF DEMOLITION ACTIVITIES. REFER TO SWPP PLAN FOR DETAILS.
10. ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
11. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
12. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL AND OSHA REGULATIONS WHEN OPERATING DEMOLITION EQUIPMENT AROUND UTILITIES.
13. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE NCDOT STANDARDS, AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT, AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
14. CONTRACTOR SHALL PROTECT AT ALL TIMES ADJACENT STRUCTURES AND ITEMS FROM DAMAGE DUE TO DEMOLITION ACTIVITIES.
15. DEMOLITION CONTRACTOR SHALL COORDINATE EXISTING FACILITIES UTILITY DISCONNECTS WITH THE OWNER'S REPRESENTATIVE A MINIMUM 7 DAYS PRIOR TO ANTICIPATED DEMOLITION OF STRUCTURES.
16. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
17. CONTRACTOR SHALL REMOVE AIR CONDITION UNITS / FREON IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
18. ALL UTILITY OR SERVICE LINES THAT UNDERLIE THE PROPOSED STRUCTURES SHALL BE REMOVED. ALL STORM AND SANITARY SEWER LINES THAT LIE BENEATH A HIGHWAY LINE EXTENDING FROM THE BASE OF FOUNDATIONS FOR FREE STANDING FOUNDATIONS FOR LOAD BEARING WALLS SHOULD BE REMOVED OR PRESSURE-GROUTED IN-PLACE.

NOTE:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
2. DEMOLITION CONTRACTOR SHALL COORDINATE EXISTING FACILITIES UTILITIES DISCONNECTS WITH OWNER'S REPRESENTATIVE A MINIMUM 7 DAYS PRIOR TO ANTICIPATED DEMOLITION OF STRUCTURES.
3. CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL REPORT PREPARED BY INTERTEK PSI DATED MAY 21, 2021 FOR INFORMATION ON THE REMOVAL OF EXISTING IN SITU MATERIALS AND HARDSCAPE.

ALWAYS CALL BEFORE YOU DIG

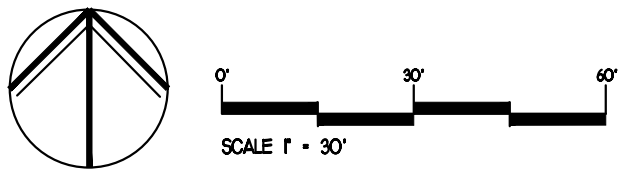
811

EVERY DIGGING JOB REQUIRES A CALL - EVEN SMALL PROJECTS LIKE PLANTING TREES OR SHRUBS. IF YOU HIT AN UNDERGROUND UTILITY LINE WHILE DIGGING, YOU CAN HARM YOURSELF OR THOSE AROUND YOU, DISRUPT SERVICE TO AN ENTIRE NEIGHBORHOOD AND POTENTIALLY BE RESPONSIBLE FOR FINES AND REPAIR COSTS.

SMART DIGGING MEANS CALLING 811 BEFORE EACH JOB. WHETHER YOU ARE A HOMEOWNER OR A PROFESSIONAL EXCAVATOR, ONE CALL TO 811 GETS YOUR UNDERGROUND UTILITY LINES MARKED FOR FREE.

ACREAGE SUMMARY (IN ACRES)	
TOTAL PARCEL AREA	1.38
ON-SITE DISTURBED AREA	1.38
OFF-SITE DISTURBED AREA	0.55
TOTAL DISTURBED AREA	1.93
IMPERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY & INCLUDES GRAVEL)	0.48
PERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY)	0.90
IMPERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.90
PERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.48
IMPERVIOUS AREA INCREASE (PRE VS POST) (ON-SITE ONLY)	0.42
IMPERVIOUS PERCENTAGE (AT POST-CONSTRUCTION STATUS)	65.2%

DEMOLITION PLAN



REVISIONS	BY
02/08/2022 REVISION #1	TMB

FREELAND and KAUFFMAN, INC.

Engineers * Landscape Architects

209 West Stone Avenue
Greenville, South Carolina 29609

864-233-5497
fax 864-233-8916

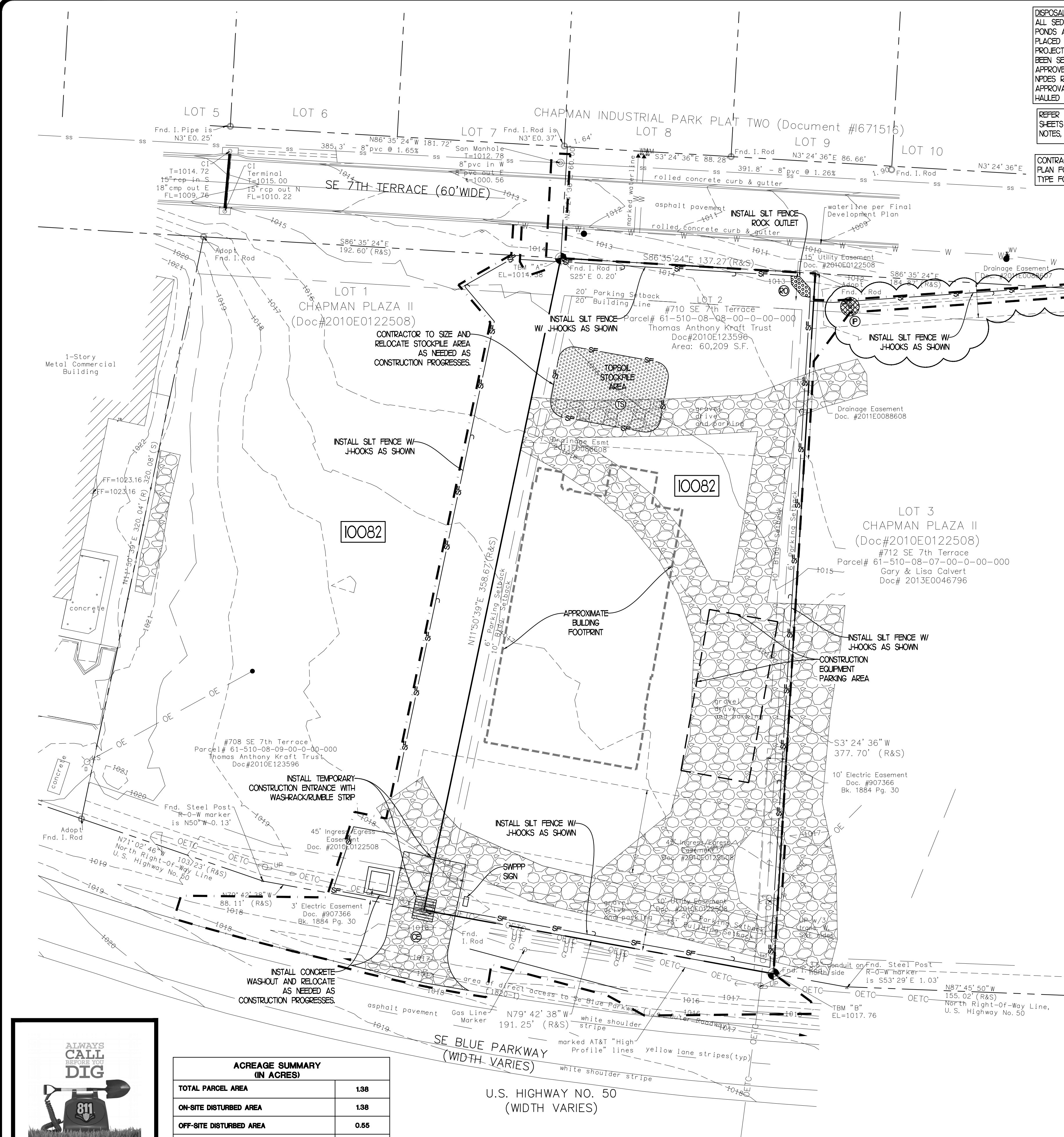


CALIBER COLLISION

710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063

CROSS DEVELOPMENT, CG LEE'S SUMMIT, LLC
4388 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

DRAWN BAC
CHECKED TMB
DATE 11/7/2021
SCALE
DRAWING



DISPOSAL OF SEDIMENT:
ALL SEDIMENT REMOVED FROM SILT FENCE, INLET PROTECTION, SEDIMENT PONDS AND TRAPS, ETC. DURING THE COURSE OF CONSTRUCTION SHALL BE PLACED ON THE TOPSOIL STOCKPILE AND RESPAID AT THE END OF THE PROJECT. SEDIMENT REMOVED FROM THESE ITEMS AFTER THE SITE HAS BEEN SEEDING SHALL BE HAULED OFF SITE AND DISPOSED OF AT AN APPROVED, LICENSED SPILL AREA THAT IS IN FULL COMPLIANCE WITH THE NPDES REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY APPROVALS NECESSARY TO ALLOW FOR THE DISPOSAL OF THIS MATERIAL IF HAULED OFF-SITE.

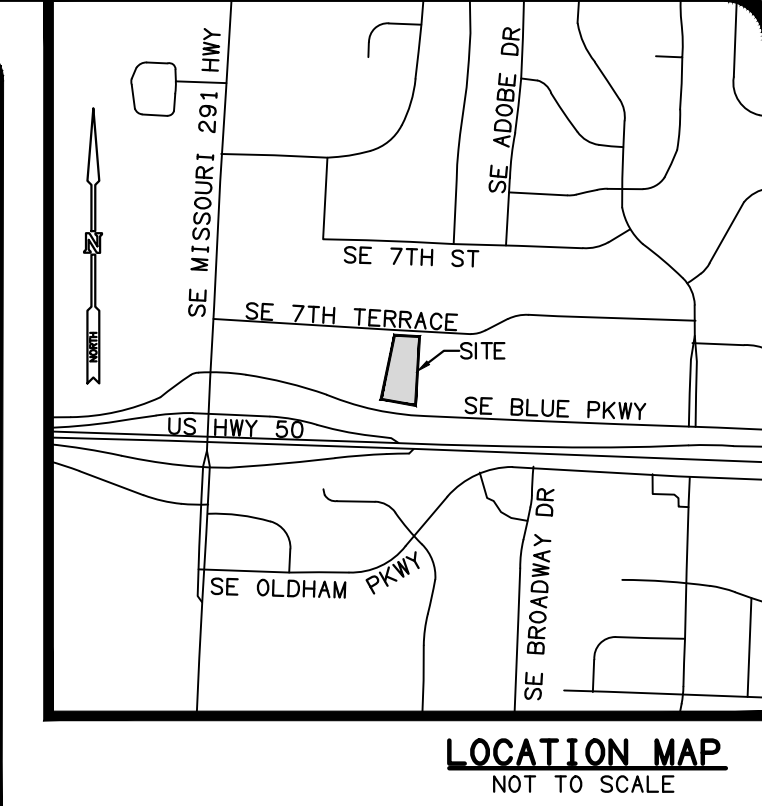
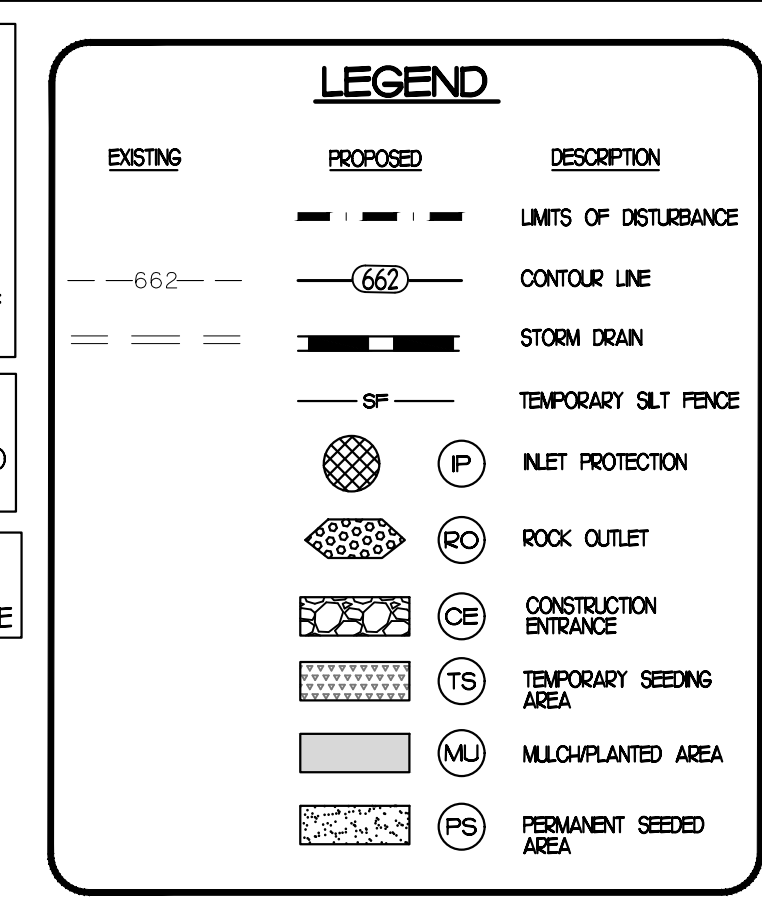
REFER TO THE EROSION CONTROL DETAIL SHEETS FOR ALL EROSION CONTROL NOTES, MAINTENANCE REQUIREMENTS, ETC.

CONTRACTOR TO REFERENCE LANDSCAPE PLAN FOR INFORMATION ON STABILIZATION TYPE FOR SEED, SOD, AND MULCH.

CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING UNDERNEATH OVERHEAD POWER LINES. ANY DAMAGE TO THE EXISTING UTILITY POLES AND UTILITY LINES SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE.

CONTRACTOR TO LOCATE POST-O-JOINS, CONSTRUCTION TRAILER, ETC. ON SITE MAP TO BE MAINTAINED ON-SITE.

NO JURISDICTIONAL WETLANDS OR STREAMS LOCATED OR IMMEDIATELY ADJACENT TO SITE.



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SWPPP CONTACT DURING CONSTRUCTION
CROSS DEVELOPMENT
ATTN:

DRAINAGE BASIN:
MISSOURI RIVER WATERSHED

RECEIVING WATERS:
EAST FORK LITTLE BLUE RIVER,
TRIBUTARY OF THE BLUE RIVER -
MISSOURI RIVER WATERSHED

SOILS ON SITE:
• K0082 - ARISBURG-URBAN LAND
COMPLEX, 1 TO 5 PERCENT SLOPES
(HYDROLOGIC SOIL GROUP C)

- ### EROSION CONTROL MAINTENANCE PLAN:
- ALL SLOPES 3:1 AND STEEPER SHALL RECEIVE A CURLEX BLANKET OR APPROVED EQUAL. IN ADDITION TO HYDROSEEDING, TEMPORARY BERMS MAY BE NEEDED DAILY UNTIL ALL SLOPES ARE BROUGHT TO GRADE.
 - EXCEPT AS NOTED BELOW, STABILIZATION SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS CONDITIONS ALLOW. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITY CEASED, (E.G., THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY HALTED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RE-SEEDING IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW). PERMANENT STABILIZATION FOR ALL DISTURBED AREAS IS TO BE COMPLETE WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION. DIVERSIONS MUST BE STABILIZED PRIOR TO BECOMING FUNCTIONAL.
 - ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (0.5) INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED AND REPLACED AS NECESSARY.
 - PROVIDE SILT FENCE AND/OR OTHER EROSION CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION.
 - ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
 - THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
 - TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LOADED WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
 - EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
 - CONTRACTOR SHALL PROVIDE EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1. CONTRACTOR HAS THE OPTION TO UTILIZE SOD IN LIEU OF AN EROSION CONTROL BLANKET (TYPICAL).

- ### SEQUENCE OF CONSTRUCTION:
- PHASE I
- SUBMIT PLANS FOR REVIEW
 - OBTAIN GRADING PERMIT (MAY INCLUDE PRE-CONSTRUCTION CONFERENCE). CONTRACTOR SHALL OBTAIN ALL APPROPRIATE PERMITS REQUIRED FOR DEMOLITION AND LAND DISTURBANCE ACTIVITIES.
 - CONTRACTOR SHALL CONTACT CITY OF LEE'S SUMMIT DEVELOPMENT SERVICES TO SCHEDULE A RECONSTRUCTION MEETING AT 680 969-2000.
 - REMOVE THE MINIMAL AMOUNT OF PERIMETER SITE FEATURES IN ORDER TO INSTALL STABILIZATION CONSTRUCTION EXIT AND SILT FENCE. ENSURE DRAINAGE IS DIRECTED TOWARDS SILT FENCE.
 - INSTALL INLET PROTECTION AT THE EXISTING STORM STRUCTURE OFF THE NORTH EAST CORNER OF THE PROPERTY ON THE ADJACENT PROPERTY.
 - INSTALL SWPPP SIGN, TEMPORARY STOCKPILE AREA, AND DESIGNATE AN AREA FOR THE PARKING OF CONSTRUCTION VEHICLES.
 - BEGIN DEMOLITION OF THE SITE FEATURES PER THE DEMOLITION PLAN. DO NOT BEGIN DEMOLITION OF THE PAVEMENT AND CONCRETE CURB ALONG SE 7TH TERRACE UNTIL READY TO BEGIN WATER MAIN INSTALLATION CONNECTION.
 - INSTALL CONCRETE WASHOUT AT SITE ENTRANCE/EXIT.
 - INSTALL TEMPORARY SEEDING AND MULCH STABILIZATION TO ALL AREAS WHERE WORK WILL BE CEASED FOR A PERIOD OF MORE THAN 7 DAYS.
- PHASE II
- CONTINUALLY INSPECT AND MAINTAIN ALL BMP'S. REPAIR AND REPLACE ANY BMP'S AS NEEDED.
 - BEGIN GENERAL GRADING OF SITE. APPLY PERMANENT SEEDING TO ALL AREAS AS SOON AS THEY ARE COMPLETE. DO NOT WAIT UNTIL JOB COMPLETION TO PERMANENTLY SEED DISTURBED AREAS. ADD EROSION CONTROL BLANKETS AS NEEDED FOR ALL AREAS WITH SLOPES THAT EXCEED 3:1.
 - INSTALL UNDERGROUND DETENTION SYSTEM PER CONTECH'S SPECIFICATIONS AND THE GRADING PLAN. INSTALL STORM SEWERS AND STRUCTURES. INLET PROTECTION SHALL BE ADDED AT EACH STRUCTURE IMMEDIATELY AFTER THEY HAVE BEEN CONSTRUCTED. CONNECT TO EXISTING STORM STRUCTURE AS SHOWN. REPAIRING/REPLACING ANY APPURTENANCES AS NEEDED.
 - INSTALL UNDERGROUND UTILITIES AND COORDINATE WITH EACH UTILITY PROVIDER. BRING ALL BUILDING'S UTILITIES TO THE PROPOSED PAD LOCATION AND CAP FOR FUTURE CONNECTION.
 - INSTALL WATER LINE EXTENSION TO EXISTING MAIN NORTH OF SE 7TH TERRACE. IMMEDIATELY REPAVE ASPHALT AND INSTALL CURB & GUTTER PER CITY OF LEE'S SUMMIT STANDARDS AND SPECS.
 - COMMENCE GRADING OF BUILDING PAD AND AREAS AROUND BUILDING PAD.
 - INSTALL CURB AND GUTTER AND FINE GRADE PARKING AREAS. STONE BASE SHALL BE INSTALLED IN ALL PAVED AREAS AS SOON AS PRACTICABLE. CONSTRUCTION EXIT SHALL BE REMOVED ONLY ONCE THE BUILDING PAD, PARKING LOT, AND DRIVEWAY HAVE BEEN STABILIZED WITH STONE BASE.
 - PAVE SITE AND INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
 - COMPLETE BUILDING CONSTRUCTION, SIDEWALKS, PLANTINGS, ETC.
 - REMOVE TEMPORARY BMP'S AS SOON AS THEIR CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED. SEED AND MULCH ANY DISTURBANCE FROM REMOVAL OF TEMPORARY BMP'S.
 - INSPECT / CLEAN / FLUSH UNDERGROUND DETENTION SYSTEM. CONTRACTOR SHALL CONTACT MANUFACTURER FOR FINAL INSPECTION AND CERTIFICATION.
 - CONTACT MOHR FOR FINAL INSPECTION AND OWNER FOR COORDINATION OF FILING THE NOTICE OF TERMINATION NOTI.

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TOTAL DISTURBED AREA	1.93
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PERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY)	0.90
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Engineers * Landscape Architects
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fax 864-233-8916

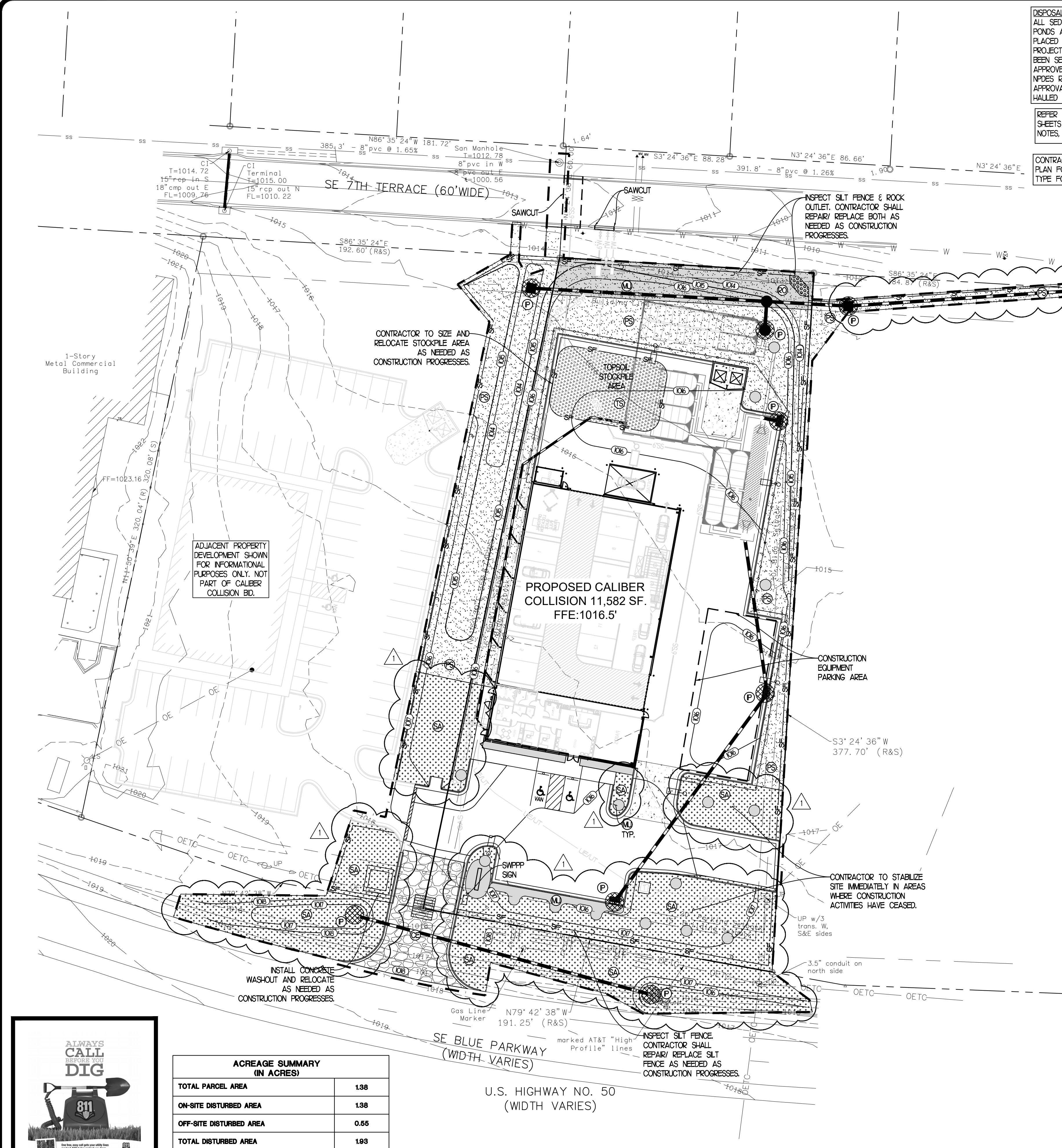


CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
CROSS DEVELOPMENT, CG LEE'S SUMMIT, LLC
4538 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

DRAWN
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1/17/2021
SCALE

DRAWING

EROSION CONTROL PHASE I



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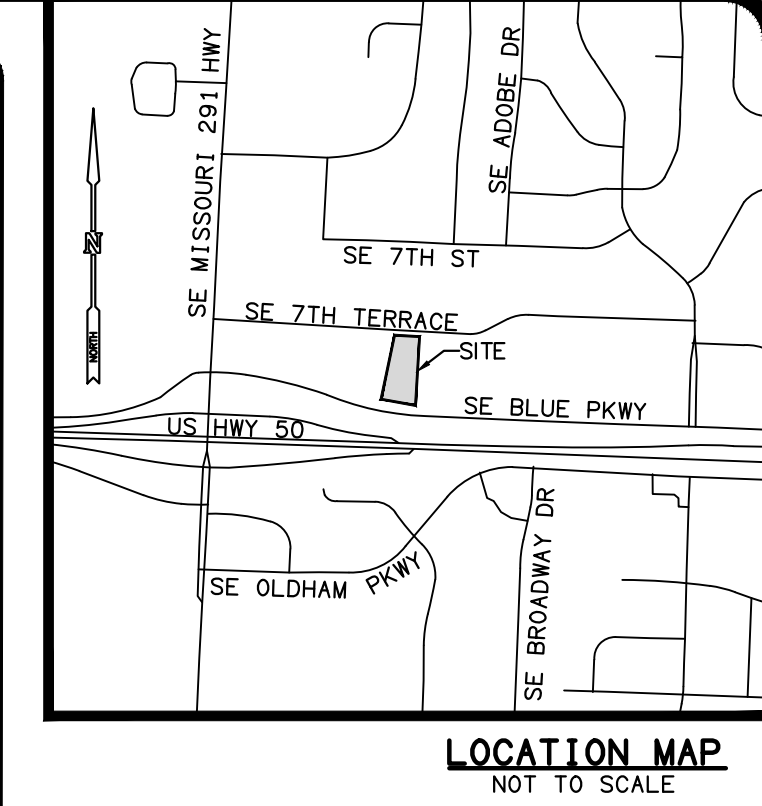
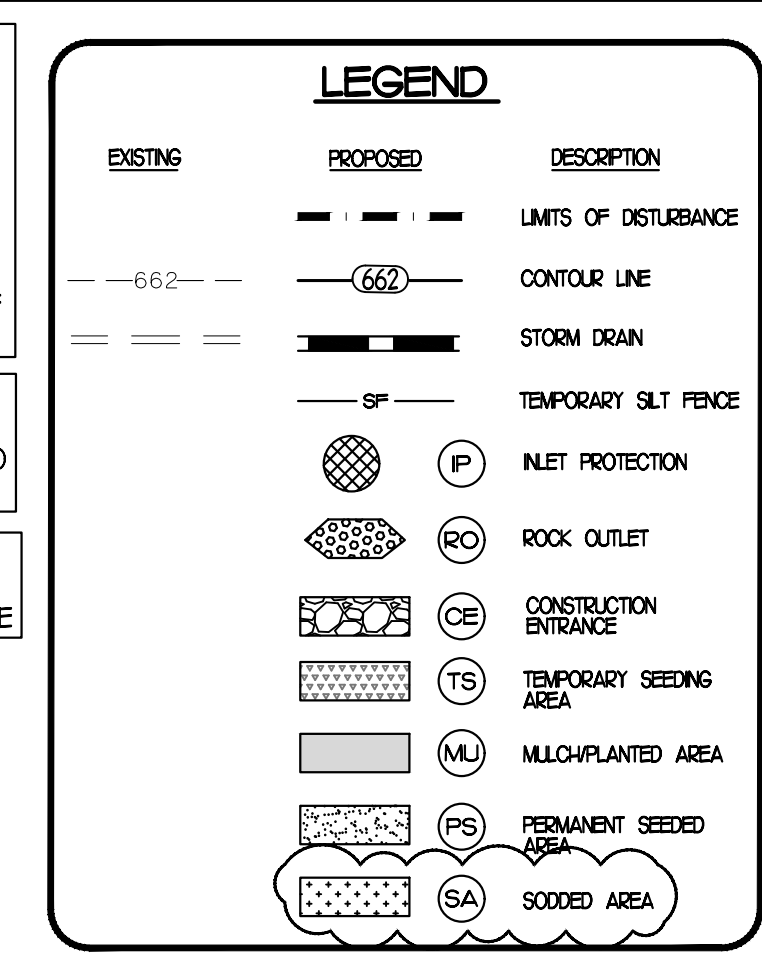
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NO JURISDICTIONAL WETLANDS OR STREAMS LOCATED OR IMMEDIATELY ADJACENT TO SITE.



SWPPP CONTACT DURING CONSTRUCTION CROSS DEVELOPMENT ATTN:

DRAINAGE BASIN: MISSOURI RIVER WATERSHED

RECEIVING WATERS: EAST FORK LITTLE BLUE RIVER, TRIBUTARY OF THE BLUE RIVER - MISSOURI RIVER WATERSHED

SOILS ON SITE: K0082 - ARISBURG-URBAN LAND COMPLEX, 1 TO 5 PERCENT SLOPES (HYDROLOGIC SOIL GROUP C)

RELEASED FOR CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
02/17/2022

EROSION CONTROL MAINTENANCE PLAN:

- ALL SLOPES 3:1 AND STEEPER SHALL RECEIVE A CURLEX BLANKET OR APPROVED EQUAL, IN ADDITION TO HYDROSEEDING. TEMPORARY BERMS MAY BE NEEDED DAILY UNTIL ALL SLOPES ARE BROUGHT TO GRADE.
- EXCEPT AS NOTED BELOW, STABILIZATION SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS CONDITIONS ALLOW. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITY CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY HALTED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RE-SEEDDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW). PERMANENT STABILIZATION FOR ALL DISTURBED AREAS IS TO BE COMPLETE WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION. DIVERSIONS MUST BE STABILIZED PRIOR TO BECOMING FUNCTIONAL.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (0.5) INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED AND REPLACED AS NECESSARY.
- PROVIDE SILT FENCE AND/OR OTHER EROSION CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFF-SITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LOADED WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- CONTRACTOR SHALL PROVIDE EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1. CONTRACTOR HAS THE OPTION TO UTILIZE SOD IN LIEU OF AN EROSION CONTROL BLANKET (TYPICAL).

SEQUENCE OF CONSTRUCTION:

- PHASE I
- SUBMIT PLANS FOR REVIEW
 - OBTAIN GRADING PERMIT (MAY INCLUDE PRE-CONSTRUCTION CONFERENCE). CONTRACTOR SHALL OBTAIN ALL APPROPRIATE PERMITS REQUIRED FOR DEMOLITION AND LAND DISTURBANCE ACTIVITIES.
 - CONTRACTOR SHALL CONTACT CITY OF LEE'S SUMMIT DEVELOPMENT SERVICES TO SCHEDULE A RECONSTRUCTION MEETING AT (816) 969-1000.
 - REMOVE THE MINIMAL AMOUNT OF PERIMETER SITE FEATURES IN ORDER TO INSTALL STABILIZED CONSTRUCTION EXIT AND SILT FENCE. ENSURE DRAINAGE IS DIRECTED TOWARDS SILT FENCE.
 - INSTALL INLET PROTECTION AT THE EXISTING STORM STRUCTURE OFF THE NORTH EAST CORNER OF THE PROPERTY ON THE ADJACENT PROPERTY.
 - INSTALL SWPPP SIGN, TEMPORARY STOCKPILE AREA, AND DESIGNATE AN AREA FOR THE PARKING OF CONSTRUCTION VEHICLES.
 - BEGIN DEMOLITION OF THE SITE FEATURES PER THE DEMOLITION PLAN. DO NOT BEGIN DEMOLITION OF THE PAVEMENT AND CONCRETE CURB ALONG SE 7TH TERRACE UNTIL READY TO BEGIN WATER MAIN INSTALLATION CONNECTION.
 - INSTALL CONCRETE WASHOUT AT SITE ENTRANCE/EXIT
 - INSTALL TEMPORARY SEEDING AND MULCH STABILIZATION TO ALL AREAS WHERE WORK WILL BE CEASED FOR A PERIOD OF MORE THAN 7 DAYS.
- PHASE II
- CONTINUALLY INSPECT AND MAINTAIN ALL BMP'S. REPAIR AND REPLACE ANY BMP'S AS NEEDED.
 - BEGIN GENERAL GRADING OF SITE. APPLY PERMANENT SEEDING TO ALL AREAS AS SOON AS THEY ARE COMPLETE. DO NOT WAIT UNTIL JOB COMPLETION TO PERMANENTLY SEED DISTURBED AREAS. ADD EROSION CONTROL BLANKETS AS NEEDED FOR ALL AREAS WITH SLOPES THAT EXCEED 3:1.
 - INSTALL UNDERGROUND DETENTION SYSTEM PER CONTECH'S SPECIFICATIONS AND THE GRADING PLAN. INSTALL STORM SEWERS AND STRUCTURES. INLET PROTECTION SHALL BE ADDED AT EACH STRUCTURE IMMEDIATELY AFTER THEY HAVE BEEN CONSTRUCTED. CONNECT TO EXISTING STORM STRUCTURE AS SHOWN. REPAIR/REPLACE ANY APPURTENANCES AS NEEDED.
 - INSTALL UNDERGROUND UTILITIES AND COORDINATE WITH EACH UTILITY PROVIDER. BRING ALL BUILDING'S UTILITIES TO THE PROPOSED PAD LOCATION AND CAP FOR FUTURE CONNECTION.
 - INSTALL WATER LINE EXTENSION TO EXISTING MAIN NORTH OF SE 7TH TERRACE. IMMEDIATELY REPAVE ASPHALT AND INSTALL CURB & GUTTER PER CITY OF LEE'S SUMMIT STANDARDS AND SPECS.
 - COMMENCE GRADING OF BUILDING PAD AND AREAS AROUND BUILDING PAD.
 - INSTALL CURB AND GUTTER AND FINE GRADE PARKING AREAS. STONE BASE SHALL BE INSTALLED IN ALL PAVED AREAS AS SOON AS PRACTICABLE. CONSTRUCTION EXIT SHALL BE REMOVED ONLY ONCE THE BUILDING PAD, PARKING LOT, AND DRIVEWAY HAVE BEEN STABILIZED WITH STONE BASE.
 - PAVE SITE AND INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
 - COMPLETE BUILDING CONSTRUCTION, SIDEWALKS, PLANTINGS, ETC.
 - REMOVE TEMPORARY BMP'S AS SOON AS THEIR CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED. SEED AND MULCH ANY DISTURBANCE FROM REMOVAL OF TEMPORARY BMP'S.
 - INSPECT/ CLEAN/ FLUSH UNDERGROUND DETENTION SYSTEM. CONTRACTOR SHALL CONTACT MANUFACTURER FOR FINAL INSPECTION AND CERTIFICATION.
 - CONTACT MOHR FOR FINAL INSPECTION AND OWNER FOR COORDINATION OF FILING THE NOTICE OF TERMINATION NOTI.

ACREAGE SUMMARY (IN ACRES)	
TOTAL PARCEL AREA	1.38
ON-SITE DISTURBED AREA	1.38
OFF-SITE DISTURBED AREA	0.55
TOTAL DISTURBED AREA	1.93
IMPERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY & INCLUDES GRAVEL)	0.48
PERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY)	0.90
IMPERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.90
PERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.48
IMPERVIOUS AREA INCREASE (PRE VS POST) (ON-SITE ONLY)	0.42
IMPERVIOUS PERCENTAGE (AT POST-CONSTRUCTION STAGE)	65.2%

ALWAYS CALL 811 BEFORE YOU DIG

EVERY DIGGING JOB REQUIRES A CALL - EVEN SMALL PROJECTS LIKE PLANTING TREES OR SHRUBS. IF YOU HIT AN UNDERGROUND UTILITY LINE WHILE DIGGING, YOU CAN HARM YOURSELF OR THOSE AROUND YOU, DISRUPT SERVICE TO AN ENTIRE NEIGHBORHOOD AND POTENTIALLY BE RESPONSIBLE FOR FINES AND REPAIR COSTS.

SMART DIGGING MEANS CALLING 811 BEFORE EACH JOB. WHETHER YOU ARE A HOMEOWNER OR A PROFESSIONAL EXCAVATOR, ONE CALL TO 811 GETS YOUR UNDERGROUND UTILITY LINES MARKED FOR FREE.

REVISIONS	BY
02/08/2022 REVISION #1	TMB

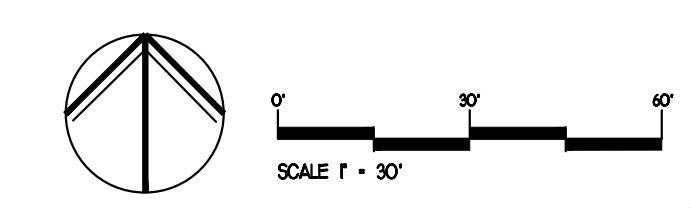
FREELAND and KAUFFMAN, INC.
Engineers * Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-6916

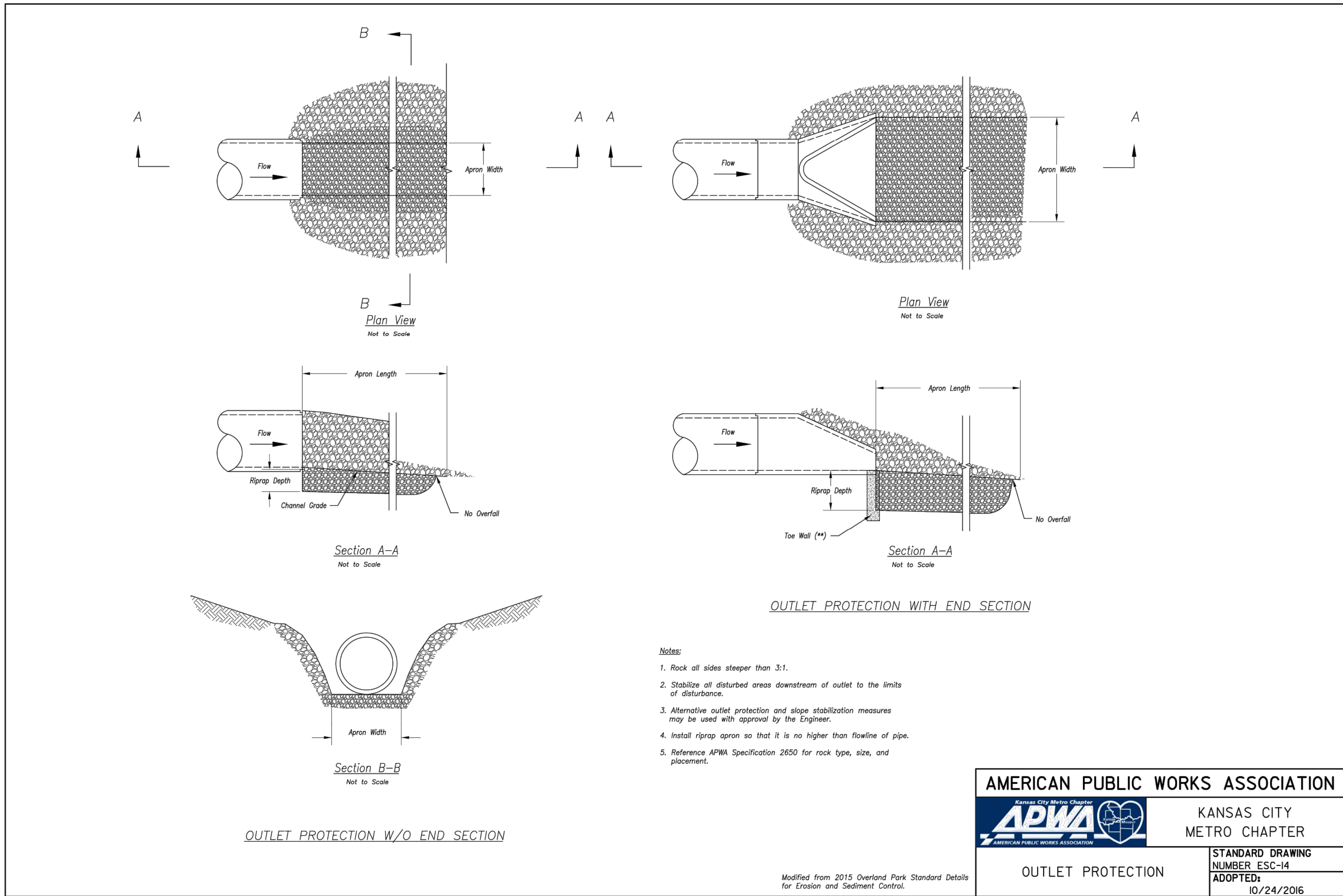
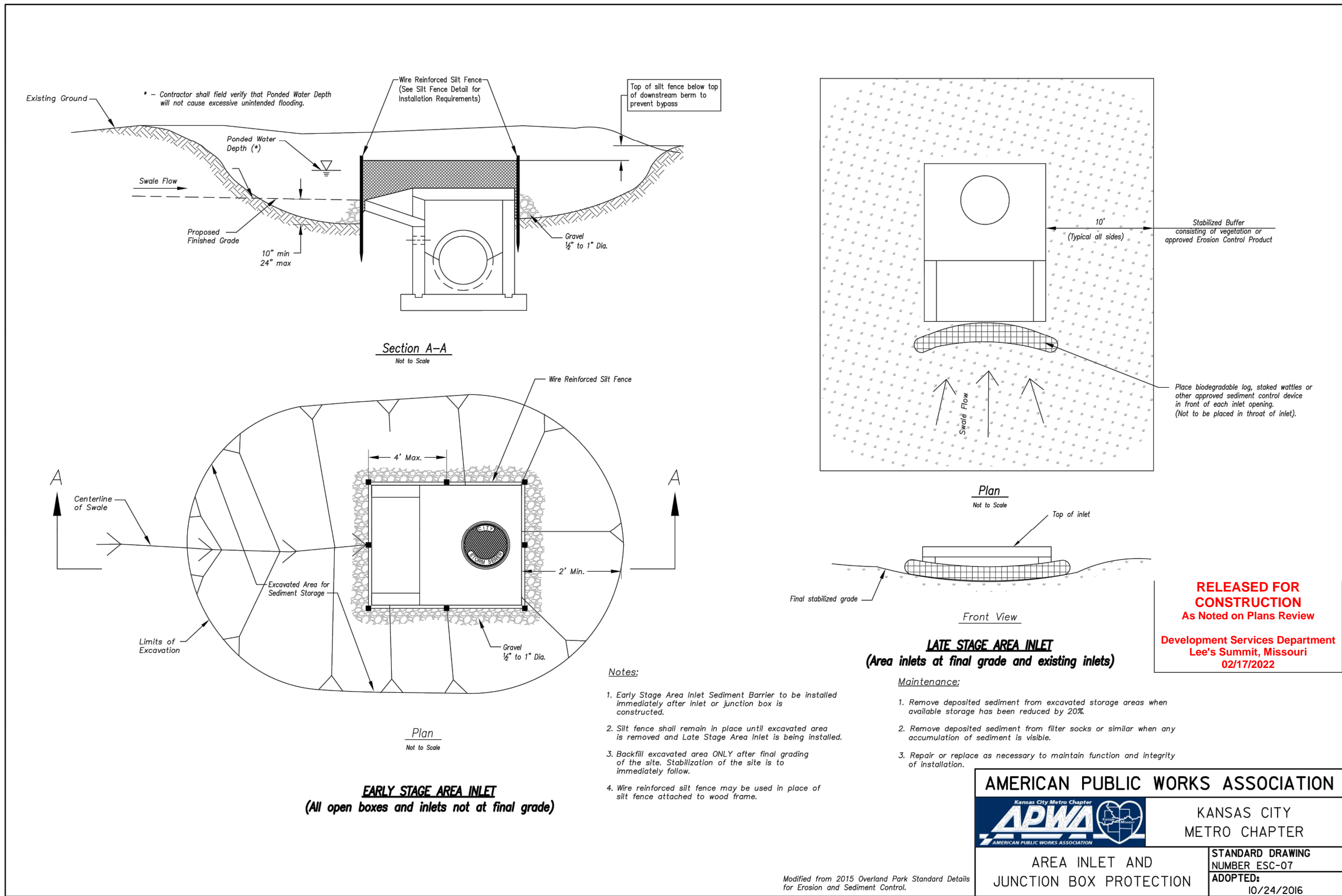
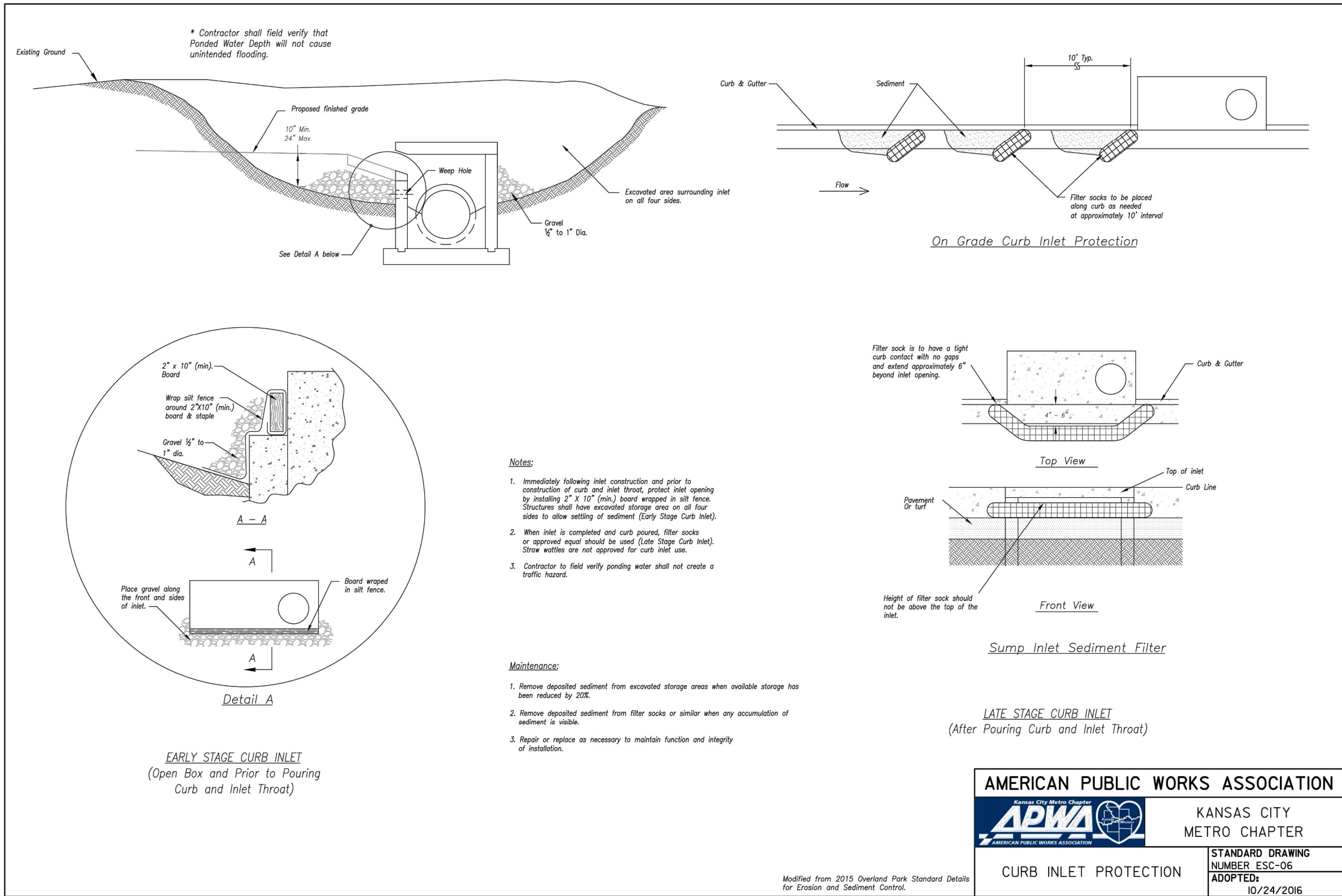
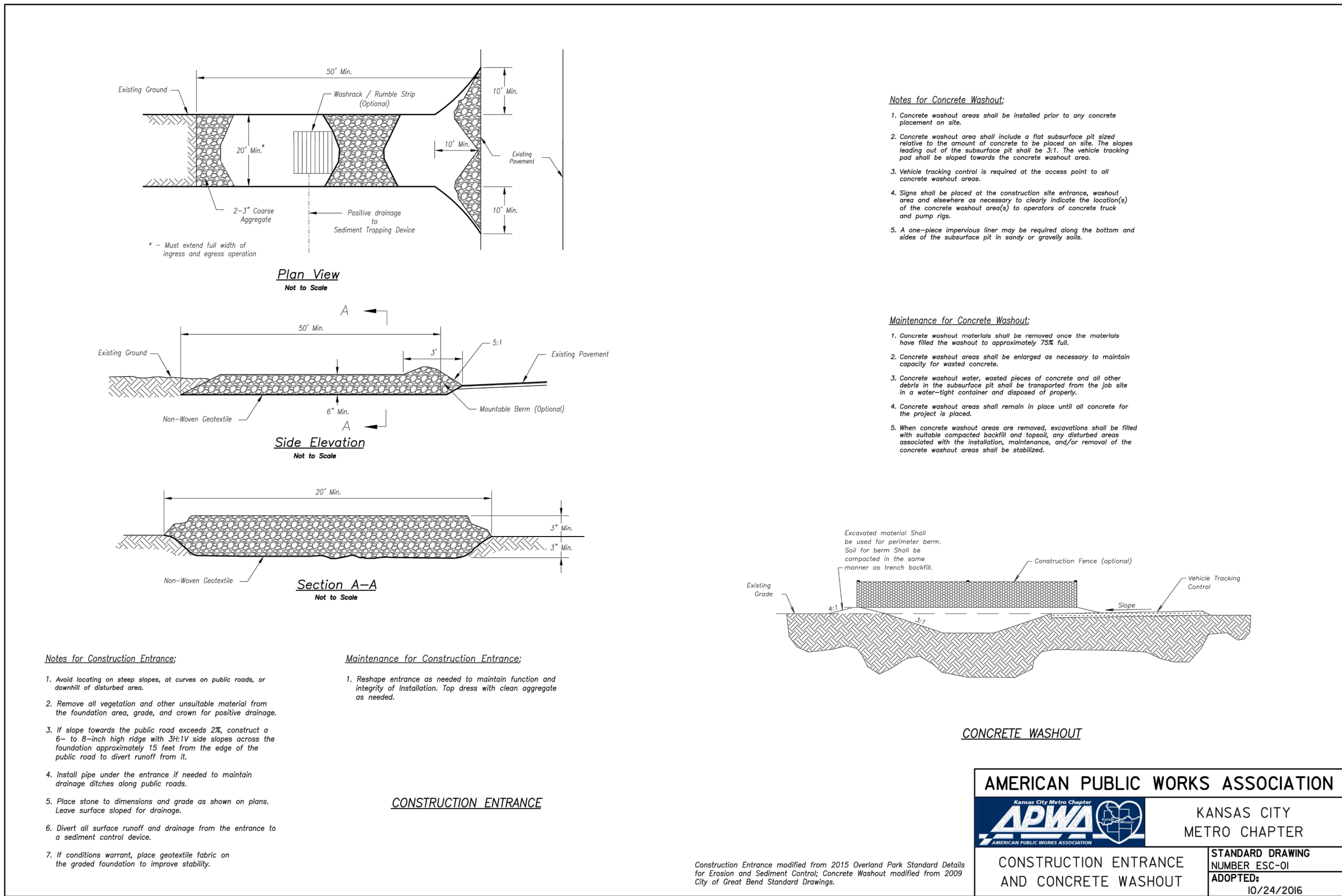


CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
CROSS DEVELOPMENT, CG LEE'S SUMMIT, LLC
4388 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

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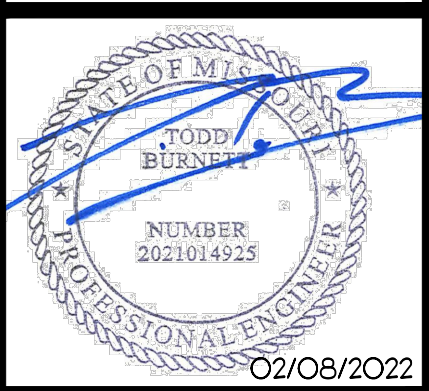
EROSION CONTROL PHASE 2





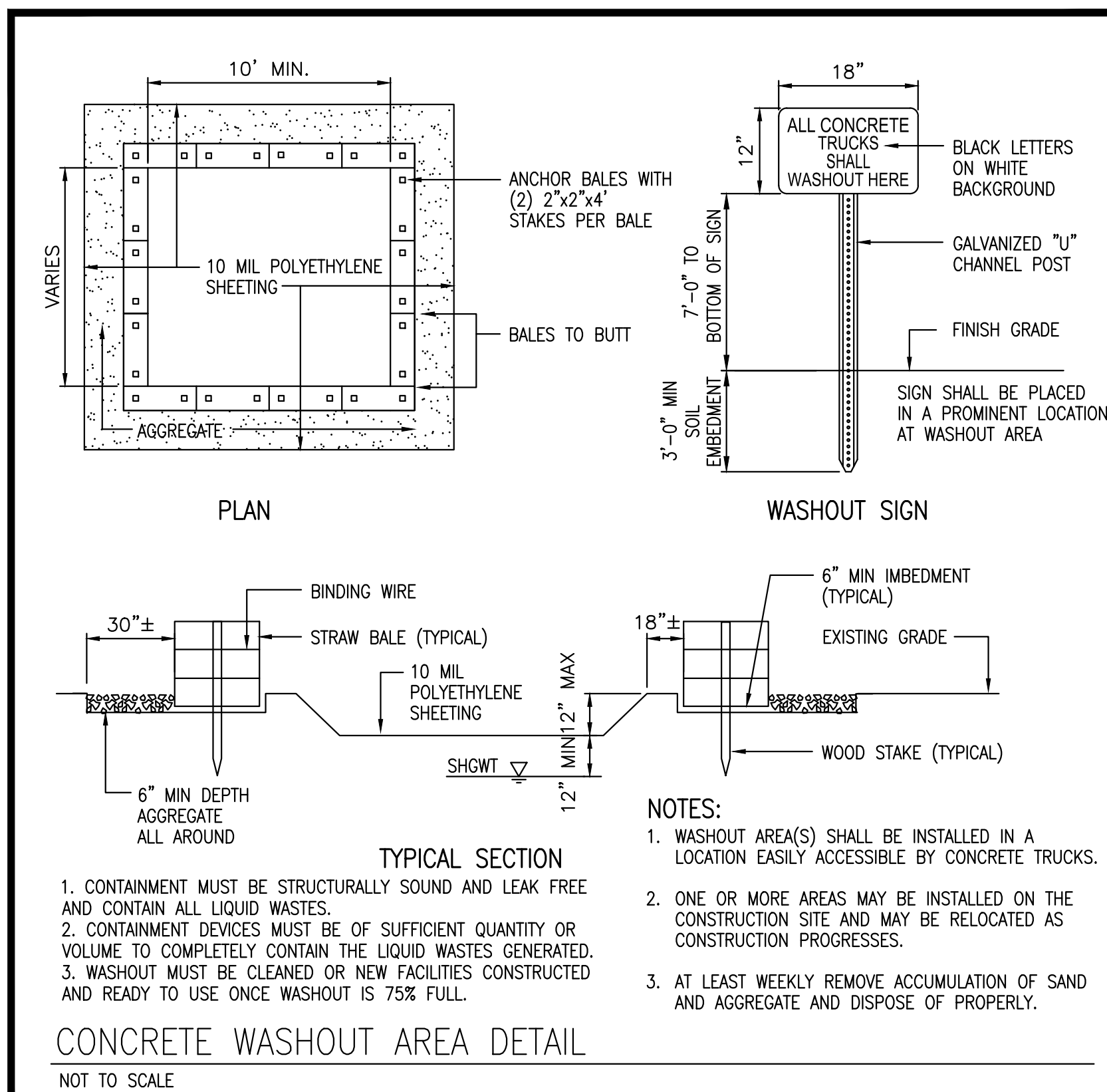
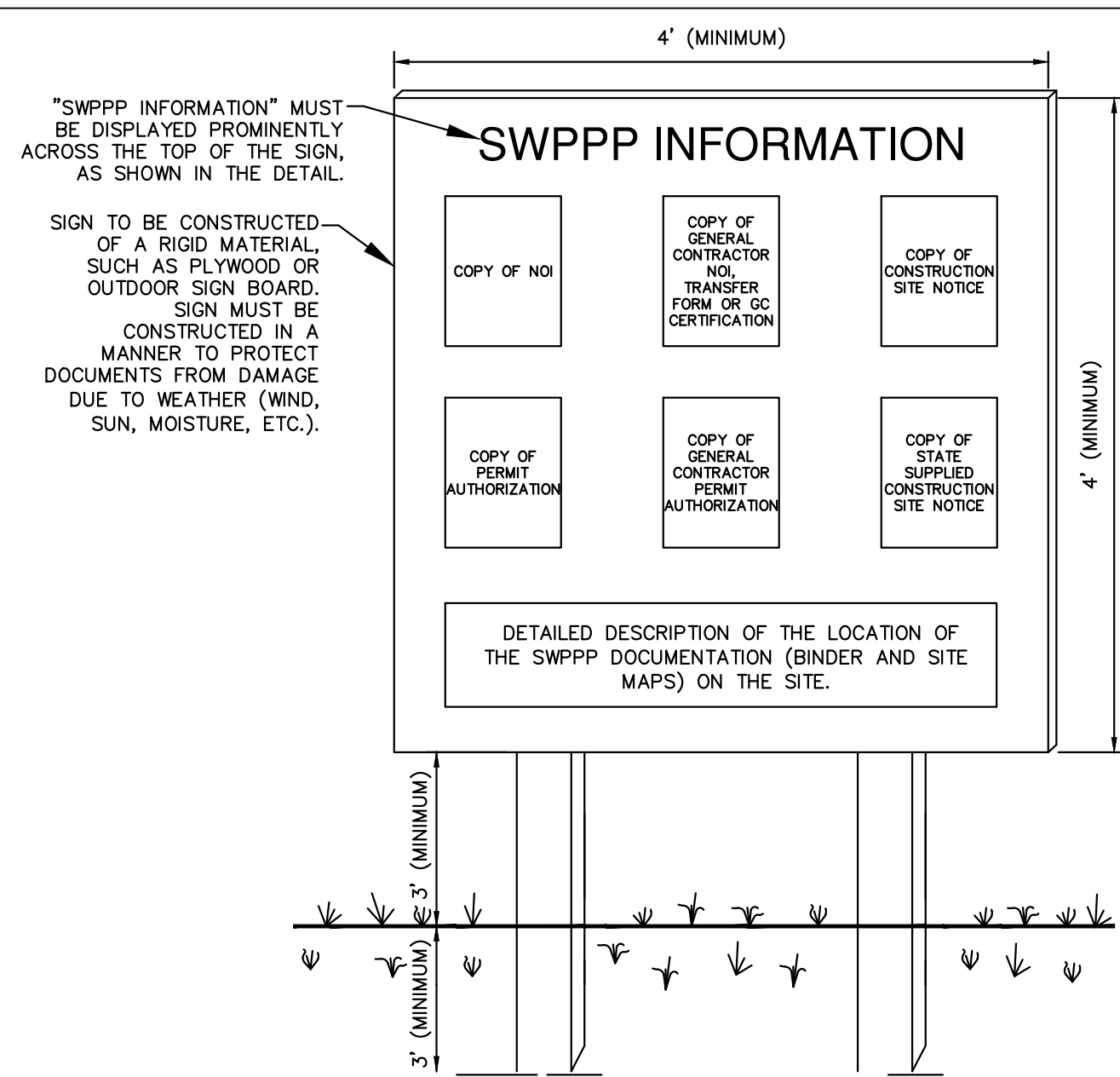
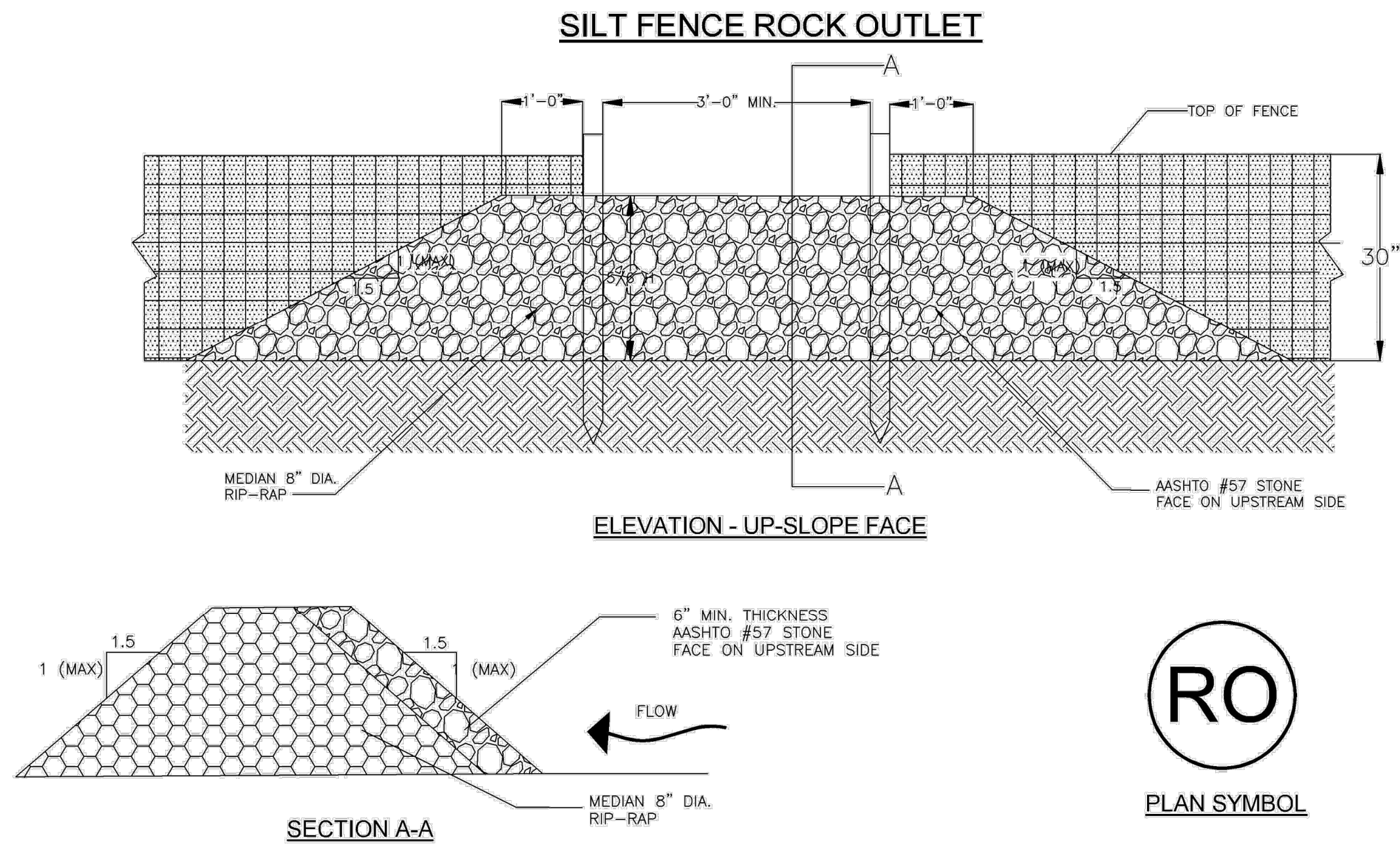
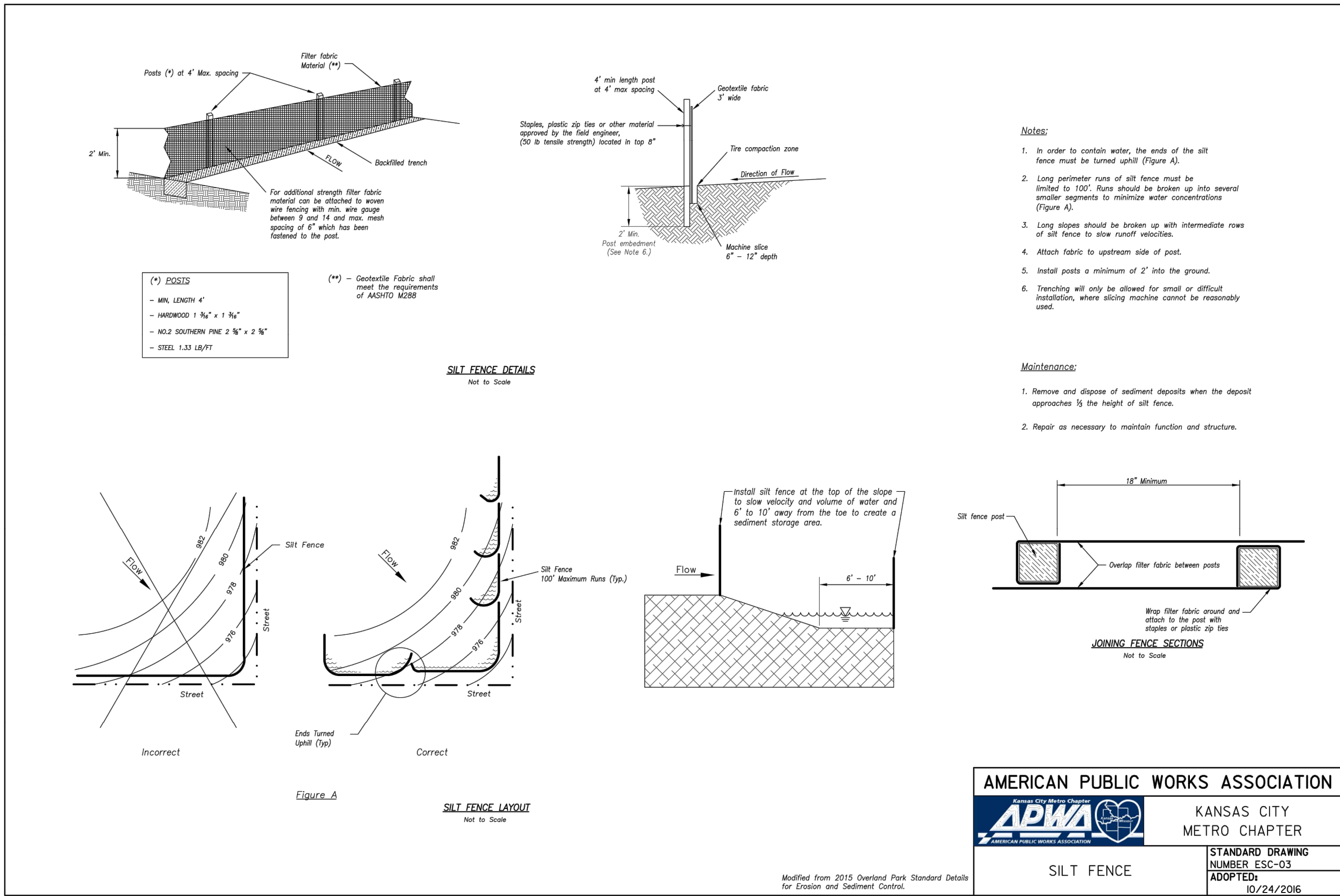
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FREELAND and KAUFFMAN, INC.
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209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8916



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CROSS DEVELOPMENT, CC LEE'S SUMMIT, LLC
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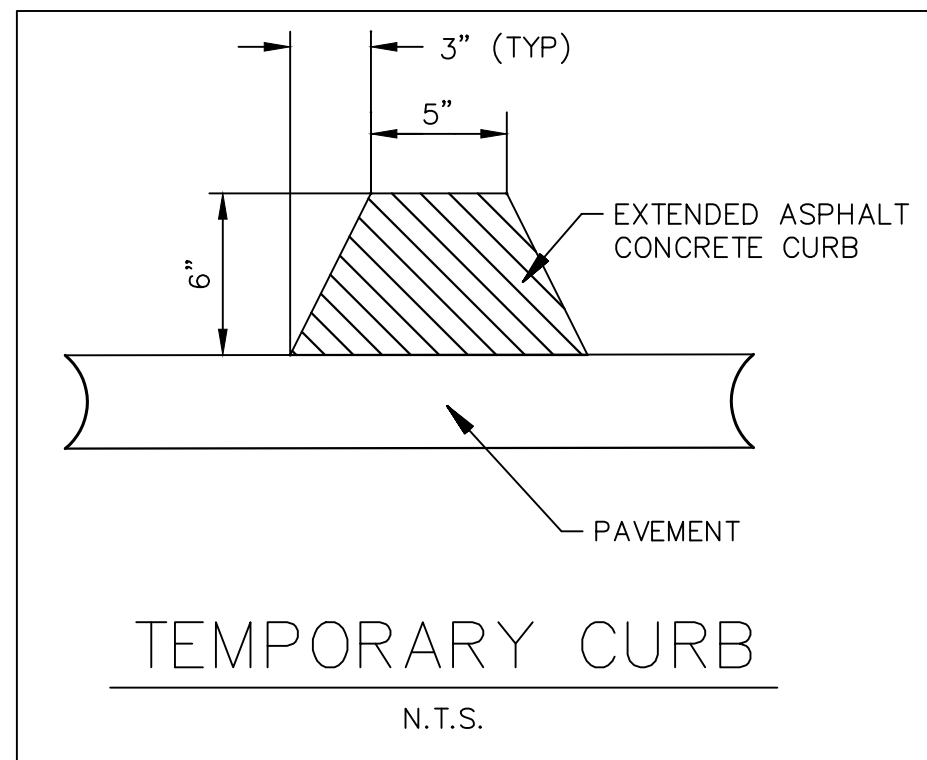
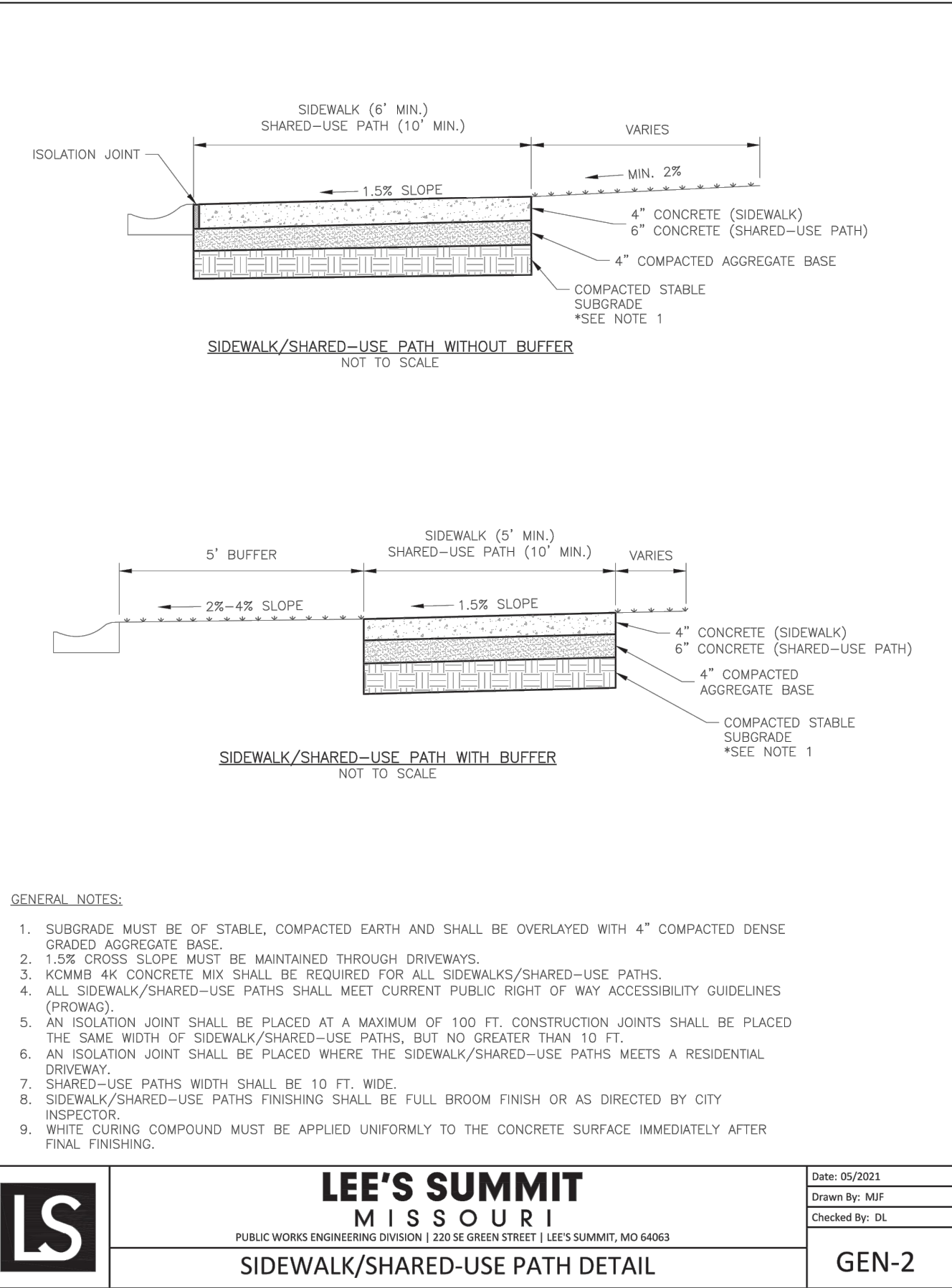
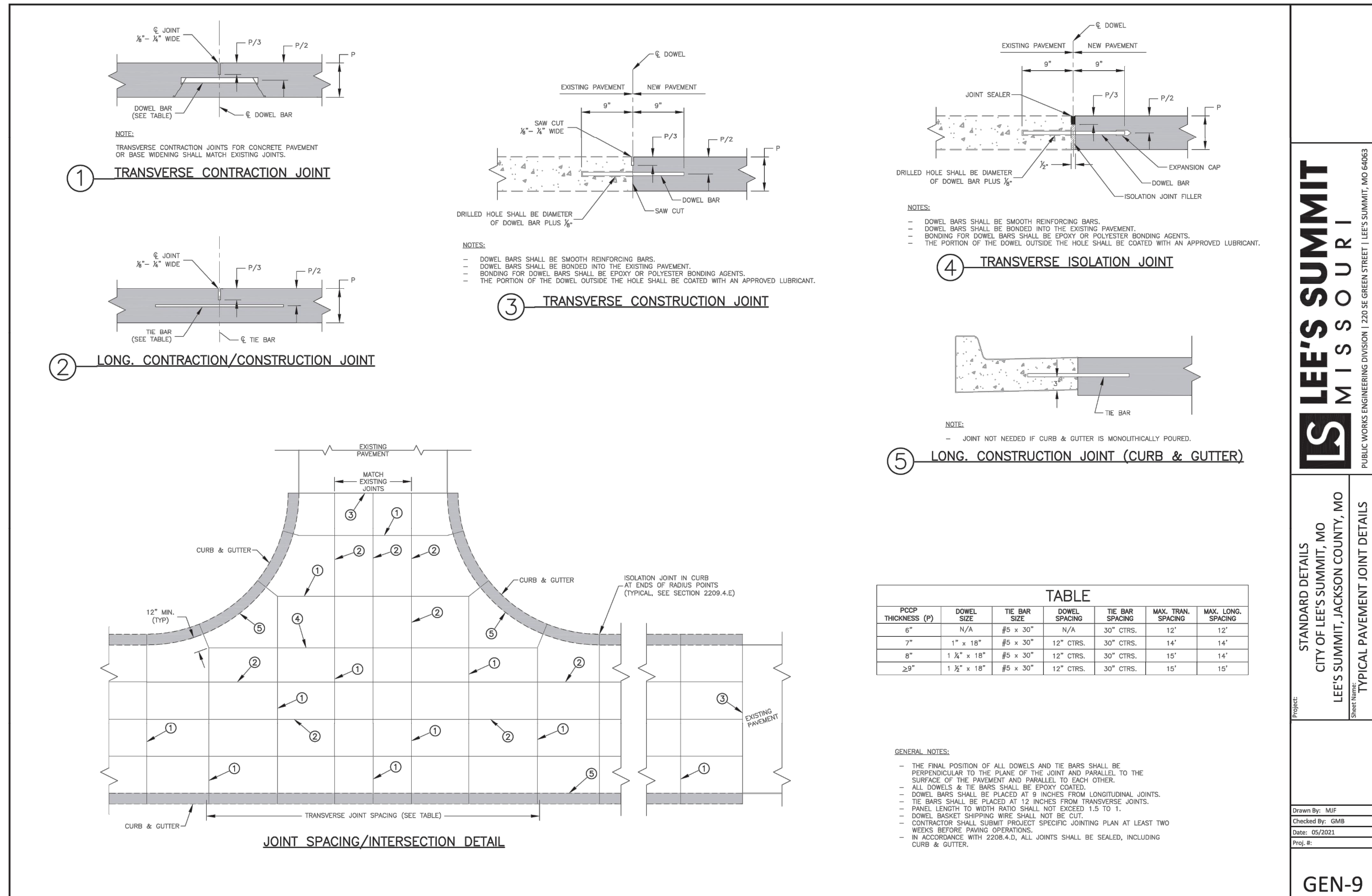
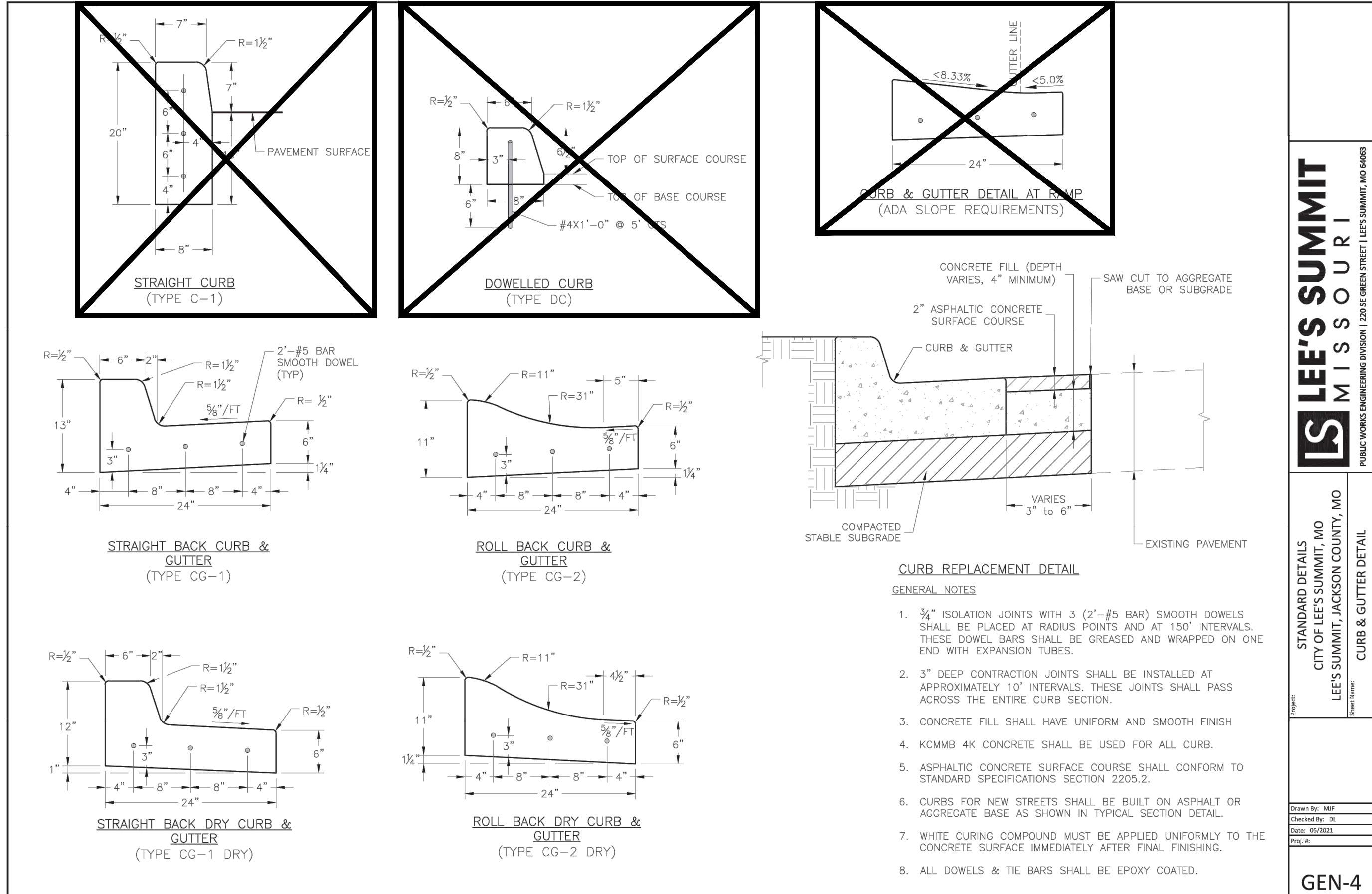
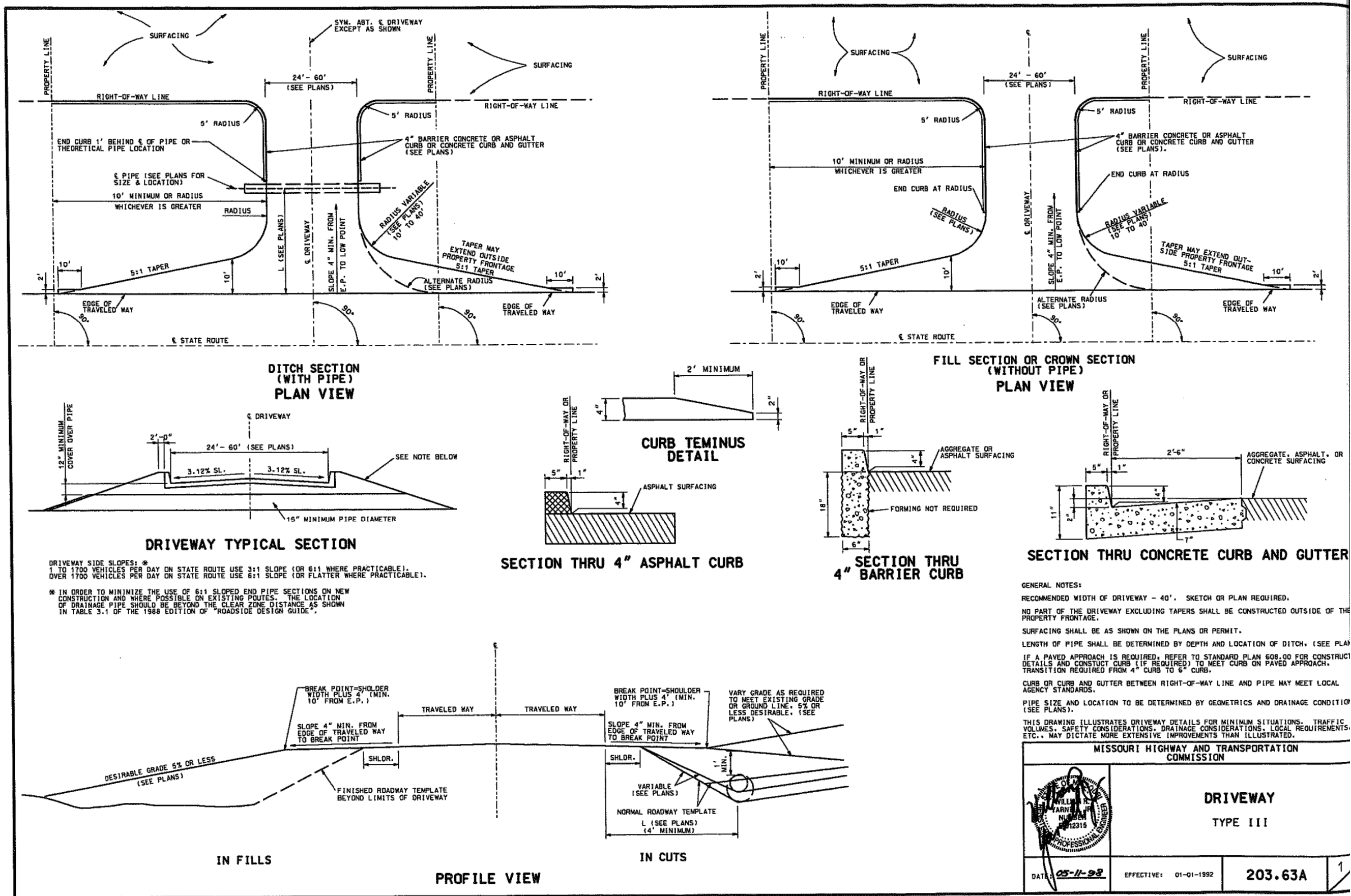
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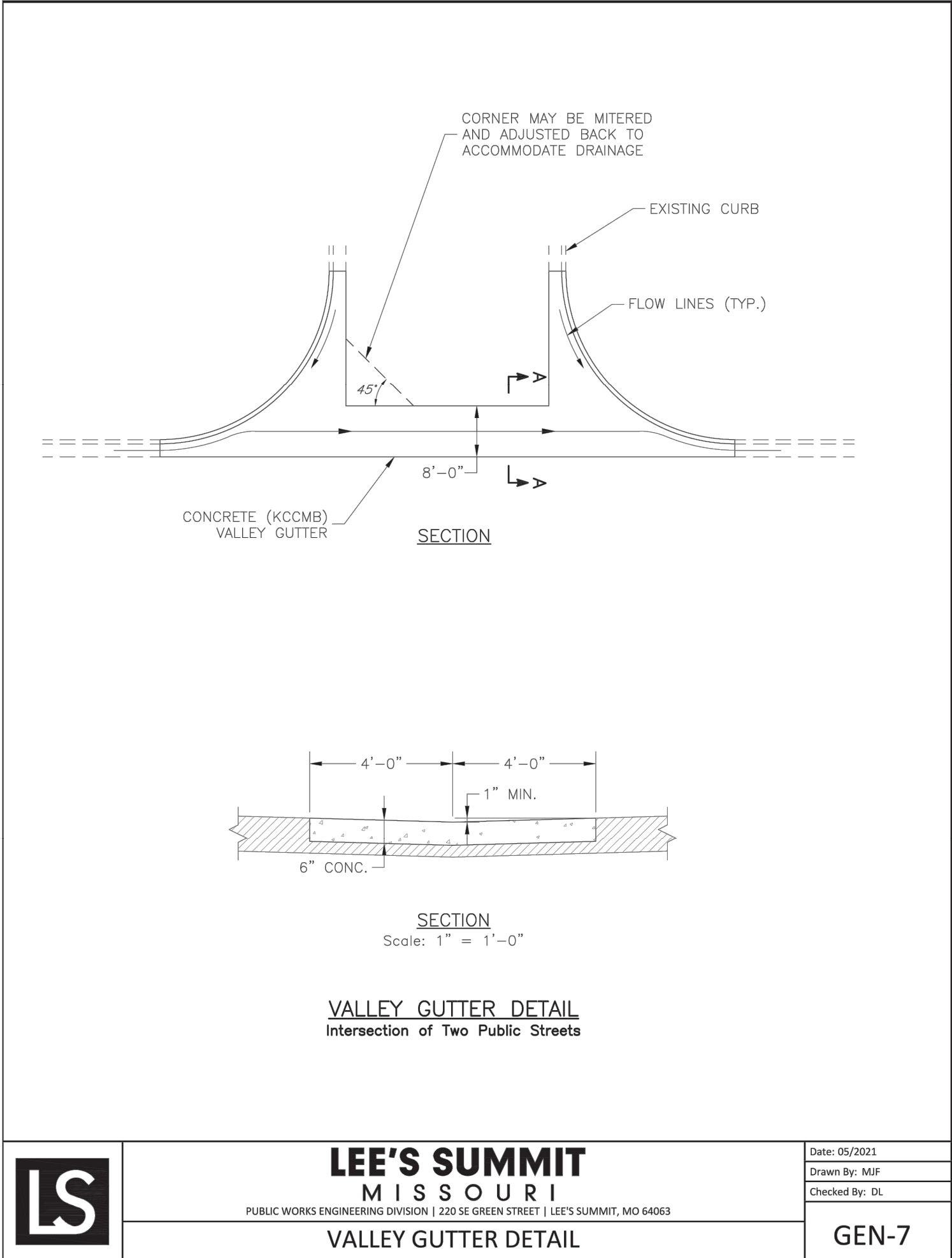
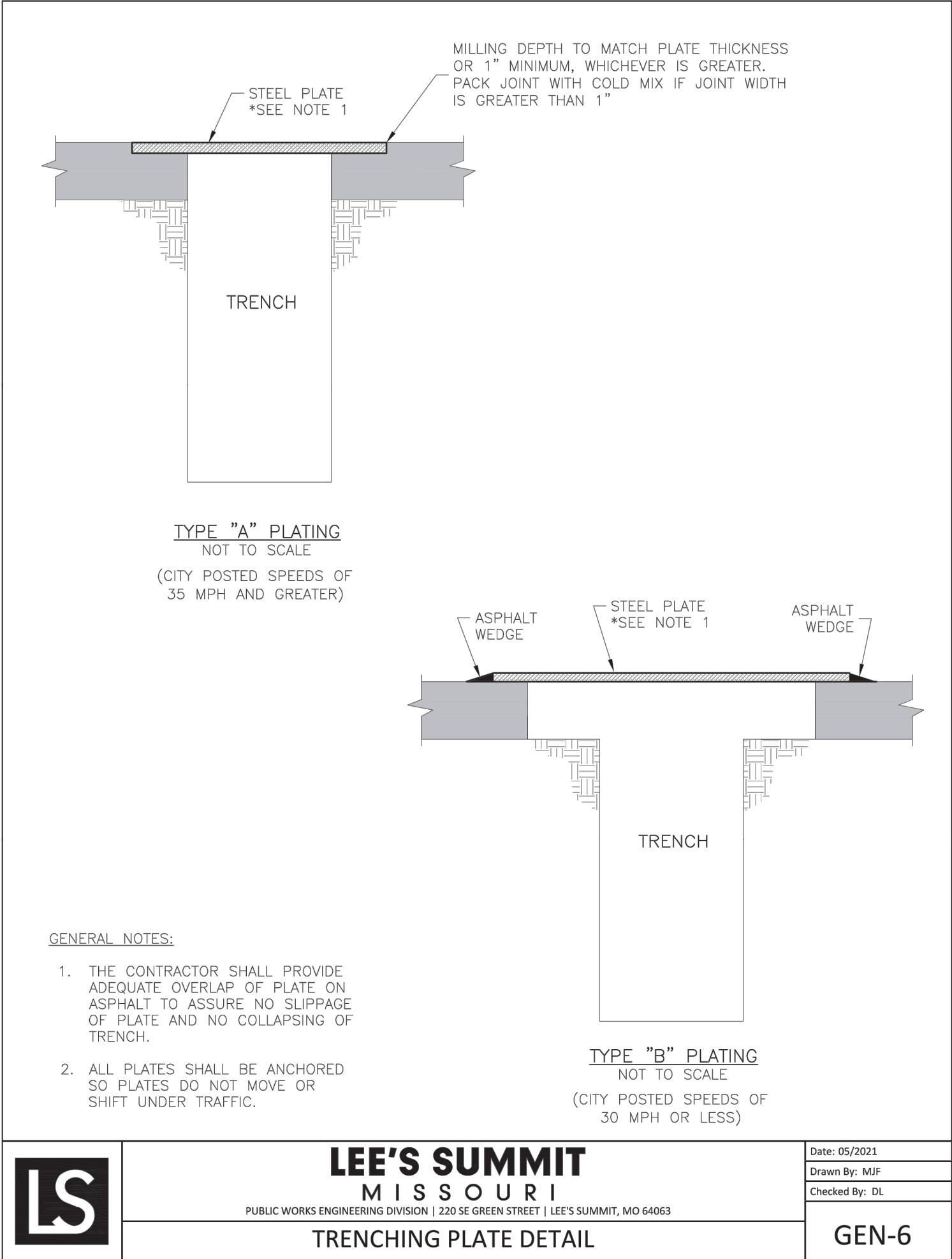
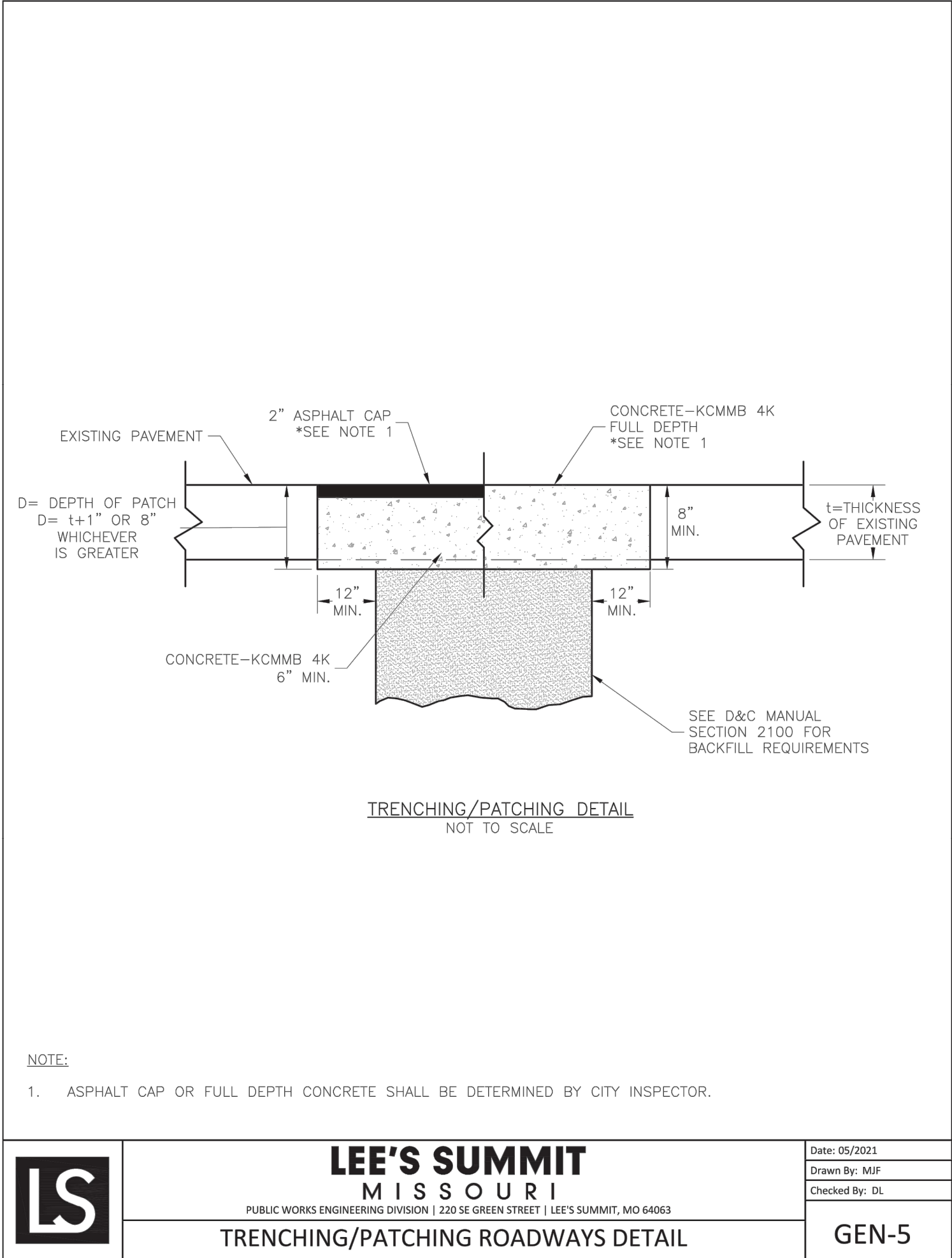
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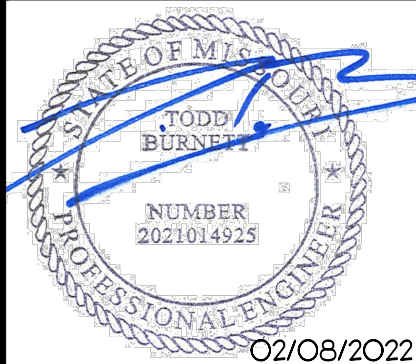
SITE DETAILS

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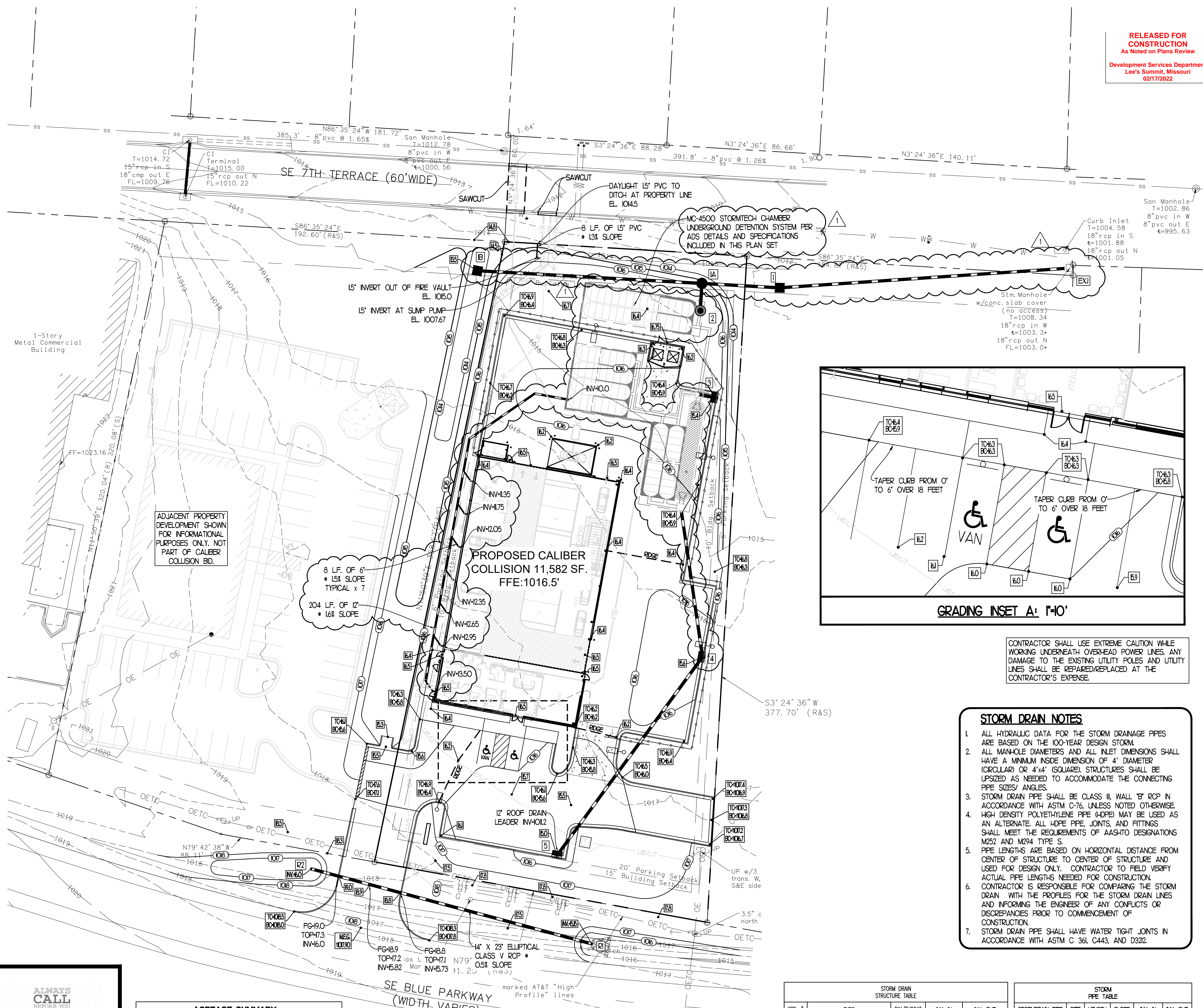


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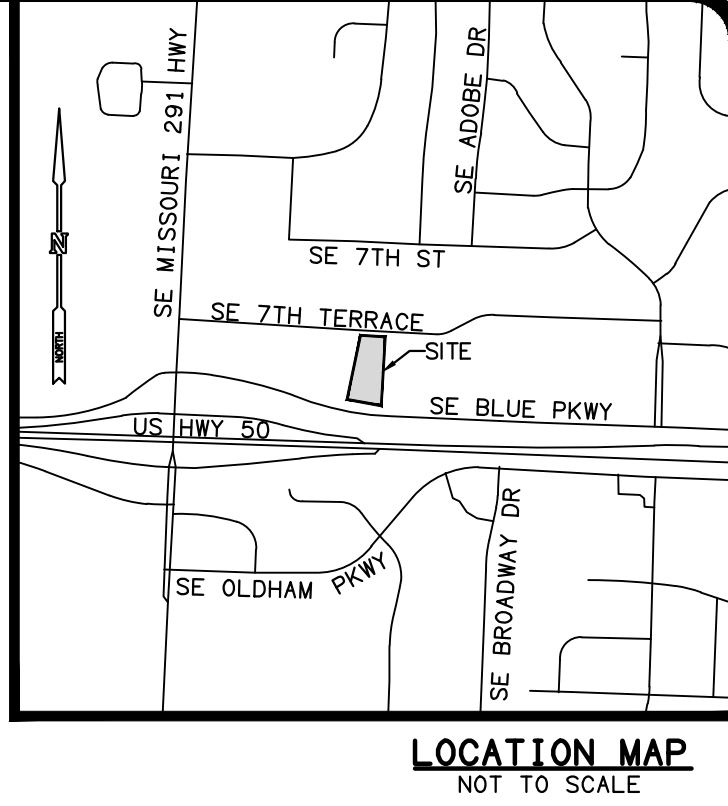
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LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS
- PHASE 2 CONTOURS (NOT PART OF CALIBER BID)
- SPOT ELEVATION
- MATCH EXISTING GRADE
- PROPOSED STORM DRAIN
- PROPOSED STORM CATCH BASIN
- PROPOSED STORM MANHOLE
- PROPOSED AREA INLET
- PROPOSED HEADWALL
- DRAINAGE FLOW ARROW
- EROSION CONTROL BLANKET



DRAINAGE BASIN:
MISSOURI RIVER WATERSHED

RECEIVING WATERS:
EAST FORK LITTLE BLUE RIVER
TRIBUTARY OF THE BLUE RIVER - MISSOURI RIVER WATERSHED

- GRADING & DRAINAGE NOTES**
- ALL SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE PLANS PREPARED BY FREELAND & KAUFFMAN, INC. THE CURRENT REQUIREMENTS OF THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, APPLICABLE SECTIONS OF THE MODOT STANDARD SPECIFICATIONS, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
 - ALL EXISTING STRUCTURES, FENCING, TREES, ETC. WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE, UNLESS OTHERWISE NOTED TO REMAIN. BURNING ON-SITE SHALL NOT BE ALLOWED.
 - ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST AND SHALL MEET MODOT MINIMUM REQUIREMENTS.
 - ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
 - BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" AT THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND THE EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
 - SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 192 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
 - ALL SLOPES SHALL BE 3:1 (HORIZONTAL:VERTICAL) UNLESS NOTED OTHERWISE. NO SLOPES SHALL EXCEED 2:1 IN ANY CASE.
 - AN AS-BUILT DRAWING OF STORM DRAIN LINES AND THE UNDERGROUND DETENTION SYSTEM MUST BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER AND THE CITY OF LEE'S SUMMIT UPON COMPLETION OF THE PROJECT.
 - ALL DISTURBED AREAS WHICH ARE NOT PAVED SHALL BE TOPSOILED, SEEDED AND MULCHED OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS, OR INSTRUCTED BY THE OWNER.
 - THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT, PREPARED BY OTHERS, PRIOR TO INITIATION OF ANY EARTHWORK ACTIVITY.
 - IF ANY EXISTING STRUCTURES OR SITE FEATURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
 - ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT. STORM PIPE MATERIALS SHALL MEET ALL CITY OF LEE'S SUMMIT, JACKSON COUNTY, AND MODOT REQUIREMENTS.
 - THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE NPDES GENERAL PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
 - CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH, CONTINUOUS GRADE.
 - CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
 - TOPOGRAPHIC INFORMATION TAKEN FROM A TOPOGRAPHIC SURVEY BY HEIDMAN ASSOCIATES, INC. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
 - ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
 - EXISTING STORM DRAIN PIPES IMMEDIATELY ADJACENT TO THE SITE SHALL BE INSPECTED AND CLEANED TO REMOVE ALL SILT AND DEBRIS.
 - CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER INLETS AND MANHOLES FOR REVIEW PRIOR TO ORDERING.
 - ROOF LEADERS SHALL DISCHARGE TO SPLASH BLOCKS UNLESS SPECIFICALLY NOTED OTHERWISE. RE-ARCH FOR EXACT NUMBER AND LOCATION.
 - ALL SIDEWALKS TO HAVE 2.00% MAXIMUM CROSS SLOPE AND 5.00% MAXIMUM LONGITUDINAL SLOPE. SLOPES 3:1 AND STEEPER SHALL BE INSTALLED WITH AN EROSION CONTROL BLANKET (TOURLEX® OR APPROVED EQUAL).
 - INSURE THAT ALL SIDEWALK CURBS LESS THAN 6" HEIGHT OR LESS ARE PAINTED YELLOW PRIOR TO CERTIFICATE OF OCCUPANCY. SURVEYOR SEALED AS-BUILT DRAWINGS OF ALL WATER QUALITY BMP'S AND DETENTION SYSTEMS MUST BE PROVIDED.
 - CONTRACTOR SHALL PROVIDE EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1. CONTRACTOR HAS THE OPTION TO UTILIZE SOD IN LIEU OF AN EROSION CONTROL BLANKET (TYPICAL). ALL CONSTRUCTED SLOPES GREATER THAN 2:1 SHALL BE DESIGNED BY A MISSOURI REGISTERED PROFESSIONAL ENGINEER. ADDITIONALLY, FOR CONSTRUCTED SLOPES GREATER THAN FIVE FEET IN HEIGHT, AN INSPECTION AND A STABILITY CERTIFICATE ARE REQUIRED BY A MISSOURI REGISTERED PROFESSIONAL ENGINEER WITH GEOTECHNICAL EXPERTISE SUFFICIENT TO PERFORM THE INSPECTION AND STABILITY ANALYSIS. FOR ALL CONSTRUCTED SLOPES WITHIN PROPOSED OR EXISTING PUBLIC RIGHTS-OF-WAY, PERIODIC INSPECTIONS AND COMPACTED REPORTS ARE REQUIRED BY A MISSOURI REGISTERED PROFESSIONAL ENGINEER WITH GEOTECHNICAL EXPERTISE.

- STORM DRAIN NOTES**
- ALL HYDRAULIC DATA FOR THE STORM DRAINAGE PIPES ARE BASED ON THE 100-YEAR DESIGN STORM.
 - ALL MANHOLE DIAMETERS AND ALL INLET DIMENSIONS SHALL HAVE A MINIMUM INSIDE DIMENSION OF 4' DIAMETER (CIRCULAR) OR 4'x4' (SQUARE). STRUCTURES SHALL BE UP-SIZED AS NEEDED TO ACCOMMODATE THE CONNECTING PIPE SIZES/ ANGLES.
 - STORM DRAIN PIPE SHALL BE CLASS II, WALL 18" RCP IN ACCORDANCE WITH ASTM C-76, UNLESS NOTED OTHERWISE.
 - HIGH DENSITY POLYETHYLENE PIPE (HDPE) MAY BE USED AS AN ALTERNATE. ALL HDPE PIPE, JOINTS, AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATIONS M252 AND M294 TYPE S.
 - PIPE LENGTHS ARE BASED ON HORIZONTAL DISTANCE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND USED FOR DESIGN ONLY. CONTRACTOR TO FIELD VERIFY ACTUAL PIPE LENGTHS NEEDED FOR CONSTRUCTION.
 - CONTRACTOR IS RESPONSIBLE FOR COMPARING THE STORM DRAIN WITH THE PROFILES FOR THE STORM DRAIN LINES AND INFORMING THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - STORM DRAIN PIPE SHALL HAVE WATER TIGHT JOINTS IN ACCORDANCE WITH ASTM C 361, C443, AND D322.

STORM DRAIN STRUCTURE TABLE					STORM PIPE TABLE					
STR. #	TYPE	R/W THROAT	INV. IN	INV. OUT	STORM DRAIN PIPE	SIZE	LENGTH	SLOPE	INV. IN	INV. OUT
1	FIELD INLET	102.00	1005.25 (A)	1004.95 (BX)	1 - EX1	18"	64'	1.00%	1004.95'	1003.30'
1A	MANHOLE	106.00	1005.90 (B) 1005.70 (C)	1005.70 (B)	1A - 1	18"	44'	1.02%	1005.70'	1005.25'
1B	FIELD INLET	103.50		1007.20 (A)	1B - 1A	18"	27'	1.02%	1007.20'	1005.90'
2	OUTLET CONTROL STRUCTURE	106.20		1006.00 (A)	2 - 1A	18"	16'	1.94%	1006.00'	1005.70'
3	COMBINATION INLET	106.20		1007.90 (D) 1007.70 (D)	3 - US21	18"	10'	2.04%	1007.90'	1007.70'
4	COMBINATION INLET	105.60	1009.70 (E)	1009.50 (US22)	4 - US22	18"	83'	3.02%	1009.50'	1007.00'
5	COMBINATION INLET	105.00		1009.00 (4)	5 - 4	18"	69'	0.93%	1009.00'	1006.70'
EX1	EXISTING MANHOLE	1008.34		1003.30	R2 - R1	14" ELIP.	64'	0.52%	1006.00'	1005.5'
R1	OPEN END PIPE	107.36	1005.5 (R2)							
R2	OPEN END PIPE	108.21		1006.00 (R3)						
US21	TO US2	105.60	1007.70 (3)							
US22	TO US2	104.41	1007.00 (4)							

ACREAGE SUMMARY (IN ACRES)	
TOTAL PARCEL AREA	1.38
ON-SITE DISTURBED AREA	1.38
OFF-SITE DISTURBED AREA	0.55
TOTAL DISTURBED AREA	1.93
IMPERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY & INCLUDES GRAVEL)	0.48
PERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY)	0.90
IMPERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.90
PERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.48
IMPERVIOUS AREA INCREASE (PRE VS POST) (ON-SITE ONLY)	0.42
IMPERVIOUS PERCENTAGE (AT POST-CONSTRUCTION STATUS)	65.2%

ALWAYS CALL BEFORE YOU DIG

811

EVERY DIGGING JOB REQUIRES A CALL - EVEN SMALL PROJECTS LIKE PLANTING TREES OR SHEDS. IF YOU HIT AN UNDERGROUND UTILITY LINE WHILE DIGGING, YOU CAN HARM YOURSELF OR THOSE AROUND YOU, DISRUPT SERVICE TO AN ENTIRE NEIGHBORHOOD AND POTENTIALLY BE RESPONSIBLE FOR FINES AND REPAIR COSTS.

SMART DIGGING MEANS CALLING 811 BEFORE EACH JOB. WHETHER YOU ARE A HOMEOWNER OR A PROFESSIONAL EXCAVATOR, ONE CALL TO 811 GETS YOUR UNDERGROUND UTILITY LINES MARKED FOR FREE.

REVISIONS	BY
02/08/2022 REVISION #1	TMB

FREELAND and KAUFFMAN, INC.
Engineers & Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8916



CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
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1/17/2021
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13

GRADING PLAN

SCALE 1" = 30'

STORM DRAIN NOTES

- ALL HYDRAULIC DATA FOR THE STORM DRAINAGE PIPES ARE BASED ON THE 100-YEAR DESIGN STORM.
- ALL MANHOLE DIAMETERS AND ALL INLET DIMENSIONS SHALL HAVE A MINIMUM INSIDE DIMENSION OF 4" DIAMETER (CIRCULAR) OR 4"x4" (SQUARE). STRUCTURES SHALL BE UPSIZED AS NEEDED TO ACCOMMODATE THE CONNECTING PIPE SIZES/ ANGLES.
- STORM DRAIN PIPE SHALL BE CLASS III, WALL "B" RCP IN ACCORDANCE WITH ASTM C-76, UNLESS NOTED OTHERWISE. HIGH DENSITY POLYETHYLENE PIPE (HDPE) MAY BE USED AS AN ALTERNATE. ALL HOPE PIPE, JOINTS, AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATIONS M252 AND M294 TYPE S.
- PIPE LENGTHS ARE BASED ON HORIZONTAL DISTANCE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND USED FOR DESIGN ONLY. CONTRACTOR TO FIELD VERIFY ACTUAL PIPE LENGTHS NEEDED FOR CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COMPARING THE STORM DRAIN WITH THE PROFILES FOR THE STORM DRAIN LINES AND INFORMING THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- STORM DRAIN PIPE SHALL HAVE WATER TIGHT JOINTS IN ACCORDANCE WITH ASTM C 361, C443, AND D322.

INLET DRAINAGE AREAS													
TYPE	INLET	AREA (AC)	TC (MIN)	IMPERVIOUS COVERAGE (ACRE)	IMPERVIOUS RUNOFF COEFFICIENT	PERVIOUS COVERAGE (ACRE)	PERVIOUS RUNOFF COEFFICIENT	WEIGHTED RUNOFF COEFFICIENT	"10	"100	Q50 (CFS)	Q100 (CFS)	PONDING DEPTH @ INLET PER 100-YR STORM (FT)
PROPOSED	1B *	1.70	5	0.04	0.90	1.66	0.35	0.36	11.30	12.60	6.97	7.77	0.30
	3	0.26	5	0.26	0.90	0.00	0.35	0.90	11.30	12.60	2.64	2.95	0.26
	4	0.15	5	0.15	0.90	0.00	0.35	0.90	11.30	12.60	1.53	1.70	0.20
	5	0.62	5	0.47	0.90	0.15	0.35	0.77	11.30	12.60	5.37	5.99	0.39
	R-2	0.94	5	0.29	0.90	0.65	0.35	0.52	11.30	12.60	5.52	6.16	** NOT CALCULATED
EXISTING	EX-1	0.08	5	0.02	0.90	0.06	0.35	0.49	11.30	12.60	0.44	0.49	** NOT CALCULATED
	EX-2	0.47	5	0.08	0.90	0.39	0.35	0.44	11.30	12.60	2.36	2.63	** NOT CALCULATED
	1	0.30	5	0.05	0.90	0.25	0.35	0.44	11.30	12.60	1.50	1.67	** NOT CALCULATED

RUNOFF COEFFICIENTS USED TO CALCULATE THE WEIGHTED RUNOFF COEFFICIENT ARE LISTED BELOW

- LAWNS/GRASS: 0.35
- ROOFS/PAVEMENT: 0.90

RAINFALL DATA FROM NOAA ATLAS 14, VOLUME 8, VERSION 2, LEE'S SUMMIT, MISSOURI

- THE AREA SHOWN FOR INLET 1B ASSUMES THAT THE ADJACENT PROPERTY WILL BE DEVELOPED AND CONNECT ITS STORM SEWER SYSTEM TO STRUCTURE 1B. PER THE CITY OF LEE'S SUMMIT CODE, THE MAXIMUM ALLOWED DISCHARGE FROM THE DEVELOPED SITE IS 3 CFS PER DEVELOPED ACRE. ASSUMING 1.70 ACRES OF DEVELOPED AREA, THE MAXIMUM DISCHARGE ALLOWED FROM THE ADJACENT SITE WOULD BE 5.1 CFS WHICH IS LESS THAN THE EXISTING SITE'S UNDEVELOPED CONDITION (WHICH RESULTS IN THE VALUE(S) SHOWN IN THE TABLE ABOVE). TO BE CONSERVATIVE, THE RELEASES FOR INLET 1B ABOVE ARE USED TO ADEQUATELY SIZE THE STORM SEWER PIPES PROPOSED BY THE CALIBER COLLISION DEVELOPMENT.
- THE PONDING DEPTHS FOR THESE INLETS WERE NOT CALCULATED AS THEY ARE A RESULT OF THE EXISTING CONDITIONS OF THE SURROUNDING PROPERTIES AND ADDITIONAL SURVEY INFORMATION WILL BE REQUIRED TO ACCURATELY CALCULATE. ADDITIONALLY, THESE "INLETS" ARE OPEN-ENDED PIPES AND NOT "STORM STRUCTURES". THEIR PONDING DEPTHS ARE NEGLECTED AS THEY CONTAIN CONDITIONS WHERE PONDING IS NOT AN ISSUE (I.E. CONTAINED WITHIN DITCHES)

RAINFALL DISTRIBUTION FOR LEE'S SUMMIT, MISSOURI

STORM EVENT	2-YR	10-YR	25-YR	50-YR	100-YR
RAINFALL (INCHES/HR)	5.81	8.35	9.98	11.30	12.60

- THE RAINFALL FOR RAINFALL DISTRIBUTION DATA TAKEN FROM NOAA ATLAS 14, VOLUME 8, VERSION 2 FOR LEE'S SUMMIT, MISSOURI
- STORM DISTRIBUTION TYPE II
- 24-HOUR STORM DISTRIBUTION

LEGEND

DESCRIPTION

- A = BASIN DESIGNATION
B = AREA IN ACRES
C = RUNOFF COEFFICIENT
- DRAINAGE BASIN BOUNDARY

LOCATION MAP

NOT TO SCALE

RELEASED FOR CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
02/17/2022

WATER TIGHT STORM PIPES

CONTRACTOR TO ENSURE THAT ALL STORM PIPES ARE WATER TIGHT AND TESTED PER ASTM C902-02

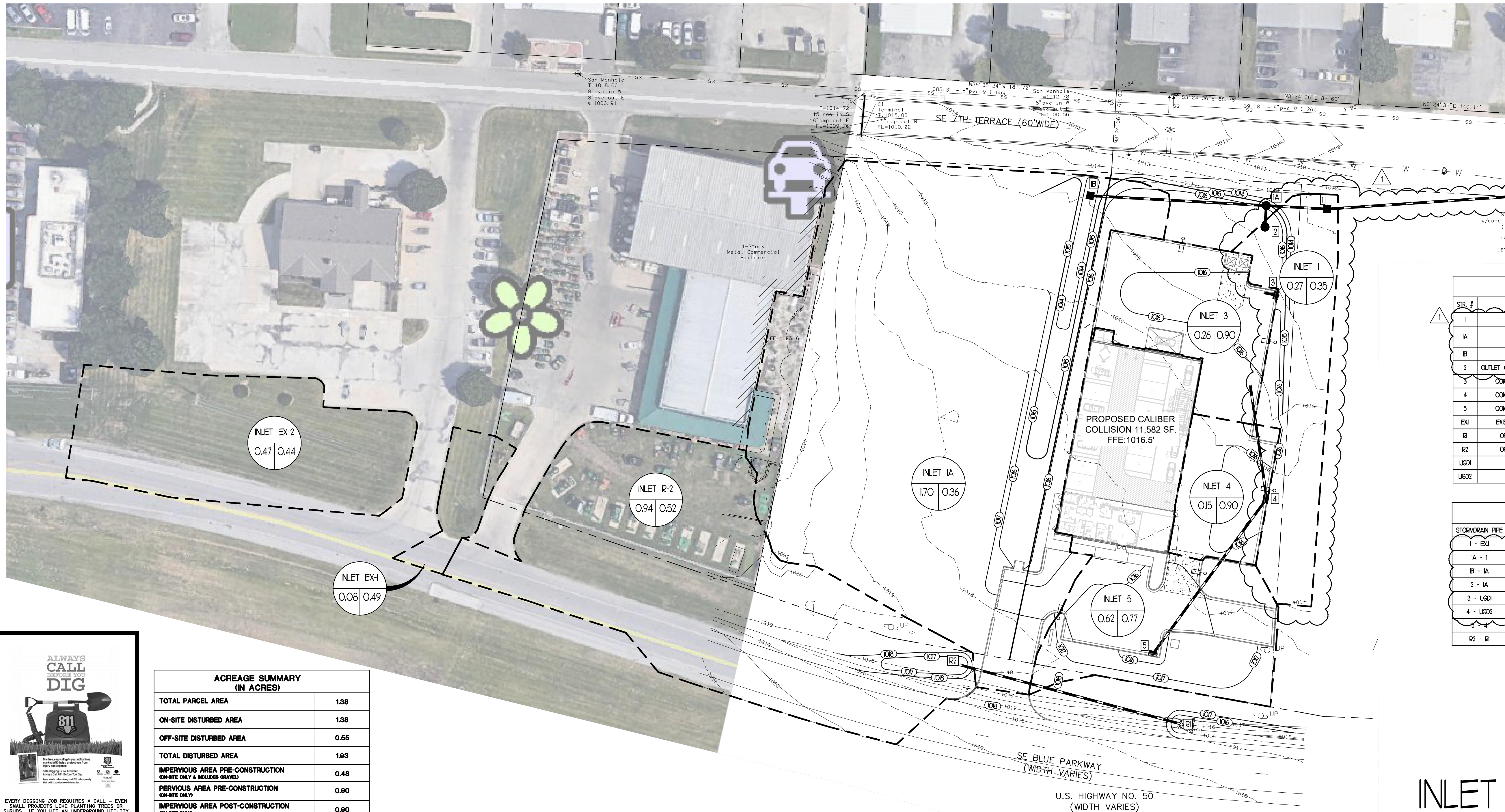
CONTRACTOR TO ENSURE ALL STORM DRAIN PIPE SHALL HAVE WATER TIGHT JOINTS IN ACCORDANCE WITH ASTM C 361, C443 AND D322.

DRAINAGE BASIN:

MISSOURI RIVER WATERSHED

RECEIVING WATERS:

EAST FORK LITTLE BLUE RIVER,
TRIBUTARY OF THE BLUE RIVER -
MISSOURI RIVER WATERSHED



STORM DRAIN STRUCTURE TABLE				
STR. #	TYPE	RW/THREAT	INV. IN	INV. OUT
1	FIELD INLET	102.00	1005.25 (A)	1004.95 (EX)
1A	MANHOLE	106.00	1005.90 (B)	1005.70 (C)
1B	FIELD INLET	103.50	1007.20 (A)	
2	OUTLET CONTROL STRUCTURE	106.20	1006.00 (A)	
3	COMBINATION INLET	106.40	1007.90 (A)	
4	COMBINATION INLET	105.60	1009.70 (C)	1009.50 (A)
5	COMBINATION INLET	105.00	1003.30 (A)	1003.00 (A)
EX1	EXISTING MANHOLE	1008.34	1003.30 (A)	
R1	OPEN END PIPE	107.36	1005.15 (A)	
R2	OPEN END PIPE	108.2	1006.00 (B)	
UG01	TO UG0	105.60	1007.70 (C)	
UG02	TO UG0	108.4	1007.00 (A)	

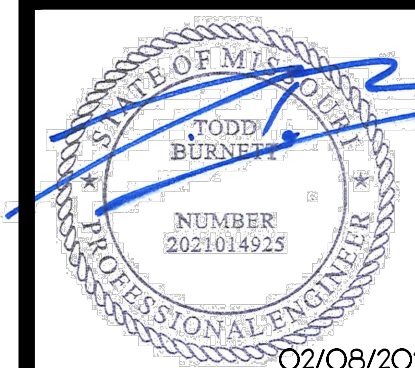
STORM PIPE TABLE					
STORM/DRAIN PIPE	SIZE	LENGTH	SLOPE	INV. IN	INV. OUT
1 - EX1	18"	164'	1.00%	1004.95	1003.30
1A - 1	18"	44'	1.02%	1005.70	1005.25
B - 1A	18"	27'	1.02%	1007.20	1005.90
2 - 1A	18"	16'	1.94%	1006.00	1005.70
3 - UG01	18"	10'	2.03%	1007.90	1007.70
4 - UG02	18"	83'	3.02%	1009.50	1007.00
5 - 4	18"	15'	0.93%	1009.50	1009.70
R2 - R1	14" BLUP	164'	0.52%	1006.00	1005.15

ACREAGE SUMMARY (IN ACRES)	
TOTAL PARCEL AREA	1.38
ON-SITE DISTURBED AREA	1.38
OFF-SITE DISTURBED AREA	0.55
TOTAL DISTURBED AREA	1.93
IMPERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY & INCLUDES GRAVEL)	0.48
PERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY)	0.90
IMPERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.90
PERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.48
IMPERVIOUS AREA INCREASE (PRE VS POST) (ON-SITE ONLY)	0.42
IMPERVIOUS PERCENTAGE (AT POST-CONSTRUCTION STATUS)	65.2%



REVISIONS	BY

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Engineers * Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
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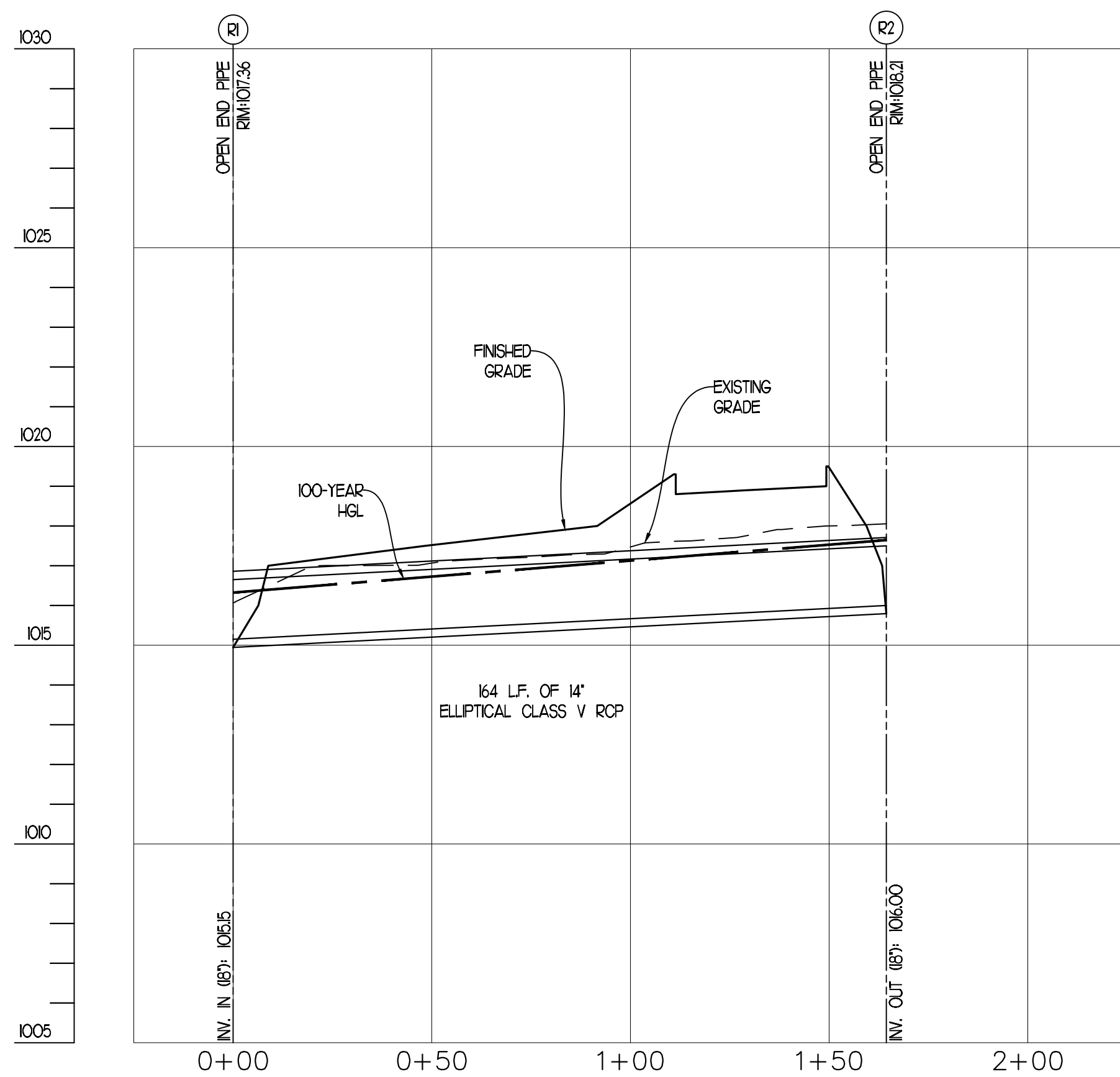


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TEL (214) 614-8252

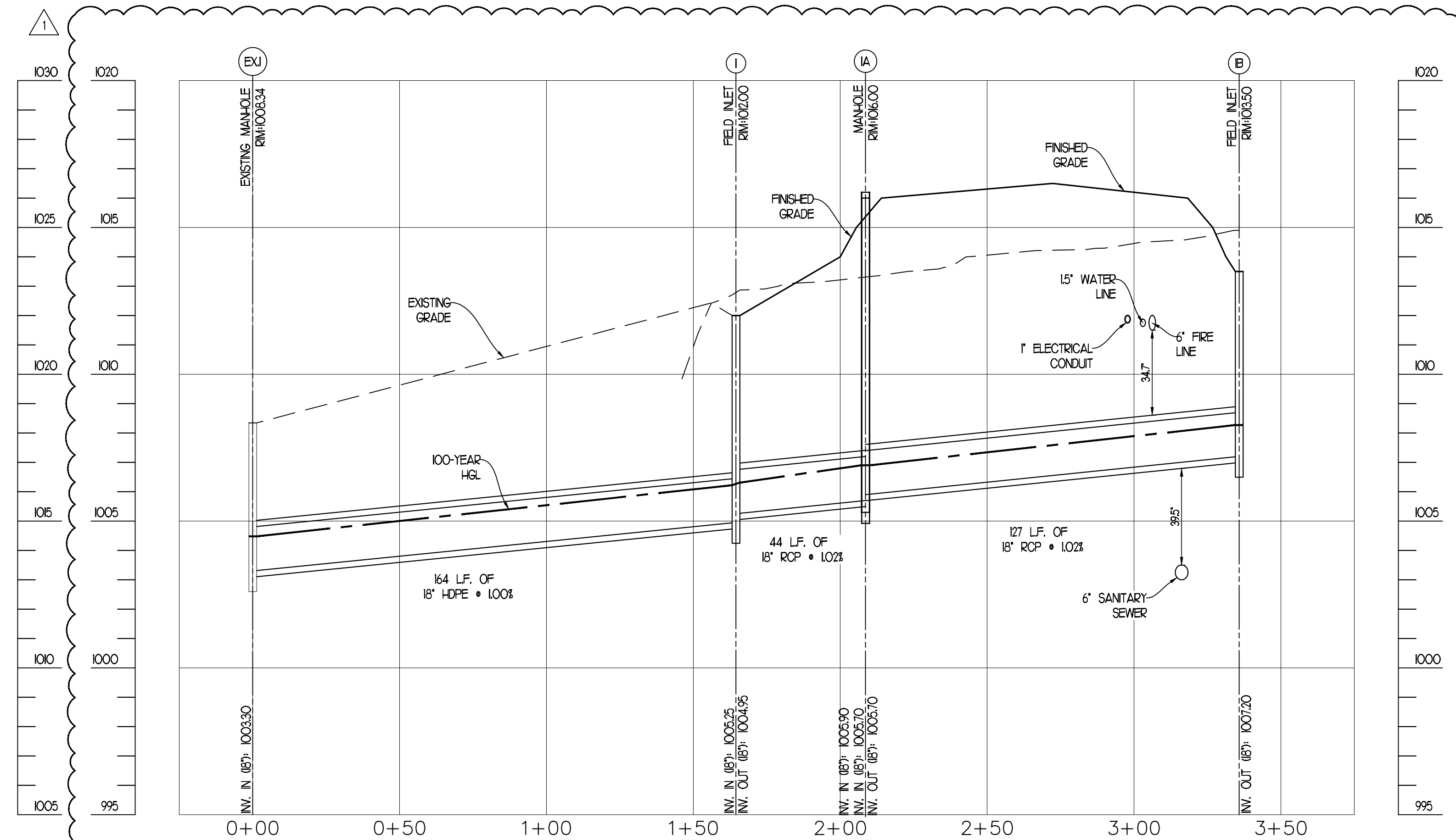
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11/7/2021
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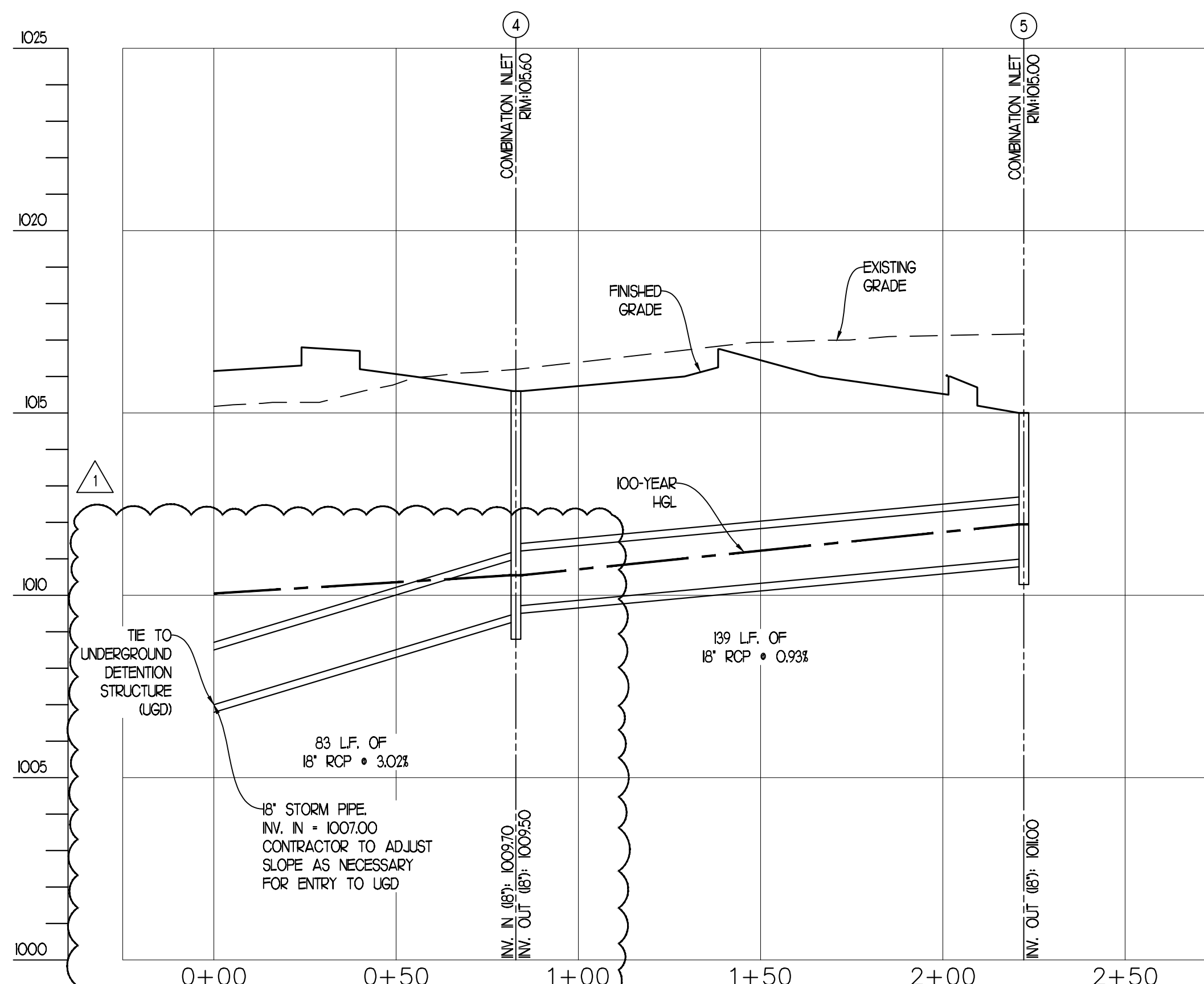
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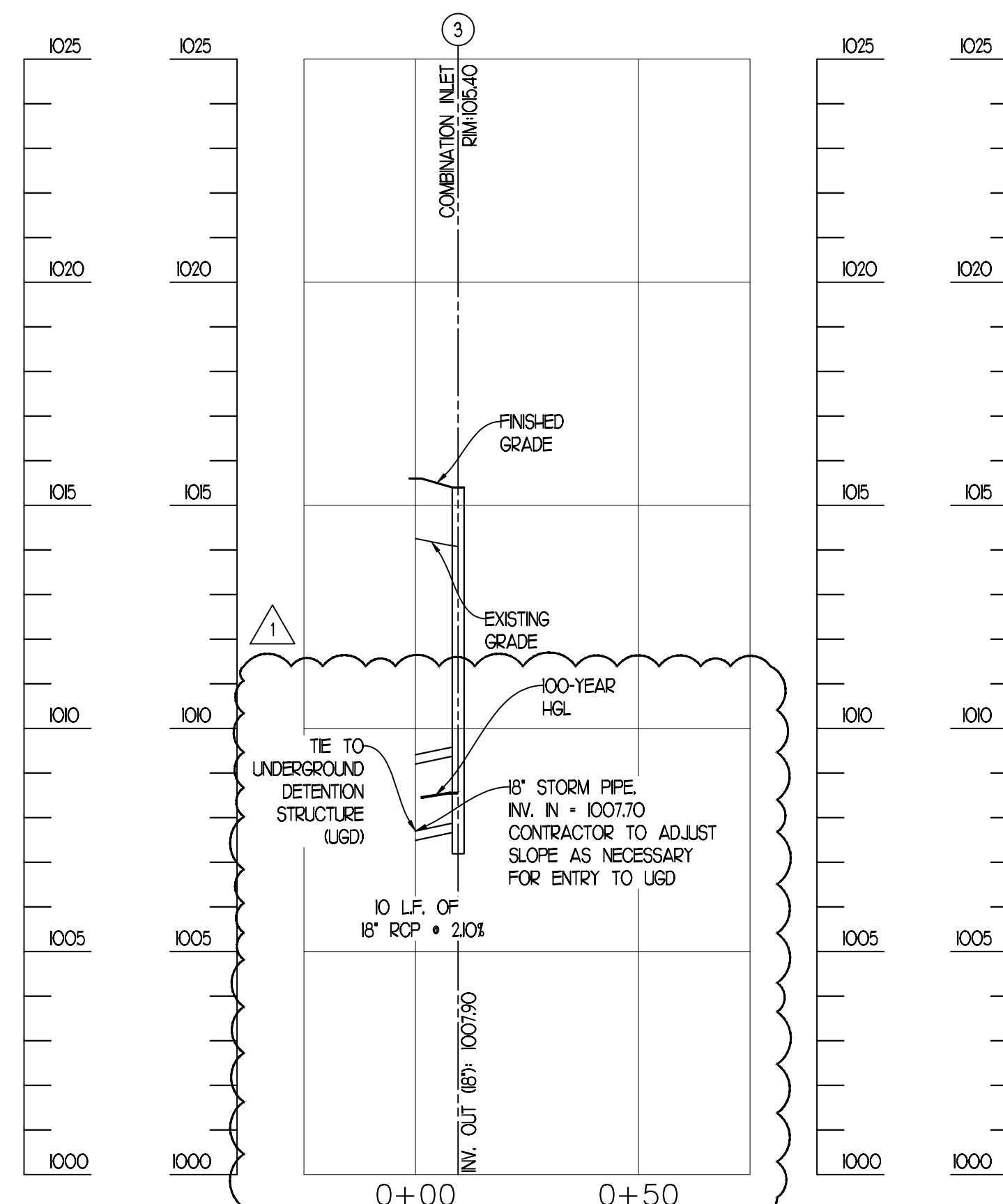
STORM DRAIN PROFILE RI TO R2



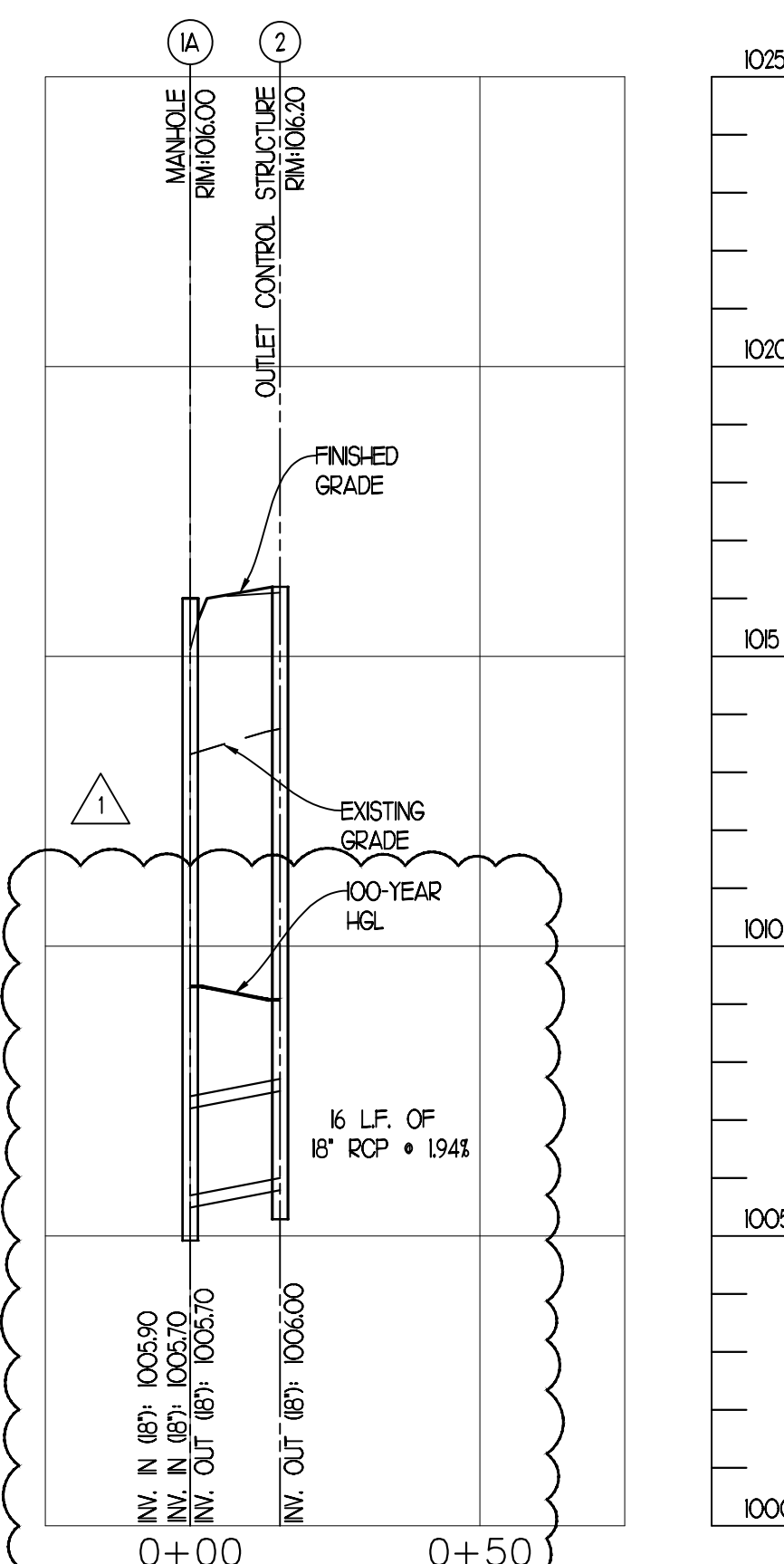
STORM DRAIN PROFILE EX.1 TO IB



STORM DRAIN PROFILE UGD TO 5



STORM PROFILE UGD TO 3



STORM DRAIN PROFILE IA TO 2

STORM DRAIN NOTES

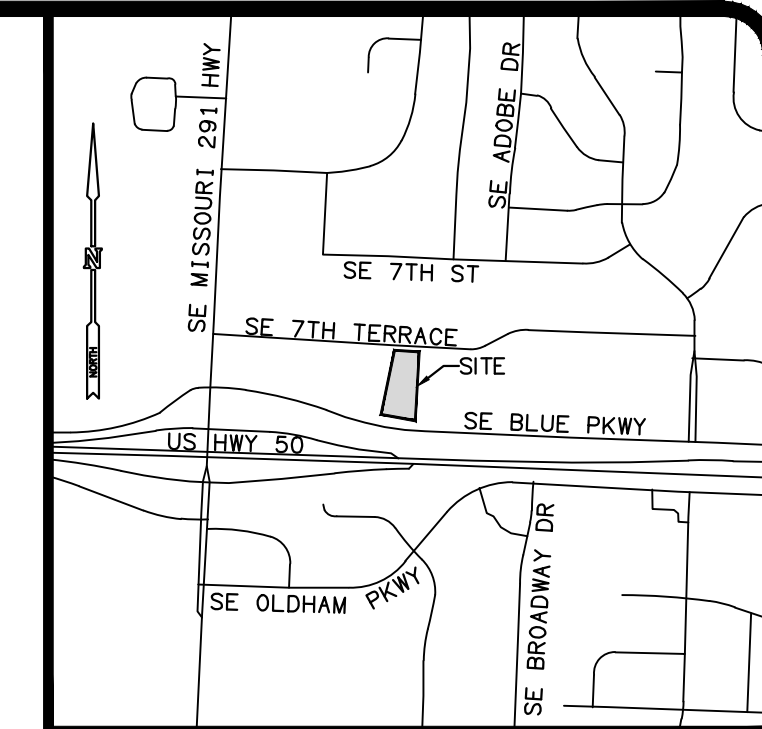
- ALL HYDRAULIC DATA FOR THE STORM DRAINAGE PIPES ARE BASED ON THE 100-YEAR DESIGN STORM.
- ALL INLET DIMENSIONS SHALL HAVE A MINIMUM INSIDE DIMENSION OF 4" DIAMETER (CIRCULAR) OR 4"x4" (SQUARED). STRUCTURES SHALL BE UPSIZED AS NEEDED TO ACCOMMODATE THE CONNECTING PIPE SIZES/ ANGLES.
- STORM DRAIN PIPE SHALL BE CLASS III, WALL "B" RCP IN ACCORDANCE WITH ASTM C-76, UNLESS NOTED OTHERWISE.
- HIGH DENSITY POLYETHYLENE PIPE (HDPE) MAY BE USED AS AN ALTERNATE. ALL HDPE PIPE JOINTS, AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATIONS M252 AND M294 TYPE S.
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- STORM DRAIN PIPE SHALL HAVE WATER TIGHT JOINTS IN ACCORDANCE WITH ASTM C 361, C443, AND D322.

STR. #	TYPE	RIM/THROAT	INV. IN	INV. OUT
1	FIELD INLET	102.00	1005.25 (A)	1004.95 (EX)
1A	MANHOLE	106.00	1005.90 (B) 1005.70 (C)	1005.70 (B)
1B	FIELD INLET	108.50		1007.20 (A)
2	OUTLET CONTROL STRUCTURE	106.20		1006.00 (A)
3	COMBINATION INLET	105.40		1007.50 (C60)
4	COMBINATION INLET	105.60	1009.70 (C)	1009.50 (C60)
5	COMBINATION INLET	105.00		1010.00 (A)
EX1	EXISTING MANHOLE	1008.34	1003.30 (B)	
R1	OPEN END PIPE	107.36	106.15 (R2)	
R2	OPEN END PIPE	108.2		106.00 (R)
UG1	TO UGD	106.60	1007.70 (C)	
UG2	TO UGD	104.4	1007.00 (A)	

STORM DRAIN PIPE	SIZE	LENGTH	SLOPE	INV. IN	INV. OUT
1 - EX1	18"	164'	1.00%	1004.95'	1003.30'
1A - 1	18"	44'	1.02%	1005.70'	1005.25'
B - 1A	18"	127'	1.02%	1007.20'	1005.90'
2 - 1A	18"	16'	1.94%	1006.00'	1005.70'
3 - UG1	18"	10'	2.01%	1007.90'	1007.70'
4 - UG2	18"	83'	3.02%	1009.50'	1007.00'
5 - 4	18"	199'	0.93%	1010.00'	1005.70'
R2 - R1	14" ELLIP.	164'	0.52%	106.00'	106.15'

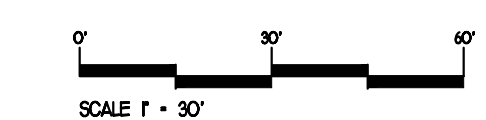
DRAINAGE BASIN:
 MISSOURI RIVER WATERSHED
 RECEIVING WATERS:
 EAST FORK LITTLE BLUE RIVER,
 TRIBUTARY OF THE BLUE RIVER -
 MISSOURI RIVER WATERSHED

STORM PROFILES

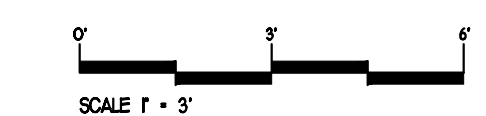


RELEASED FOR
 CONSTRUCTION
 As Noted on Plans Review
 Development Services Department
 Lee's Summit, Missouri
 02/17/2022

HORIZONTAL SCALE:



VERTICAL SCALE:



WATER TIGHT STORM PIPES

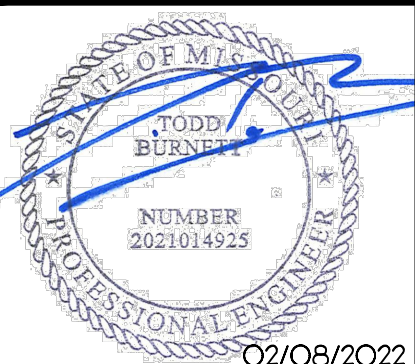
CONTRACTOR TO ENSURE THAT ALL STORM PIPES ARE WATER TIGHT AND TESTED PER ASTM C902-02

CONTRACTOR TO ENSURE ALL STORM DRAIN PIPE SHALL HAVE WATER TIGHT JOINTS IN ACCORDANCE WITH ASTM C 361, C443 AND D322.

REVISIONS	BY
02.08.2022 REVISION #1	TMB

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Engineers * Landscape Architects
 209 West Stone Avenue
 Greenville, South Carolina 29609
 864-233-5497
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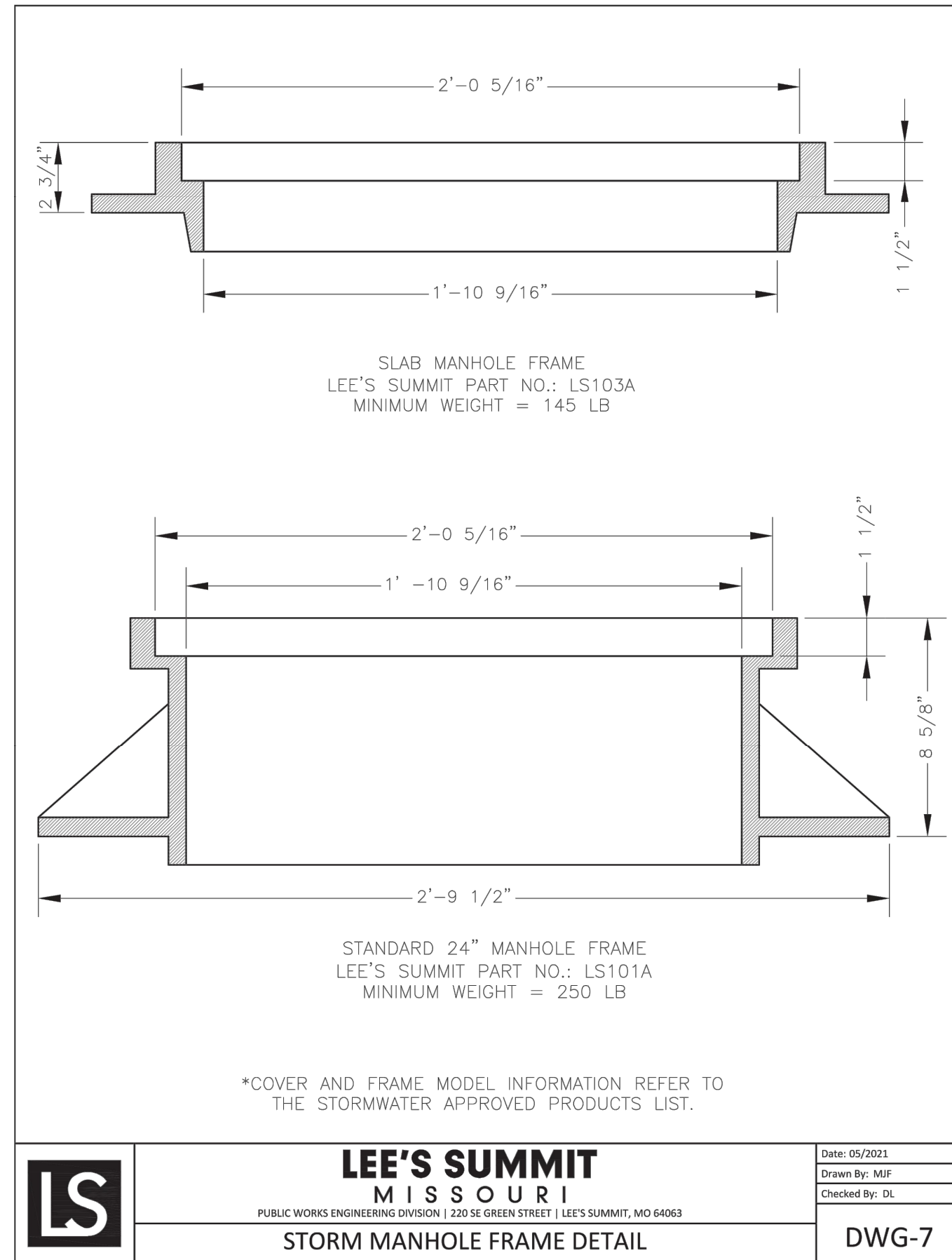
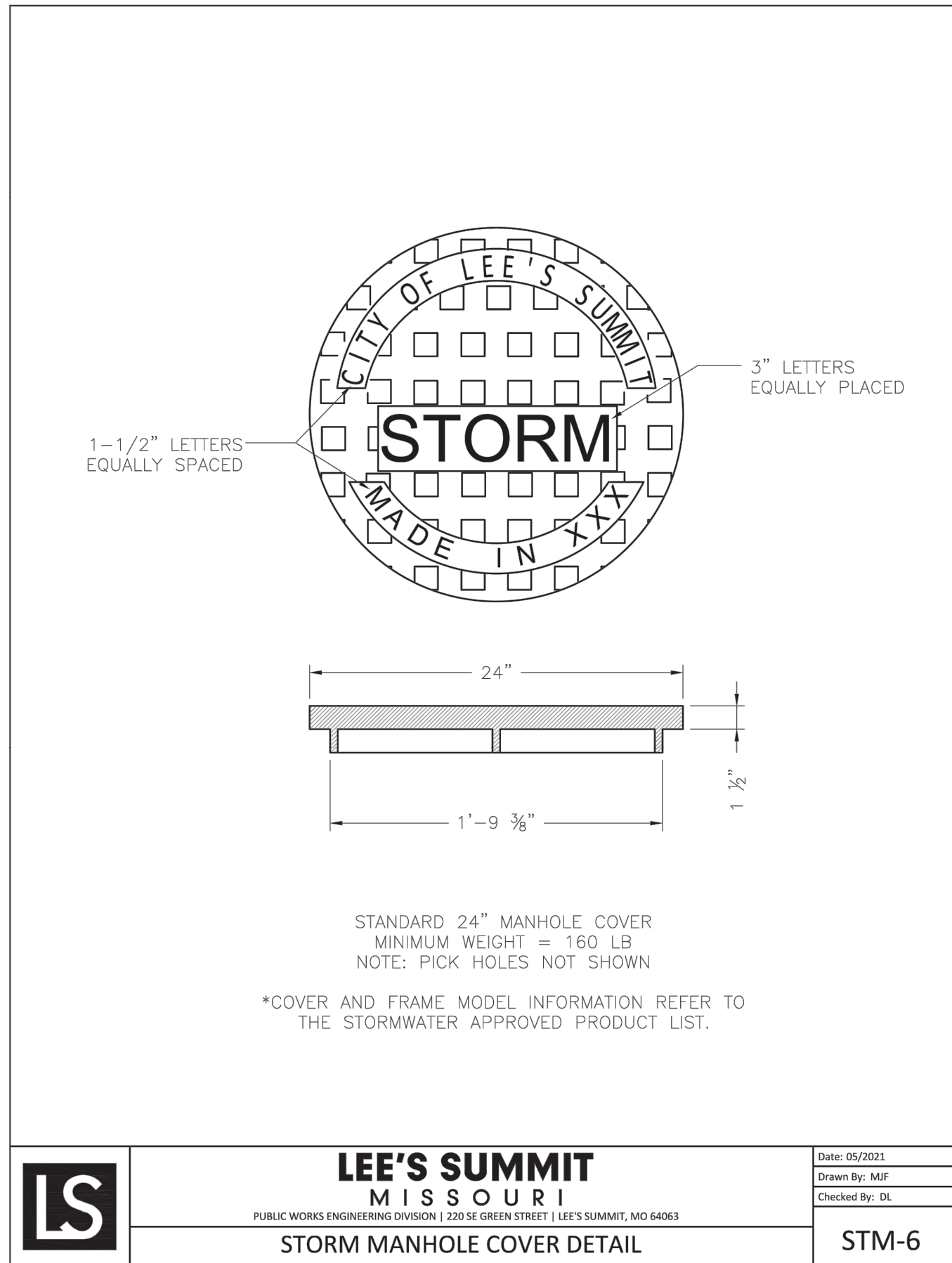
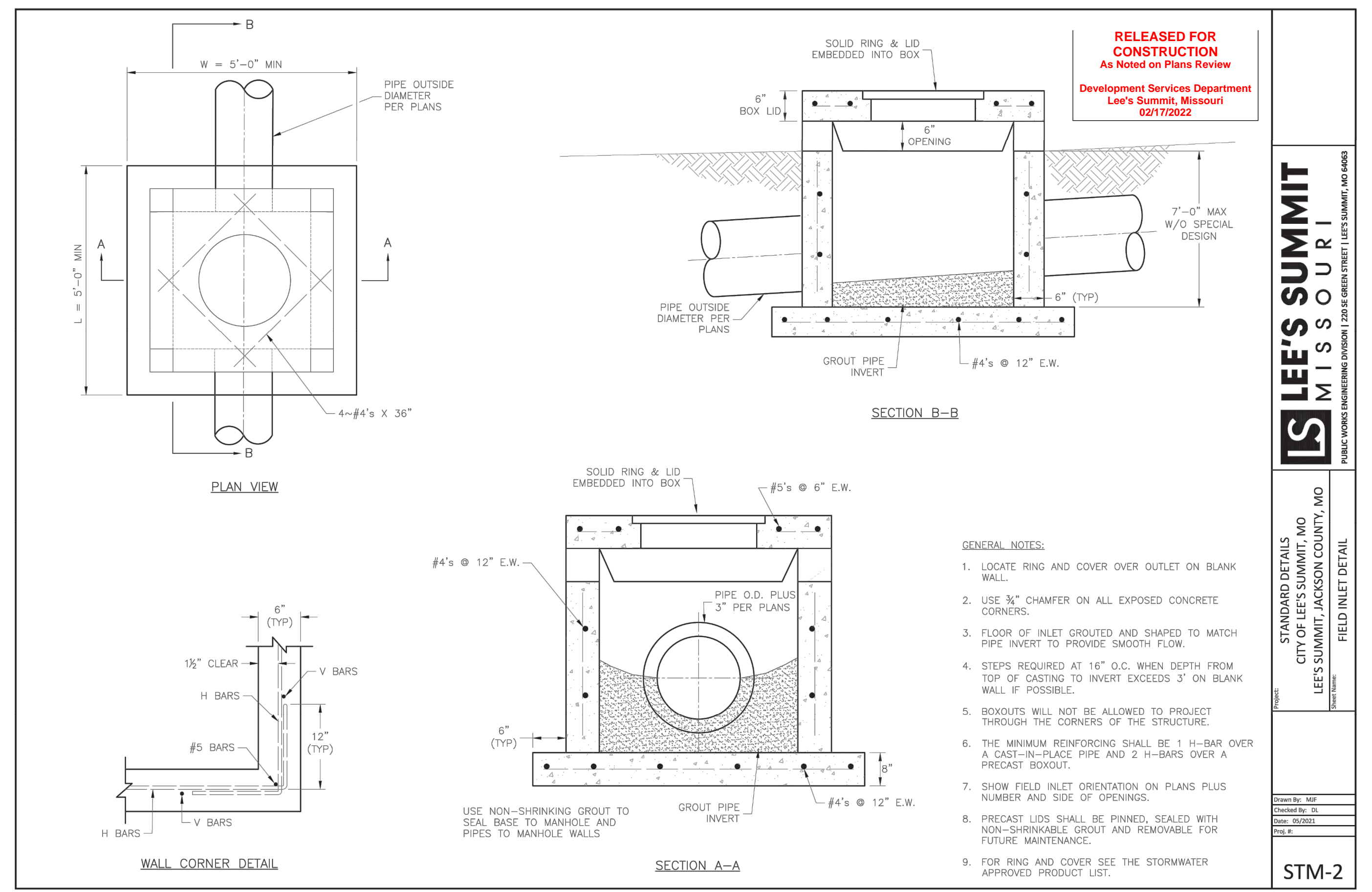
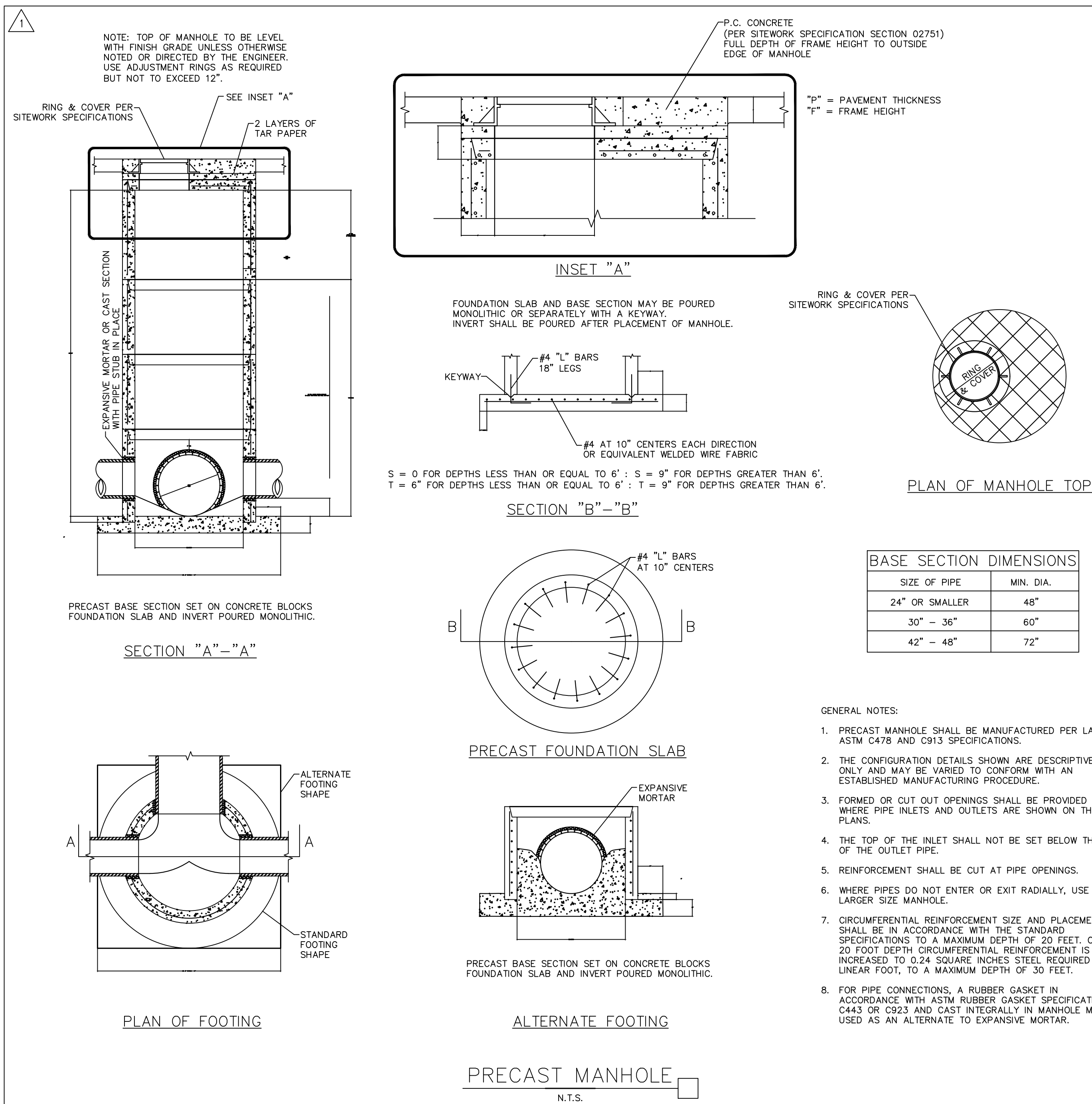
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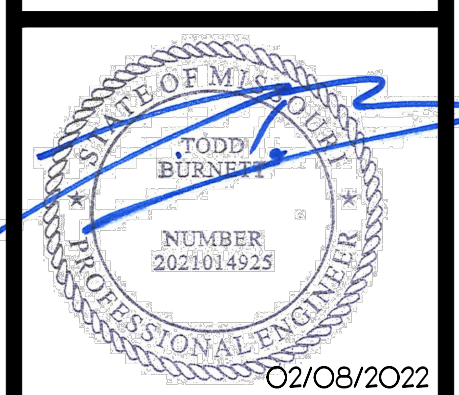
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02/08/2022 REVISION #1	TMB

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Engineers * Landscape Architects
209 West Stone Avenue
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864-233-5497
fax 864-233-8916



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4538 MARSH RIDGE ROAD
CARROLLTON, TX 75010
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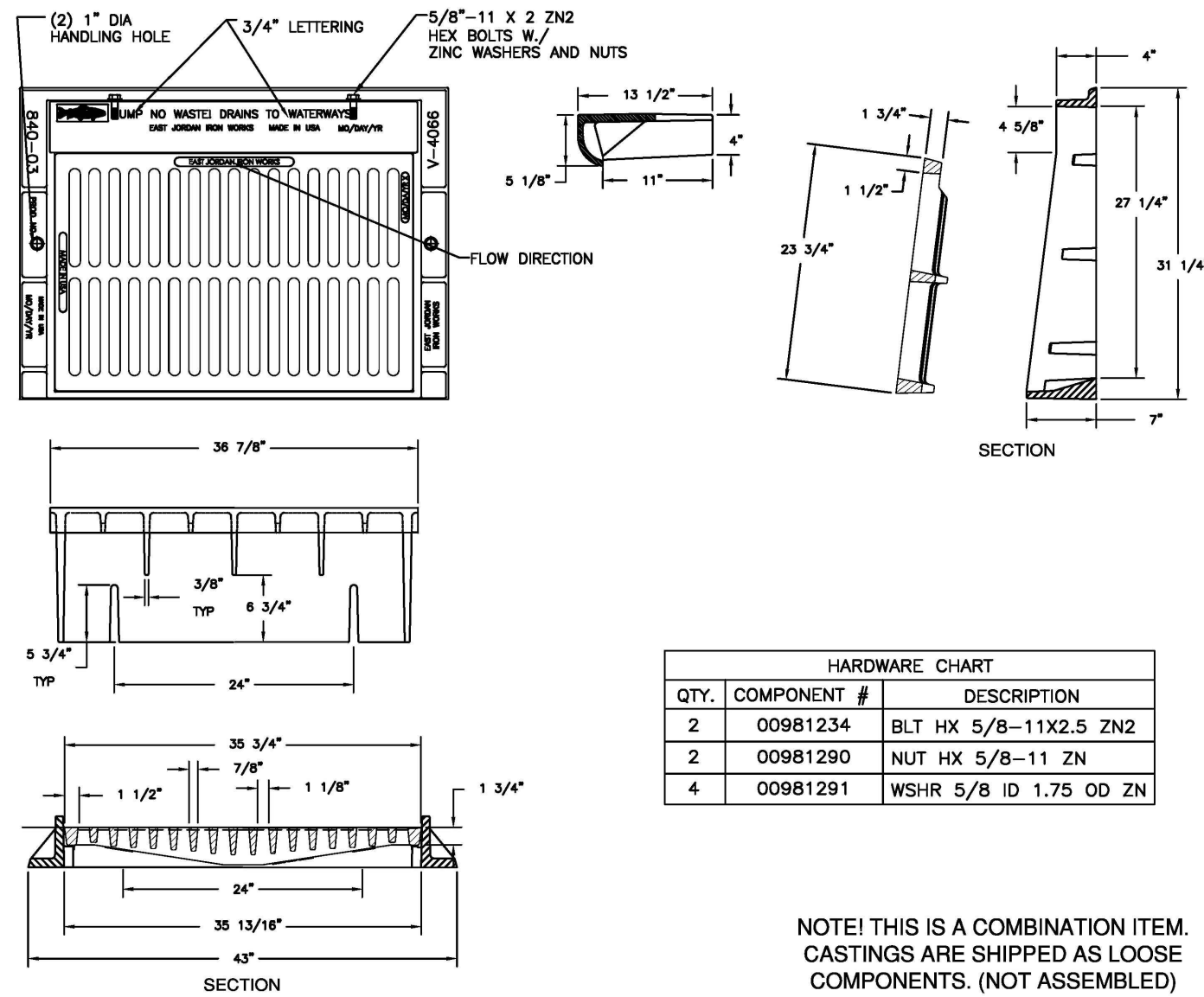
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DATE 11/7/2021
SCALE

DRAWING

16

STORM DETAILS

V4066-9 ASSEMBLY



QTY.	COMPONENT #	DESCRIPTION
2	00981234	BLT. HX 5/8-11X2.5 ZN2
2	00981290	NUT HX 5/8-11 ZN
4	00981291	WSHR 5/8 ID 1.75 OD ZN

NOTE! THIS IS A COMBINATION ITEM. CASTINGS ARE SHIPPED AS LOOSE COMPONENTS. (NOT ASSEMBLED)

PRODUCT NUMBER
44066930C31

DESIGN FEATURES

MATERIALS
GRATE-GRAY IRON
ASTM A48 CL358
FRAME-GRAY IRON
ASTM A48 CL358
BACK-GRAY IRON
ASTM A48 CL358

DESIGN LOAD
HEAVY DUTY

COATING
UNDIPPED

OPEN AREA
366 SQ. IN.

DESIGNATES MACHINED SURFACE

REFERENCE INFORMATION

44066910
44066930
44066063

DRAWING DETAILS

ORIGINAL DRAWING: DEF 04/26/08
REVISED BY: JJD 04/03/10

Corporate Headquarters
301 Spring Street
PO Box 439
East Jordan, MI
49727-0439
800.874.4100

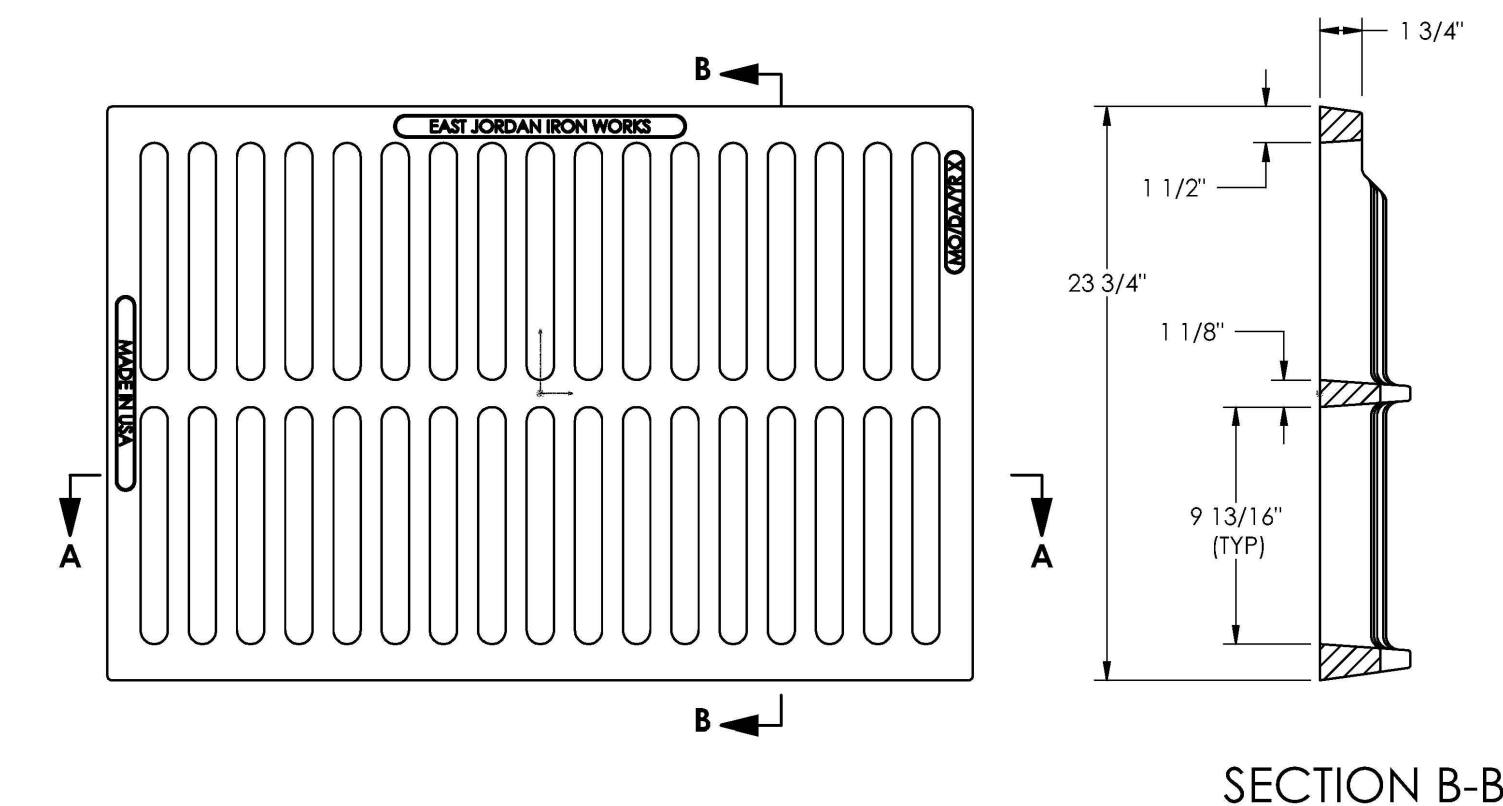
Call Today for
More Information

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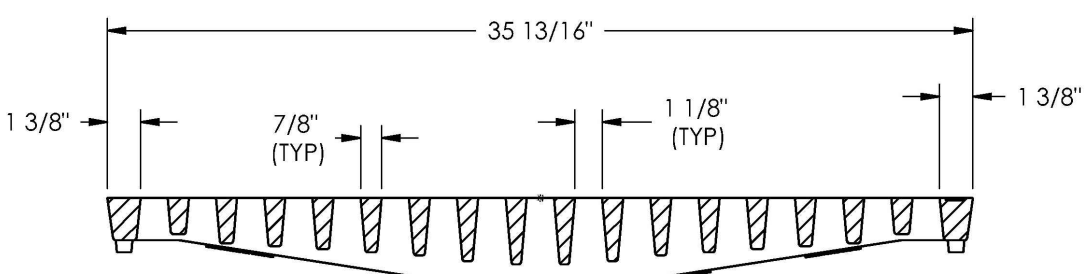
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MADE IN THE USA

*Weights (kg./sq.) dimensions (inches), and drawings provided for your guidance.
We reserve the right to modify specifications without prior notice.
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SECTION B-B



SECTION A-A

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CATCH BASIN
FRAME AND GRATE

N.T.S.

EJIW EAST JORDAN
800-626-4653
www.ejiw.com
MADE IN USA

PRODUCT NUMBER

44066930

CATALOG NUMBER

V-4066-9

GRATE

LOAD RATING

HEAVY DUTY

COATING

UNDIPPED

ESTIMATED WEIGHT

GRATE: 230 LBS

MATERIAL SPECIFICATION

GRATE - GRAY IRON
ASTM A48 CL358

OPEN AREA

366 SQ. IN.

DESIGNATES MACHINED SURFACE

DRAWN

SBB

DATE

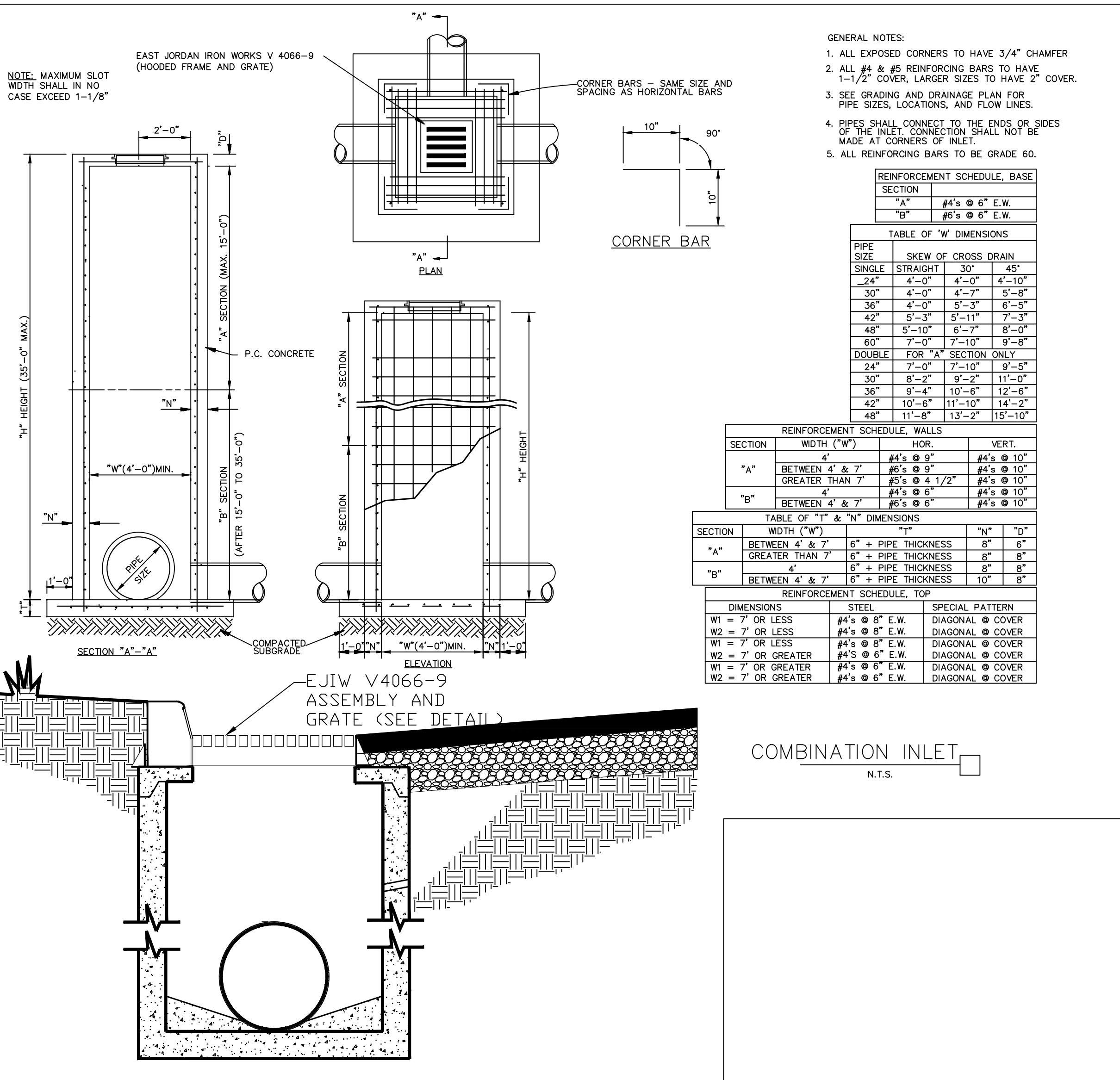
11/12/07

LAST REVISED

DATE

REFERENCE INFORMATION

44066930



- GENERAL NOTES:
- ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
 - ALL #4 & #5 REINFORCING BARS TO HAVE 1-1/2" COVER, LARGER SIZES TO HAVE 2" COVER.
 - SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
 - PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF INLET.
 - ALL REINFORCING BARS TO BE GRADE 60.

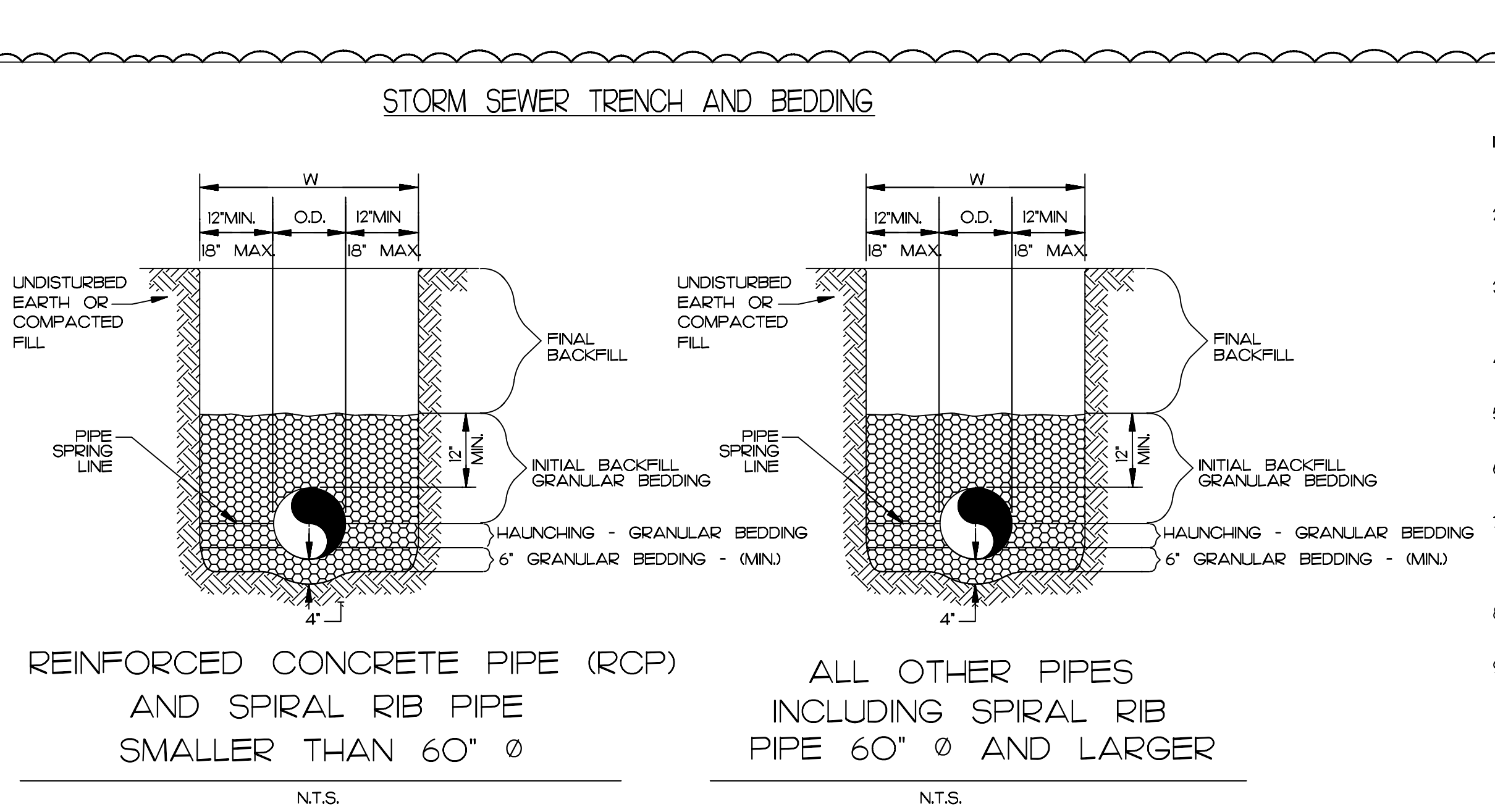
SECTION	#4's @ 6" E.W.	#6's @ 6" E.W.
"A"	#4's @ 6" E.W.	#6's @ 6" E.W.
"B"	#4's @ 6" E.W.	#6's @ 6" E.W.

PIPE SIZE	SKW OF CROSS DRAIN	30"	45"
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-7"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"
72"	7'-0"	7'-10"	9'-5"
30"	8'-2"	9'-2"	11'-0"
36"	9'-4"	10'-6"	12'-6"
42"	10'-6"	11'-10"	14'-2"
48"	11'-8"	13'-2"	15'-10"

SECTION	WIDTH ("W")	HOR.	VERT.
"A"	4'	#4's @ 3"	#4's @ 10"
"B"	BETWEEN 4' & 7'	#4's @ 3"	#4's @ 10"
"C"	GREATER THAN 7'	#4's @ 4 1/2"	#4's @ 10"
"D"	BETWEEN 4' & 7'	#4's @ 3"	#4's @ 10"

SECTION	WIDTH ("W")	"T"	"N"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
"B"	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"C"	4'	6" + PIPE THICKNESS	8"	8"
"D"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"	8"

DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER



REINFORCED CONCRETE PIPE (RCP)
AND SPIRAL RIB PIPE
SMALLER THAN 60" Ø

N.T.S.

ALL OTHER PIPES
INCLUDING SPIRAL RIB
PIPE 60" Ø AND LARGER

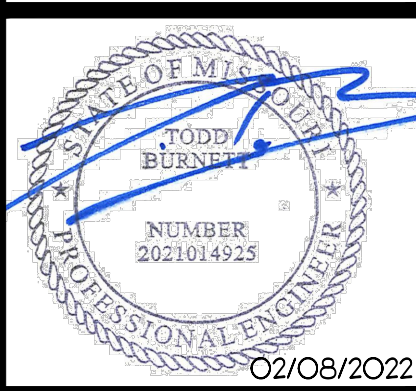
N.T.S.

GENERAL NOTES

- BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
- HAUNCHING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
- INITIAL BACKFILL SHALL BE CLASS I-A. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
- FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3 AND 4.
- FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV-A COMPACTED TO 95% STANDARD PROCTOR.
- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2924-LATEST EDITION.
- ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
- FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
- ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS).

REVISIONS	BY
02/08/2022 REVISION #1	TMB

FREELAND and KAUFFMAN, INC.
Engineers * Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8916



CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
CROSS DEVELOPMENT, CC LEE'S SUMMIT, LLC
4338 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

DRAWN	BAC
CHECKED	TMB
DATE	11/7/2021
SCALE	

DRAWING

17

STORM DETAILS



Advanced Drainage Systems, Inc.

SiteASSIST™
FOR STORMTECH
INSTRUCTIONS,
DOWNLOAD THE
INSTALLATION APP

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

- ## NOTES FOR CONSTRUCTION EQUIPMENT
1. STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 2. THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

15" ADS N-12 BOTTOM CONNECTION
INVERT 1.7' ABOVE CHAMBER BASE
(SEE NOTES)

6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN
(SIZE TBD BY ENGINEER / SOLID OUTSIDE PERIMETER STONE)

OUTLET STRUCTURE PER PLAN
MAXIMUM OUTLET FLOW 5.4 CFS
(DESIGN BY ENGINEER / PROVIDED BY OTHERS)

15" X 15" ADS N-12 TOP MANIFOLD
INVERT 32.72' ABOVE CHAMBER BASE
(SEE NOTES)

PROPOSED STRUCTURE WELEVATED BYPASS MANIFOLD
MAXIMUM INLET FLOW 15.0 CFS
(DESIGN BY ENGINEER / PROVIDED BY OTHERS)

INSTALL FLAMP ON 24" ACCESS PIPE
PART# MC4500GRAMP
(TYP 2 PLACES)

ISOLATOR ROW PLUS
(SEE DETAIL)

INSPECTION PORT

24" PARTIAL CUT END CAP, PART# MC4500EPP24B OR MC4500EPP24BW
TYP. OF ALL MC-4500 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS

PROPOSED STRUCTURE WELEVATED BYPASS MANIFOLD
MAXIMUM INLET FLOW 5.5 CFS
(DESIGN BY ENGINEER / PROVIDED BY OTHERS)

18" PARTIAL CUT END CAP,
PART# MC4500EPP18T OR MC4500EPP18TW
TYP. OF ALL MC-4500 18" TOP CONNECTIONS

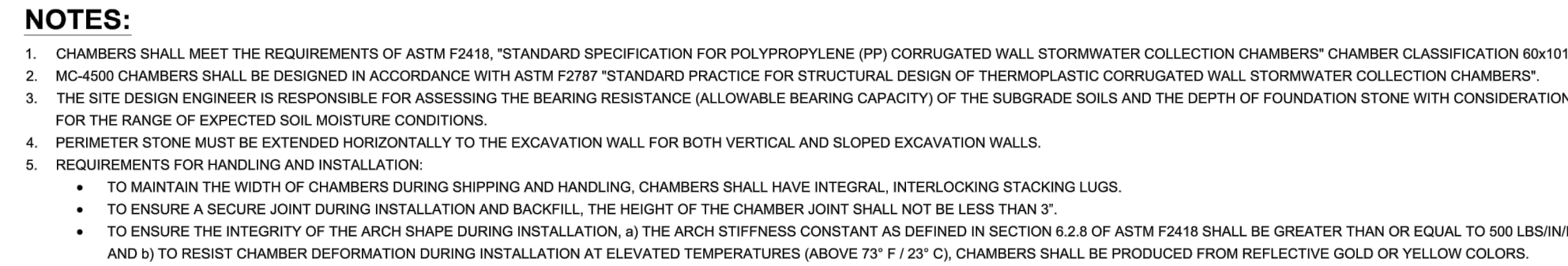
PLACE MINIMUM 17.5' OF ADSPLUS175 WOVEN GEOTEXTILE
OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET
FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

18" X 18" ADS N-12 TOP MANIFOLD
INVERT 29.36' ABOVE CHAMBER BASE
(SEE NOTES)

StormTech®

PLEASE NOTE:

1. THE LISTED ASBESTOS DESIGNATIONS ARE FOR GRADATIONS OR LAYER STONE MATERIALS ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (ASHTO M85) STONE". STORMTIGHT COMPACTMENT REQUIREMENTS ARE MET FOR 7A; LOCATION MATERIALS WOULD BE PLACED AND COMPACTED IN P" (230 mm) FOR ALL MATS (LIFE USING TWO FULL COVERSAGES WITH A VIBRATORY COMPACTOR).
2. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTATION EQUIPMENT. FOR SPECIAL LOAD SITUATIONS, CONTACT STORMTIGHT FOR ADDITIONAL REQUIREMENTS.
3. ONCE LAYER 7C IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 7'D UP TO THE FINISHED GRADE. MOST PAVEMENT SUBGRADE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 7C OR 7'D AT THE SITE DESIGN ENGINEERS DISCRETION.

**StormTech®**

COVER PIPE CONNECTION TO END CAP WITH ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE

STORMTECH HIGH-Y RECOMMENDS FLEXSTORM INSERTS IN ANY UPSTREAM STRUCTURES WITH OPEN GRATES

ELEVATED BYPASS MANIFOLD

SLUMP DEPTH TBD BY SITE DESIGN ENGINEER (24" (600 mm) MIN RECOMMENDED)

CATCH BASIN OR MANHOLE

INSTALL FLAMP ON 24" (600 mm) ACCESS PIPE PART #: MC450024RAMP

MC-4500 CHAMBER

OPTIONAL INSPECTION PORT

MC-4500 END CAP

ELEV. + 202.75

ELEV. + 201.75

▽ 100-YEAR PEAK ELEV. + 100.99

▽ 50-YEAR PEAK ELEV. + 100.78

▽ 10-YEAR PEAK ELEV. + 100.42

▽ 2-YEAR PEAK ELEV. + 100.834

ELEV. + 100.65

ELEV. + 100.600

24" (600 mm) HOPE ACCESS PIPE REQUIRED USE FACTORY PARTIAL CUT END CAP PART #: MC4500EP24BC OR MC4500RPP24BW

ONE LAYER OF ADSPLUS175 WOVEN GEOTEXTILE BETWEEN FOUNDATION STONE AND CHAMBERS (10.3 (3.1 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS)

MC-4500 ISOLATOR ROW PLUS DETAIL

NTS

STEP 1	<p>INSPECT ISOLATOR ROW PLUS FOR SEDIMENT</p> <ol style="list-style-type: none"> INSPECTION PORTS (IF PRESENT) REMOVE OPEN LID ON V/PLASTIC INLINE DRAIN REMOVE AND CLEAN FLEXITOP FILTER IF INSTALLED USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS FOR SEDIMENT AND RECORD ON MAINTENANCE LOG LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL) IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) DEPTH OF ISOLATOR 2, IF NOT, PROCEED TO STEP 2 <p>B. ISOLATOR ROW PLUS</p> <ol style="list-style-type: none"> REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE MIRRORS ON POLES OR CAMERA MAY BE USED TO AVOID A CONFINED SPACE ENTRY FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) DEPTH OF ISOLATOR 2, IF NOT, PROCEED TO STEP 3.
STEP 2	<p>CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS</p> <ol style="list-style-type: none"> FIXED CULVERT: POSITION NOZZLE WITH EASEL FACING SPREAD OF 45° (1 m) OR MORE IS PREFERRED APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLOW WATER IS CLEAN VACUUM STRUCTURE SUMP AS REQUIRED
STEP 3	REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
STEP 4	INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

**StormTech®**[illegible]

FREELAND and KAUFFMAN, INC.
*Engineers * Landscape Architects*
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8915



CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063

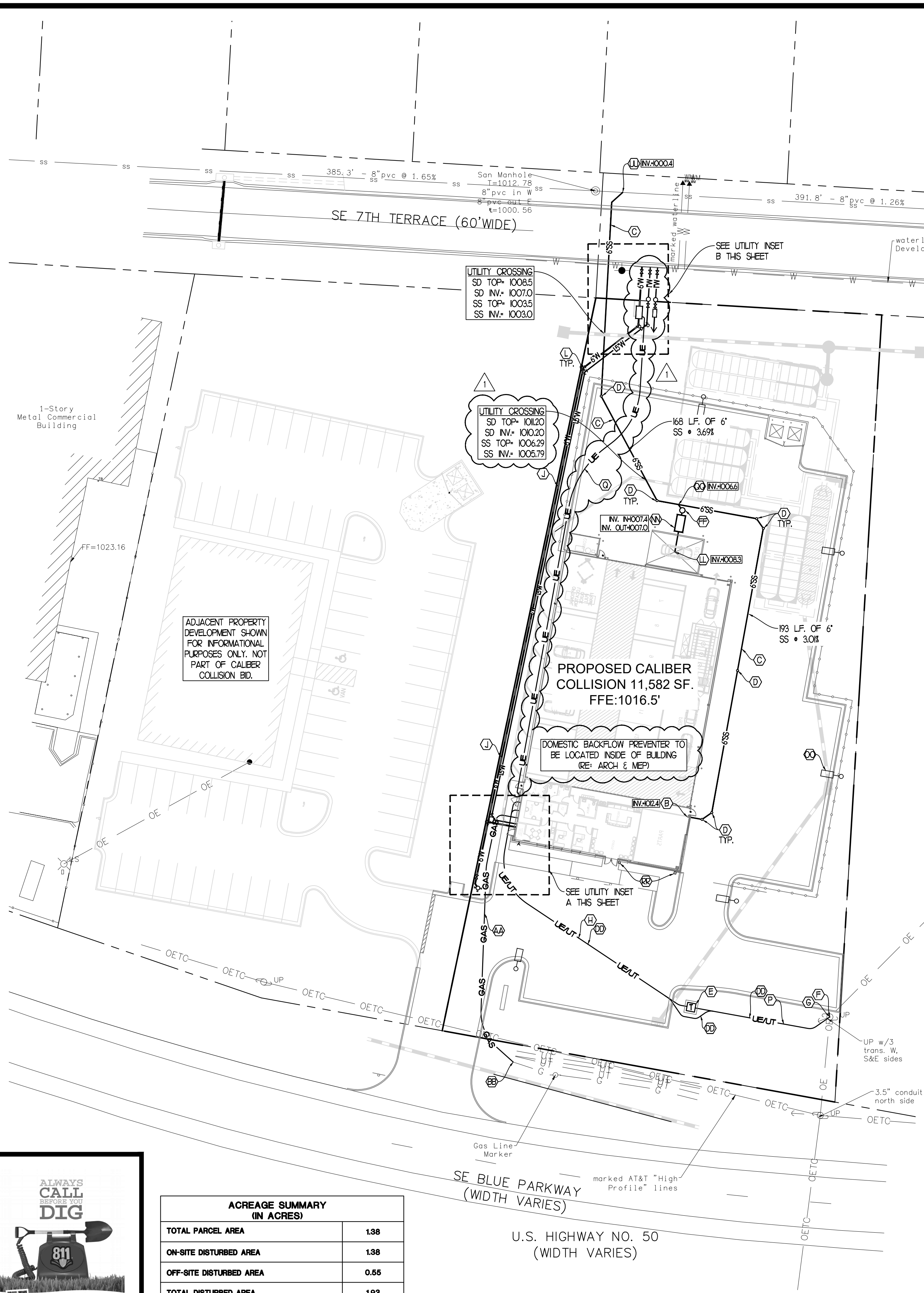
CROSS DEVELOPMENT, CC LEE'S SUMMIT, LLC
4336 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL: (214) 614-8252

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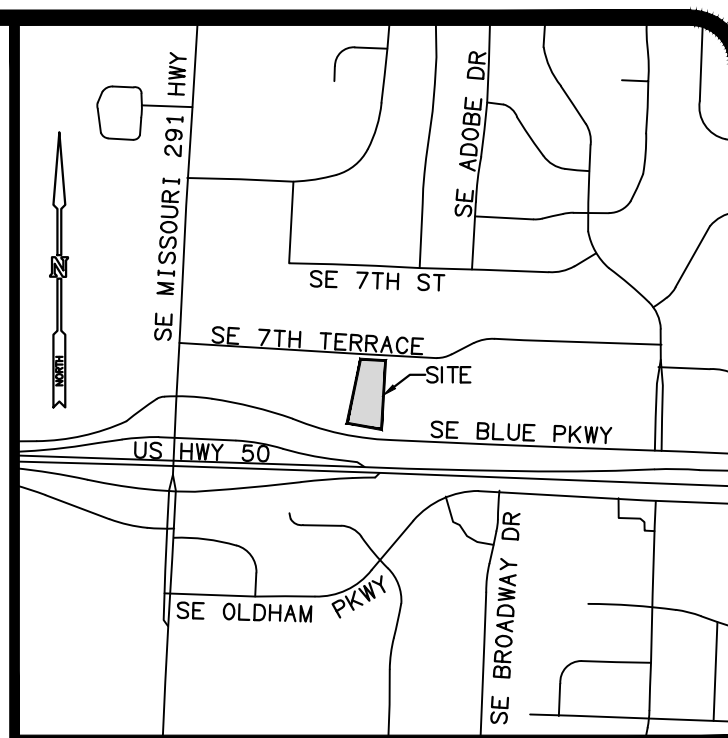
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RELEASED FOR CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
02/17/2022

UTILITY CONTACTS	
WATER: LEE'S SUMMIT WATER UTILITIES PHONE: (816) 969-1900	ELECTRIC: EVERGY LEE'S SUMMIT SERVICE CONTACT: DOUG DAVIN PHONE: (816) 347-4320
SEWER: LEE'S SUMMIT WATER UTILITIES PHONE: (816) 969-1900	TELEPHONE/CABLE: AT&T CONTACT: DARRIN SHEPARD PHONE: (816) 772-0336
GAS: SPIKE, INC. CONTACT: BOBBIE GAULSBERRY PHONE: (816) 969-2266	

LEGEND		
EXISTING	PROPOSED	DESCRIPTION
	15" W	15" DOMESTIC WATER LINE
	6" F	6" FIRE LINE
	1" IR	1" IRRIGATION WATER LINE
		FIRE HYDRANT
	UE	UNDERGROUND ELECTRIC LINE
	UT	UNDERGROUND TELEPHONE LINE
		STORM DRAIN
	6" SS	SANITARY SEWER LINE
	GAS	GAS LINE
		SS MANHOLE
		SS CLEAN-OUT



REVISIONS	BY
02/08/2022 REVISION #1	TMB

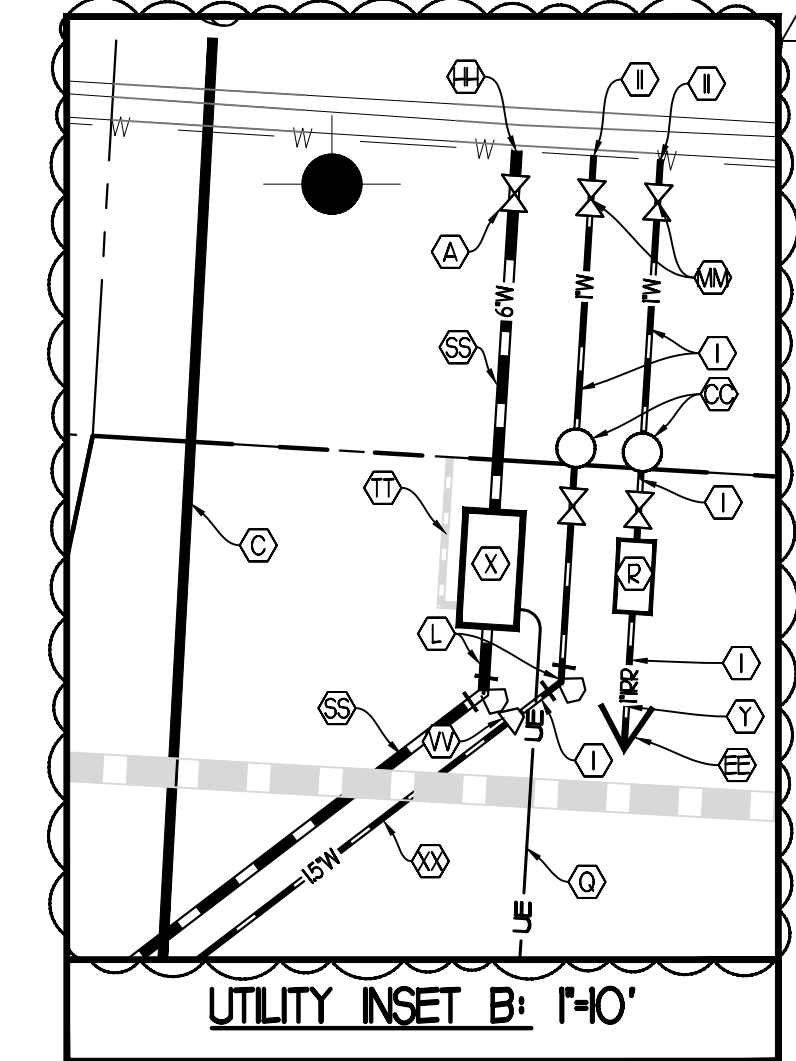
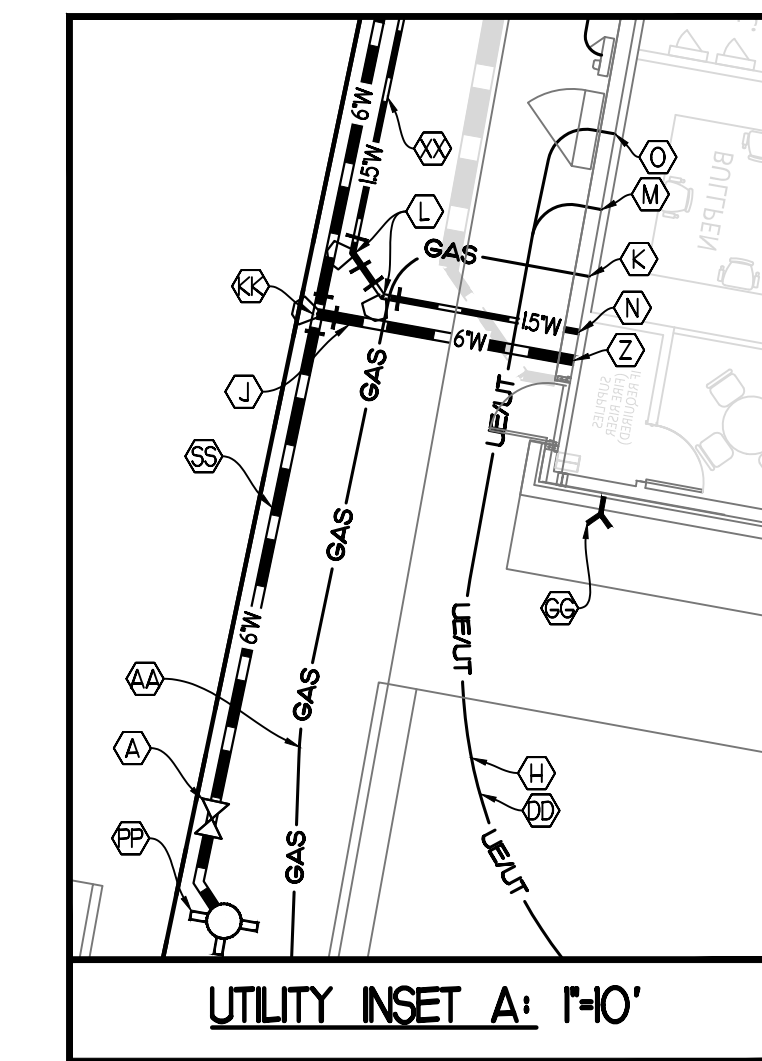
- CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING UNDERNEATH OVERHEAD POWER LINES. ANY DAMAGE TO THE EXISTING UTILITY POLES AND UTILITY LINES SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR RELOCATING ANY APPLICABLE CONFLICTING UTILITIES NECESSARY TO COMPLETE SERVICE INSTALLATIONS.
- CONTRACTOR IS RESPONSIBLE FOR STAKING SITE AS NECESSARY TO DETERMINE SERVICE LOCATIONS AND ELEVATIONS PRIOR TO MOBILIZING TO INSTALL SERVICES.
- CONTRACTOR SHALL ENSURE THAT PROPOSED WATER LINE EXTENSION HAS A MINIMUM OF 18" VERTICAL CLEARANCE WHEN CROSSING STORM & SANITARY SEWER (PROPOSED OR EXISTING) BENDS AND FITTINGS SHALL BE UTILIZED TO MEET THIS REQUIREMENT.
- CONTRACTOR TO INCLUDE ALL METER INSTALLATION AND CAPACITY FEES FOR UTILITY SERVICES IN THE BASE BID TO PROVIDE UTILITY SERVICES AS SHOWN.
- HYDRANTS SHALL BE PROTECTED FROM MECHANICAL DAMAGE. THE MEANS OF PROTECTION SHALL BE ARRANGED SO THAT IT WILL NOT INTERFERE WITH THE OPERATION OF THE HYDRANT (3 FEET CLEARANCE).

UTILITY PLAN NOTES

- ALL SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE PLANS PREPARED BY FREELAND & KAUFFMAN, CURRENT REQUIREMENTS OF LEE'S SUMMIT WATER UTILITIES, JACKSON COUNTY, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
- THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
- BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" AT 811 THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL EXISTING UTILITIES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL PROPOSED UTILITIES. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY ON THE ADDITION, REMOVAL AND/OR RELOCATION OF UTILITIES AND UTILITY POLES AND THE EXTENSION OF ALL PROPOSED UTILITIES TO THE BUILDING.
- ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
- A SEALED AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE ENGINEER/SURVEYOR AND SUBMITTED TO LEE'S SUMMIT WATER UTILITIES UPON COMPLETION & PRIOR TO ACTIVATION OF THE PROJECT.
- REFER TO THE BUILDING PLANS FOR ALL CONDUIT SIZES, NUMBER AND LOCATIONS FOR SERVICE TO THE SIGN AND SITE LIGHT POLES. COORDINATE FINAL CONDUIT LOCATIONS WITH THE OWNER.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER ON CONDUIT ROUTE TO THE STORE FROM THE TRANSFORMER AND/OR SERVICE UTILITY POLE FOR TELEPHONE AND ELECTRICAL SERVICES.
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED PRIOR TO INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY'S INSPECTORS 72 HOURS BEFORE CONNECTION OR DEMOLITION OF ANY EXISTING LINE.
- MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE LEE'S SUMMIT WATER UTILITIES WATER STANDARDS AND SPECIFICATIONS AND LEE'S SUMMIT WATER UTILITIES SEWER STANDARDS AND SPECIFICATIONS.
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- RESTRAINED JOINTS BY AN APPROVED PIPE MANUFACTURER ARE TO BE USED FOR ALL PUBLIC WATERLINES WHERE THRUST RESTRAINING IS REQUIRED; HOWEVER, THRUST BLOCKS ARE PERMITTED WHERE CONNECTIONS ARE MADE TO EXISTING WATERLINES OR WHERE THE USE OF MECHANICAL RESTRAINT IS NOT FEASIBLE.
- ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE). UTILITIES OF THE SAME SERVICE ARE NOT REQUIRED TO PROVIDE 18" OF VERTICAL SEPARATION.
- MAINTAIN A MINIMUM OF 3'-6" COVER ON ALL WATERLINES.
- IN THE EVENT OF A VERTICAL CROSSING LESS THAN 18" BETWEEN WATERLINES AND SANITARY LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATERLINE SHALL HAVE RESTRAINED JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED MEETING ALL ANSI, AWWA, AND CITY OF LEE'S SUMMIT WATER UTILITIES REQUIREMENTS.
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- 1" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLED ABOVE-GROUND WITHIN HEATED INSULATED ENCLOSURE PER LEE'S SUMMIT WATER UTILITIES REQUIREMENTS. ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER PER LEE'S SUMMIT WATER UTILITIES REQUIREMENTS. SEE DETAIL ON UTILITY DETAILS SHEET.
- 2018 IPC 305.4 FREEZING, WATER, SOIL, AND WASTE PIPES SHALL NOT BE INSTALLED OUTSIDE OF A BUILDING, IN ATTICS OR CRAWL SPACES, CONCEALED IN OUTSIDE WALLS, OR IN ANY OTHER PLACE SUBJECT TO FREEZING TEMPERATURES UNLESS ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPES FROM FREEZING BY INSULATION OR HEAT OR BOTH. EXTERIOR WATER SUPPLY SYSTEM PIPING SHALL BE INSTALLED NOT LESS THAN 60" BELOW THE FROST LINE (42" BELOW GRADE) AND NOT LESS THAN 12 INCHES BELOW GRADE.

ELECTRIC SERVICE NOTES:

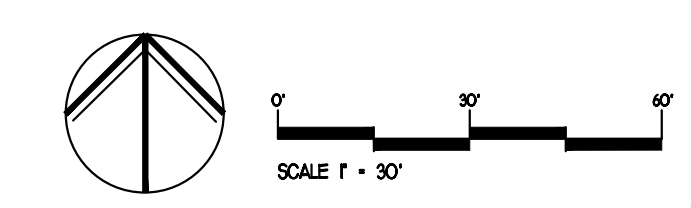
- CONTRACTOR RESPONSIBLE FOR COORDINATING TIMING AND EXACT CONDUIT ROUTING WITH EVERGY.
- CONTRACTOR SHALL INSTALL TRANSFORMER PAD PER EVERGY STANDARDS AND SPECIFICATIONS.
- EVERGY SHALL INSTALL TRANSFORMER AND PRIMARY CONDUIT & CABLE FROM THE EXISTING UTILITY TO THE PROPOSED TRANSFORMER LOCATION.
- CONTRACTOR SHALL INSTALL CT ENCLOSURE, CT, METER BASE, AND METER AT ONCE EVERGY HAS INSTALLED THE TRANSFORMER.
- CONTRACTOR SHALL PROVIDE AND INSTALL SECONDARY CONDUIT & CABLE FOR SERVICE (SEE KEYNOTES FOR SIZE AND QUANTITY).
- CONTRACTOR IS RESPONSIBLE FOR INSPECTION OF PROPER ELECTRICAL SERVICE INSTALLATION UPON COMPLETION.



KEYNOTES

- (A) 6" GATE VALVE PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (B) SANITARY SEWER EXT (RE: ARCH FOR EXACT LOCATION)
- (C) 6" PVC SANITARY SEWER LATERAL (SEE PLAN FOR SLOPE (RE: ARCH FOR BUILDING ENTRY))
- (D) SEWER CLEAN-OUT (SEE DETAIL)
- (E) TRANSFORMER PAD AND METER. SEE ELECTRIC SERVICE NOTES THIS SHEET FOR LIST OF RESPONSIBILITIES.
- (F) UNDERGROUND TELEPHONE POINT OF CONNECTION AT POLE BY AT&T
- (G) UNDERGROUND ELECTRIC POINT OF CONNECTION AT POLE BY EVERGY LEE'S SUMMIT SERVICE CENTER
- (H) CONTRACTOR TO PROVIDE (2) 4" CONDUIT AND SERVICE FOR SECONDARY UNDERGROUND ELECTRIC UTILITY. (RE: ARCH FOR BUILDING ENTRY)
- (I) 1" SOFT TYPE "K" COPPER DOMESTIC WATERLINE PER LEE'S SUMMIT WATER UTILITIES STANDARDS A MINIMUM OF 10' BEYOND METER WALL
- (J) 6" WATERLINE FOR FIRE SERVICE PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (K) GAS SERVICE ENTRY AND METER (RE: ARCH)
- (L) WATER LINE BEND WITH THRUST BLOCK
- (M) TELEPHONE SERVICE ENTRY (RE: ARCH)
- (N) DOMESTIC WATERLINE ENTRY (RE: ARCH)
- (O) ELECTRIC SERVICE ENTRY (RE: ARCH FOR EXACT LOCATION)
- (P) (2) 4" PRIMARY ELECTRICAL CONDUIT & PULLWIRE. SEE ELECTRIC SERVICE NOTES THIS SHEET FOR LIST OF RESPONSIBILITIES
- (Q) 1" LOW VOLTAGE ELECTRICAL CONDUIT FOR SUMP PUMP
- (R) 1" DOUBLE DETECTOR CHECK VALVE BACKFLOW PREVENTER FOR IRRIGATION SERVICE LOCATED IN BELOW GROUND FIBERGLASS BOX PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (S) 6" DOUBLE DETECTOR CHECK VALVE BACKFLOW PREVENTER FOR FIRE SERVICE LOCATED IN BELOW GROUND VAULT WITH SUMP PUMP PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (T) 1" IRRIGATION WATERLINE PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (U) 1" GAS SERVICE LINE
- (V) GAS SERVICE POINT OF CONNECTION. DOMINION ENERGY TO EXTEND SERVICE FROM MAIN
- (W) 6" C900 PVC WATER LINE PER CITY OF LEE'S SUMMIT WATER UTILITIES STANDARDS & SPECIFICATIONS
- (X) 15" PVC DRAIN PIPE TO DRAINAGE TO EXISTING DITCH. SEE GRADING PLAN
- (Y) CONNECT 6" SANITARY SEWER LATERAL TO 8" MAIN VIA 8" X 6" OUT-IN WYE. SEE PLAN FOR INVERT
- (Z) 1" TO 15" INVERTED REDUCER
- (AA) 15" PVC DOMESTIC WATERLINE AFTER INITIAL 10' OF COPPER HAS BEEN INSTALLED PAST METER. PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (AB) 8" X 6" OUT IN TEE, VALVE AND THRUST BLOCK TO EXISTING MAIN PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (AC) 6" X 1" TAP WITH A CORPORATION STOP TO EXISTING MAIN PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (AD) KEYNOTE REMOVED
- (AE) 6" X 6" TEE PER LEE'S SUMMIT WATER UTILITIES STANDARDS
- (AF) SANITARY SEWER EXT FROM DETAIL BAY (RE: ARCH FOR EXACT LOCATION)
- (AG) DOMESTIC WATER GATE VALVE
- (AH) SAND/OIL SEPARATOR (RE: ARCH)
- (AI) SITE LIGHTING, TYPICAL (RE: PHOTOMETRIC)
- (AJ) FIRE HYDRANT PER LEE'S SUMMIT WATER UTILITIES AND CITY OF LEE'S SUMMIT FIRE MARSHALL STANDARDS
- (AK) SANITARY SEWER WYE CONNECTION. SEE PLAN FOR INVERT.
- (AL) KNOX BOX PER LEE'S SUMMIT WATER UTILITIES AND CITY OF LEE'S SUMMIT FIRE MARSHALL STANDARDS
- (AM) 6" C900 PVC WATER LINE PER CITY OF LEE'S SUMMIT WATER UTILITIES STANDARDS & SPECIFICATIONS
- (AN) 15" PVC DRAIN PIPE TO DRAINAGE TO EXISTING DITCH. SEE GRADING PLAN
- (AO) CONNECT 6" SANITARY SEWER LATERAL TO 8" MAIN VIA 8" X 6" OUT-IN WYE. SEE PLAN FOR INVERT
- (AP) 1" TO 15" INVERTED REDUCER
- (AQ) 15" PVC DOMESTIC WATERLINE AFTER INITIAL 10' OF COPPER HAS BEEN INSTALLED PAST METER. PER LEE'S SUMMIT WATER UTILITIES STANDARDS

UTILITY PLAN



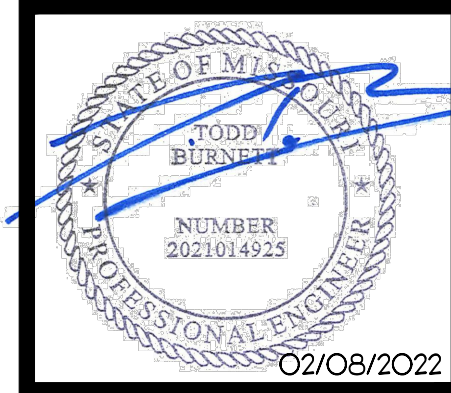
ACREAGE SUMMARY (IN ACRES)	
TOTAL PARCEL AREA	1.38
ON-SITE DISTURBED AREA	1.38
OFF-SITE DISTURBED AREA	0.55
TOTAL DISTURBED AREA	1.93
IMPERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY & INCLUDES GRAVEL)	0.48
PERVIOUS AREA PRE-CONSTRUCTION (ON-SITE ONLY)	0.90
IMPERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.90
PERVIOUS AREA POST-CONSTRUCTION (ON-SITE ONLY)	0.48
IMPERVIOUS AREA INCREASE (PRE VS POST) (ON-SITE ONLY)	0.42
IMPERVIOUS PERCENTAGE (AT POST-CONSTRUCTION STATUS)	65.2%

ALWAYS CALL BEFORE YOU DIG
811

EVERY DIGGING JOB REQUIRES A CALL - EVEN SMALL PROJECTS LIKE PLANTING TREES OR SHRUBS. IF YOU HIT AN UNDERGROUND UTILITY LINE WHILE DIGGING, YOU CAN HARM YOURSELF OR THOSE AROUND YOU, DISRUPT SERVICE TO AN ENTIRE NEIGHBORHOOD AND POTENTIALLY BE RESPONSIBLE FOR FINES AND REPAIR COSTS.

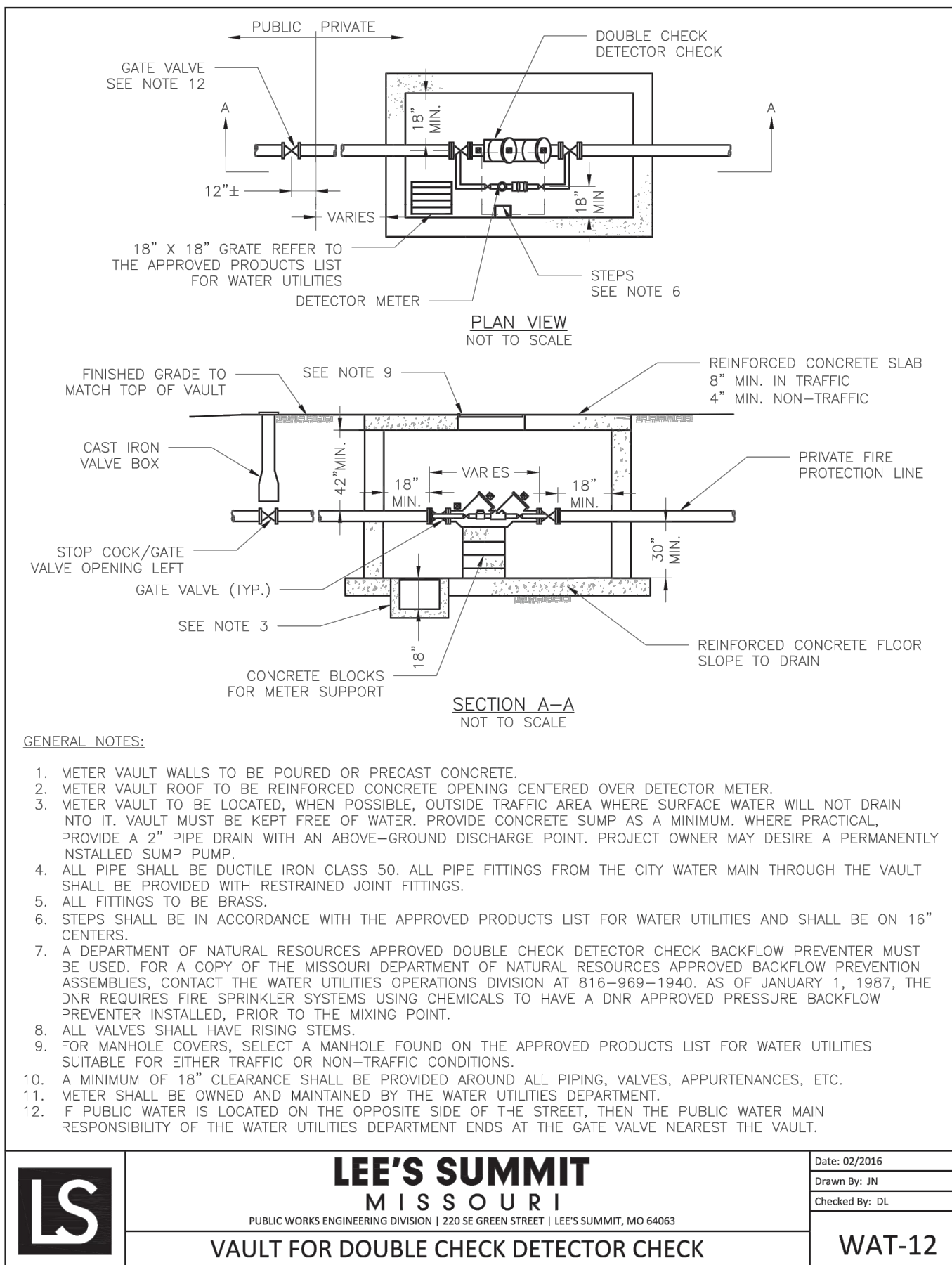
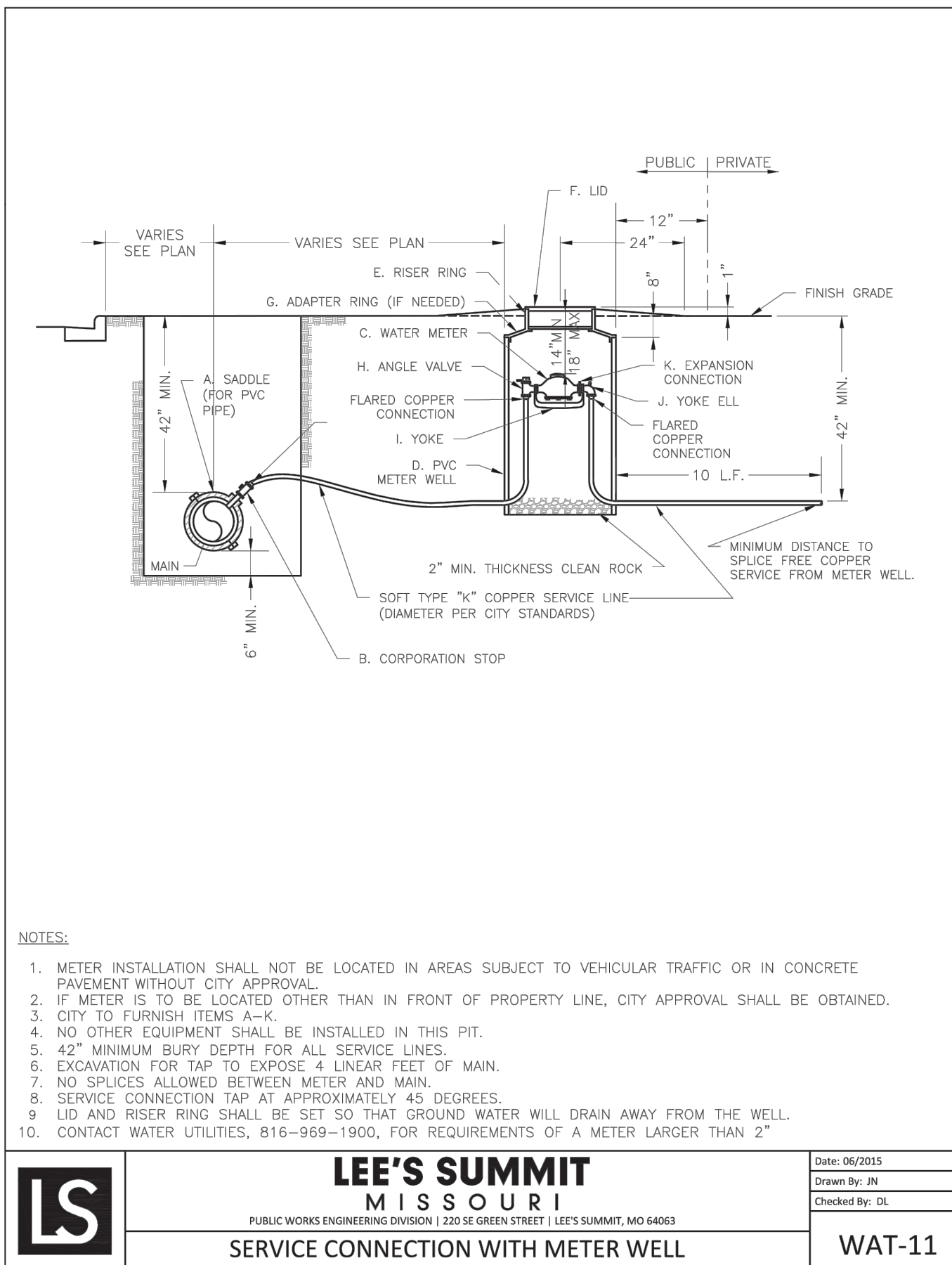
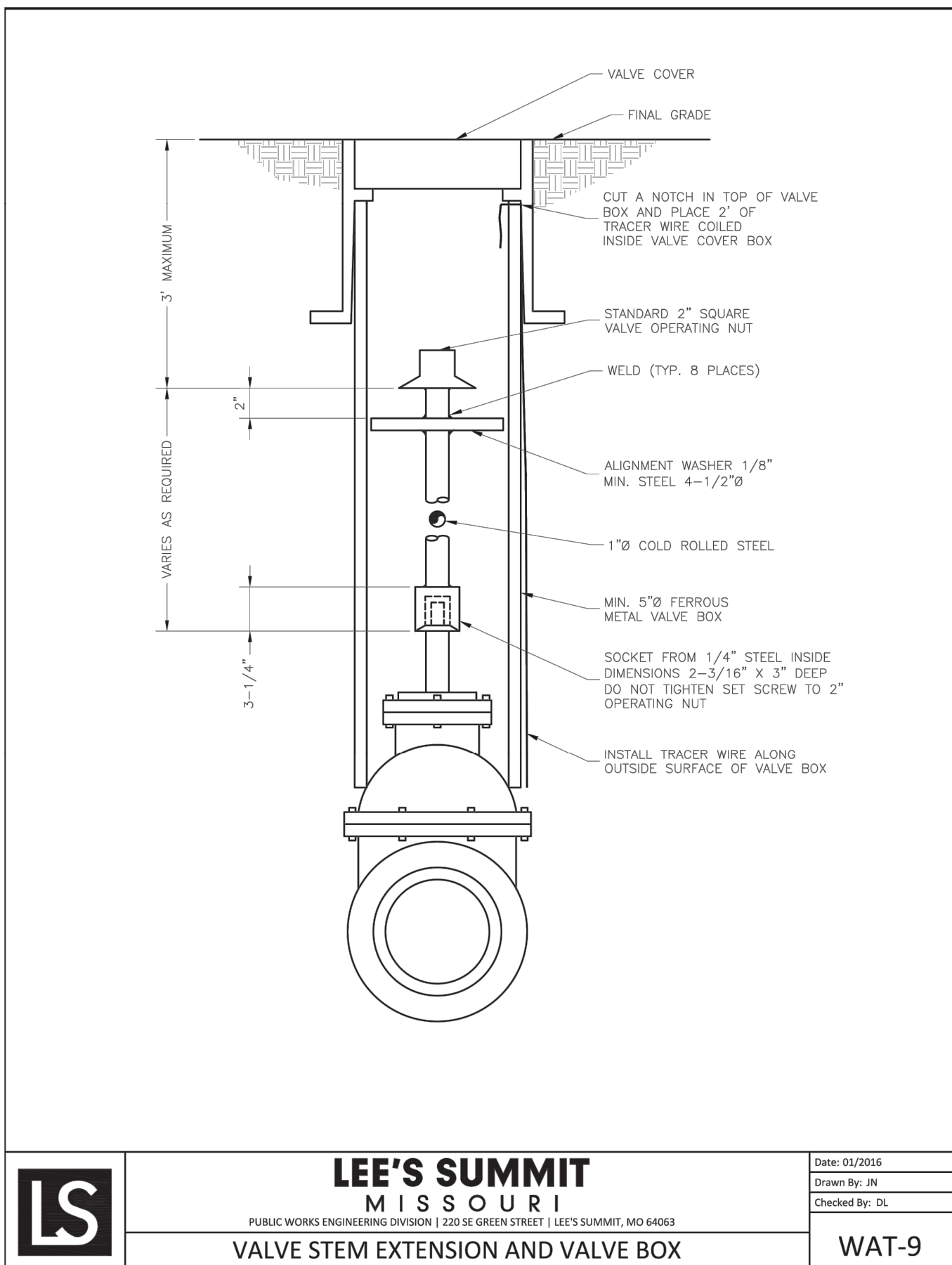
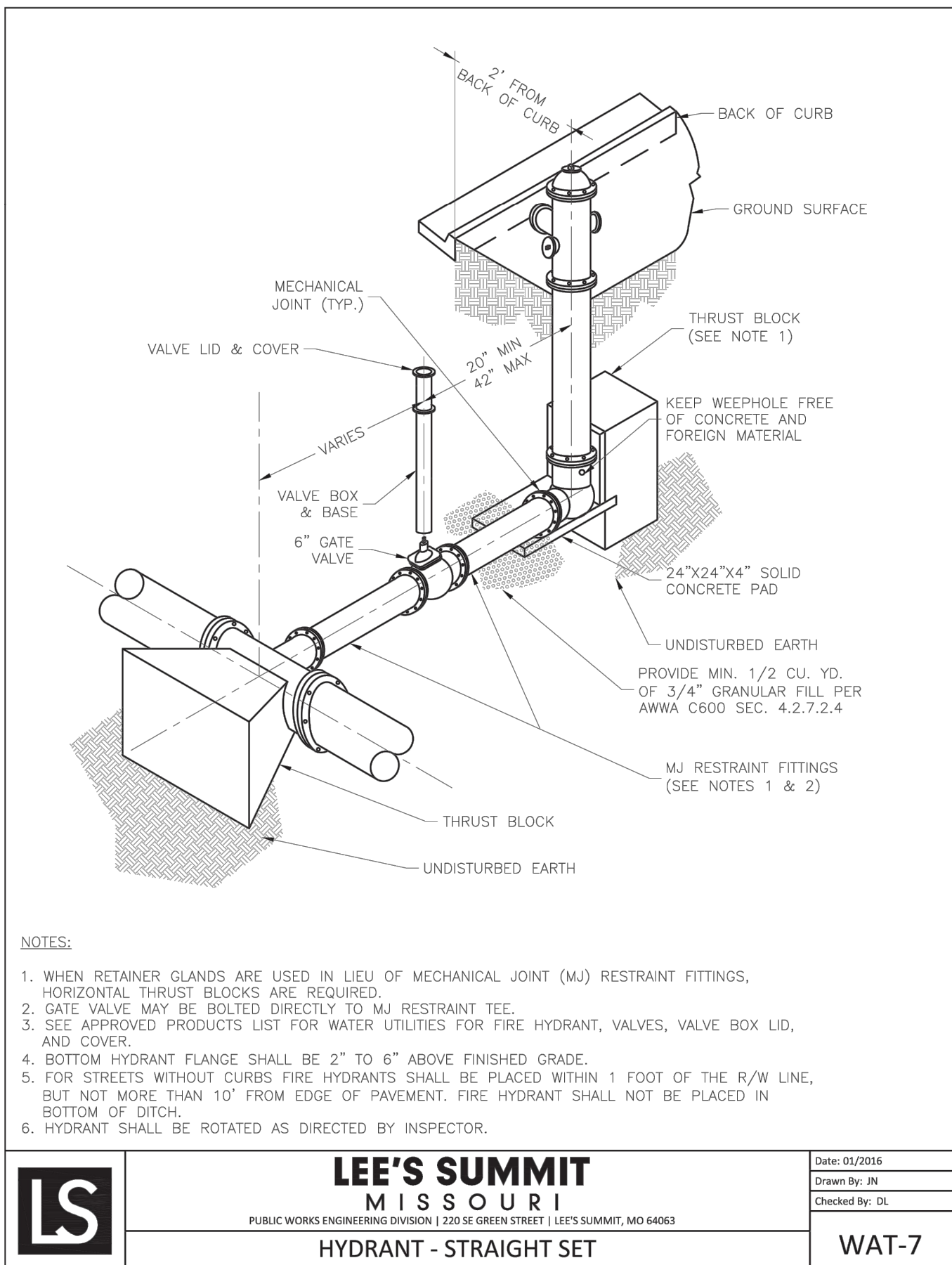
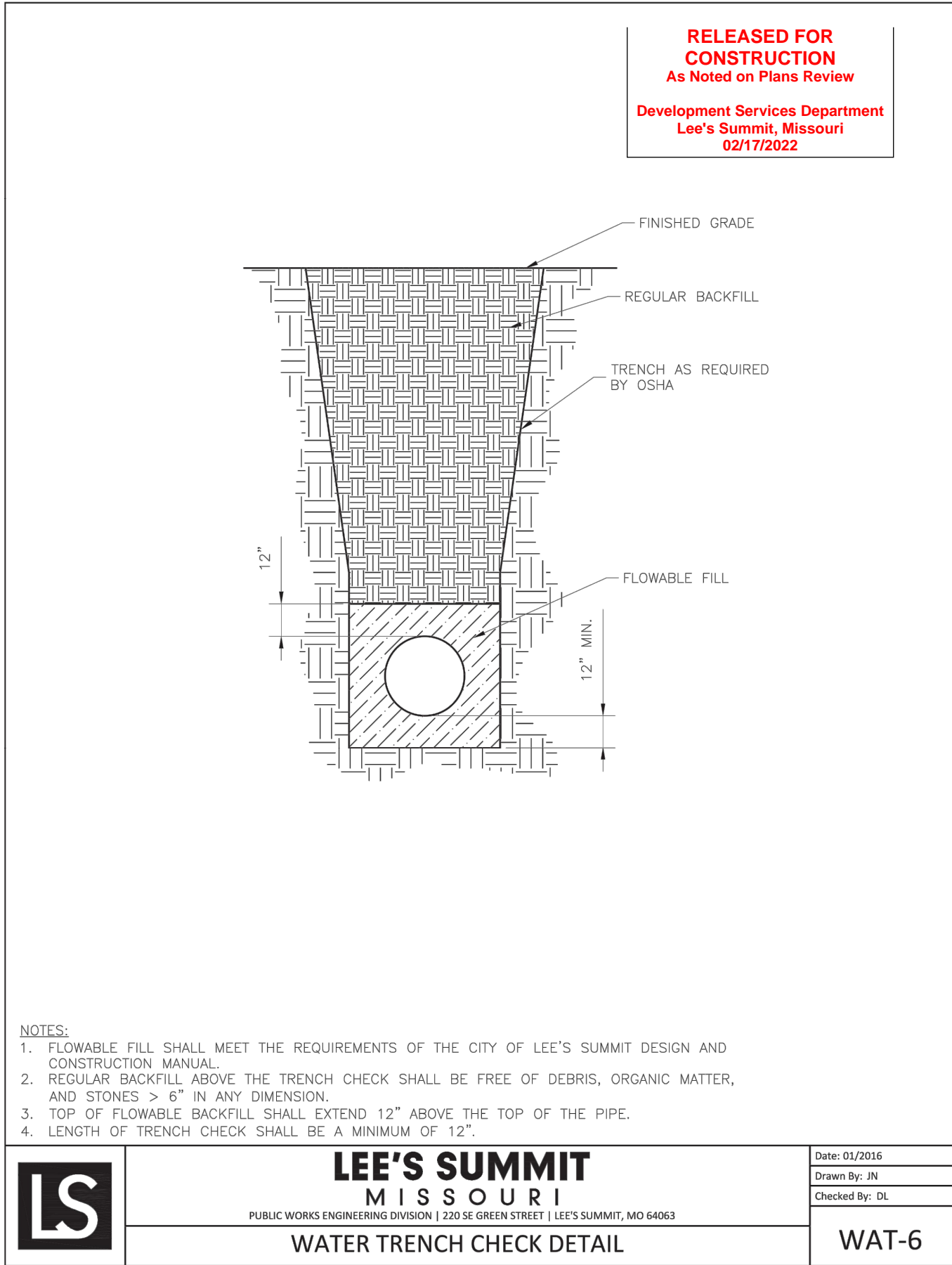
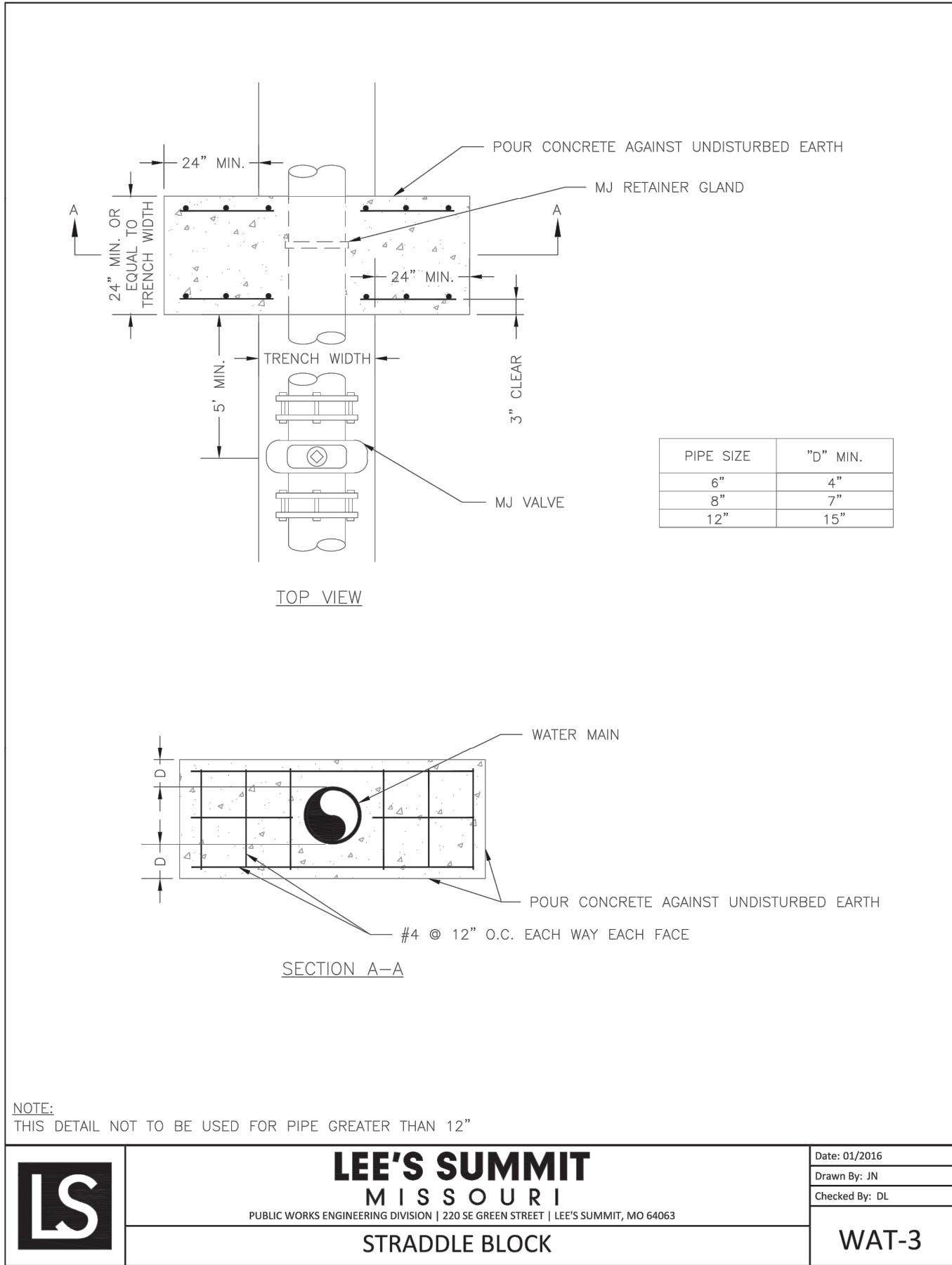
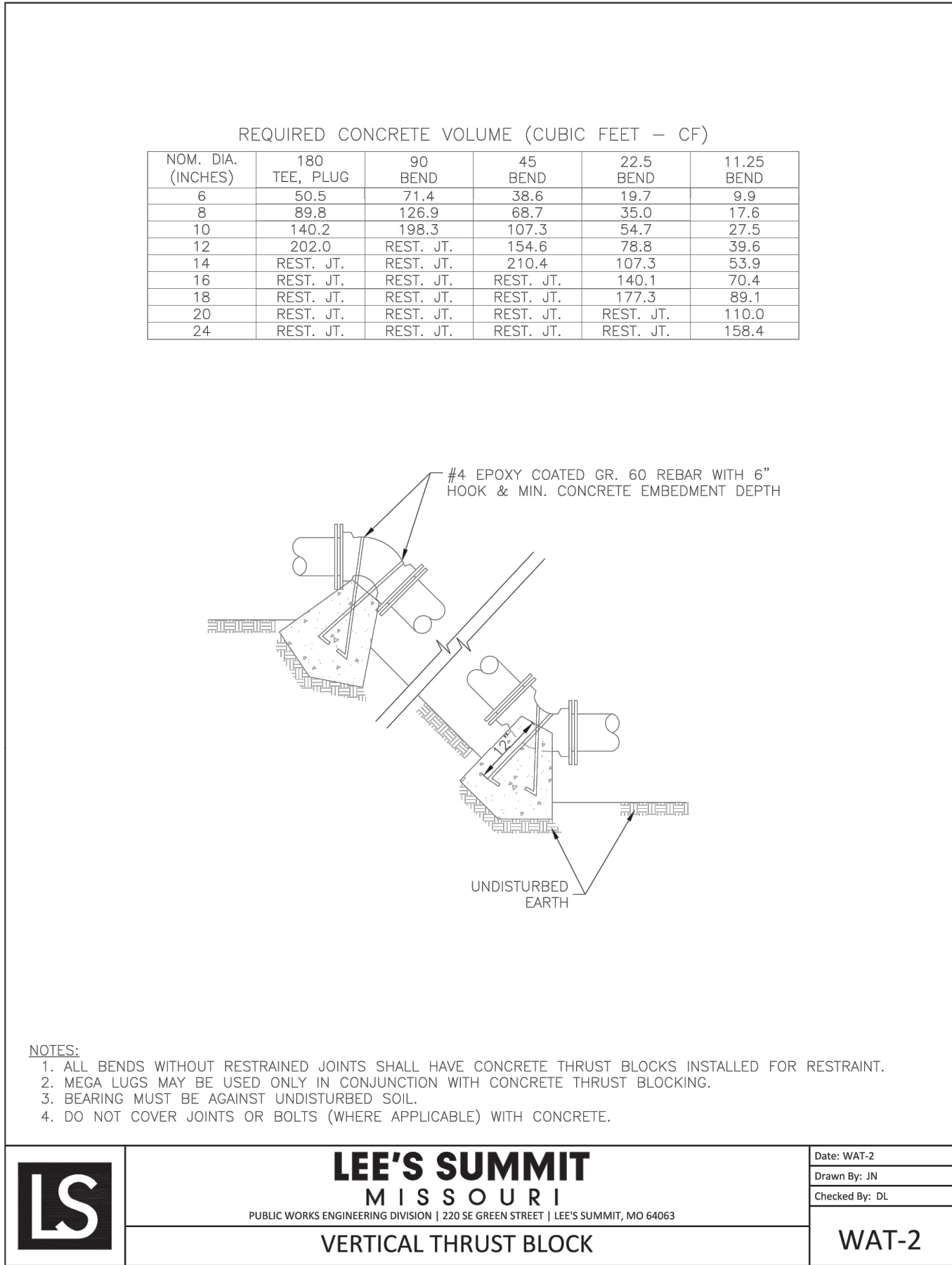
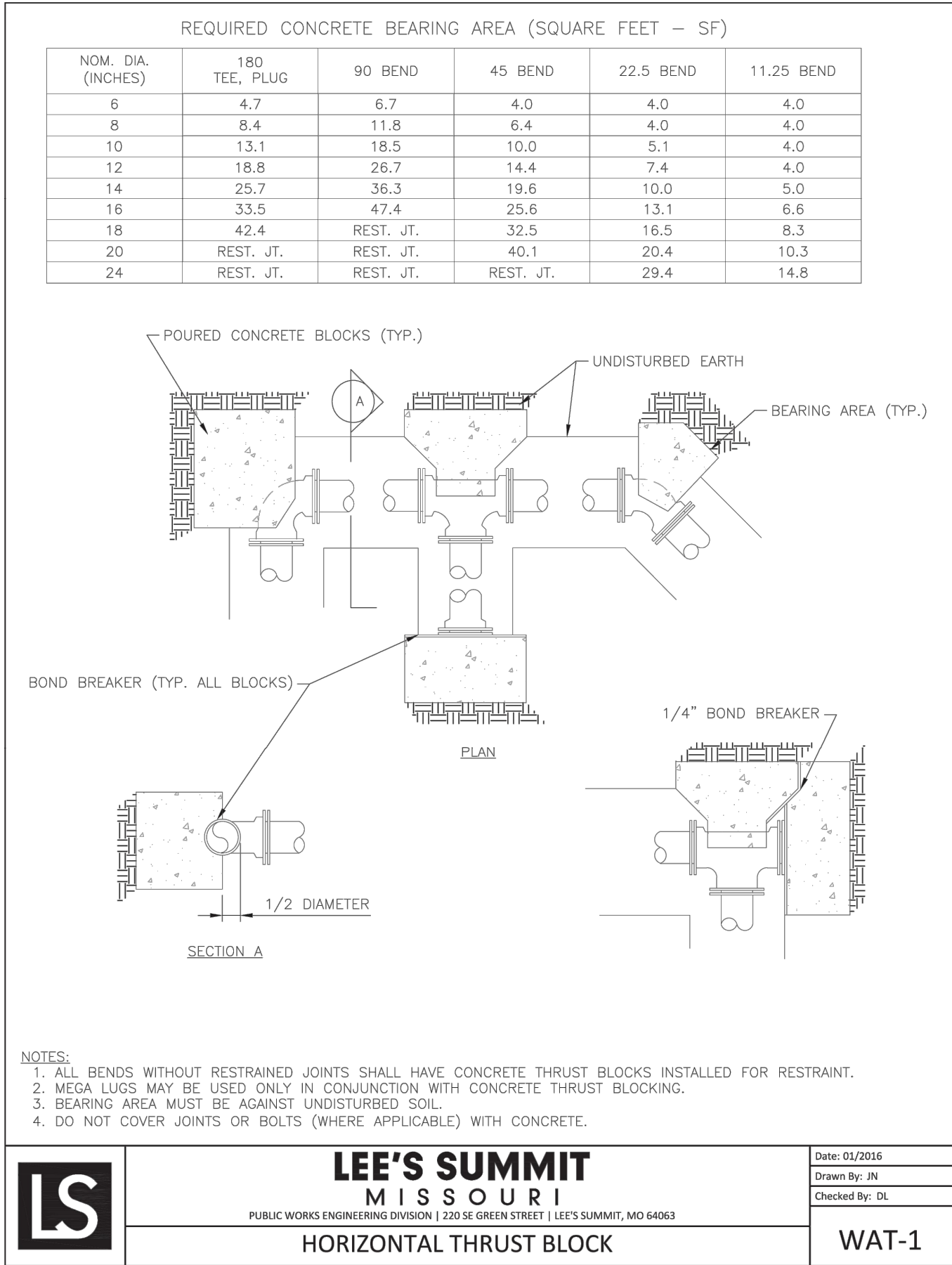
SMART DIGGING MEANS CALLING 811 BEFORE EACH JOB. WHETHER YOU ARE A HOMEOWNER OR A PROFESSIONAL EXCAVATOR, ONE CALL TO 811 GETS YOUR UNDERGROUND UTILITY LINES MARKED FOR FREE.

FREELAND and KAUFFMAN, INC.
Engineers & Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8916



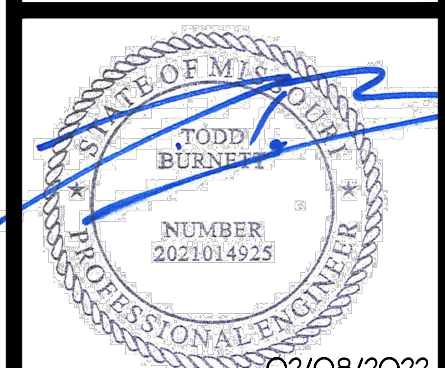
CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
CROSS DEVELOPMENT, CG LEE'S SUMMIT, LLC
4358 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

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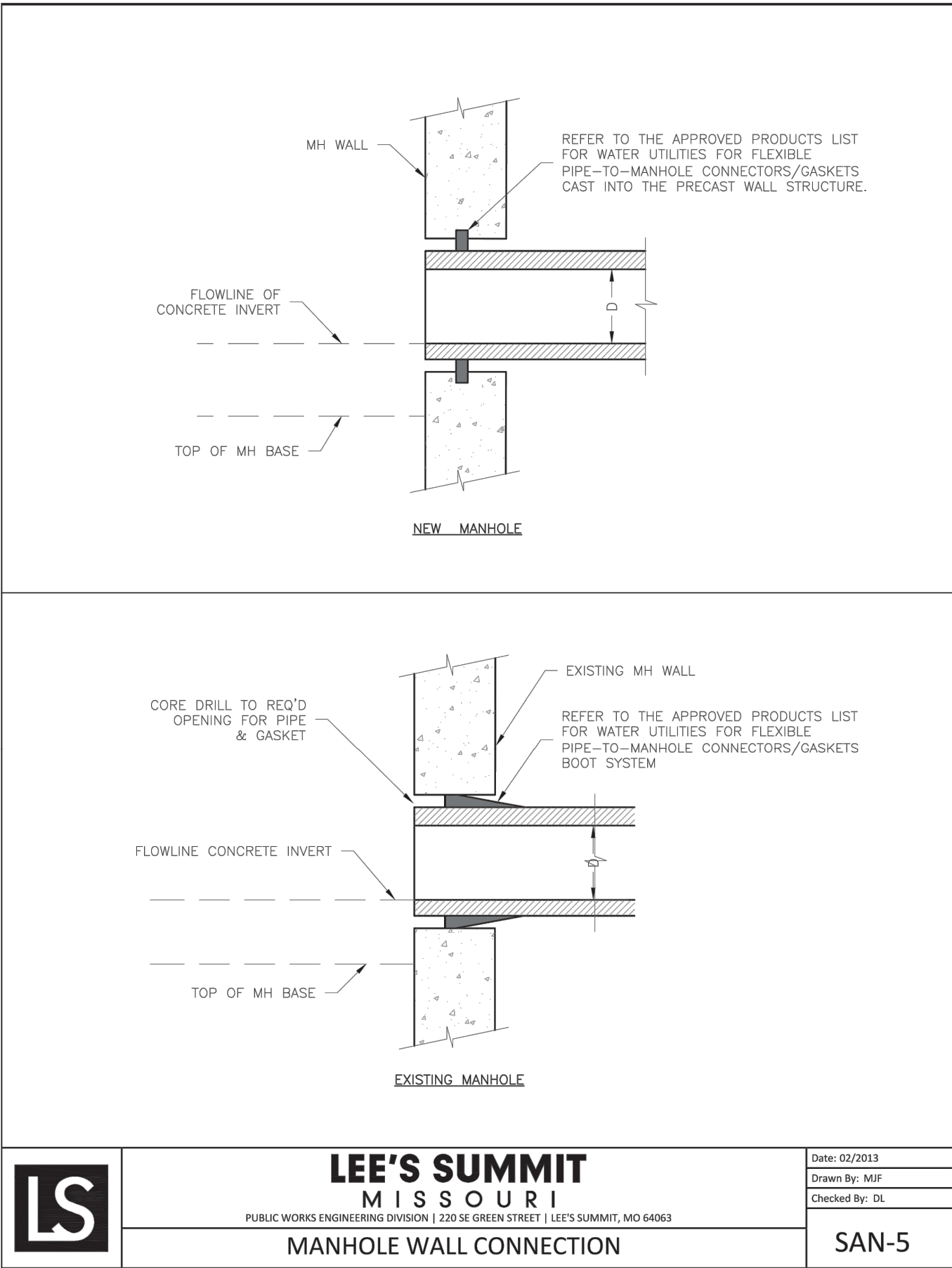
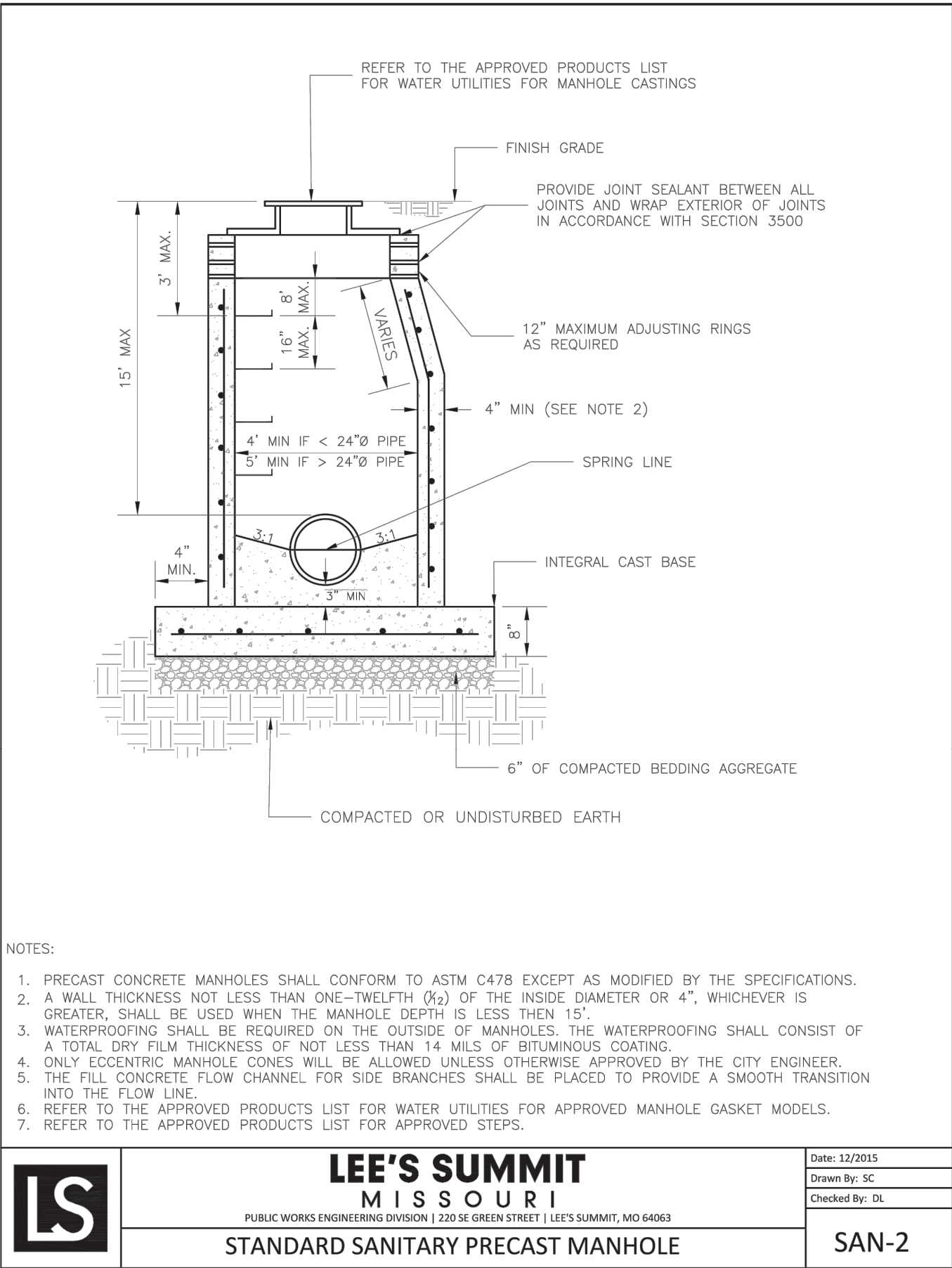
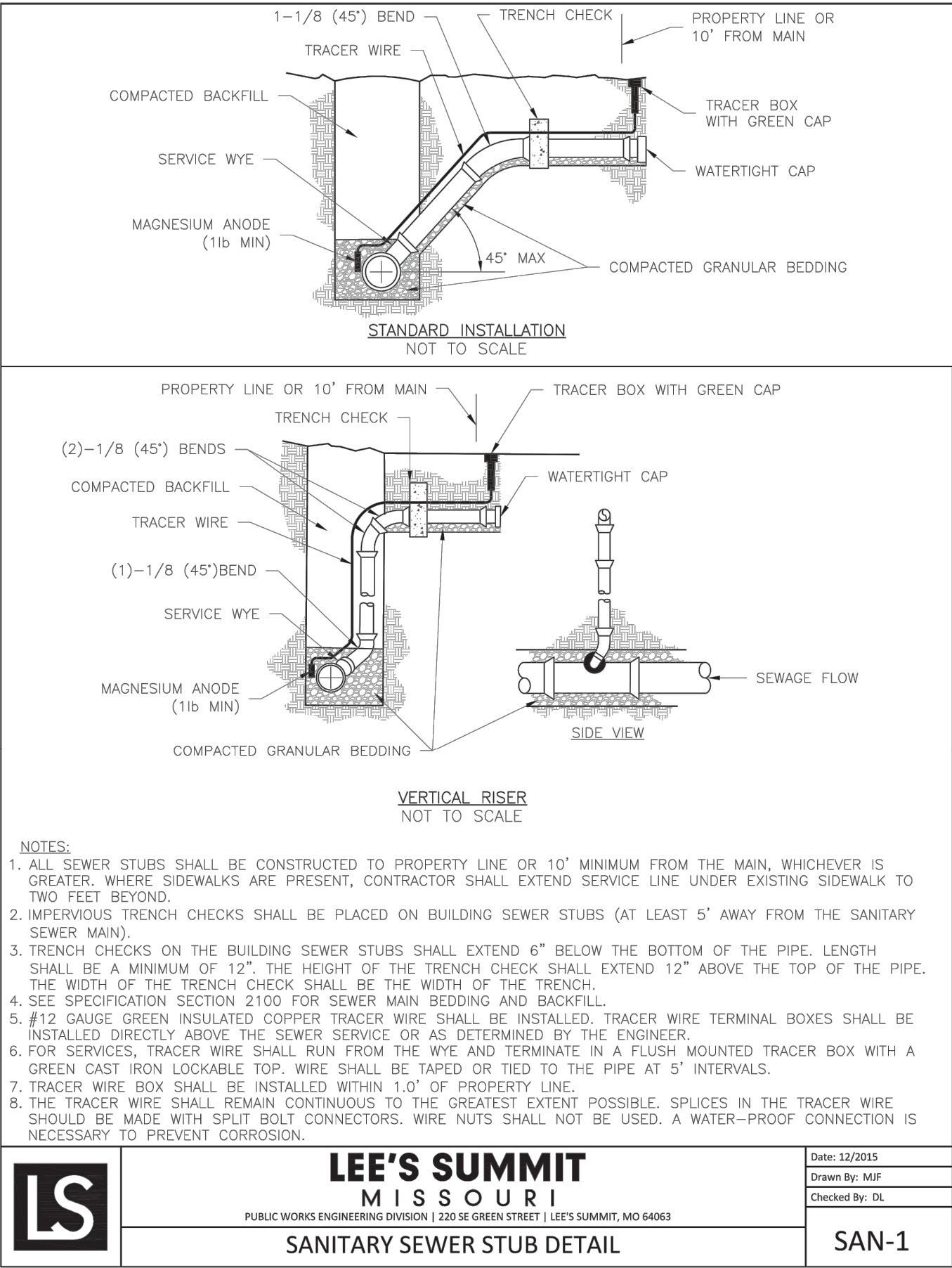


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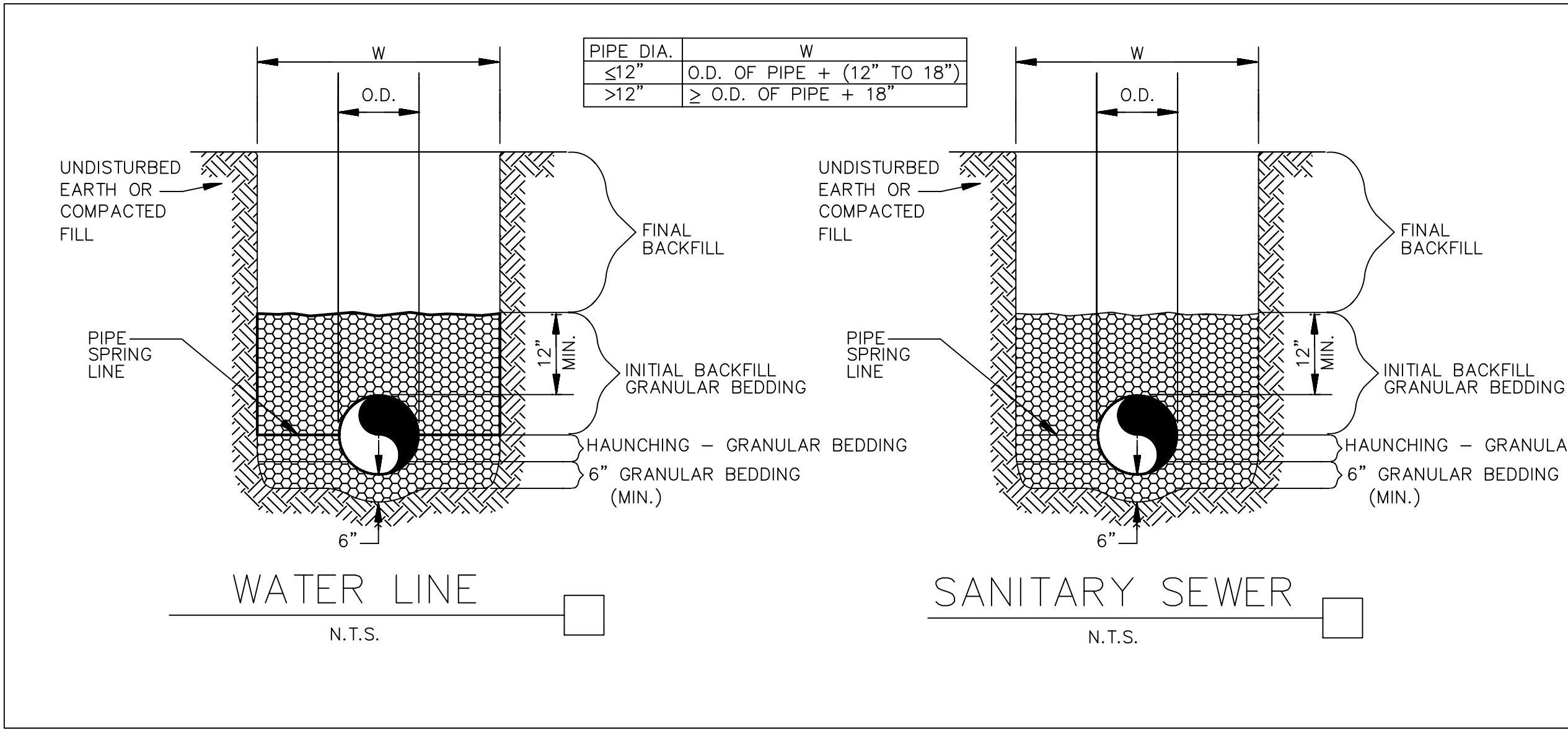
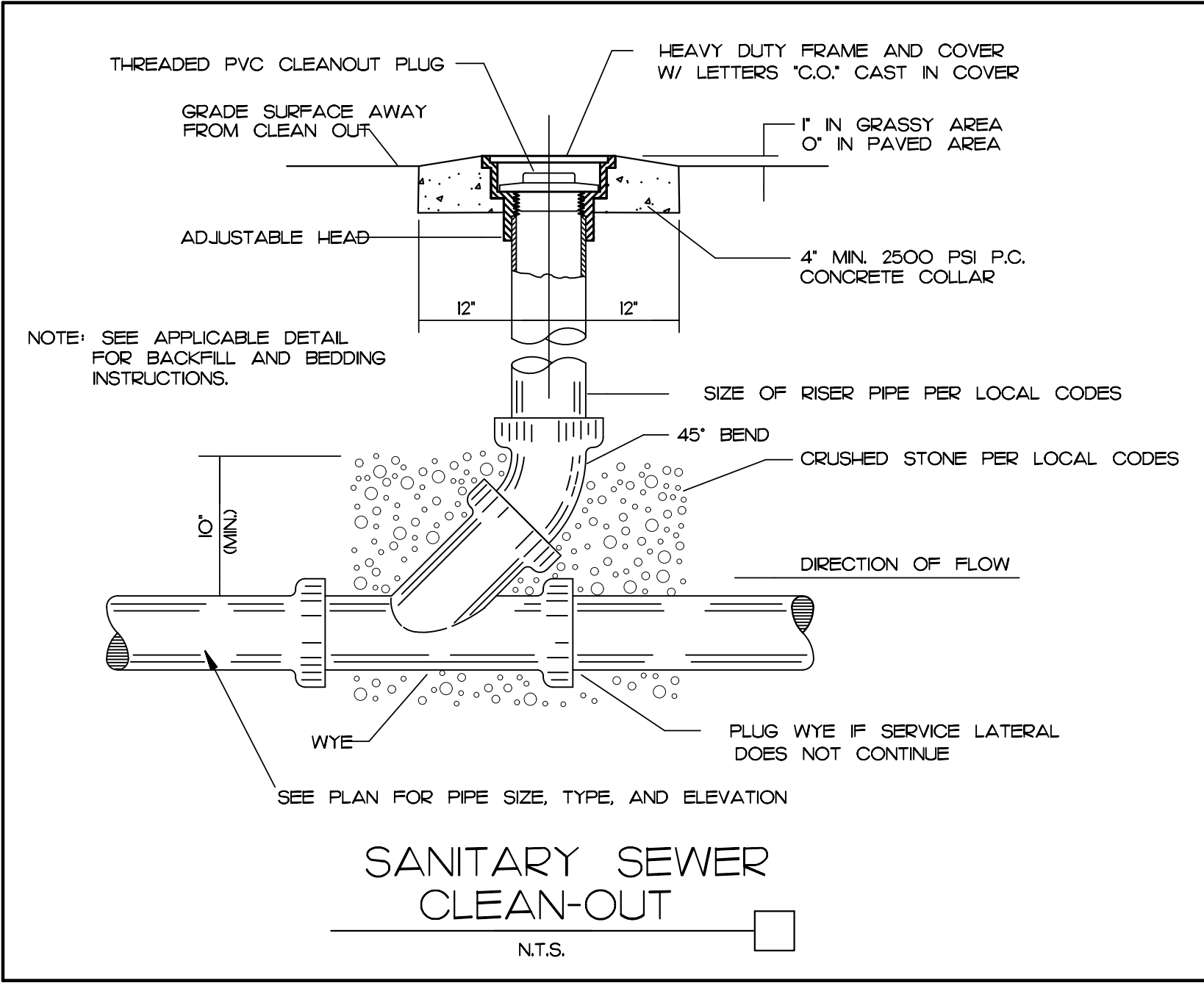
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RELEASED FOR CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
02/17/2022



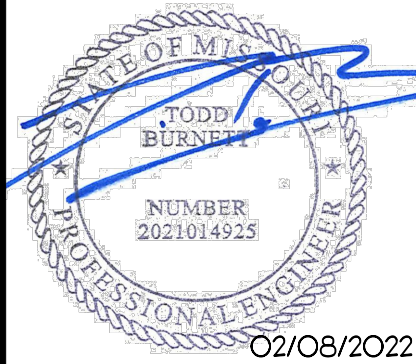
GENERAL NOTES

1. BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
2. HAUNCHING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR.
4. FINAL BACKFILL SHALL BE PER PROJECT SPECIFICATIONS AND PER THE PROJECT'S GEOTECHNICAL REPORT OF RECORD.
5. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
6. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
7. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
8. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

UTILITY TRENCH AND BEDDING

N.T.S.

FREELAND and KAUFFMAN, INC.
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209 West Stone Avenue
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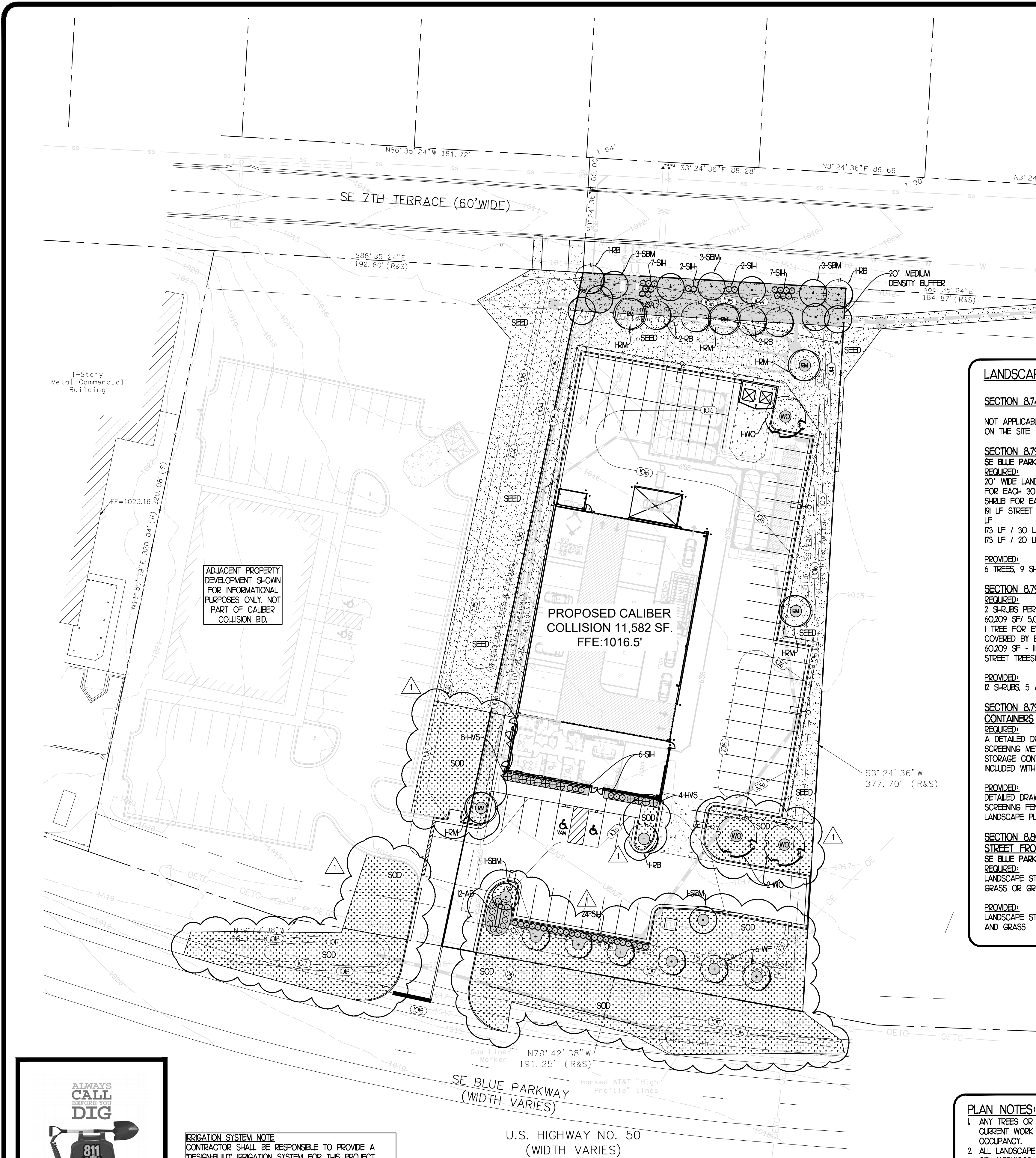


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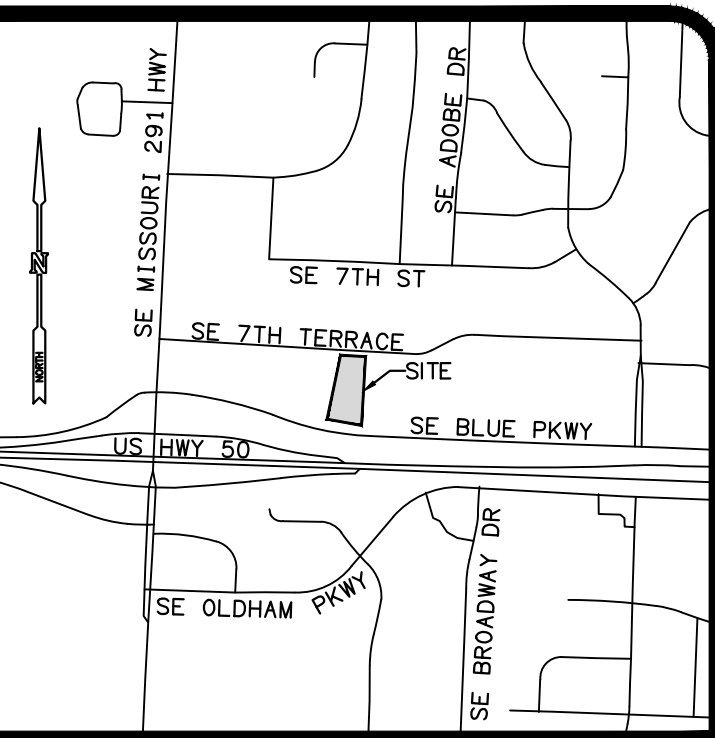
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UTILITY DETAILS



PLANT LIST							
	QUANTITY	SYMBOL	LABELED	SCIENTIFIC NAME	COMMON NAME	SIZE REQUIREMENTS	SPACING
TREES	3	WO	WO	QUERCUS P-ELLOS	WILLOW OAK	3" MIN. CALIPER, 14" MIN. HT, BEB	AS SHOWN
	5	RM	RM	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3" MIN. CALIPER, 14" MIN. HT, BEB	AS SHOWN
	7	RB	RB	CERCIS CANADENSIS	EASTERN REDBUD	3" MIN. CALIPER, 12" MIN. HT, BEB	AS SHOWN
	11	SBM	SBM	MAGNOLIA VIRGINICUS	SWEETBAY MAGNOLIA	3" MIN. CALIPER, 12" MIN. HT, BEB	AS SHOWN
	6	WF	WF	CHIONANTHUS VIRGINICUS	WHITE FRINGE TREE	3" MIN. CALIPER, 12" MIN. HT, BEB	AS SHOWN
SHRUBS	12	HVS	HVS	ITEA VIRGINICA 'HENRY'S GARNET'	HENRY'S GARNET VIRGINIA SWEETSPIRE	18"-24" BEB, OR 2-GAL. CONT.	4' O.C.
	48	SH	SH	ILEX GLABRA 'SHAMROCK'	SHAMROCK DWARF INK-BERRY HOLLY	24"-30" BEB, OR 5-GAL. CONT.	AS SHOWN
	12	AB	AB	CALICARPA AMERICANA	AMERICAN BEAUTYBERRY	18"-24" BEB, OR 2-GAL. CONT.	3'-4' O.C.



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As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
02/17/2022

LANDSCAPE CALCULATIONS

SECTION 8.740 TREE CONSERVATION

NOT APPLICABLE. THERE ARE NO EXISTING TREES ON THE SITE

SECTION 8.790A STREET FRONTAGE SE BLUE PARKWAY

REQUIRED:
20' WIDE LANDSCAPE STRIP PLANTED WITH 1 TREE FOR EACH 30' OF STREET FRONTAGE AND 1 SHRUB FOR EACH 20' OF STREET FRONTAGE.
19 LF STREET FRONTAGE MINUS 18" DRIVEWAY = 173 LF
173 LF / 30 LF = 6 TREES
173 LF / 20 LF = 9 SHRUBS

PROVIDED:
6 TREES, 9 SHRUBS

SECTION 8.790B OPEN YARD AREA

REQUIRED:
2 SHRUBS PER 5,000 SF OF TOTAL LOT AREA
60,209 SF / 5,000 SF = 12 SHRUBS
1 TREE FOR EVERY 5,000 SF OF LOT AREA NOT COVERED BY BUILDINGS/ STRUCTURES
60,209 SF - 16,000 SF = 44,209 SF
44,209 SF / 5,000 SF = 9 TREES (IN ADDITION TO STREET TREES)

PROVIDED:
12 SHRUBS, 5 ADDITIONAL TREES

SECTION 8.790C TRASH STORAGE CONTAINERS

REQUIRED:
A DETAILED DRAWING OF ENCLOSURE AND SCREENING METHODS TO BE USED FOR TRASH STORAGE CONTAINERS ON THE PROPERTY SHALL BE INCLUDED WITH THE LANDSCAPE PLAN

PROVIDED:
DETAILED DRAWING OF TRASH ENCLOSURE AND SCREENING FENCE ENCLOSURE SHOWN ON LANDSCAPE PLAN

SECTION 8.800 LANDSCAPE STRIPS ALONG STREET FRONTAGES SE BLUE PARKWAY

REQUIRED:
LANDSCAPE STRIP PLANTED WITH TREES, SHRUBS, GRASS OR GROUND COVER.

PROVIDED:
LANDSCAPE STRIP PLANTED WITH TREES, SHRUBS, AND GRASS

SECTION 8.810 PARKING LOT LANDSCAPING - TREES

REQUIRED:
LANDSCAPE ISLANDS/ OTHER PLANTING AREAS LOCATED WITHIN PARKING LOT SHALL CONSTITUTE 5% OF ENTIRE AREA DEVOTED TO PARKING SPACES, AISLES & DRIVES. ISLANDS SHALL BE LOCATED AT END OF EVERY PARKING BAY AND PLANTED WITH SHADE TREES.
9,985 X 0.05 = 500 SF PARKING LOT ISLANDS

PROVIDED:
ISLANDS LOCATED AT END OF EVERY PARKING BAY PLANTED WITH TREES.
1,007 SF INTERIOR PARKING LOT LANDSCAPED AREA PROVIDED

SECTION 8.820 SCREENING - PARKING LOT

REQUIRED:
EVERGREEN SCREENING (25' TALL) PROVIDED ALONG EDGE OF PARKING LOT PARALLEL TO THE STREET - PLANTED WITH 12 SHRUBS PER 40 LF. SHRUBS SHALL BE AT LEAST 18" AT TIME OF PLANTING.

PROVIDED:
EVERGREEN SHRUBS (CONTINUOUS ROW)

SECTION 8.890 BUFFER/ SCREEN REQUIREMENTS SE 7TH TERRACE

REQUIRED:
20' WIDE SCREEN 18" (MEDIUM DENSITY BUFFER (CPZ ZONING ADJACENT TO P1 ZONING))
1 SHADE TREE PER 1,000 SF
1 ORNAMENTAL TREE PER 500 SF
1 EVERGREEN TREE PER 300 SF
1 SHRUB PER 200 SF
15 LF X 20 LF = 2,700 SF
2,700 SF / 1,000 = 3 SHADE TREES
2,700 SF / 500 = 6 ORNAMENTAL TREES
2,700 SF / 300 = 9 EVERGREEN TREES
2,700 SF / 200 = 14 SHRUBS

PROVIDED:
3 SHADE TREES
6 ORNAMENTAL TREES
9 EVERGREEN TREES
14 EVERGREEN SHRUBS

WEED BARRIER NOTE
PLACE BLACK COMMERCIAL GRADE WEED BARRIER FILTER FABRIC IN ALL LANDSCAPE TREE, SHRUB, AND GROUND COVER PLANTING AREAS. ANCHOR FABRIC WITH COMMERCIAL GRADE LANDSCAPE FABRIC ANCHOR PINS.

PLAN NOTES:

- ANY TREES OR SHRUBS THAT ARE DEAD, DYING OR MISSING OUTSIDE THE SCOPE OF THE CURRENT WORK WILL NEED TO BE REPLACED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- ALL LANDSCAPE BEDS TO HAVE NEATLY TRENCHED BED EDGE AND HAVE 4" MINIMUM DEPTH OF HARDWOOD PINE BARK MULCH.
- ALL TREES AND SHRUBS SHALL BE COORDINATED WITH LIGHTING PLAN PRIOR TO INSTALLATION.
- ALL NEW PLANT MATERIAL AND SOD AREAS SHALL BE IRRIGATED.
- ALL SHRUBS TO BE 3' BACK OF CURB.
- ALL AREAS OF DISTURBANCE OUTSIDE OF LANDSCAPE BEDS SHALL BE REPAIRED WITH REBEL III PESQUE SEED OR SOD.
- ANY UTILITY STRUCTURE, LIGHT POLES, SIGN, OR OTHER FEATURE MAY NOT BE ADDED TO ANY REQUIRED LANDSCAPE ISLAND IN SUCH A MANNER THAT WOULD DISPLACE THE REQUIRED ELEMENT(S) (TREES, SHRUBS, ETC.)
- PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING MATERIALS, INCLUDING TURF, AND IRRIGATION MATERIALS BOTH ON SITE, AND INSIDE THE ROW.

LANDSCAPE NOTES

- ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERMEN INC.
- ALL PLANTS MUST BE HEALTHY, WELL BRANCHED, STRAIGHT TRUNKED, FULL HEADED, FREE OF DISEASE AND INSECT INFESTATION, AND MEET ALL SPECIFIED REQUIREMENTS.
- ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
- ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
- ALL TREES MUST BE GUIED AND STAKED AS SHOWN IN THE DETAILS.
- ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRONG THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL PLANTING AND LAWN AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
- THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
- ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
- ALL PLANT BEDS, TREES, SHRUB MASSES, ETC. SHALL RECEIVE 3" OF SHREDED HARDWOOD BARK MULCH. THIS INCLUDES A 4 FOOT DIAMETER MULCH RING AROUND ALL PROPOSED TREES.
- LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF UTILITY LINES IN AND ADJACENT TO THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD.
- SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
- THE CONTRACTOR SHALL PERFORM A SOIL TEST ON THE EXISTING AND PROPOSED TOP SOIL AND APPLY LIME AND FERTILIZER AS RECOMMENDED.
- ALL DISTURBED AREAS NOT TO RECEIVE PLANTINGS SHALL BE TOP SOILED, LIMED, AND FERTILIZED ACCORDING TO THE SOIL TEST REPORT. THESE GRASS AREAS SHALL BE SEEDDED WITH TALL TURF TYPE PESQUE SEED AS SHOWN ON THE PLAN. THE CONTRACTOR SHALL WATER AND MAINTAIN ALL GRASS AREAS UNTIL A HEALTHY STAND IS ESTABLISHED.
- ALL PLANTING AREAS, INCLUDING PARKING LOT ISLANDS, SHALL CONTAIN SOILS SUITABLE FOR PLANTING. SOILS SHALL BE CLEAN AND FREE OF ALL CONSTRUCTION MATERIALS. THE TOP TWO FEET OF SOIL SHALL BE LOOSE. IF PREVIOUSLY COMPACTED, IT SHALL BE LOOSENEED BY TILLING OR OTHER MEASURE TO A DEPTH OF TWO FEET. THE TOP SIX INCHES OF SOIL SHALL BE CLEAN TOPSOIL, OR OTHER CLEAN SOILS AMENDED WITH ORGANIC MATERIAL. THIS REQUIREMENT SHALL BE MET PRIOR TO THE INSTALLATION OF LANDSCAPING.
- THE CONTRACTOR SHALL SPOIL ANY EXCESS TOPSOIL LOCATED ON THE SITE THAT IS NOT REQUIRED TO PERFORM THE LANDSCAPE OPERATION. ALSO, IF INSUFFICIENT TOPSOIL IS PRESENT ON THE SITE THE CONTRACTOR IS REQUIRED TO HAVE TOPSOIL BROUGHT INTO THE SITE FOR THE LANDSCAPE OPERATION.
- THE CONTRACTOR SHALL INCLUDE IN HIS BID PACKAGE REMOVAL AND EXCAVATION OF ROCK AS REQUIRED DURING TREE PLANTING TO INSURE SURVIVAL OF THE TREES AND TO PROVIDE A PLANTING PIT AS DIMENSIONED ON THE PLANTING DETAILS.
- ALL LANDSCAPING FOR THE PROJECT SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF CERTIFICATE OF OCCUPANCY. CONTRACT THE CITY OF LEE'S SUMMIT AT 86-969-2200 FOR THE SITE INSPECTION UPON COMPLETION OF LANDSCAPE INSTALLATION.

LANDSCAPE PLAN



REVISIONS	BY
02/08/2022 REVISION #1	TMB

FREELAND and KAUFFMAN, INC.
Engineers * Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
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fax 864-233-8916

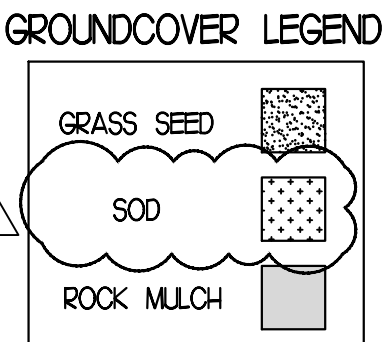


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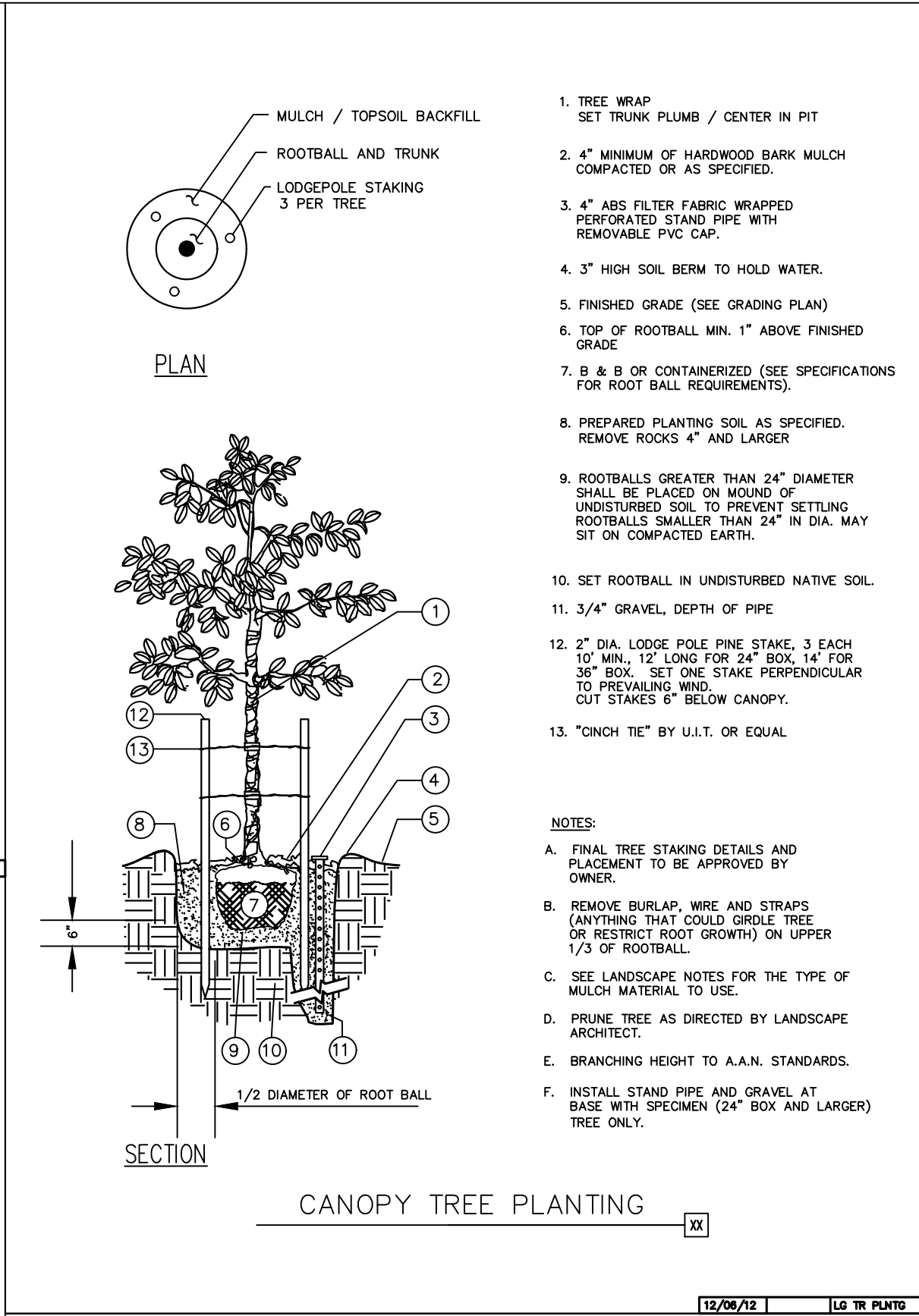
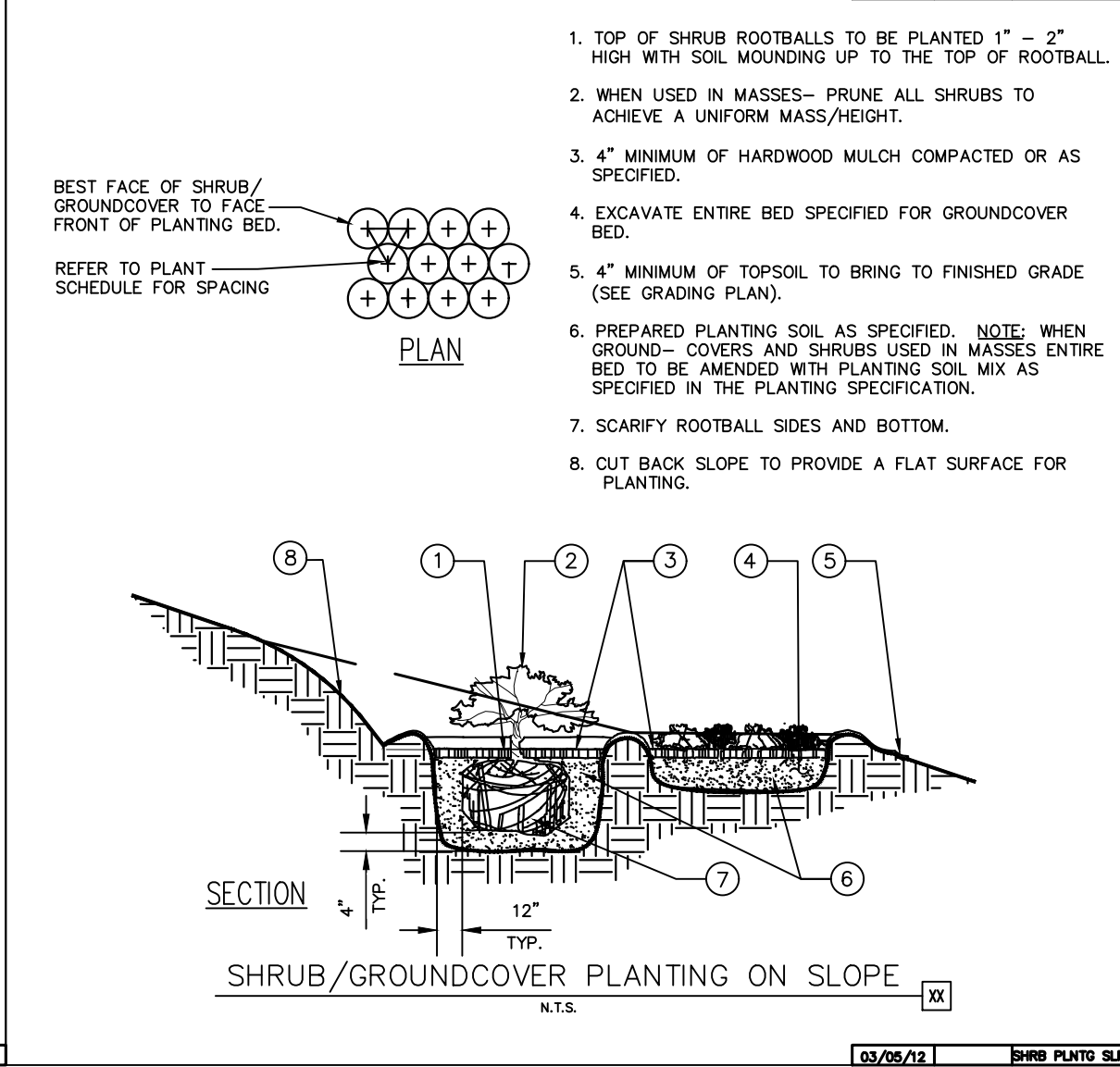
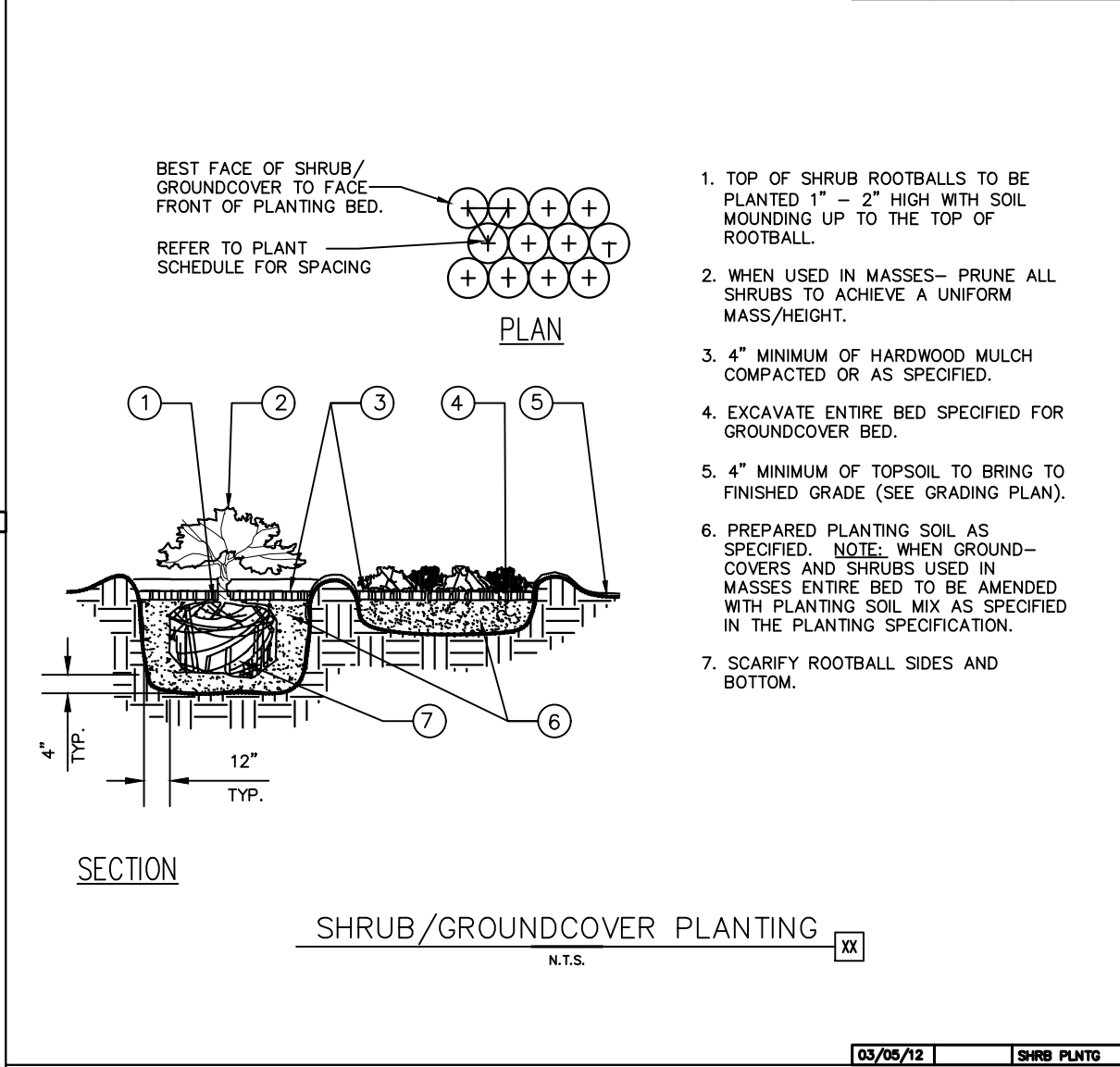
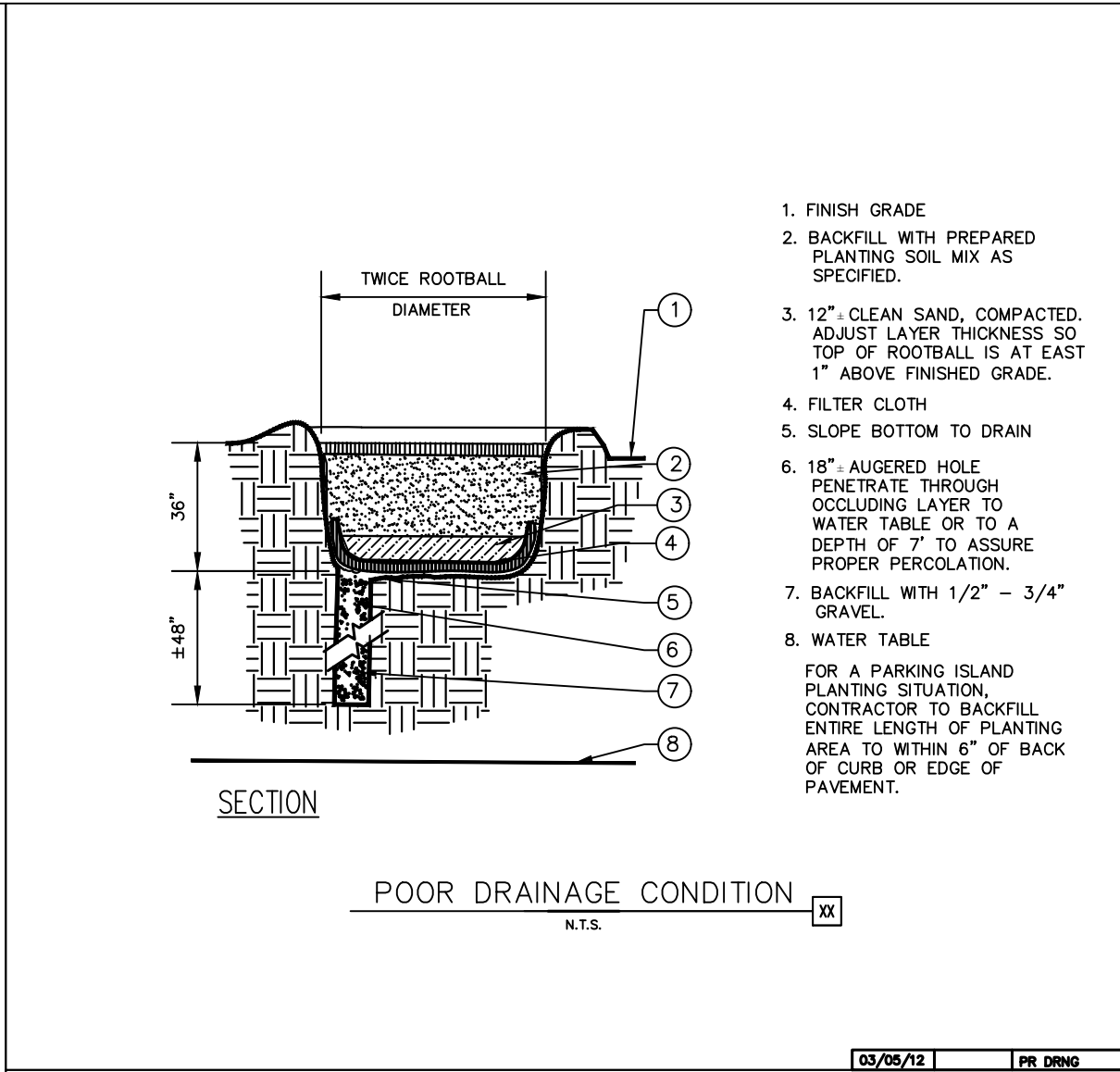
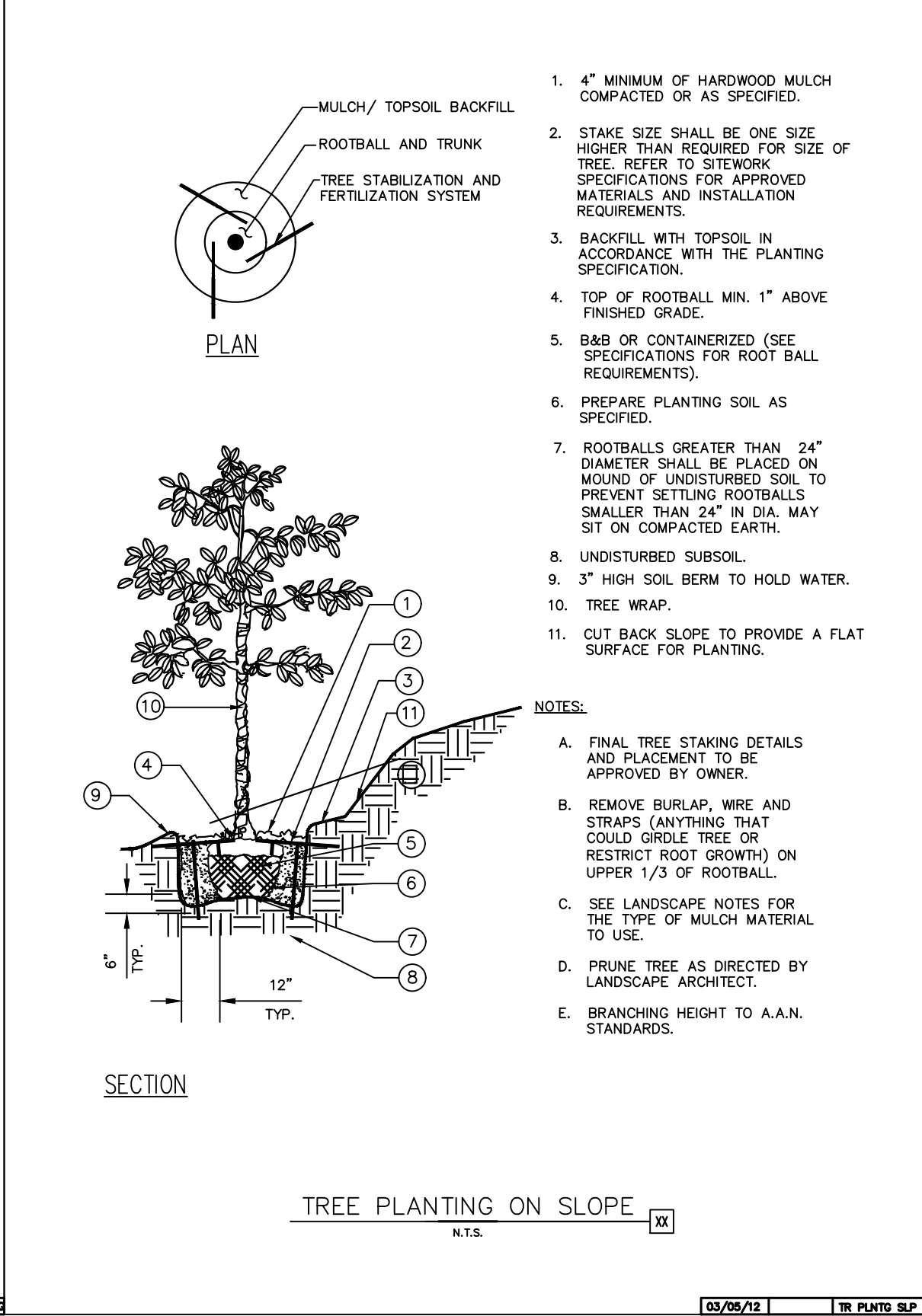
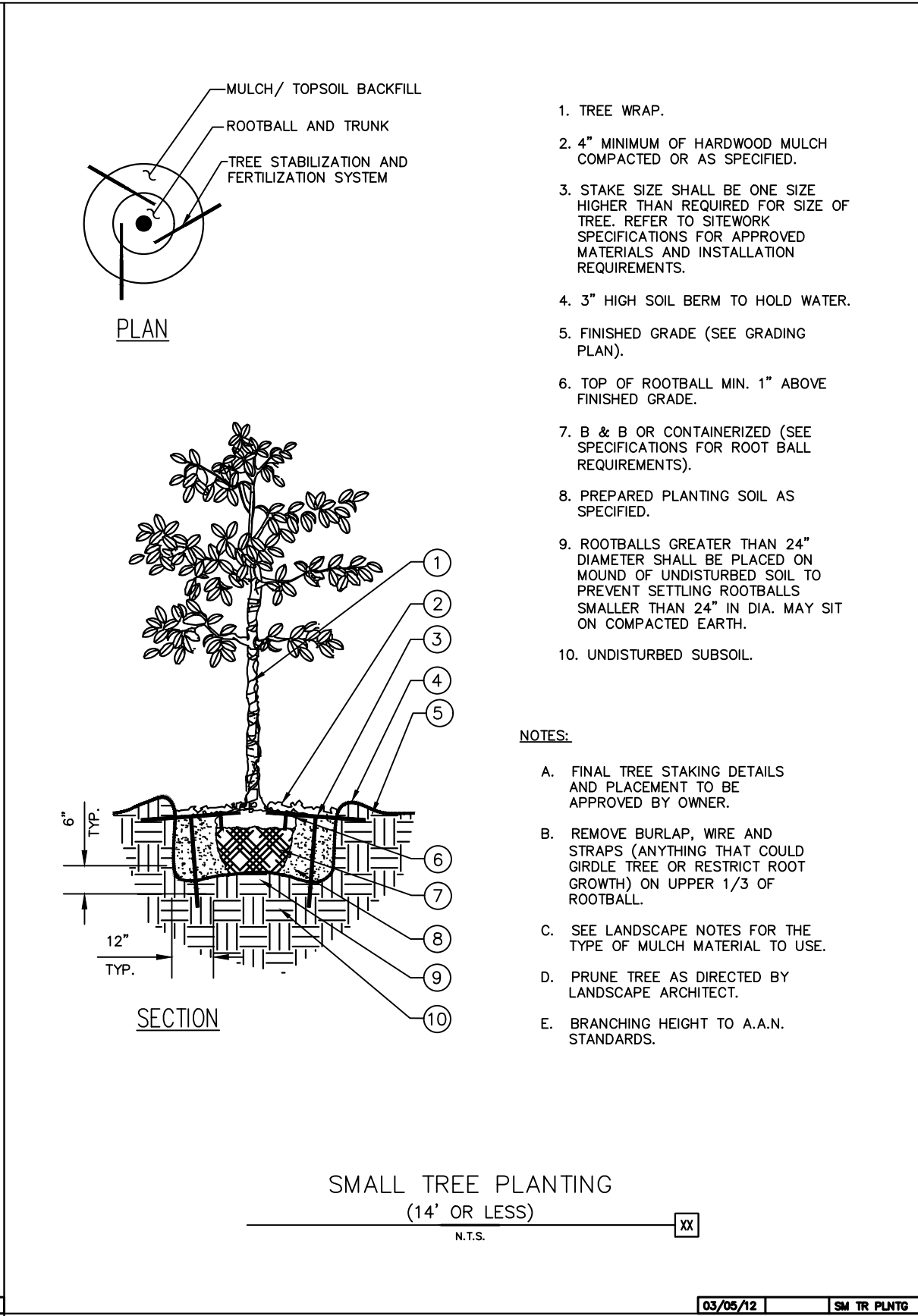
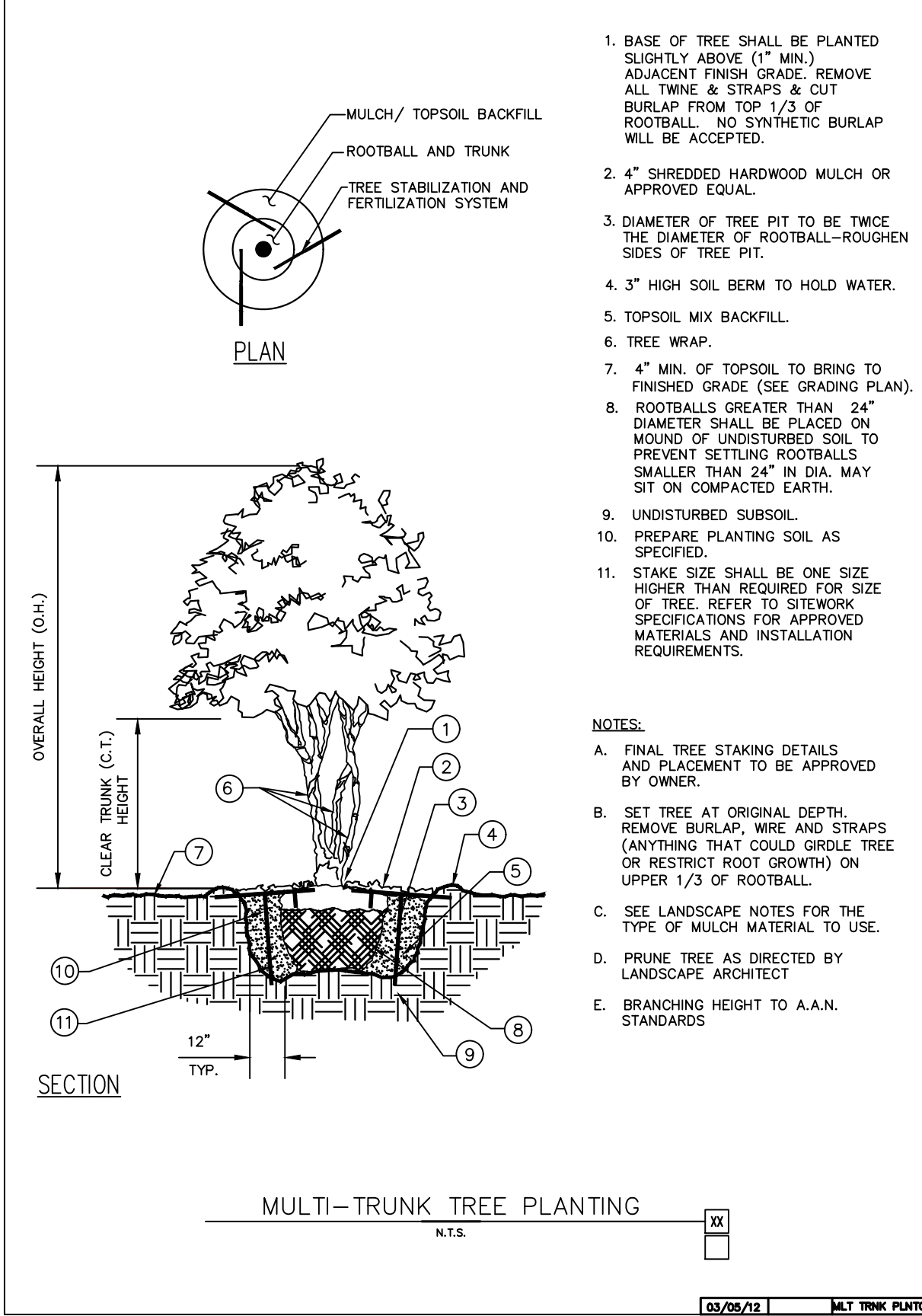
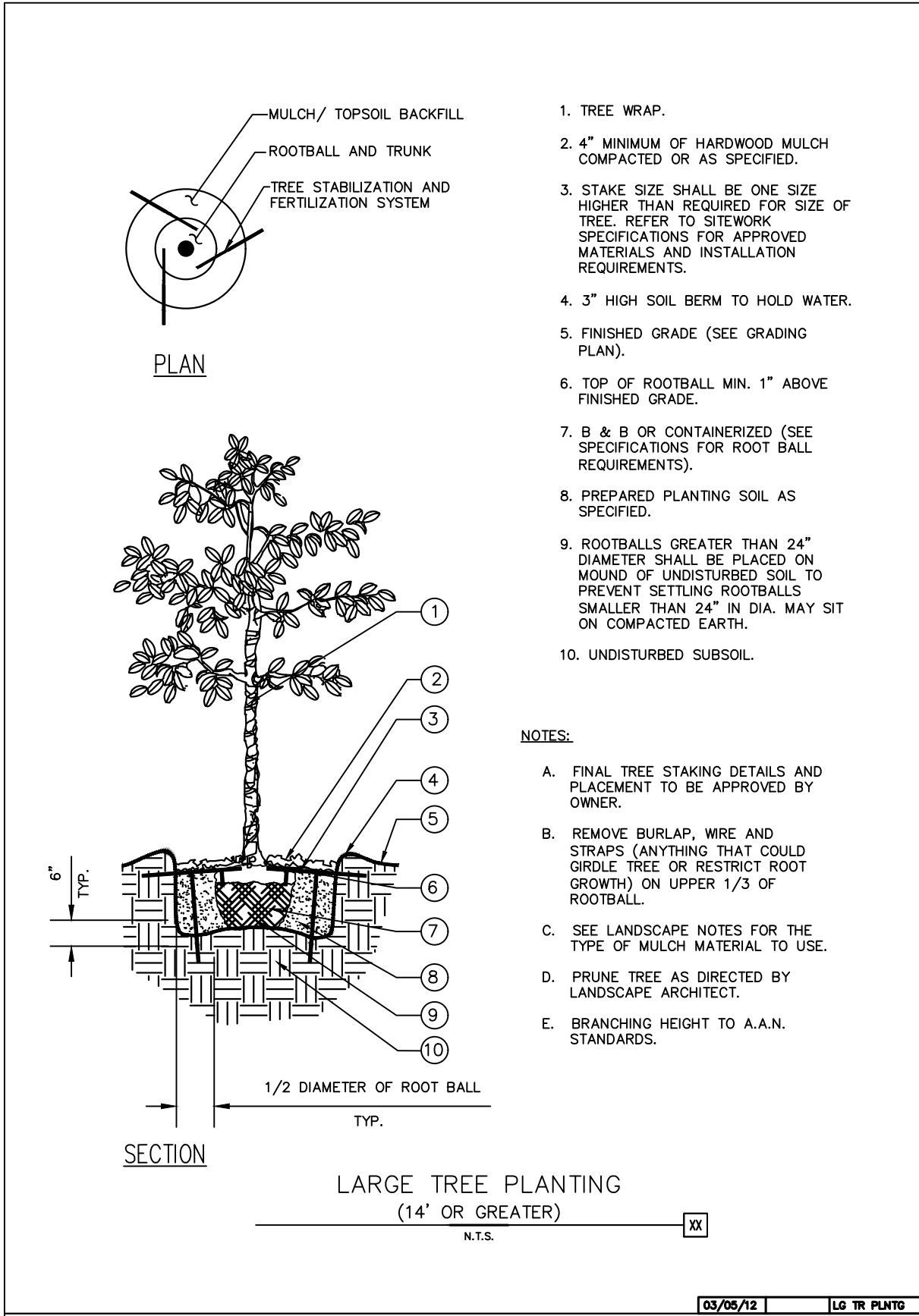


IRRIGATION SYSTEM NOTE
CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A 'DESIGNBUILT' IRRIGATION SYSTEM FOR THIS PROJECT. THE SYSTEM SHALL BE AUTOMATICALLY CONTROLLED AND SHALL PROVIDE ADEQUATE COVERAGE FOR ALL GRASS AND OTHER PLANTINGS. CONTROLLER SHALL BE LOCATED INSIDE THE BUILDING AT A LOCATION APPROVED BY THE OWNER. REFER TO THE UTILITY PLAN FOR THE IRRIGATION SOURCE/METER LOCATION.



PERMANENT SEEDING

SEEDING RATE:
PESQUE GRASS (HULLED) (ALONE) -
8-12 LBS. PER ACRE



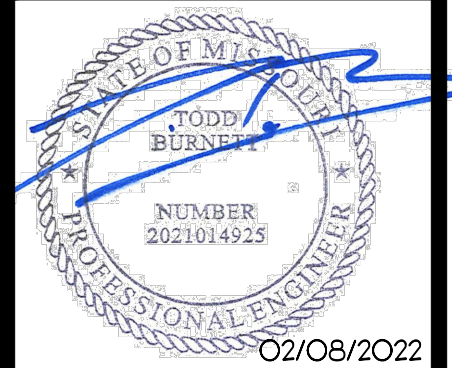
LANDSCAPE ARCHITECT INSPECTION REQUIREMENTS & NOTES:

- ALL PLANT MATERIAL MUST BE INSPECTED AND ACCEPTED BY THE LANDSCAPE ARCHITECT FOR THIS PROJECT (FREELAND AND KAUFFMAN, INC.) IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. THIS INCLUDES THE FOLLOWING PROCEDURE:
1. THE GENERAL CONTRACTOR SHALL ARRANGE AN INSPECTION OF ALL TREES AT THE APPROPRIATE NURSERY (IES) WHICH WILL SUPPLY THEM. ALL TREES FOR USE ON THIS PROJECT SHALL BE IDENTIFIED AND FLAGGED AT THE NURSERY. THE LANDSCAPE CONTRACTOR SHALL BE PRESENT.
 2. AT THE SOLE DISCRETION OF THE LANDSCAPE ARCHITECT, PHOTOS OF SELECT TREES MAY BE ACCEPTED IN PLACE OF A PHYSICAL INSPECTION. IF PHOTOS ARE ACCEPTED, A SEPARATE PHOTO OF EACH PROPOSED TREE MUST BE PROVIDED.
 3. THE LANDSCAPE ARCHITECT SHALL BE CONTACTED TO INSPECT THE PLACEMENT OF TOPSOIL WITHIN ALL PARKING LOT ISLANDS AND PLANTING AREAS, PRIOR TO PLANTING OF ANY LANDSCAPE MATERIAL.
 4. THE LANDSCAPE ARCHITECT SHALL INSPECT PLANT MATERIAL UPON DELIVERY TO THE SITE, AND PRIOR TO PLANTING, FOR ACCEPTANCE. CONTRACTOR SHALL PROVIDE A SPECIFIC DELIVERY DATE OF ALL MATERIAL, AND SHALL MAKE EFFORTS TO INSURE THAT MATERIAL FROM SEPARATE NURSERIES IS DELIVERED AT THE SAME TIME.
 5. THE LANDSCAPE ARCHITECT SHALL PERFORM A SUBSTANTIAL COMPLETION INSPECTIONS. CONTRACTOR SHALL PROVIDE A SCHEDULE OF PLANT INSTALLATION.
 6. THE LANDSCAPE ARCHITECT SHALL PERFORM A FINAL LANDSCAPE INSPECTION WITHIN 30 DAYS OF THE CONTRACTOR'S SUBSTANTIAL COMPLETION DATE. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF THE SUBSTANTIAL COMPLETION DATE.
 7. ALL REQUIRED LANDSCAPING SHALL MEET THE MINIMUM PLANTING STANDARDS AND BE MAINTAINED IN ACCORDANCE WITH SECTION 7-II-3 (F) OF THE CITY OF ASHEVILLE'S UNIFIED DEVELOPMENT ORDINANCES. A DIVERSE PLANT LIST SHALL BE PROVIDED (AS PER THIS PLAN) SO THAT NO ONE SPECIES IS OVER PLANTED AND TO ELIMINATE WIDESPREAD DISEASE BETWEEN THE LIKE SPECIES.

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CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
02/17/2022

REVISIONS	BY

FREELAND and KAUFFMAN, INC.
Engineers * Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8916



CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
CROSS DEVELOPMENT, CG LEE'S SUMMIT, LLC
4388 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

DRAWN
BAC
CHECKED
TMB
DATE
11/7/2021
SCALE

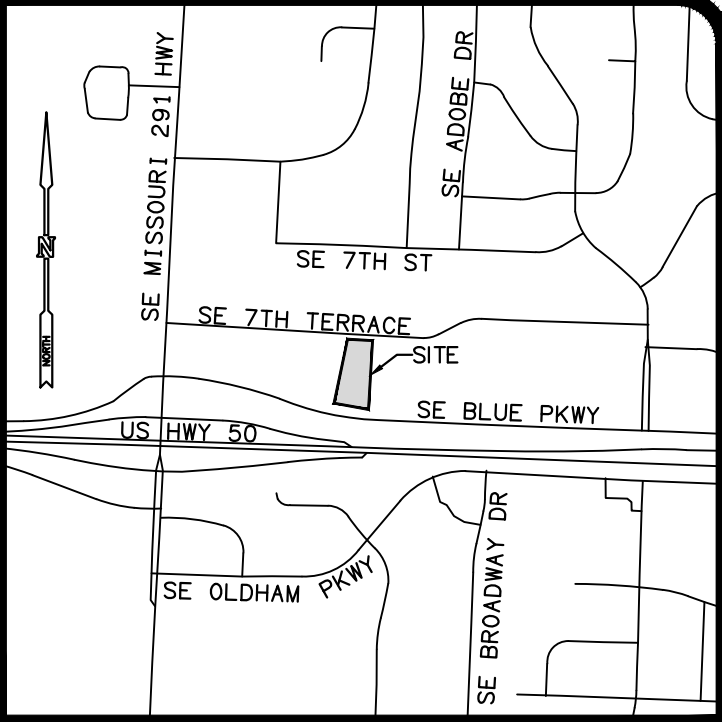
DRAWING

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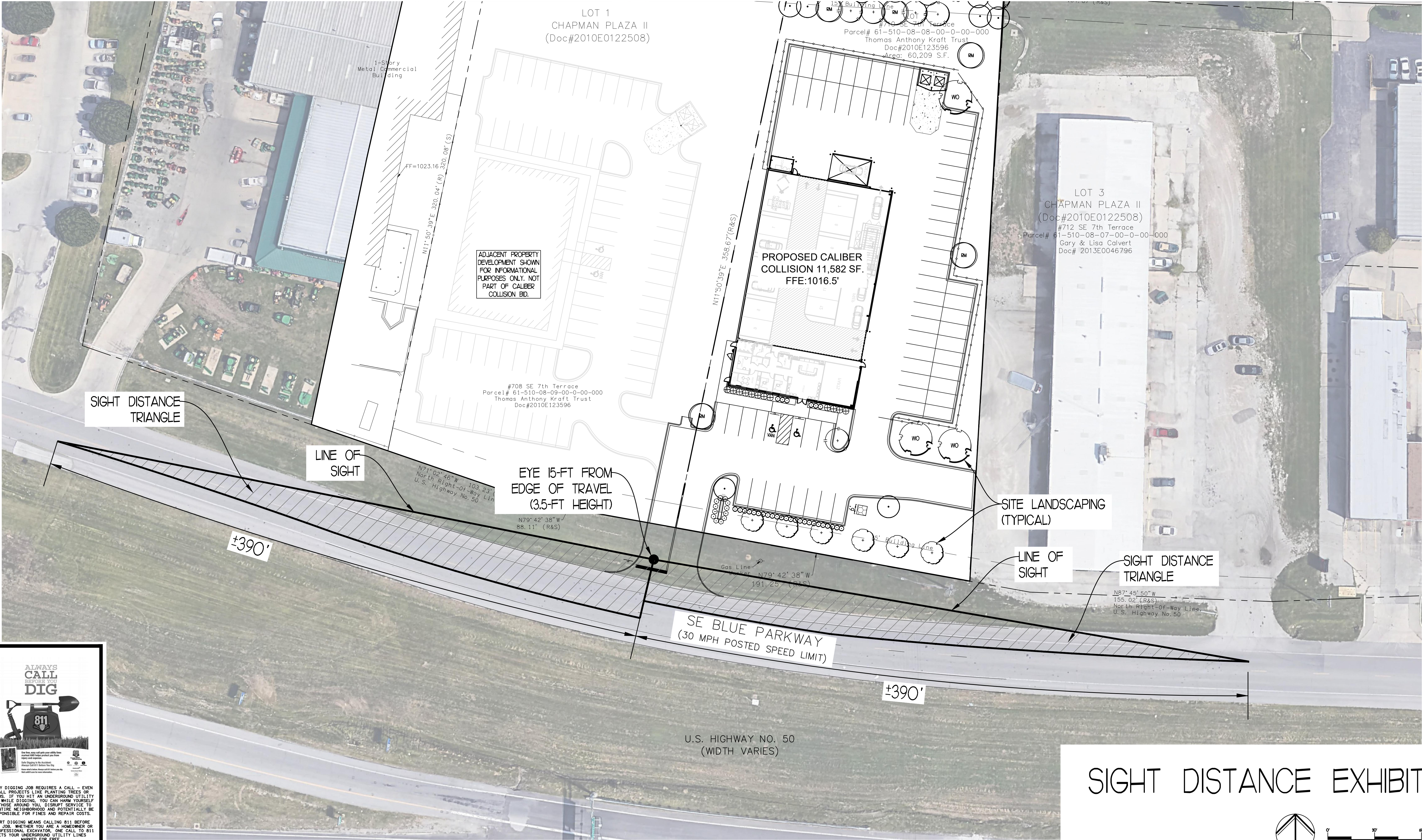
NOTES:
POSTED SPEED LIMIT OF SE BLUE
PARKWAY AT DEVELOPMENT IS 35-MPH.

LEGEND

SYMBOL	DESCRIPTION
	PROPOSED SIGHT DISTANCE TRIANGLE
	PROPOSED TREES



REVISIONS	BY



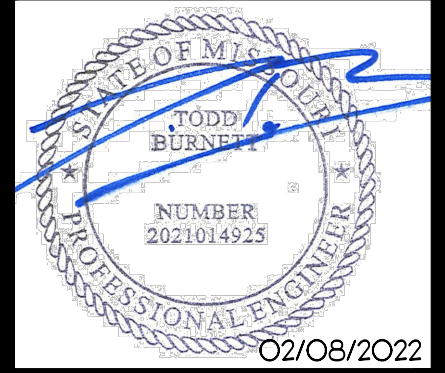
ALWAYS
CALL
BEFORE YOU
DIG
811

THE 811 SERVICE IS A FREE, NATIONAL SERVICE THAT HELPS YOU IDENTIFY AND MARK地下 UTILITY LINES BEFORE YOU DIG. IT'S THE EASIEST WAY TO AVOID ACCIDENTS, DAMAGE TO UTILITY LINES, AND COSTLY REPAIRS.

EVERY DIGGING JOB REQUIRES A CALL - EVEN SMALL PROJECTS LIKE PLANTING TREES OR SHEDS. IF YOU HIT AN UNDERGROUND UTILITY LINE WHILE DIGGING, YOU CAN HARM YOURSELF OR THOSE AROUND YOU, DISRUPT SERVICE TO AN ENTIRE NEIGHBORHOOD AND POTENTIALLY BE RESPONSIBLE FOR FINES AND REPAIR COSTS.

SMART DIGGING MEANS CALLING 811 BEFORE EACH JOB. WHETHER YOU ARE A HOMEOWNER OR A PROFESSIONAL EXCAVATOR, ONE CALL TO 811 GETS YOUR UNDERGROUND UTILITY LINES MARKED FOR FREE.

FREELAND and KAUFFMAN, INC.
Engineers * Landscape Architects
209 West Stone Avenue
Greenville, South Carolina 29609
864-233-5497
fax 864-233-8916

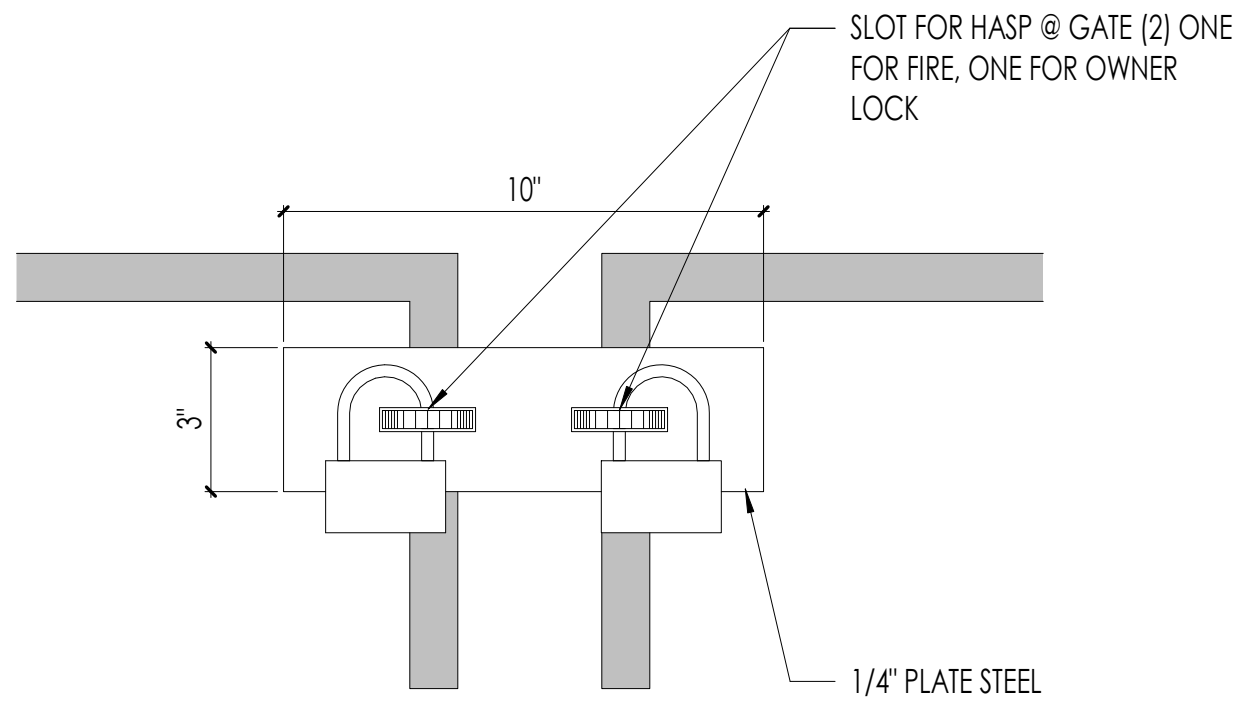


CALIBER COLLISION
710 SE BLUE PARKWAY
LEE'S SUMMIT, MO 64063
CROSS DEVELOPMENT, CG LEE'S SUMMIT, LLC
4338 MARSH RIDGE ROAD
CARROLLTON, TX 75010
TEL (214) 614-8252

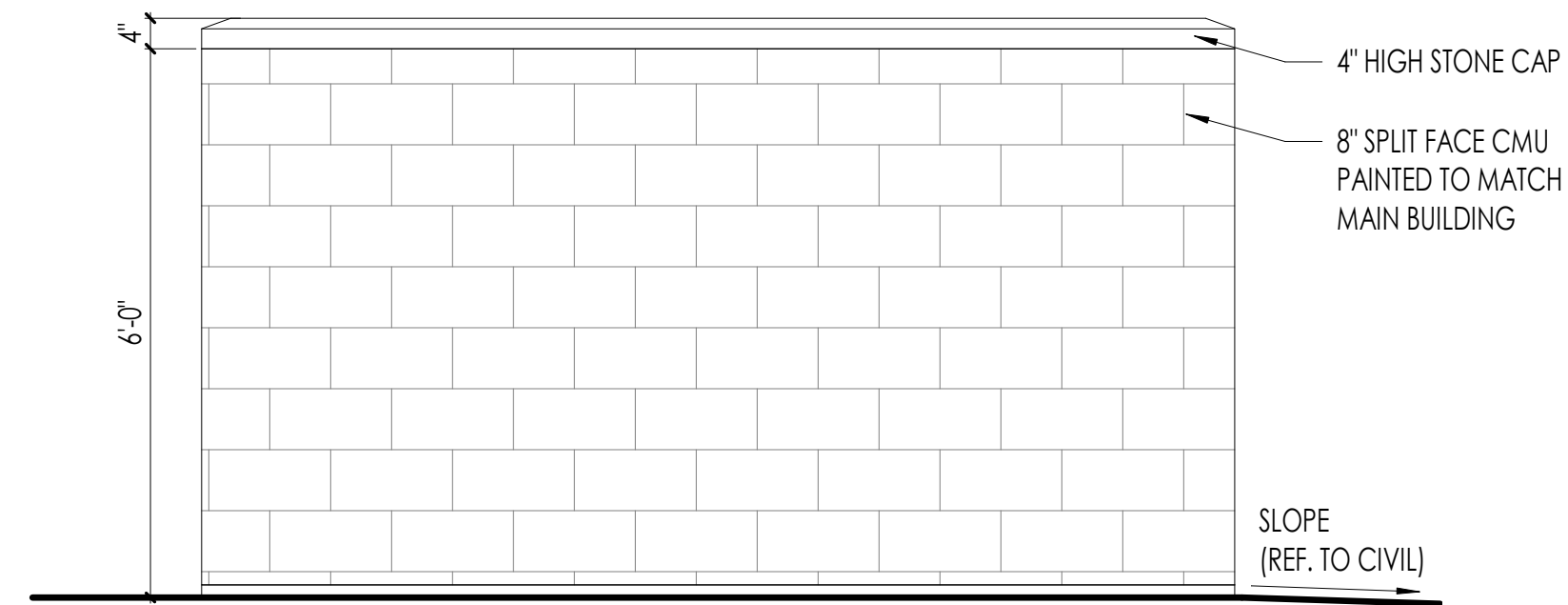
DRAWN
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TMB
DATE
11/17/2021
SCALE

DRAWING

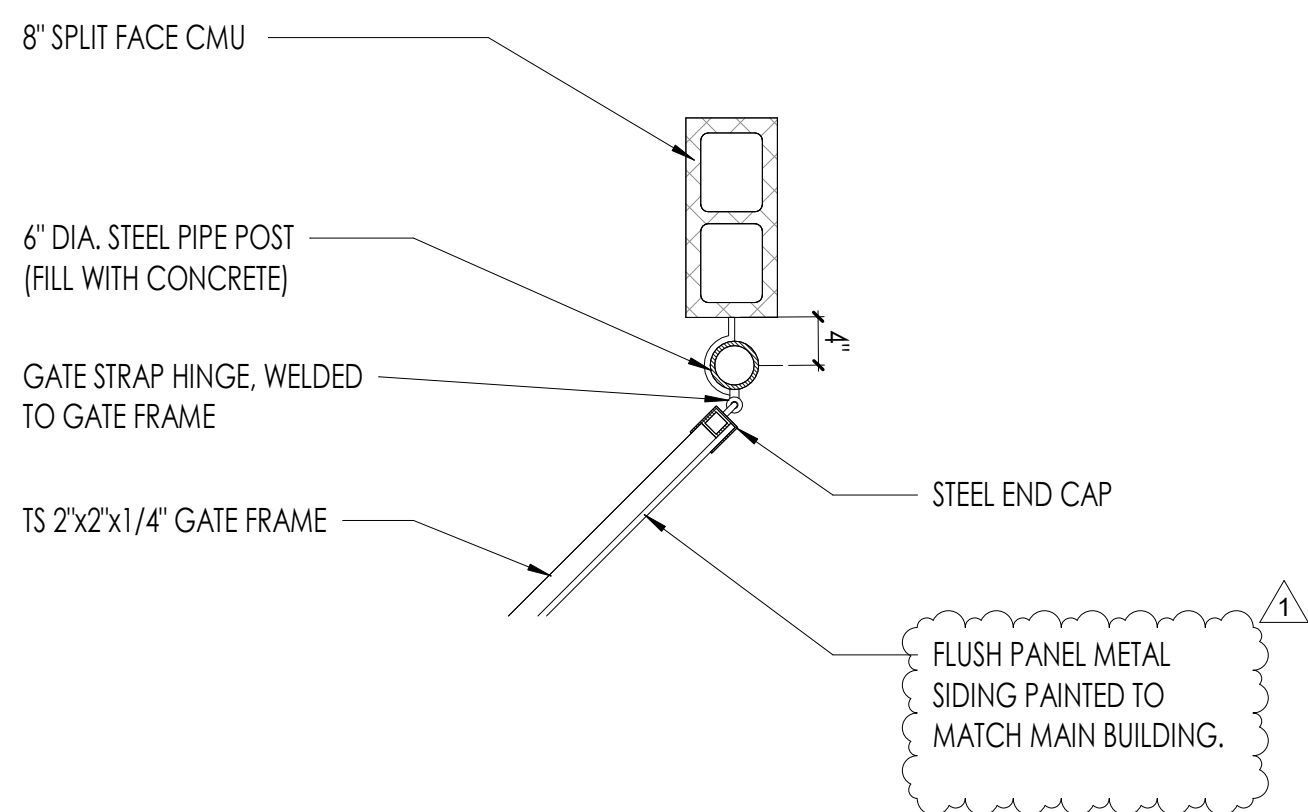
25



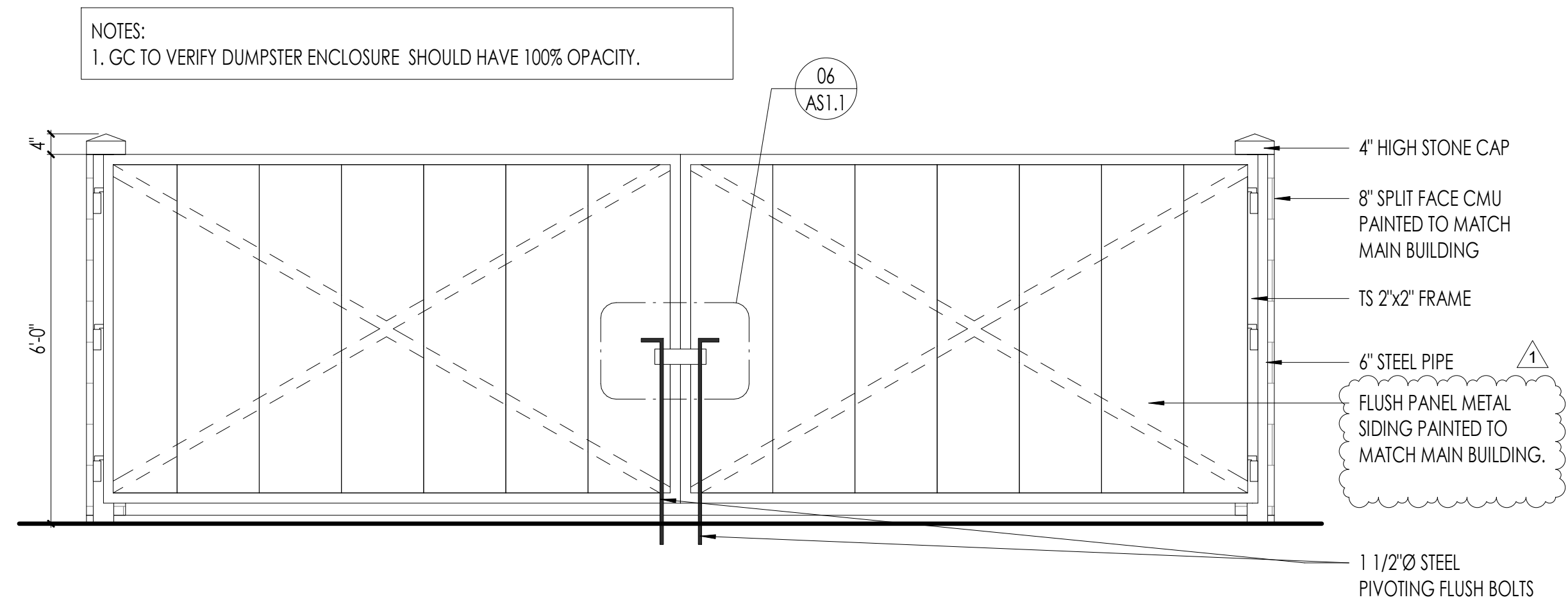
06 GATE CLASP
SCALE: 3" = 1'-0"



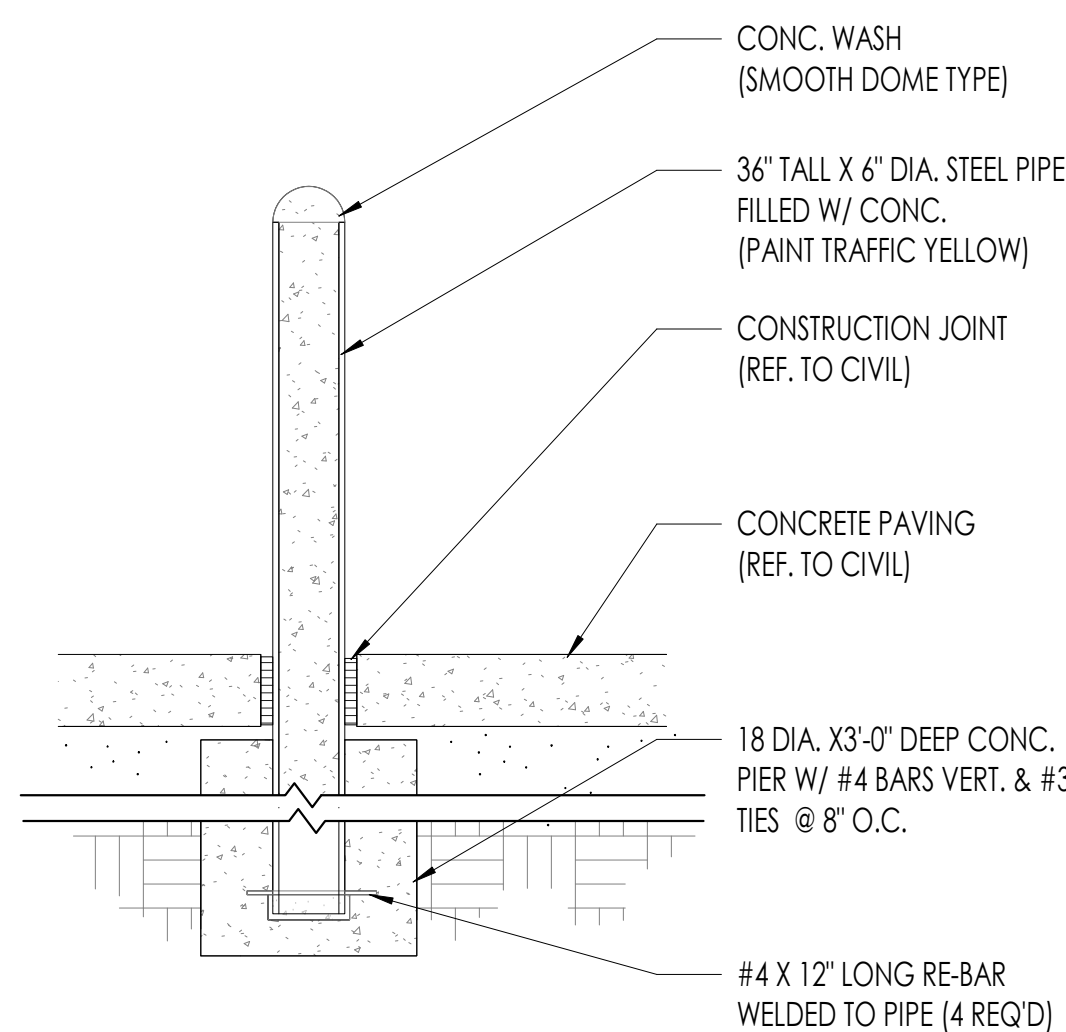
03 DUMPSTER ENCLOSURE SIDE ELEVATION
SCALE: 1/2" = 1'-0"



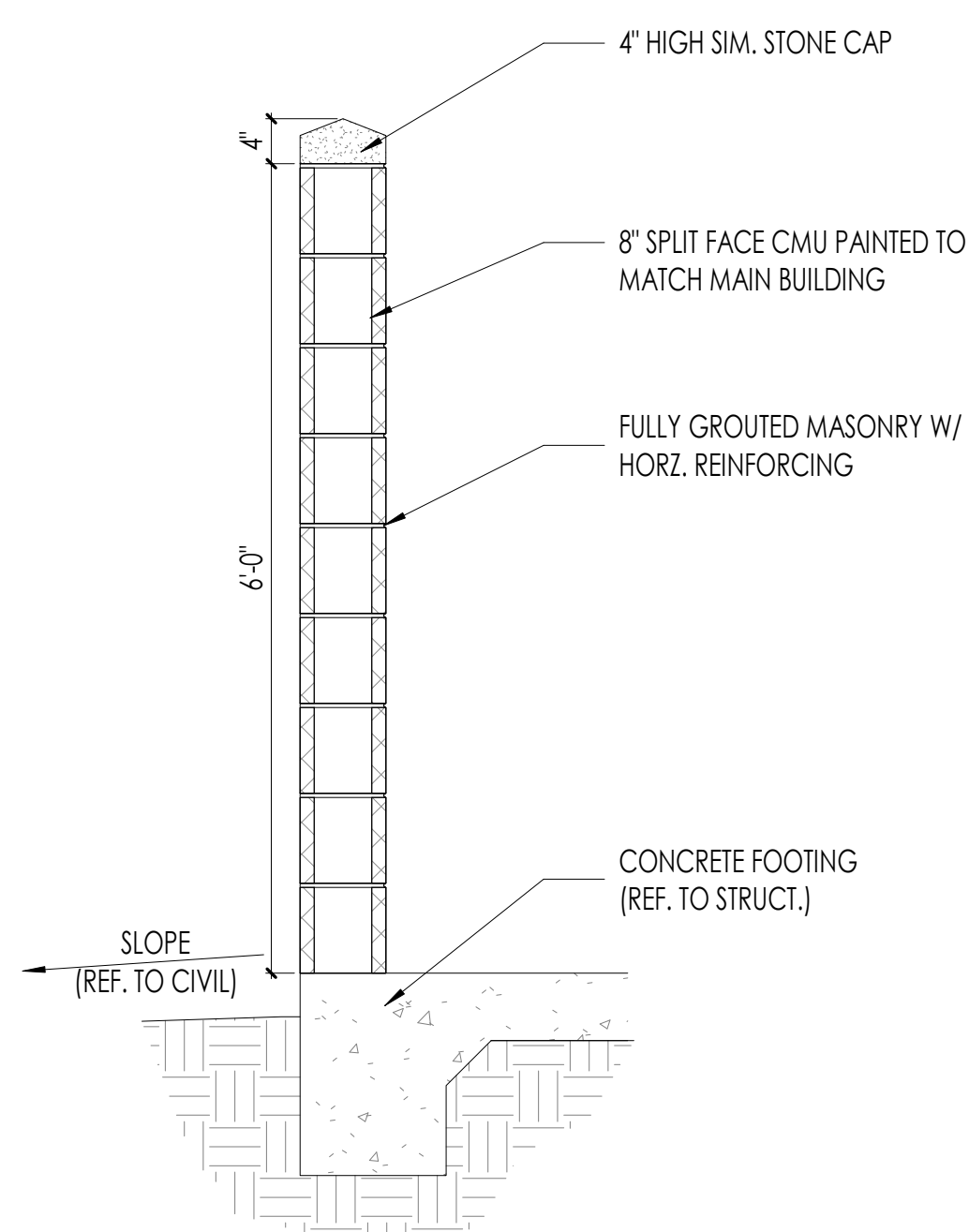
05 GATE DETAILS
SCALE: 3/4" = 1'-0"



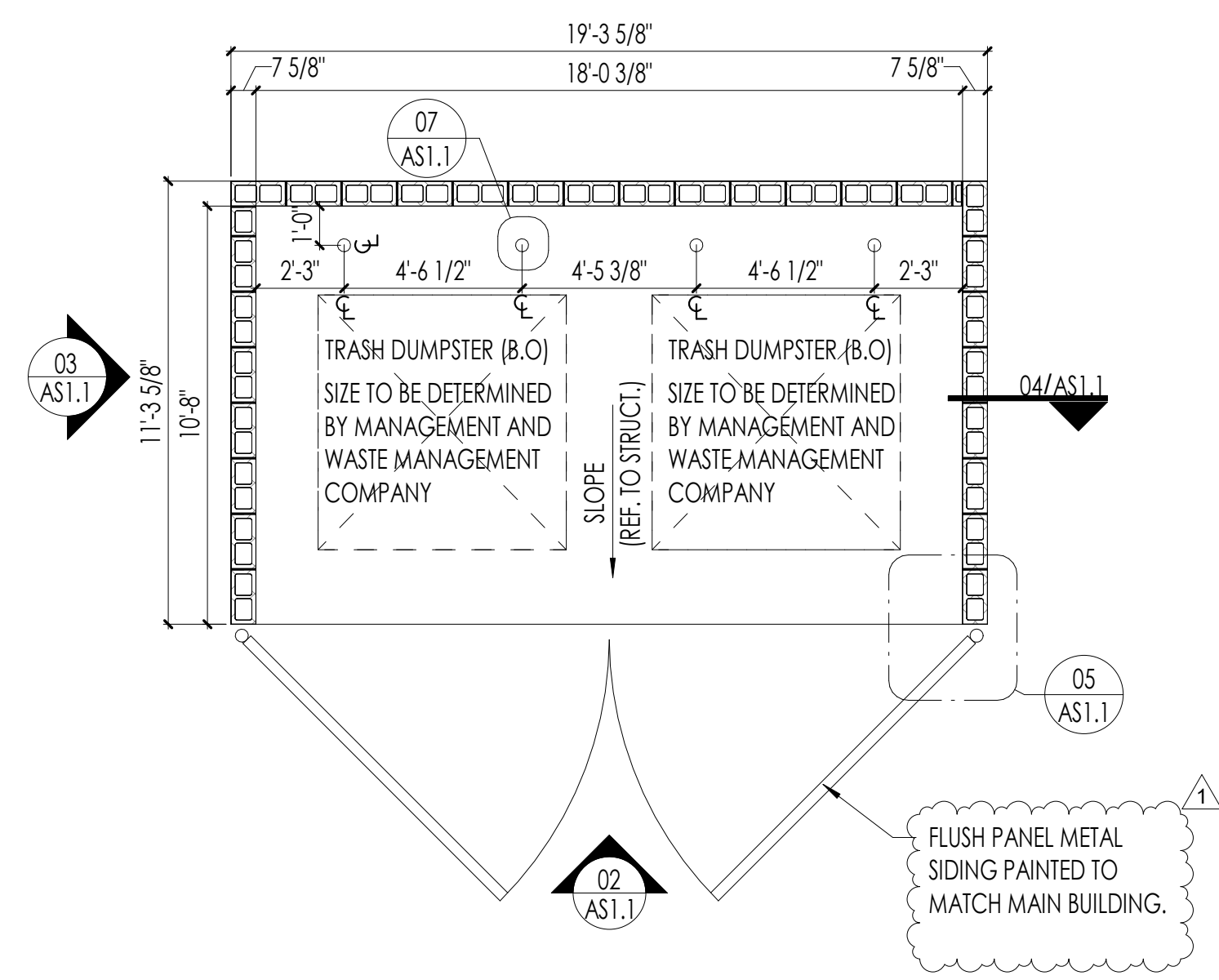
02 DUMPSTER ENCLOSURE FRONT ELEVATION
SCALE: 1/2" = 1'-0"



07 BOLLARD DETAIL
SCALE: 3/4" = 1'-0"



04 WALL SECTION
SCALE: 3/4" = 1'-0"



01 DUMPSTER ENCLOSURE PLAN
SCALE: 1/4" = 1'-0"

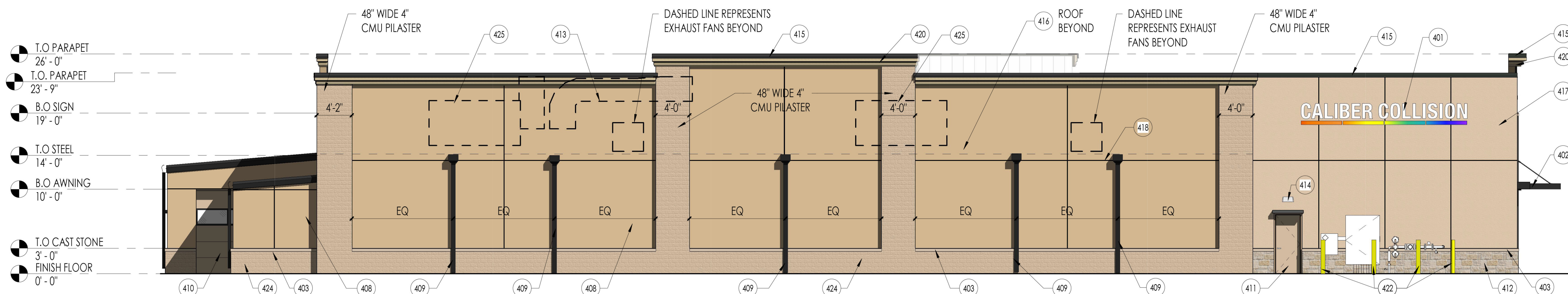
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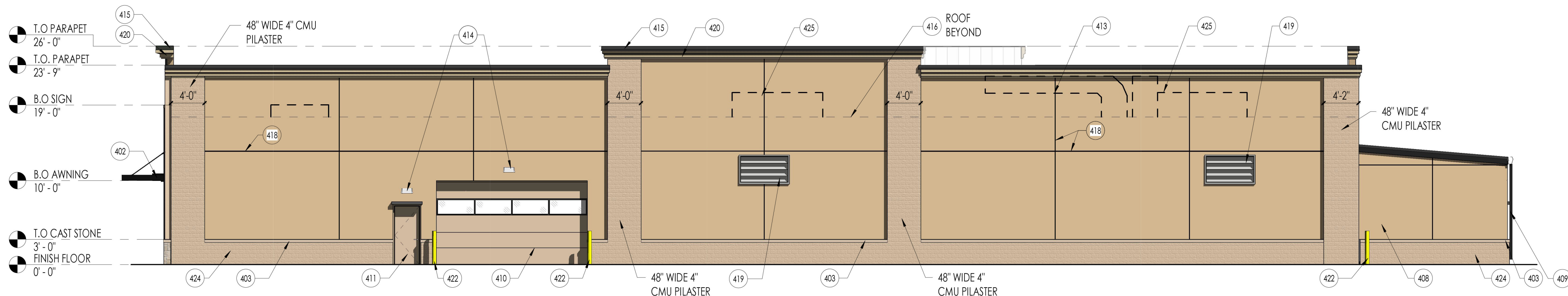
Job Number: 2071
Issue Date: 12.10.2021
Revisions: 01.07.2022
Revisions:
Revisions:
Revisions:
Revisions:
Revisions:
Revisions:
Site and Trash Enclosure Details



01 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



02 EAST ELEVATION
SCALE: 1/8" = 1'-0"



03 WEST ELEVATION
SCALE: 1/8" = 1'-0"



04 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

FACADE DIRECTION	EAST DIRECTION	WEST DIRECTION	NORTH DIRECTION	SOUTH DIRECTION
METAL (PANEL, COPING, FRAMES, AND DOORS) SQ. FT.	36.39	248.69	93.27	497.7
PERCENTAGE (%)	2.80%	7.22%	4.64%	18.00%
STONE SQ. FT.	74.12	2.31	482.7	0
PERCENTAGE (%)	2.15%	0.07%	24.00%	0%
CAST STONE SQ. FT.	50.6	44.14	37.28	32.55
PERCENTAGE (%)	1.47%	1.28%	1.85%	1.18%
EIFS SQ. FT.	109.19	139.54	172.35	80.5
PERCENTAGE (%)	3.17%	4.03%	8.57%	2.91%
GLAZING SQ. FT.	0	28.61	177	65.82
PERCENTAGE (%)	0%	0.83%	8.80%	2.38%
3 STEP STUCCO SQ. FT.	618.92	13.05	1048.3	0
PERCENTAGE (%)	17.98%	0.38%	52.13%	0%
EIFS (OVER R-PANEL) SQ. FT.	1874.16	2298.15	0	1811.91
PERCENTAGE (%)	54.46%	66.43%	0%	65.54%
CMU SQ. FT.	618.22	642.13	0	276.21
PERCENTAGE (%)	17.96%	18.56%	0%	9.99%
LOUVERS SQ. FT.	0	42	0	0
PERCENTAGE (%)	0%	1.21%	0%	0%
TOTAL SQ. FT.	3441.61	3459.62	2010.9	2764.6
TOTAL PERCENTAGE	100%	100%	100%	100%

KEYNOTES:

- SIGNAGE (BY OTHERS)-PROVIDE 3/4" PLYWD. BACKING (SEPARATE PERMIT).
- PREMANUFACTURED MTL. AWNING W/ TIE RODS BY G.C. (CP-1)
- SYNTHETIC STONE SILL/WATER TABLE. REFER TO SPECS.(CS-1)
- PARAPET BACK PANEL (SOLAR WHITE COLOR).
- MTL. GUTTER-PROVIDED BY MTL. BUILDING PROVIDER AND INSTALLED BY GC. (MTL-2)
- STOREFRONT / GLAZING (AL-2).
- ROOFLINE BEYOND.
- 1-1/2" EIFS OVER 1-1/2" METAL R-PANEL (EF-5).
- PRE-FINISHED 6"x4" D (SQUARE) METAL DOWNSPOUT (BURNISHED SLATE)-PROVIDED BY MTL. BUILDING SUPPLIER AND INSTALLED BY GC.
- FACTORY FINISHED SECTIONAL OH DOOR (PT-3).
- HOLLOW MTL. DOOR (PT-3) AND FRAME (SADDLE TAN). PROVIDE DRIP CAP OVER DOORS WITH NO OVERHEAD COVER.
- SYNTHETIC STONE VENEER (M-1).
- EXHAUST AND AIR INTAKE. REF. PAINT BOOTH SHEETS.
- WALL MOUNTED LIGHT FIXTURE. REF. MEP.
- PRE-FINISHED MTL. COPING (MTL-2) - PROVIDED BY MTL. BUILDING SUPPLIER AND INSTALLED BY GC.
- METAL BUILDING STANDING SEAM ROOFING (MTL-1).
- 3 STEP STUCCO INTEGRATED COLOR (PT-3).
- CONTROL JOINT
- WALL LOUVER. (CLEAR ANODIZED FINISH) REF. MEP
- EIFS CORNICE. (PT-9).
- EIFS ACCENT BANDING-PAINT TO MATCH SW6258 TRICORN BLACK (EF-4).
- BOLLARDS.
- PRE-FINISHED METAL BUILDING "R" PANEL ROOFING. (MTL-1)
- SPLIT FACE C.M.U. - COLOR TO MATCH (PT-7) LIGHT STONE.
- DASH LINE REPRESENTS ROOF TOP UNIT BEYOND.

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Development Services Department
Lee's Summit, Missouri
02/17/2022

EXTERIOR FINISH LEGEND

FINISH KEY	DESCRIPTION	LOCATION	MANUFACTURER	PRODUCT COLOR	IDENTIFICATION/ FINISH/ STYLE	CONTACT
AL-2	STOREFRONT SYSTEM	OFFICE EXTERIOR	KAWNEER OR APPROVED EQUAL	DARK ANODIZED BRONZE	2" X 4-1/2" ALUMINUM FRAME	N/A
CS-1	CAST STONE (REF. ELEV)	OFFICE EXTERIOR	CORONADO STONE/ EL DORADO STONE	CORONADO- OFF WHITE EL DORADO-BUCKSKIN	REFER TO SPECS-047300	N/A-SAMPLE TO BE PROVIDED BY GC
CP-1	CUSTOM CANOPY	LOBBY ENTRANCE	ARCHITECTURAL FABRICATORS	DARK BRONZE	HELIOS 399 X 446	ARCH. FABRICATORS 1-800-962-8027
EF-4	EXTERIOR BANDING	-	SHERWIN WILLIAMS	TRICORN BLACK	-	BRETT C. HUCKLEBURY 214-728-6696
EF-5	E.I.F.S	SHOP EXTERIOR	-	COLOR TO MATCH SADDLE TAN	1-1/2" E.I.F.S OVER 1-1/2" R-PANEL	-
GR-2	EXTERIOR MASONRY MORTAR	-	SGS SOLOMON COLORS INC.	10X BUFF	TYPE S MORTAR	BART SNOWDEN 214-794-9159
M-1	EXTERIOR MASONRY	-	GC TO PROVIDE LOCAL ALTERNATE OR APPROVAL	CORONADO- TEXAS CREAM EL DORADO-AUSTIN CREAM	CORONADO STONE/ EL DORADO STONE REFER TO SPECS-047300	N/A
PT-3	EXTERIOR DOOR PAINT	-	SHERWIN WILLIAMS	NOMADIC DESERT	SW 6107	BRETT C. HUCKLEBURY 214-728-6696
PT-7	EXTERIOR FINISH	-	SHERWIN WILLIAMS	NOMADIC DESERT	SW 6107	BRETT C. HUCKLEBURY 214-728-6696
PT-9	EXTERIOR CORNICE	-	DRYVIT	BAVARIAN WOOD #448	SAND PEBBLE	N/A
MTL-1	MTL. ROOFING	SHOP ROOF	METL-SPAN	SOLAR WHITE	PREM. WEATHER XL E0.85 SRI:76	METL-SPAN 877-585-9969
MTL-2	RAKE, GUTTER, TRIM	EXTERIOR	METL-SPAN	BURNISHED SLATE	PREM. WEATHER XL E0.86 SRI:25	METL-SPAN 877-585-9969

GENERAL NOTE

- DOWNSPOUTS ARE INDICATED FOR SIZE, QUANTITY, AND APPROXIMATE LOCATION ONLY.
- HOLLOW METAL STEEL DOORS, FRAMES, EXPOSED METAL FLASHING AND EXPOSED MISCELLANEOUS STEEL SHALL MATCH ADJACENT BUILDING COLOR UNLESS NOTED OTHERWISE. IF THERE ARE TWO ADJACENT COLORS AT THE DOOR LOCATIONS CONTRACTOR TO USE THE BASE OF THE BOTTOM FINISH FOR THE ENTIRE DOOR.
- SIGNAGE SHALL BE PERMITTED SEPARATELY.
- REFER TO THIS SHEET FOR FINISHES AND MATERIALS.
- PAINT EXPOSED STEEL BEAMS IN STORAGE AREA.
- THE LIGHT SOURCE FOR EXTERIOR FIXTURES SHALL NOT PROJECT BELOW THE OPAQUE HOUSING SELECTED. NO FIXTURE SHALL DIRECTLY PROJECT LIGHT HORIZONTALLY.

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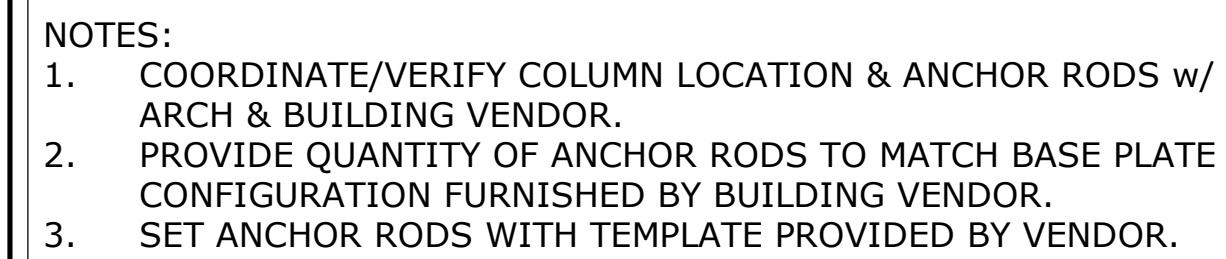
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Job Number: TBD
Issue Date: TBD

Revisions:
Revisions:
Revisions:
Revisions:
Revisions:

Exterior Elevations (Colored)

Sheet Number: A2.01



FTG., WALL, OR BOND BEAM

LONGITUDINAL BARS

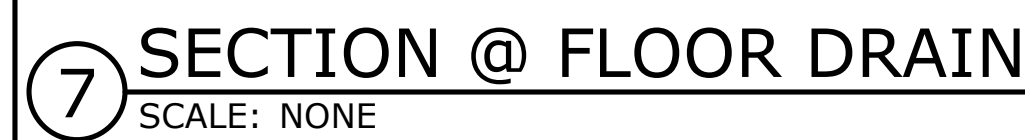
24 BAR DIA.
MIN. LAP

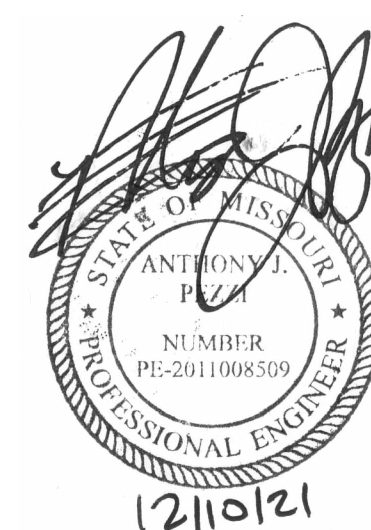
CONSTRUCTION JOINT (IF REQUIRED)

24 BAR DIA.
MIN. LAP

SPLICE BARS SAME SIZE & QUANTITY AS LONGITUDINAL REINF. BARS

NOTE:
1. REFER TO SECTIONS DETAILS REBAR SIZING REBAR SIZING QUANTITY





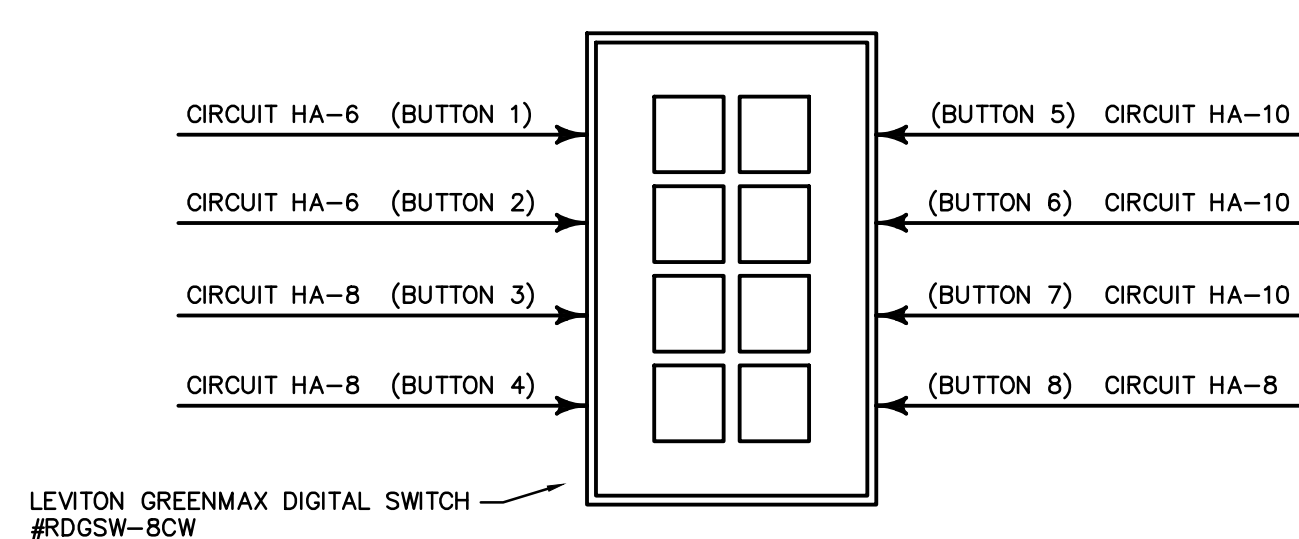
CALIBER COLLISION

LEES SUMMIT,
MISSOURI

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Development Services Department
Lee's Summit, Missouri
02/17/2022

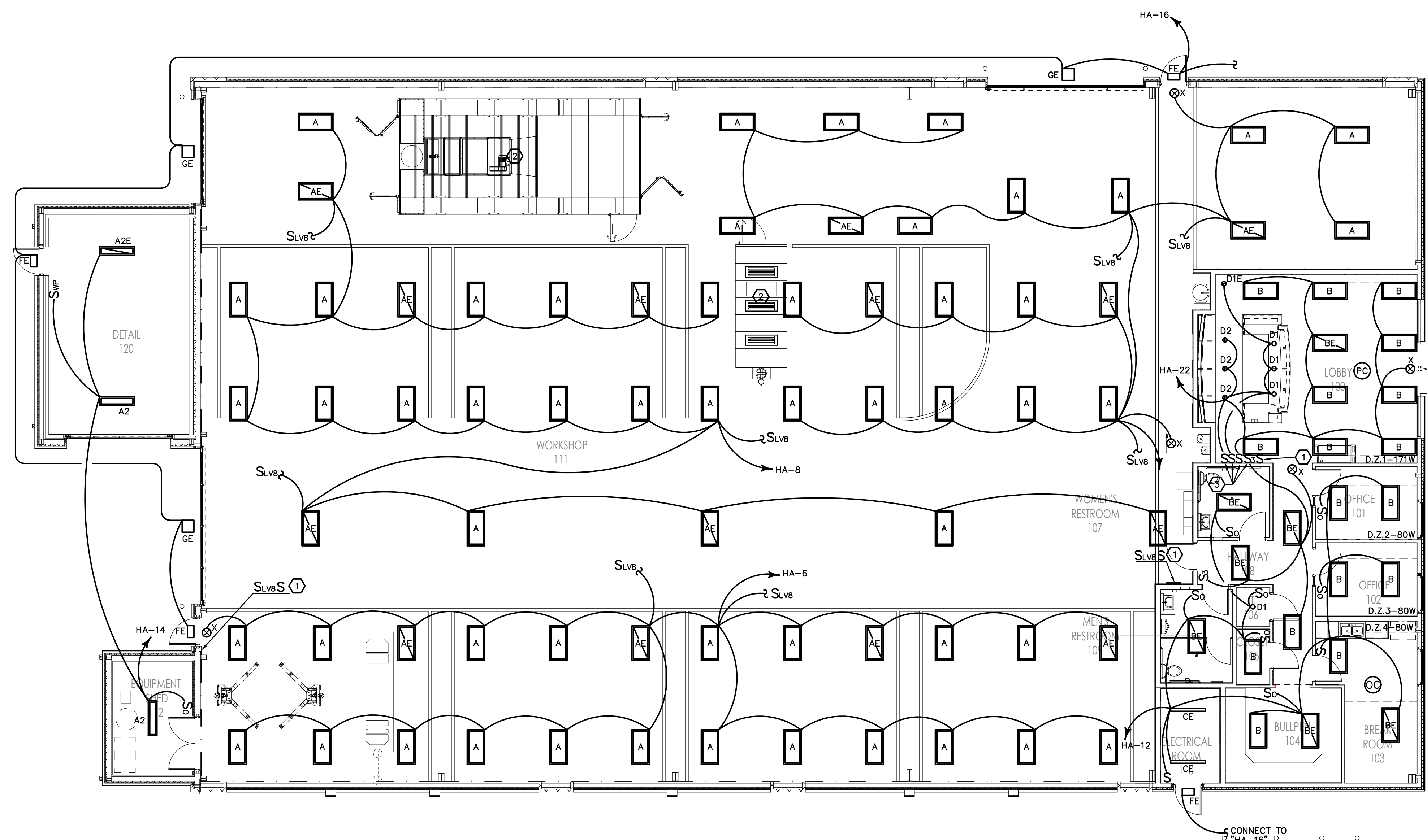
CONTRACTOR SHALL RUN ALL OVERHEAD ELECTRICAL CONDUIT ABOVE MAIN FRAMES PARALLEL WITH ROOF PURLINS PRIOR TO ROOF INSULATION. MAINTAIN A MINIMUM 1-1/2" SEPARATION FROM THE LOWEST SURFACE OF THE ROOF DECKING TO THE TOP OF THE RACEWAY, BOX, ETC. IN ACCORDANCE WITH NEC 300.4(E). SEE ARCHITECTURAL PLANS FOR RECOMMENDED CONDUIT RUN LOCATION.



8 BUTTON DIGITAL SWITCH DETAIL (S_{LV8})

NO SCALE

NOTE: SWITCH SHALL CONTROL CIRCUITS SHOWN VIA LIGHTING
CONTROL PANEL BY LEVITON



LIGHTING PLAN

SCALE: 1/8" = 1'-0"

GENERAL LIGHTING NOTES

1. ALL CIRCUITS ARE FED FROM PANEL "H1" U.N.O. ROUTE ALL CIRCUITS THROUGH RELAY BASED LIGHTING CONTROL PANEL FOR PHOTOCELL/TIME OF DAY CONTROL. PROVIDE LIGHTING CONTROL PANEL OVERRIDE SWITCHES PER PLAN.
2. PRIOR TO ROUGH-IN, VERIFY MOUNTING HEIGHTS AND ELECTRICAL REQUIREMENTS FOR ALL LIGHTS, EMERGENCY FIXTURES, AND UNSWITCHED NIGHT LIGHTS AHEAD OF ALL SWITCHES AND CONTROLS SHALL BE ACCESSIBLE PER A.D.A., "MAXIMUM 48" AFF TO TOP OF OPERATION.
3. FINISH COLOR ON ALL OUTLET AND SWITCH FACELATES SHALL BE WHITE. VERIFY AND COORDINATE FINAL COLOR WITH OWNER.
4. CIRCUIT ALL EXIT SIGNS "X" TO LOCAL LIGHTING CIRCUIT. CIRCUIT ALL EXIT SIGNS, EMERGENCY FIXTURES, AND UNSWITCHED NIGHT LIGHTS AHEAD OF ALL SWITCHES AND TIME CLOCK.
5. REFER TO ARCHITECTURAL DRAWINGS FOR ALL LIGHTING DIMENSIONS PERTAINING TO LOCATIONS, HEIGHT, MOUNTING HEIGHTS, ETC. CONTRACTOR SHALL VERIFY LIGHTING DIMENSIONS TO BE 100% ACCURATE TO BE WITHIN 36" OF BOTH SHALL MEET NEC INSTALLATION REQUIREMENTS FOR CLASS 1, DIVISION 2 HAZARDOUS LOCATIONS.
6. CONTRACTOR TO INSTALL OCCUPANCY / VACANCY SENSOR SWITCH () AS SHOWN. PROVIDE ACTUITY ~~WSSX~~-POT-SA OR EQUIVALENT. COORDINATE FINISH WITH OWNER.
7. CONTRACTOR TO INSTALL OCCUPANCY / VACANCY SENSOR () AS SHOWN. PROVIDE ACTUITY SERIES: ACTUITY SENSOR SWITCH, DIGITAL SERIES: ACTUITY SENSOR SWITCH. LOCATIONS SHOWN ARE APPROXIMATE. REFERENCE INSTALLATION MANUAL FOR OPTIMUM PLACEMENT OF SENSORS. PROVIDE LOW VOLTAGE SWITCH FOR MANUAL ON/OFF OPERATION. BOTH ANALOG AND DIGITAL SERIES: ACTUITY SENSOR SWITCH. ANALOG SERIES: ACTUITY SENSOR SWITCH. DIGITAL SERIES: ACTUITY SENSOR SWITCH OR EQUIVALENT.
9. CONTRACTOR TO INSTALL CEILING MOUNTED DAYLIGHT SENSOR () AS SHOWN. INSTALL ACTUITY ~~WSSX~~-APP-VALP SERIES. COORDINATE FINISH WITH ARCHITECT. LOCATIONS SHOWN ARE APPROXIMATE. REFERENCE INSTALLATION MANUAL FOR OPTIMUM PLACEMENT OF SENSORS. PROVIDE LOW VOLTAGE SWITCH FOR MANUAL ON/OFF OPERATION. BOTH ANALOG AND DIGITAL SERIES: ACTUITY SENSOR SWITCH. ANALOG SERIES: ACTUITY SENSOR SWITCH. DIGITAL SERIES: ACTUITY SENSOR SWITCH OR EQUIVALENT.
10. AT ALL LOCATIONS WHERE CEILING OCCUPANCY / VACANCY SENSORS ARE SHOWN TO BE USED IN CONJUNCTION WITH DIMMING, CONTRACTOR TO PROVIDE DIMMING CONTROLS. DIMMING CONTROLS MAY BE PRESET STATUSES. MULTI-TAPS MAY BE USED AS INDICATED ON PLAN. BOTH ANALOG AND DIGITAL SYSTEMS ARE ACCEPTABLE. ANALOG SERIES: ACTUITY SENSOR SWITCH. DIGITAL SERIES: ACTUITY SENSOR SWITCH OR EQUIVALENT.
11. D-Z, (g) = DAYLIGHT ZONE (g). ALL DAYLIGHT ZONES ARE EXEMPT DUE TO BEING LESS THAN 150 WATTS (IN EACH EXCEPT FOR DAYLIGHT ZONE #1. PROVIDE DAYLIGHT HARVESTING PER IECC
12. LOWER CASE LETTER "X" BY CIRCUIT DESIGNATION INDICATES CORRESPONDING LIGHT SWITCH.
13. ELECTRICAL CONTRACTOR TO REFERENCE ARCH PLANS FOR LIGHTING DIMENSION CONTROL PLAN FOR LIGHT LOCATIONS.
14. THE WIRING OF THE HVAC, FIRE ALARM, SECURITY, AND EMERGENCY COMMUNICATIONS AND SIGNALING SYSTEMS ARE REQUIRED THAT ALL CABLES USED FOR EMERGENCY COMMUNICATIONS HAVE A 2-HOUR FIRE-RESISTIVE RATING AND BE RATED FOR USE IN RISERS.
15. NO CONDUITS ROUTED THROUGH SHOP FLOOR UNLESS SPECIFICALLY NOTED OTHERWISE.
16. NO EXPOSED MC CABLE ALLOWED EXCEPT FOR APPROXIMATELY 6' MAXIMUM AT LIGHT FIXTURE CONNECTIONS. THERE SHALL BE NO LONG RUNS OF MC CABLE.
17. ALL CONDUITS SHALL BE INSTALLED AS TIGHT TO DECK AS POSSIBLE. MAIN 1"-1/2" SEPARATIONS FROM THE LOWEST SURFACE OF THE DECK, DECKING TO THE TOP OF THE CONDUIT SHALL BE IN ACCORDANCE WITH NEC 300.6(E).
18. NOTHING IN THE SHOP AREAS SHALL BE MOUNTED BELOW 12'-0" AFF, UNLESS SPECIFICALLY NOTED AS SUCH. ALL PIPES, CONDUITS AND LINES SHALL BE RUN NEAT AND BE PROTECTED TO LIGHT TO STRUCTURE AS POSSIBLE. ROUTE CONDUIT WITHIN GIRTS WHEREVER POSSIBLE.
19. DO NOT PAISY CHAIN LIGHTING IN SHOP.

KEY LIGHTING NOTES

1. 2-HOUR MAXIMUM OVERRIDE SWITCH FOR LIGHTING CONTROL PANEL. CONFIRM LOCATION WITH OWNER PRIOR TO ROUGH-IN. SWITCH SHALL BE LEVITON GREENMAX #RDGSW-2CW.
2. LIGHTING UNITS IN PAINT BOOTH WILL BE PROVIDED BY MANUFACTURER.
3. SWITCH SHALL BE A 4-BUTTON DIGITAL SWITCH: LEVITON GREENMAX #RDGSW-4CW.

LIGHTING CONTROL NOTES

1. BUILDING SHALL HAVE A LIGHTING CONTROL SYSTEM CAPABLE OF TURNING OFF ALL BUILDING LIGHTS AUTOMATICALLY AFTERHOURS.
2. AFTERHOURS LIGHTING SYSTEM SHALL INITIATE AUTOMATIC SHUTDOWN EVERY THREE HOURS.
3. SPACES WITH INDIVIDUAL OCCUPANCY SENSORS AND AUTOMATIC SHUTOFF WILL NOT BE CONTROLLED BY LIGHTING CONTROL PANEL.
4. SPACES WITH OCCUPANCY SENSORS AND LOCAL LIGHTING CONTROL SHALL BE WIRED WITH SEPARATE CIRCuits TO A LOCAL LIGHTING CONTROL. PROVIDE ADDITIONAL RELAYS FOR SEPARATE CIRCUITS AND/OR DIFFERENT VOLTAGES.
5. LIGHTING CONTROL SYSTEM SHALL ALSO CONTROL EXTERIOR LIGHTING AND SIGN CIRCUITS.
6. PROVIDE COMMISSIONING AND FUNCTIONAL TESTING IN ACCORDANCE WITH THE FOLLOWING:
 - A. COMMISSIONING AND FUNCTIONAL TESTING SHALL BE PERFORMED BY MANUFACTURER REPRESENTATIVE. PROVIDE WRITTEN CERTIFICATION OF COMPLETION OF TESTING AND COMMISSIONING. THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
 - A. CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANCY SENSORS YIELD ACCEPTABLE PERFORMANCE.
 - B. CONFIRM THAT THE PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
 - C. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF TURNING LIGHTS OFF.

Project: 21259 Drawing: 21259-E1.0_Lighting Plan.dwg

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Job Number: 2
Issue Date: 12.10.2

Revisions: _____
Revisions: _____
Revisions: _____
Revisions: _____
Revisions: _____

LIGHTING PLAN

Sheet No.

E1.0

PARSONS ENGINEERING, INC.
ELECTRICAL
COA NUMBER: F01125744
4751 TROUSDALE DRIVE, SUITE 200
NASHVILLE, TN 37220
615-386-9396
ANTHONY PEZZI, ELECTRICAL
LICENSE NUMBER: PE-201100

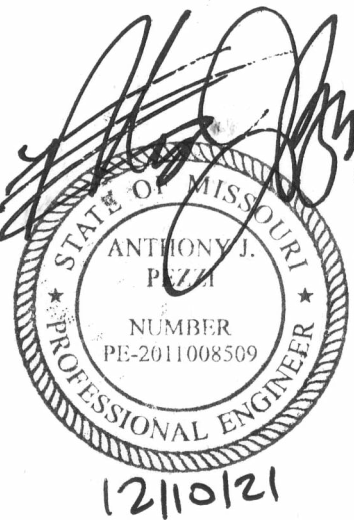
PE

PARSONS
ENGINEERING, INC.
NASHVILLE, TENNESSEE
PARSONSENGINEERING.COM



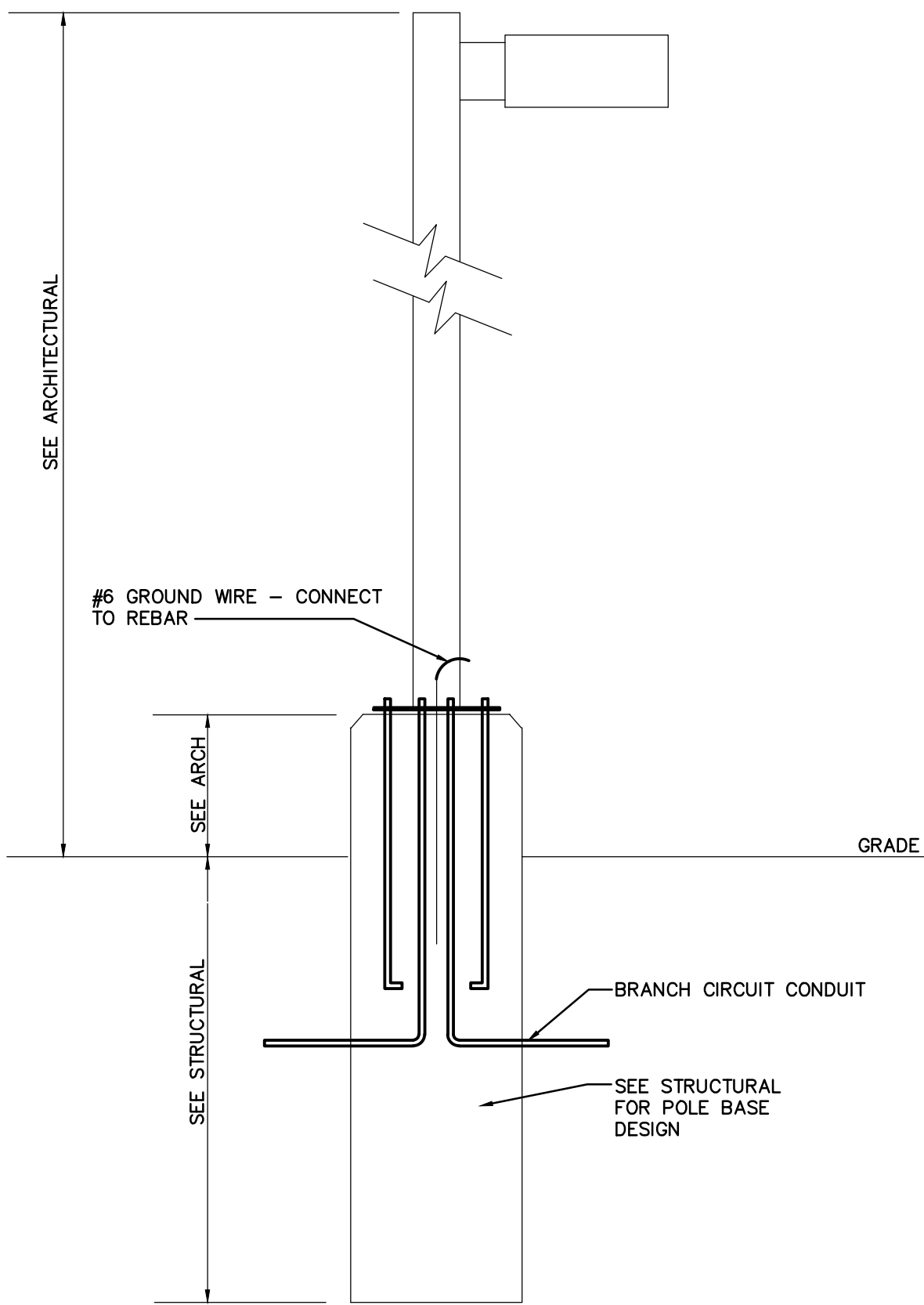
OXFORD
ARCHITECTURE

2934 Sisco Drive
Suite 120
Nashville, TN 37204
Architecture
Planning
Interior Architecture

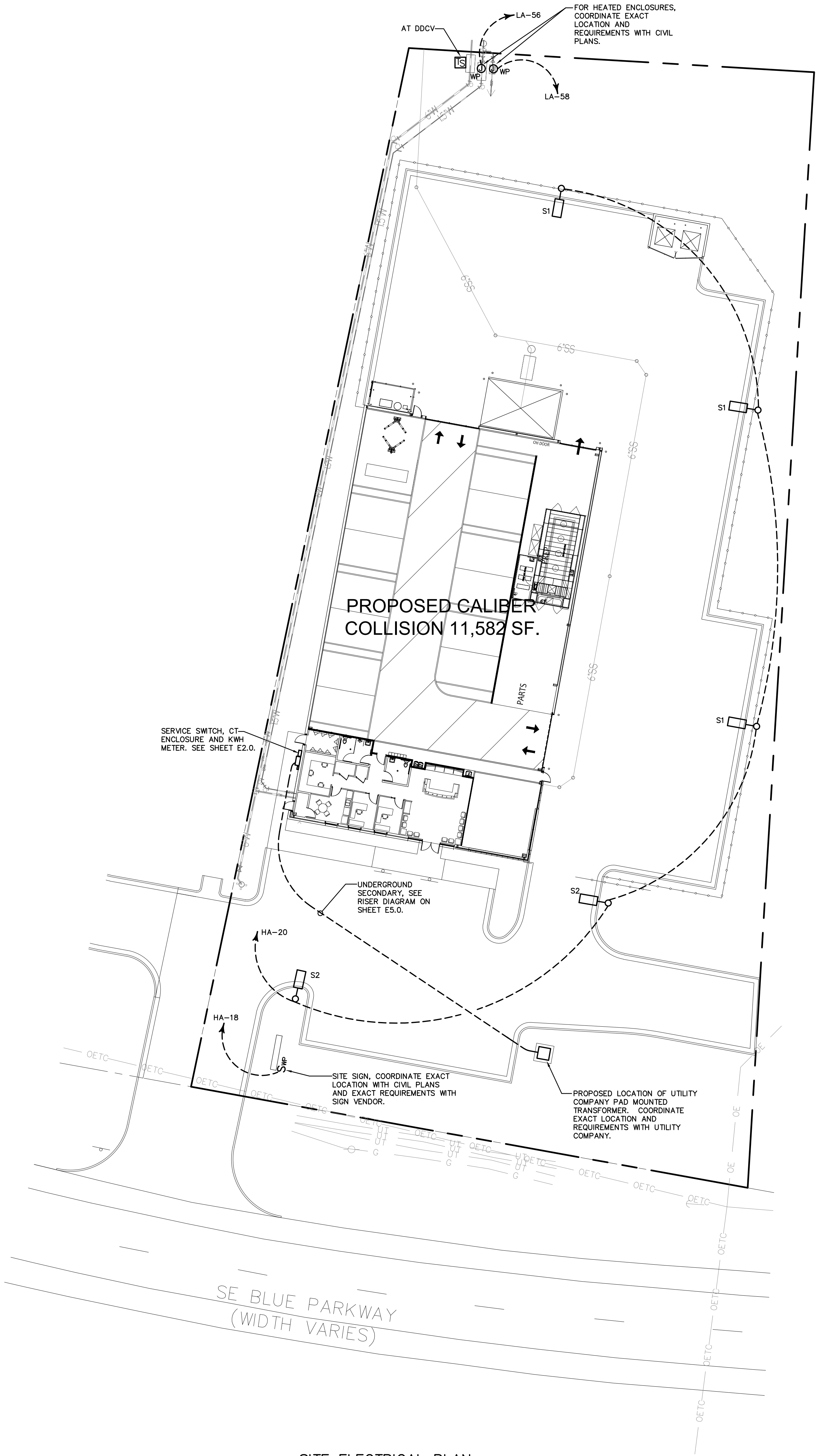


**CALIBER
COLLISION**

LEES SUMMIT,
MISSOURI



POLE BASE/PARKING LOT LIGHT FIXTURE DETAIL
NO SCALE



SITE ELECTRICAL PLAN
SCALE: 1" = 20'-0"

All measurements and items portrayed on this sheet are deemed to be accurate by architect, however all bidding General Contractors should field verify the actual conditions. Any changes to the scope of work, and thus potential change orders, should be identified and communicated in your price submittal to Cross Development / Caliber Collision.

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Job Number:	2116
Issue Date:	12.10.2021
Revisions:	
Revisions:	
Revisions:	
Revisions:	

SITE ELECTRICAL PLAN
Sheet Name

ES1.00

PARSONS ENGINEERING, INC.
ELECTRICAL
COA NUMBER: F01125744
4751 TROUSDALE DRIVE, SUITE 202
NASHVILLE, TN 37220
615-386-9396
ANTHONY PEZZI, ELECTRICAL ENGINEER
LICENSE NUMBER: PE-2011008509

