

# SITE DEVELOPMENT PLANS FOR ASSOCIATED PLASTIC SURGEONS

ADDRESS: 2701 NE McBAINE DRIVE  
IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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**FIRE ACCESS ROAD NOTE:**

ALL FIRE ACCESS LANES SHALL BE HEAVY DUTY ASPHALT CAPABLE OF SUPPORTING 75,000-POUNDS.

**OIL-GAS WELLS:**

ACCORDING TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES STATE OIL & GAS COUNCIL WELLS, LOCATED AT [www.dnr.mo.gov/geology/geosrv/oilandgas.htm](http://www.dnr.mo.gov/geology/geosrv/oilandgas.htm), THERE ARE NO OIL OR GAS WELLS ON THE PROPERTY SHOWN HEREON.

**PRE-CONSTRUCTION MEETING NOTE:**

THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

**UTILITY COMPANIES:**

MISSOURI GAS ENERGY (816) 969-2218  
LUCAS WALLS (LUCAS.WALLS@SUG.COM)  
3025 SOUTHEAST CLOVER DRIVE  
LEE'S SUMMIT, MO 64082

EVERGY (816) 347-4339  
PHILLIP INGRAM (PHILLIP.INGRAM@KCPL.COM)  
RON DEJARNETTE (RON.DEJARNETTE@KCPL.COM) (816) 347-4316  
1300 HAMLEN ROAD  
LEE'S SUMMIT, MO 64081

STORM SEWER (PUBLIC WORKS DEPARTMENT) (816) 969-1800  
220 SE GREEN STREET  
LEE'S SUMMIT, MO 64063

SANITARY SEWER & WATER (WATER UTILITIES DEPT.) (816)-969-1900  
1200 SE HAMLEN ROAD,  
LEE'S SUMMIT, MO 64081

AT&T (913) 383-4929  
MR. CLAYTON ANSPAUGH (CA4089@ATT.COM) (913) 383-4849-FAX  
9444 NALL AVENUE  
OVERLAND PARK, KANSAS 66207

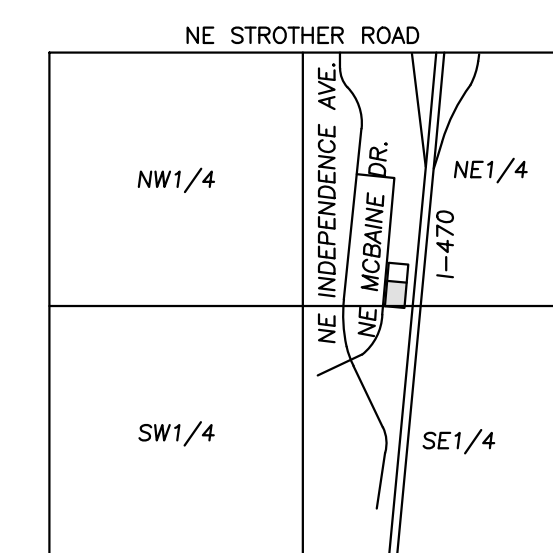


**PREPARED & SUBMITTED BY:**

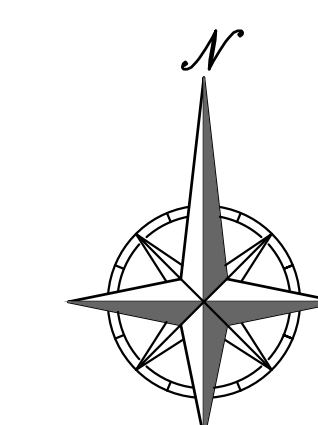
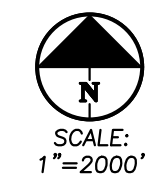
PHELPS ENGINEERING, INC.  
1270 N. WINCHESTER  
OLATHE, KS 66061  
913-393-1155 OFFICE  
913-393-1166 FAX  
CONTACT: DANIEL FINN, P.E.

**DEVELOPER:**

AURION LC  
(913)-451-5050  
CONTACT: MATT PICK  
matt.pick@apsks.com  
11501 GRANADA LANE,  
LEAWOOD, KS 66211



VICINITY MAP  
SEC. 20-48N-31W



SCALE: 1"=150'  
0' 150' 300'

**BENCHMARK:**

VERTICAL DATUM = NAVD83 BASED ON GPS OBSERVATION USING SMARTNET GPS NETWORK  
1. SET "I" CUT IN CENTER FRONT FACE OF CURB INLET ON WEST SIDE OF NE McBAINE DRIVE WEST OF LOT 7.  
ELEVATION = 987.72

**LEGAL DESCRIPTION:**

LOT 7, 1-470 BUSINESS AND TECHNOLOGY CENTER, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

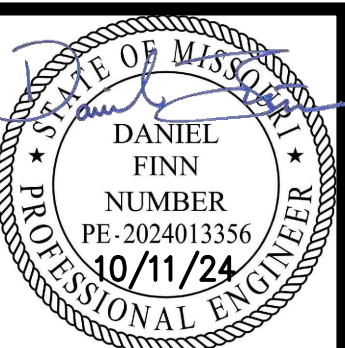
AREA = ±1.2413 ACRES / ±54,071 SQ.FT.

**FLOOD NOTE:**

THIS PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 29095C04306, AND DATED JANUARY 20, 2017.

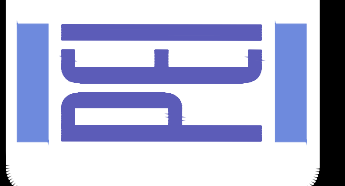


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1270 N. Winchester  
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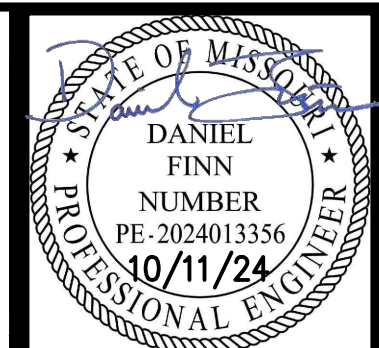
COVER SHEET  
I-470 BUSINESS & TECHNOLOGY CENTER  
2701 NE McBAINE DR  
LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	NO.	DATE	BY	APP.	REVISIONS
240024	09-12-2024	1.	09-12-2024	AEB	DAF	REVISED PER CITY COMMENTS
	10-02-2024	2.	10-02-2024	AEB	DAF	REVISED PER CITY COMMENTS
	10-11-2024	3.	10-11-2024	AEB	DAF	REVISED PER CITY COMMENTS

SHEET  
C000

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 1270 N. Winchester  
 Olathe, Kansas 66060  
 (913) 993-1155  
 Fax: (913) 993-1165  
 www.phelpsengineering.com



**DEMOLITION PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAINE DR  
 LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	BY	APP.	Revisions:		
				REVISED PER CITY COMMENTS	REVISED PER CITY COMMENTS	REVISED PER CITY COMMENTS
240024	09-12-2024	AEB	DAF			
240024	10-02-2024	AEB	DAF			
240024	10-11-2024	AEB	DAF			

SHEET  
**C001**

**DEMOLITION NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL CURBS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
3. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
4. CONTRACTOR MUST COORDINATE WITH OWNER PRIOR TO ANY CONSTRUCTION TO ESTABLISH CUSTOMER ACCESS AND TRAFFIC FLOW DURING ALL PHASES.

**DEMOLITION KEY NOTES:**

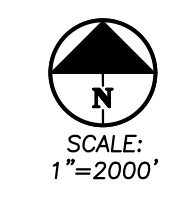
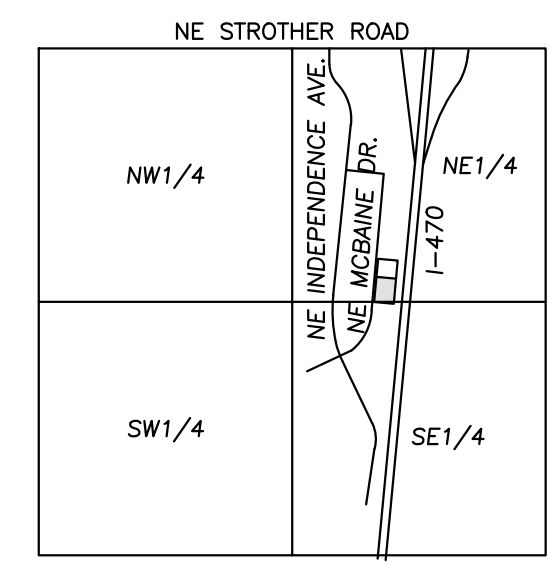
(A) THE CONTRACTOR SHALL REMOVE EXISTING CURB AND GUTTER.

(B) ALL UTILITIES SHALL REMAIN IN SERVICE THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DAMAGE TO SUCH UTILITIES. TYPICAL LOCATION.

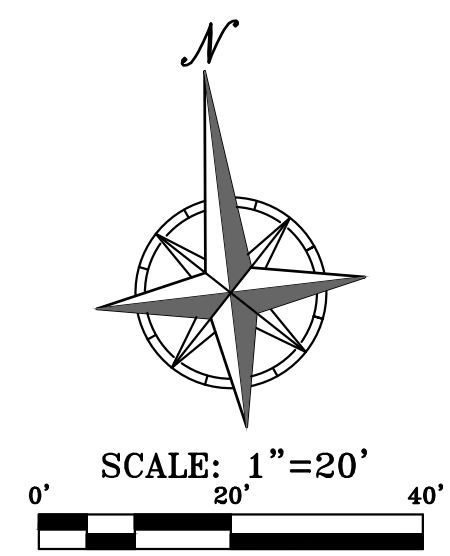
(C) THE CONTRACTOR SHALL REMOVE EXISTING 24" END SECTION (SEE SHEET C400).

**LEGEND**

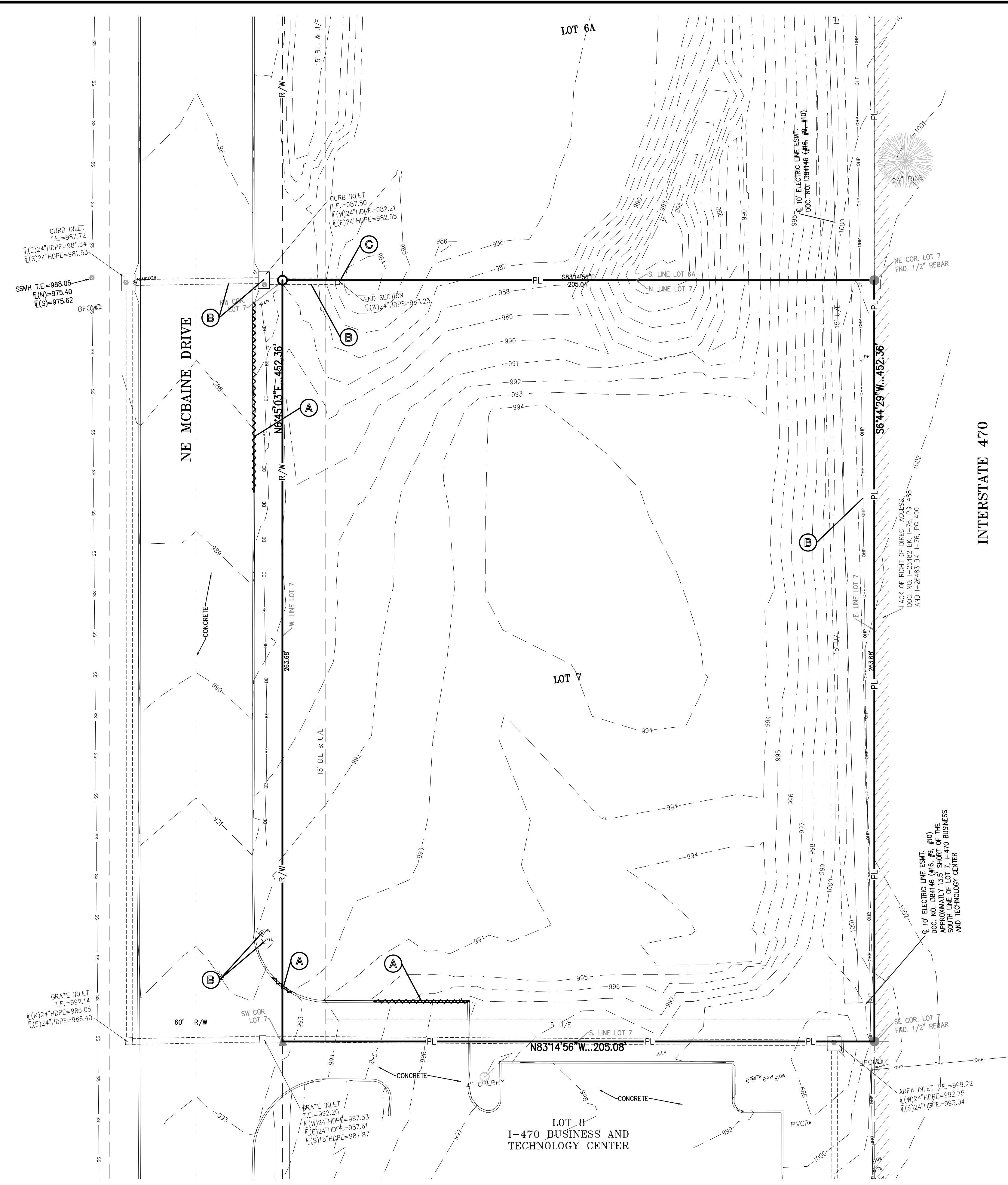
— PL —	PROPERTY LINE
- - - LL - - -	LOT LINE
- R/W -	RIGHT-OF-WAY
~ ~ ~	REMOVE EXISTING CURB & GUTTER
(Tree symbol)	EXISTING TREE TO REMAIN
BT	EXISTING BURIED TELEPHONE
CTV	EXISTING CABLE TELEVISION LINE
FO	EXISTING FIBER OPTIC LINE
W	EXISTING WATER LINE
G	EXISTING GAS LINE
BE	EXISTING BURIED ELECTRIC
OHP	EXISTING OVERHEAD POWER LINE
SS	EXISTING SANITARY SEWER
---	EXISTING STORM SEWER
⊕	EXISTING FIRE HYDRANT
⊙	EXISTING LIGHT POLE
⊗	EXISTING CHAIN LINK FENCE



VICINITY MAP  
 SEC. 20-48N-31W



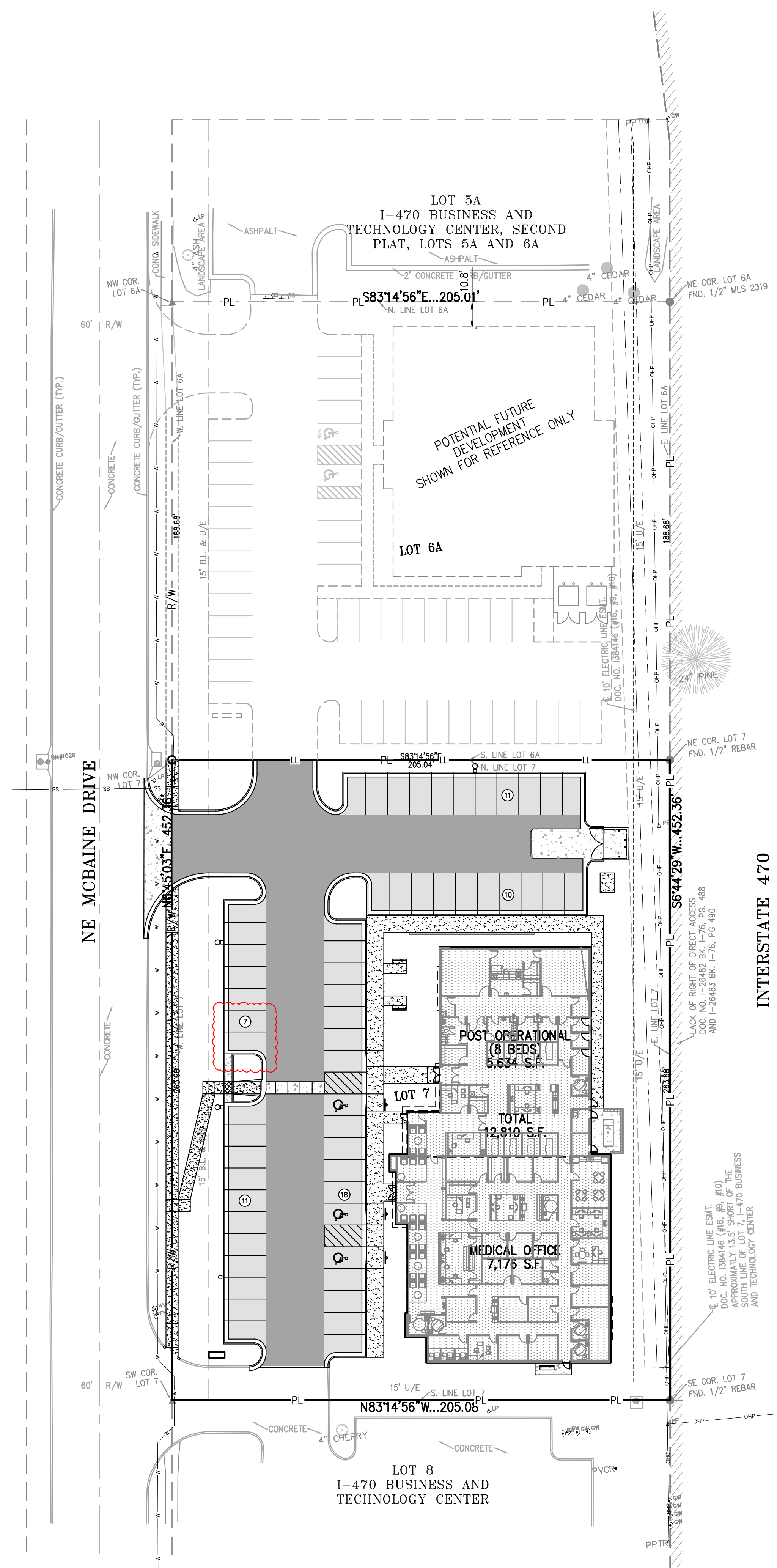
SCALE: 1"=20'  
 0' 20' 40'



**UTILITY NOTES:**  
 VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN. UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.

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**LEGAL DESCRIPTION:**

LOT 7, 1-470 BUSINESS AND TECHNOLOGY CENTER, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, ACCORDING TO THE RECORDED PLAT THEREOF.

AREA = ±1.2413 ACRES / ±54,071 SQ.FT.

**FLOOD NOTE:**

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**BUILDING & LOT DATA**

Site Area - Lot 7	54,071 S.F./1.24 Ac.
Zoning	PMIX
Proposed Building No. of Stories	1 Story
Medical Office	7,176 S.F.
Post Operational (8 Beds)	5,634 S.F.
Total Building S.F.	12,810 S.F.
Floor Area Ratio (FAR)	0.2369
Impervious Area	0.8194 Ac. (66%)
Open Space	0.4219 Ac. (34%)

**PARKING SUMMARY**

Parking Provided	
Standard Parking Provided	54 Spaces
Handicap Accessible Parking Spaces Provided	3 Spaces
Total Parking Provided	57 Spaces
Parking Required:	53 Spaces*

\* - Refer to Parking Memo

**LEGEND**

- PL — PROPERTY LINE
- LL — LOT LINE
- R/W — RIGHT-OF-WAY
- 2' — 2' CURB & GUTTER
- 6" — 6" CURB
- B/L — BUILDING SETBACK LINE
- P/S — PARKING SETBACK LINE
- L/S — LANDSCAPE SETBACK LINE
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK



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**SITE PLAN NOTES:**

- All construction materials and procedures on this project shall conform to the latest revision of the following governing requirements, incorporated herein by reference:
  - City ordinances & O.S.H.A. Regulations.
  - The City of Lee's Summit Technical Specifications and Municipal Code.
  - All construction shall follow the City of Lee's Summit Design and Construction Manual as adopted by Ordinance 5813. Where discrepancies exist between these plans and the Design and Construction Manual, the Design and Construction Manual shall prevail.
- The contractor shall have one (1) signed copy of the plans (approved by the City) and one (1) copy of the appropriate Design and Construction Standards and Specifications at the job site at all times.
- The contractor will be responsible for securing all permits, bonds and insurance required by the contract documents, City of Lee's Summit, Missouri, and all other governing agencies (including local, county, state and federal authorities) having jurisdiction over the work proposed by these construction documents. The cost for all permits, bonds and insurance shall be the contractor's responsibility and shall be included in the bid for the work.
- The contractor is responsible for coordination of his and his sub-contractor's work. The contractor shall assume all responsibility for protecting and maintaining his work during the construction period and between the various trades/sub-contractors constructing the work.
- The demolition and removal (or relocation) of existing pavement, curbs, structures, utilities, and all other features necessary to construct the proposed improvements, shall be performed by the contractor. All waste material removed during construction shall be disposed off the project site. The contractor shall be responsible for all permits for hauling and disposing of waste material. The disposal of waste material shall be in accordance with all local, state and federal regulations.
- Contractor shall be responsible for all relocations, including but not limited to, all utilities, storm drainage, sanitary sewer services, signs, traffic signals & poles, etc. as required. All work shall be in accordance with governing authorities specifications and shall be approved by such. All cost shall be included in base bid.
- All existing utilities indicated on the drawings are according to the best information available to the Engineer; however, all utilities actually existing may not be shown. The contractor shall be responsible for contacting all utility companies for an exact field location of each utility prior to any construction. All underground utilities shall be protected at the contractor's expense. All utilities, shown and unshown, damaged through the negligence of the contractor shall be repaired or replaced by the contractor at his expense.
- The contractor will be responsible for all damage to existing utilities, pavement, fences, structures and other features not designated for removal. The contractor shall repair all damages at his expense.
- The contractor shall verify the flow lines of all existing storm or sanitary sewer connections and utility crossings prior to the start of construction. Notify the engineer of any discrepancies.
- SAFETY NOTICE TO CONTRACTOR:** In accordance with generally accepted construction practices, the contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Any construction observation by the engineer of the contractor's performance is not intended to include review of the adequacy of the contractor's safety measures, in, on or near the construction site.
- All site concrete (curbs, pavements, sidewalks, etc.) shall meet Kansas City Materials Metro Board (KCMMB) mix design specifications for 4,000 p.s.i. air entrained concrete. APWA detail references are provided for all geometrical and other design information.
- Refer to the building plans for site lighting electrical requirements, including conduits, pole bases, pull boxes, etc.

**SITE DIMENSION NOTES:**

- BUILDING TIES SHOWN ARE TO THE OUTSIDE FACE OF PROPOSED WALLS. THE SUBCONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR SPECIFIC DIMENSIONS AND LAYOUT INFORMATION FOR THE BUILDINGS.
- ALL DIMENSIONS SHOWN FOR THE PARKING LOT AND CURBS ARE MEASURED FORM BACK OF CURB TO BACK OF CURB.

**PAVEMENT MARKING AND SIGNAGE NOTES:**

- PARKING STALL MARKING STRIPES SHALL BE FOUR INCH (4") WIDE WHITE STRIPES. DIRECTIONAL ARROW AND HANDICAP STALL MARKINGS SHALL BE FURNISHED AT LOCATIONS SHOWN ON PLANS.
- HANDICAP PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO ALL FEDERAL (AMERICANS WITH DISABILITIES ACT) AND STATE LAWS AND REGULATIONS.
- TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
- STOP SIGNS SHALL BE PROVIDED AT ALL LOCATIONS AS SHOWN ON PLANS AND SHALL CONFORM TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". SIGNS SHALL BE 18" X 12", 18 GAUGE STEEL AND SHALL BE ENGINEER GRADE REFLECTIVE.
- TRAFFIC CONTROL AND PAVEMENT MARKINGS SHALL BE PAINTED WITH A WHITE SHERWIN WILLIAMS S-W TRAFFIC MARKING SERIES B-2972 OR APPROVED EQUAL. THE PAVEMENT MARKING SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. APPLY ON A CLEAN, DRY SURFACE AND AT A SURFACE TEMPERATURE OF NOT LESS THAN 70° AND THE AMBIENT AIR TEMPERATURE SHALL NOT BE LESS THAN 60° AND RISING. TWO COATS SHALL BE APPLIED.

**OIL-GAS WELLS:**

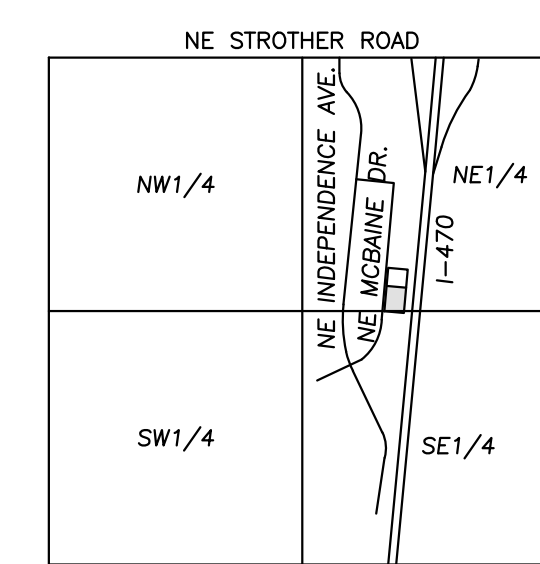
ACCORDING TO THE MISSOURI DEPARTMENT OF NATURAL RESOURCES STATE OIL & GAS COUNCIL WELLS, LOCATED AT [www.dnr.mo.gov/geology/geosrv/oilandgas.htm](http://www.dnr.mo.gov/geology/geosrv/oilandgas.htm), THERE ARE NO OIL OR GAS WELLS ON THE PROPERTY SHOWN HEREON.

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**FIRE ACCESS ROAD NOTE:**

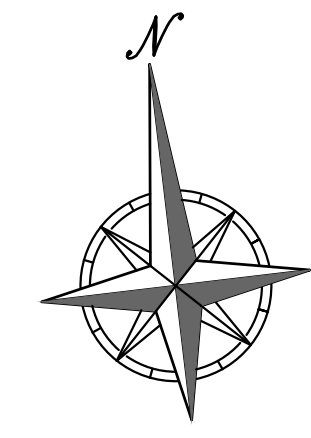
ALL FIRE ACCESS LANES SHALL BE HEAVY DUTY ASPHALT CAPABLE OF SUPPORTING 75,000-POUNDS.



VICINITY MAP  
SEC. 20-48N-31W



SCALE: 1"=2000'

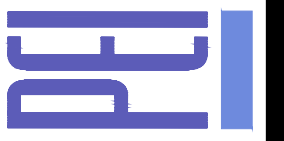


SCALE: 1"=30'  
0' 30' 60'



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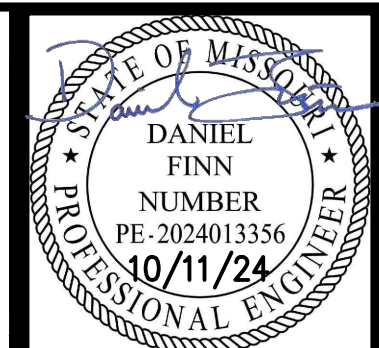


**OVERALL SITE PLAN**  
1-470 BUSINESS & TECHNOLOGY CENTER  
2701 NE MCBAINE DR  
LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	Date	By	App.	Revisions:
240024	09-12-2024	AEB	DAF	REVISED PER CITY COMMENTS
DATE: 08-13-2024	10-02-2024	AEB	DAF	REVISED PER CITY COMMENTS
CHECKER: DAF	10-11-2024	AEB	DAF	REVISED PER CITY COMMENTS
CORPORATE SEAL				
DATE OF AUTHORIZATION				
LAND SURVEYING - LS-82				
ENGINEERING - E-361				
DATE OF AUTHORIZATION				
LAND SURVEYING-200701028				
ENGINEERING-200300308				

SHEET  
**C100**





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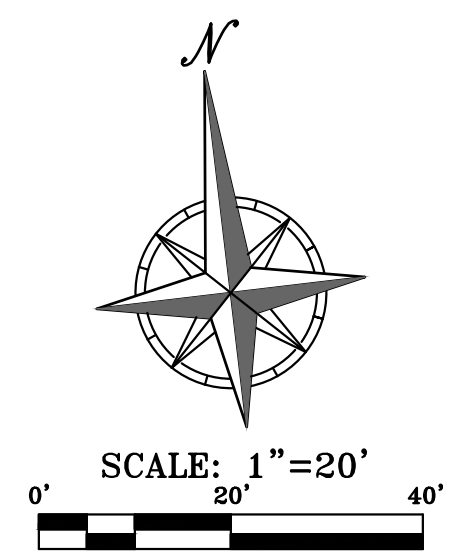
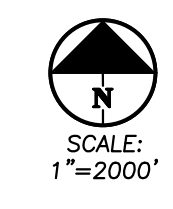
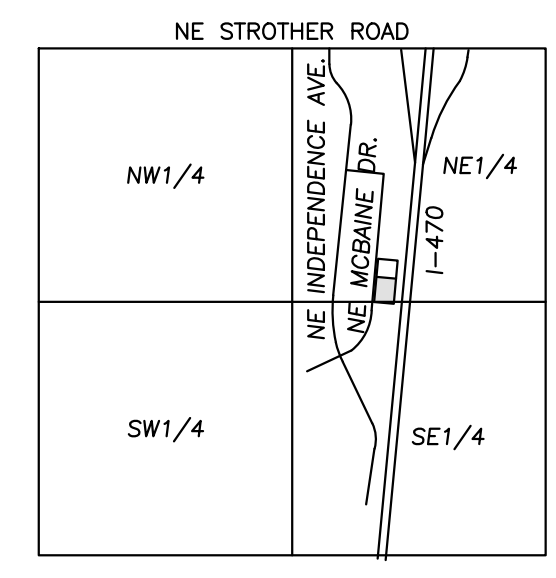
**ENLARGED SITE PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DRIVE  
 LEE'S SUMMIT, MISSOURI 64064

**SITE KEY NOTES:**

- (A) CONSTRUCT PRIVATE TYPE CO-1 CONCRETE CURB & GUTTER, TYP. SEE DETAIL GEN-4 ON SHEET C700.
- (B) CONSTRUCT PRIVATE CONCRETE SIDEWALK, TYP. SEE "PRIVATE CONCRETE SIDEWALKS (NON-REINFORCED)" DETAIL ON SHEET C701.
- (C) INSTALL ACCESSIBLE PAVEMENT MARKINGS PER ADA SPECIFICATIONS. SEE "ACCESSIBLE PARKING SPACE DETAIL" DETAIL ON SHEET C701.
- (D) INSTALL ACCESSIBLE PARKING SIGN. SEE "ACCESSIBLE SIGN IN GRASS AREA" DETAIL ON SHEET C701.
- (E) INSTALL VAN ACCESSIBLE PARKING SIGN. SEE "ACCESSIBLE SIGN IN GRASS AREA" DETAIL ON SHEET C701.
- (F) INSTALL TRASH ENCLOSURE (RE: ARCH PLANS).
- (G) INSTALL SCORED CONCRETE CROSSWALK. SEE "CROSSWALK DETAIL" ON SHEET C700.
- (H) INSTALL MONUMENT SIGN (RE: ARCH PLANS).
- (I) CONSTRUCT TRANSFORMER PAD (RE: EVERY WORKORDER).
- (J) CONSTRUCT CONCRETE SIDEWALK FLUME WITH STEEL PLATE AT SIDEWALK. SEE "SIDEWALK FLUME" DETAIL ON SHEET C704.
- (K) INSTALL CONCRETE COMMERCIAL ENTRANCE. SEE DETAIL GEN-1 ON SHEET C704.
- (L) CONSTRUCT PUBLIC CONCRETE SIDEWALK. SEE DETAIL GEN-2 ON SHEET C703.
- (M) CONSTRUCT PUBLIC SIDEWALK RAMP (OMIT DETECTABLE WARNING) SEE SHEET C703 FOR SITE SPECIFIC DESIGN INFORMATION.
- (N) INSTALL STANDARD ASPHALT PAVEMENT. SEE "STANDARD ASPHALT PAVING" DETAIL ON SHEET C700.
- (O) INSTALL HEAVY DUTY ASPHALT PAVEMENT. SEE "HEAVY DUTY ASPHALT PAVING" DETAIL ON SHEET C700.
- (P) INSTALL CONCRETE PAVEMENT. SEE "CONCRETE PAVING" DETAIL ON SHEET C700.
- (Q) INSTALL BENCH (RE: ARCH PLANS).
- (R) EXTERIOR MECHANICAL AREA W/ SCREEN WALL (RE: ARCH PLANS).
- (S) CONSTRUCT PRIVATE SIDEWALK CURB RAMP (OMIT DETECTABLE WARNING). SEE "PRIVATE SIDEWALK RAMPS" DETAIL ON SHEET C701.
- (T) CONSTRUCT RETAINING WALL. SEE "LANDSCAPE RETAINING WALL" DETAIL ON SHEET C703.

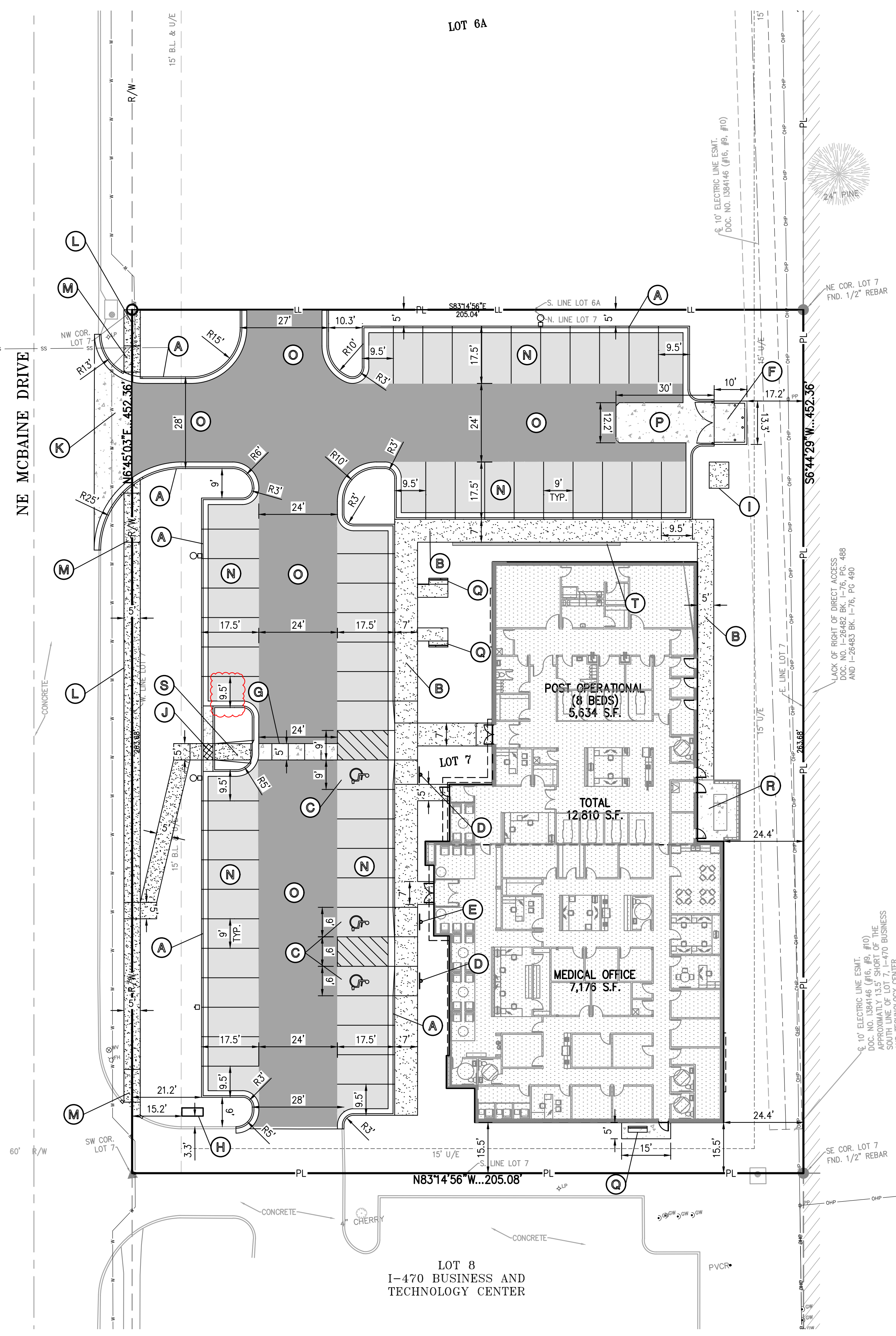
**LEGEND**

- PL — PROPERTY LINE
- LL — LOT LINE
- R/W — RIGHT-OF-WAY
- 2' CURB & GUTTER
- 6" CURB
- B/L — BUILDING SETBACK LINE
- P/S — PARKING SETBACK LINE
- L/S — LANDSCAPE SETBACK LINE
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK



Project No.	Date	By	App.
240024	09-12-2024	AEB	DAF
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**SHEET**  
**C101**



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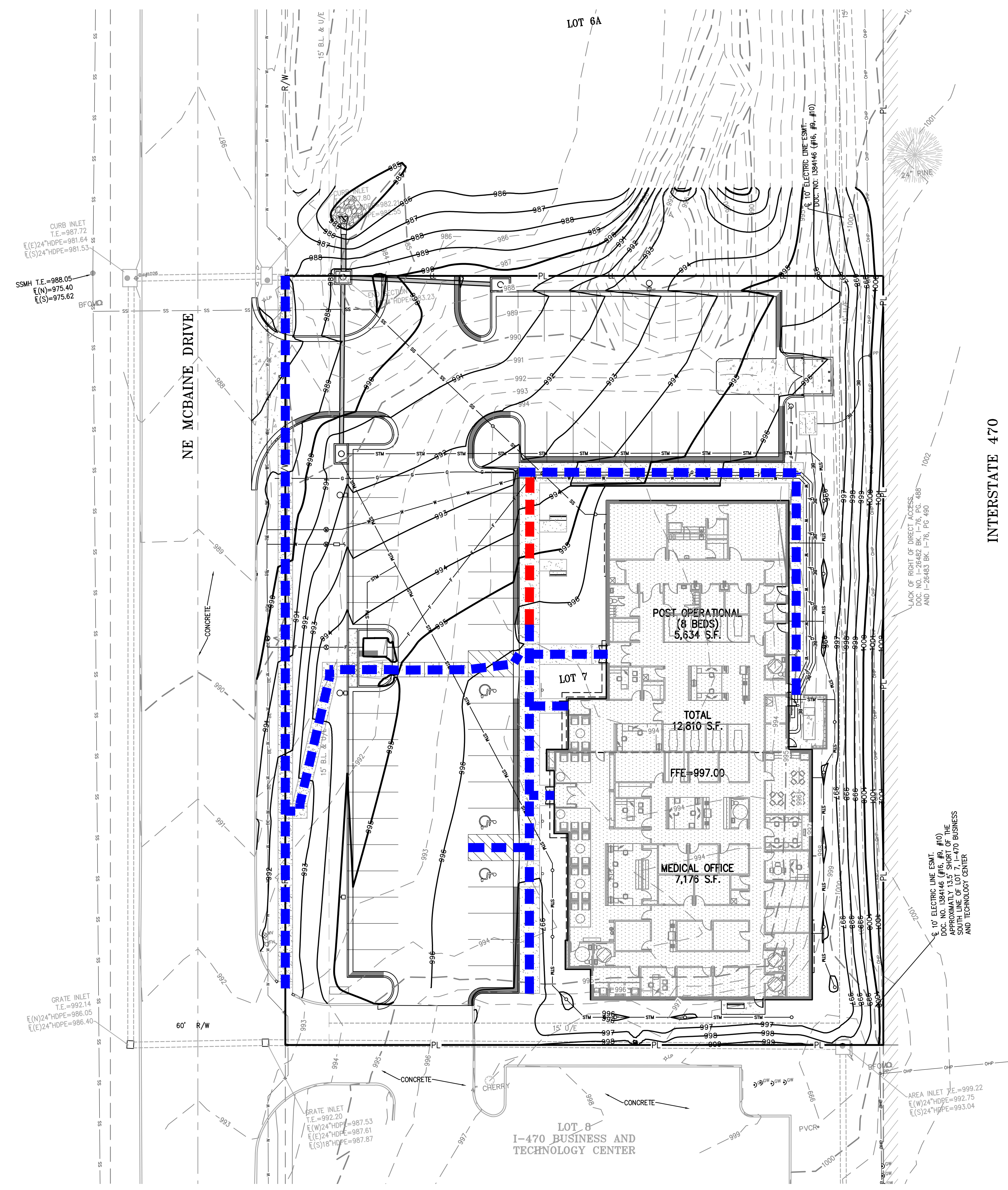


Know what's below.  
 Call before you dig.

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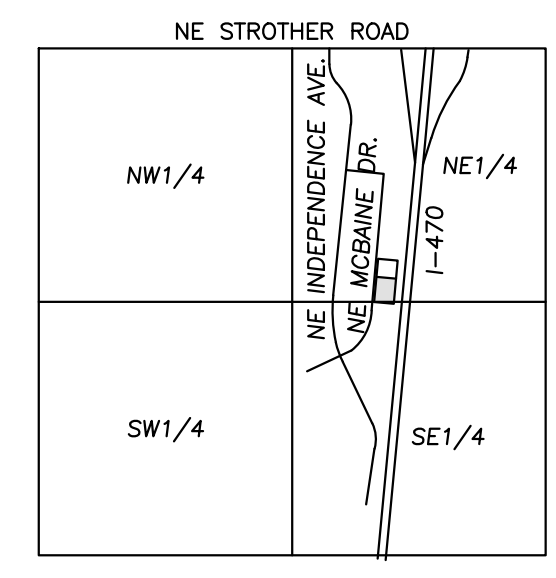


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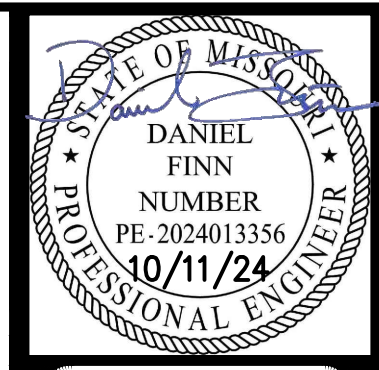
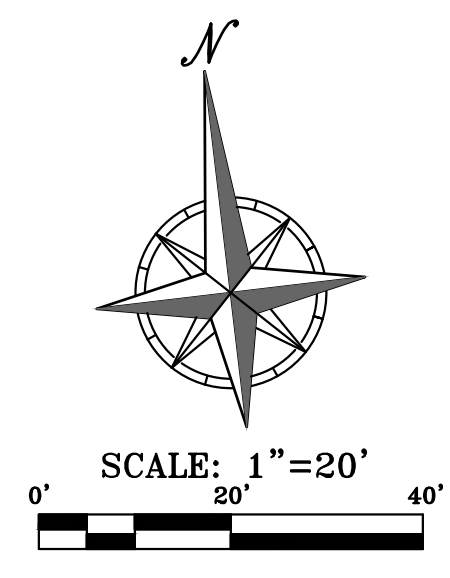
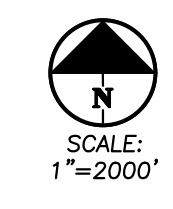


INTERSTATE 470

**LEGEND**  
--- ADA ROUTE  
--- NON-ADA ROUTE



VICINITY MAP  
 SEC. 20-48N-31W



**PHELPS ENGINEERING, INC.**  
 1270 N. Winchester  
 Olathe, Kansas 66061  
 (913) 993-1155  
 Fax (913) 993-1165  
 www.phelpsengineering.com

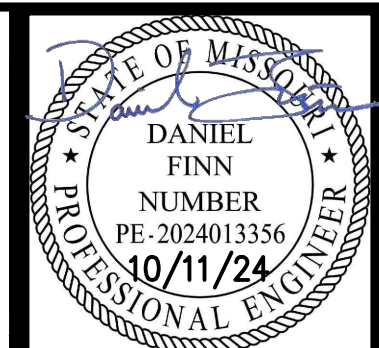
PLANNING  
 ENGINEERING  
 IMPLEMENTATION

**ADA PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DR  
 LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	No.	Date	By	Revisions:	
				REVISED PER CITY COMMENTS	AEB DAF
240024	1.	09-12-2024	AEB DAF	REVISED PER CITY COMMENTS	AEB DAF
	2.	10-02-2024	AEB DAF	REVISED PER CITY COMMENTS	AEB DAF
	3.	10-11-2024	AEB DAF	REVISED PER CITY COMMENTS	AEB DAF

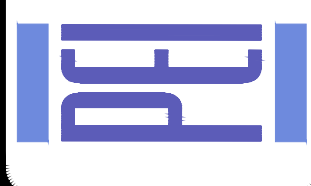
SHEET  
**C102**





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 1370 N. Winchester  
 Olathe, Kansas 66061  
 (913) 993-1155  
 Fax: (913) 993-1165  
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PLANNING  
 IMPLEMENTATION



**OVERALL GRADING PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAINE DR  
 LEE'S SUMMIT, MISSOURI 64064

**SITE GRADING NOTES:**

- CONTOURS AND ELEVATIONS: Existing and proposed contours are shown on plans at one foot (1') contour intervals, unless otherwise noted. Proposed contours and elevations shown represent approximate finish grade. Contractor shall hold down subgrades to allow for pavement and sub-base thicknesses.
  - If the 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.
  - CLEARING AND GRUBBING: Prior to beginning preparation of subgrade, all areas under pavements or building shall be stripped of all topsoil, vegetation, large rock fragments (greater than 6 inches in any dimension) and any other deleterious material. The actual stripping depth should be based on visual examination during construction and the results of proof-rolling operations. The root systems of all trees (not designated to remain) shall be removed in their entirety. Stripping materials shall not be incorporated into structural fills.
  - TOPSOIL STRIPPING: Prior to the start of site grading, the contractor shall strip all topsoil from areas to be graded, and stockpiled at a location on or adjacent to the site as directed by the owner. At completion of grading operations and related construction, the contractor shall be responsible for redistribution of topsoil over all areas disturbed by the construction activities. Topsoil shall be placed to a minimum depth of six inches (6") and in accordance with specifications for landscaping. At that time, and prior to the installation of landscaping or irrigation, all topsoil graded areas shall be visually inspected and accepted by the owner and I.T.L.
  - Contractor shall adjust and/or cut existing pavement as necessary to assure a smooth fit and continuous grade. Contractor shall assure positive drainage away from buildings for all natural and paved areas.
  - SUBGRADE PREPARATION: Prior to placement of new fill material, the existing subgrade shall be proofrolled and approved under the direction of the Geotechnical Engineer or his representative.
  - PROOFROLLING: Subsequent to completion of stripping and over-excavation, all building and pavement areas to receive engineered fill shall be systematically proof-rolled using a tandem axle dump truck loaded to approximately 20,000 pounds per axle. Also, any finished subgrade areas to receive paving shall be proof-rolled within 48 hours of paving. Unsuitable soils that are detected and that can not be recompacted should be over-excavated and replaced with controlled structural fill.
- A) GEOTECHNICAL:** All earthwork shall conform to the recommendations of the Geotechnical report. Said report and its recommendations are herein incorporated into the project requirements by reference. Prior to beginning construction, the contractor shall obtain a copy of and become familiar with the geotechnical report. Unless specifically noted on the plans, the recommendations in the geotechnical report are hereby incorporated into the project requirements and specifications.
- B) SURFACE WATER:** Surface water shall be intercepted and diverted during the placement of fill.
- C) FILLS:** All fills shall be considered controlled or structural fill and shall be free of vegetation, organic matter, topsoil and debris in areas where the thickness of the fill is greater than five feet building and pavement construction should not commence until so authorized by the on-site geotechnical engineer to allow for consolidation.
- D) BUILDING SUBGRADE:** As specified in the Geotechnical Engineering Report, the upper section of building subgrade shall consist of Low Volume Change (LVC) material defined as approved, compacted granular fill or low to moderate plasticity cohesive soil materials stabilized with Class C Flyash. Granular fill shall consist of compacted granular materials with a maximum particle size of two (2) inches or less, such as limestone screenings. Refer to geotechnical report for complete requirements.
- E) EXISTING SLOPES:** Where fill material is to be placed on existing slopes greater than 5:1 (horizontal to vertical), existing slope shall be benched providing a minimum vertical face of twelve inches (12"). The benches should be cut wide enough to accommodate the compaction equipment. Fill material shall be placed and compacted in horizontal lifts not exceeding nine inches (9") (loose lift measurement), unless otherwise approved by the Geotechnical Engineer.
- F) COMPACTION REQUIREMENTS:** The upper 9 inches of pavement subgrade areas shall be compacted to a minimum density of ninety five percent (95%) of the material's maximum dry density as determined by ASTM D698 (standard proctor compaction). The moisture content at the time of placement and compaction shall within a range of 0% below to 4% above optimum moisture content as defined by the standard proctor compaction procedure. The moisture contents shall be maintained within this range until completion of the work. Where compaction of earth fill by a large roller is impractical or undesirable, the earth fill shall be hand compacted with small vibrating rollers or mechanical tampers.
- All cut or fill slopes shall be 3:1 or flatter. All asphalt parking areas shall be a minimum of 1% slope but not more than 5% slope unless otherwise noted. All pavements within ADA parking areas shall not exceed 2% total slope. All grades around building shall be held down 6" from finish floor and slope away another 6" in 10 feet. Contractor shall notify engineer prior to final subgrade construction of any areas not within this slope requirement.
  - TESTING AND INSPECTION: Owner's Independent Testing Laboratory (ITL) shall make tests of earthwork during construction and observe the placement of fill and other work performed on this project to verify that work has been completed in accordance with Geotechnical Engineering Report, Project Specifications and within industry standards. The ITL will be selected by the owner and the cost of testing will be the owner's responsibility.
  - CLASSIFICATION: All excavation shall be considered unclassified. No separate or additional payments shall be made for rock excavation.
  - PERMANENT RESTORATION: All areas disturbed by earthwork operations shall be sodded, unless shown otherwise by the landscaping plan or erosion control plan.
  - UTILITIES: The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility companies at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
  - LAND DISTURBANCE: The contractor shall adhere to all terms & conditions as outlined in the EPA or applicable state N.P.D.E.S. permit for storm water discharge associated with construction activities. Refer to project S.W.P.P.P. requirements.

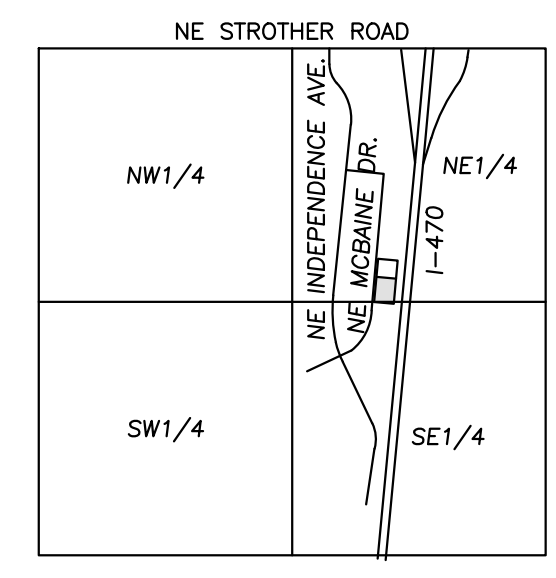
**Earthwork Summary**  
 Associated Plastic Surgeons  
 10/11/2024

Raw Excavation	770 Cu. Yds.
In Place Compaction (+15%)	-4,153 Cu. Yds.
Pavement Adjustment	792 Cu. Yds. (assume 12" of additional excavation)
Building Adjustment	949 Cu. Yds. (assume 24" of additional excavation)
On Site Net	-1,643 Cu. Yds.

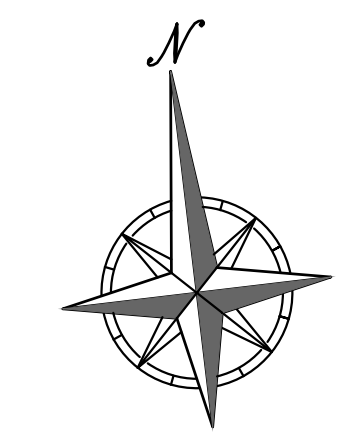
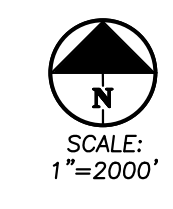
\* EARTHWORK COMPUTATIONS BY PHELPS ENGINEERING, INC. ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE VERIFIED BY CONTRACTORS BY THEIR CHOSEN METHOD PRIOR TO PLACING BID. ALL EARTHWORK SHALL BE CONSIDERED UNCLASSIFIED. 15% WAS ADDED INTO RAW FILL QUANTITY TO ACCOUNT FOR SHRINKAGE.

**LEGEND**

- PL — PROPERTY LINE
- LL — LOT LINE
- R/W — RIGHT-OF-WAY
- — 2' CURB & GUTTER
- — — — — EXISTING CONTOURS
- — — — — PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- LG — TOP OF GUTTER
- TC — TOP OF CURB
- SW — SIDEWALK
- ME — MATCH EXISTING
- HP — HIGH POINT
- LP — LOW POINT
- P — TOP OF PAVEMENT
- TE — TOP OF STRUCTURE
- OR — GROUND ELEVATION
- BS — BOTTOM OF STEPS
- TS — TOP OF STEPS
- BW — BOTTOM OF WALL
- TW — TOP OF WALL
- — — — — EXISTING STORM SEWER
- — — — — PROPOSED STORM PIPE
- — — — — PROPOSED WET CURB & GUTTER
- — — — — PROPOSED DRY CURB & GUTTER
- — — — — PROPOSED RETAINING WALL

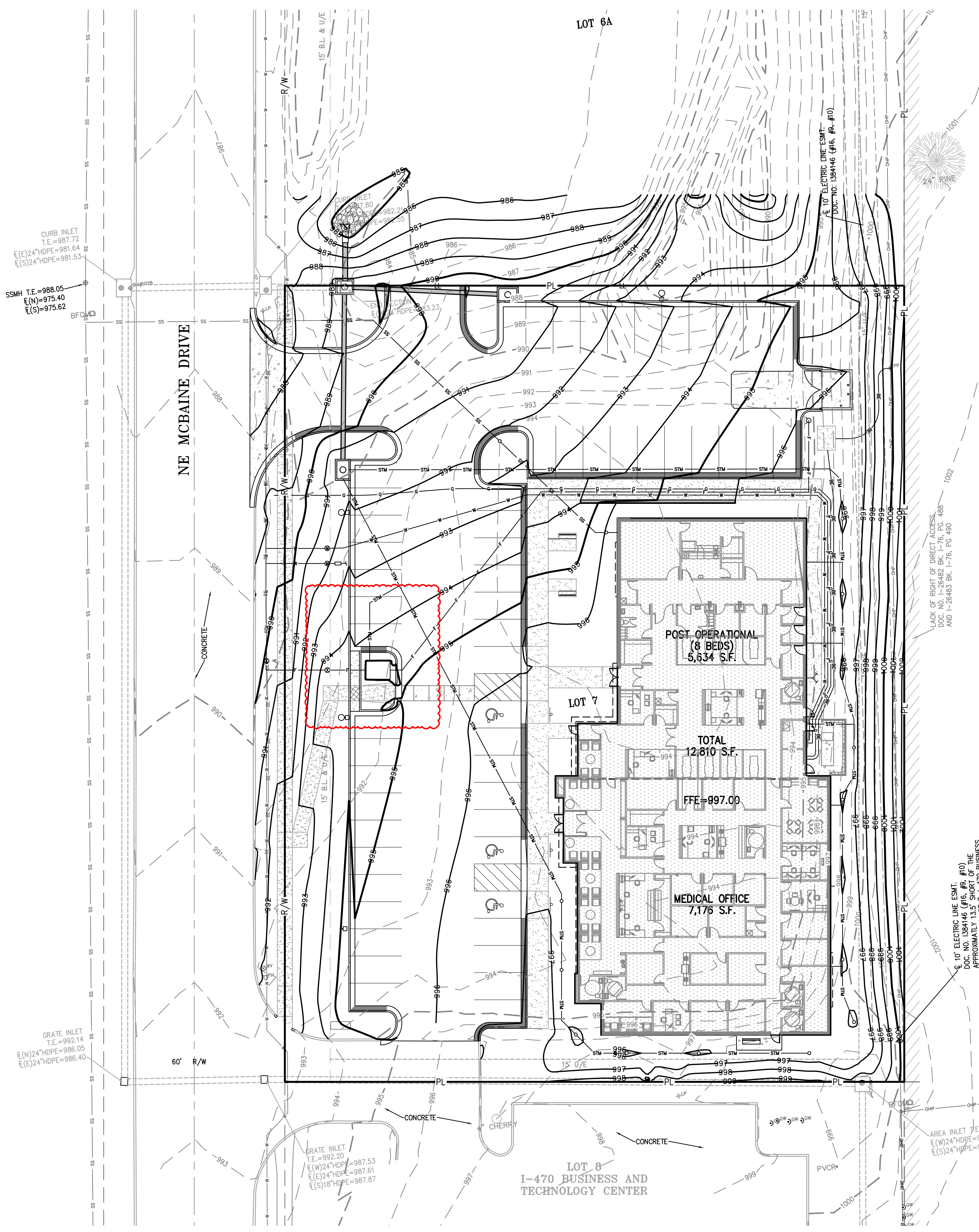


VICINITY MAP  
 SEC. 20-48N-31W



Project No.	Date	By	App.
240024	09-12-2024	AEB	DAF
1	10-02-2024	AEB	DAF
2	10-11-2024	AEB	DAF
3			

SHEET  
**C200**



**UTILITY NOTES:**  
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**BENCHMARK:**

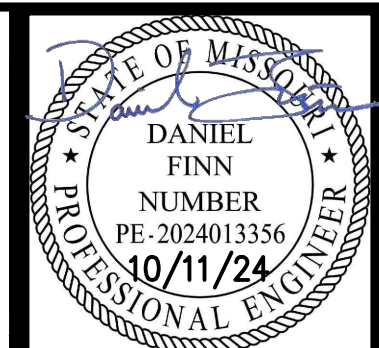
VERTICAL DATUM = NAVD88 BASED ON GPS OBSERVATION USING SMARTNET GPS NETWORK  
 1. SET "1" CUT IN CENTER FRONT FACE OF CURB INLET ON WEST SIDE OF NE MCBAINE DRIVE WEST OF LOT 7.  
 ELEVATION = 987.72

**FLOOD NOTE:**

THIS PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 29095C04306, AND DATED JANUARY 20, 2017.

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**PHILIPS ENGINEERING, INC.**  
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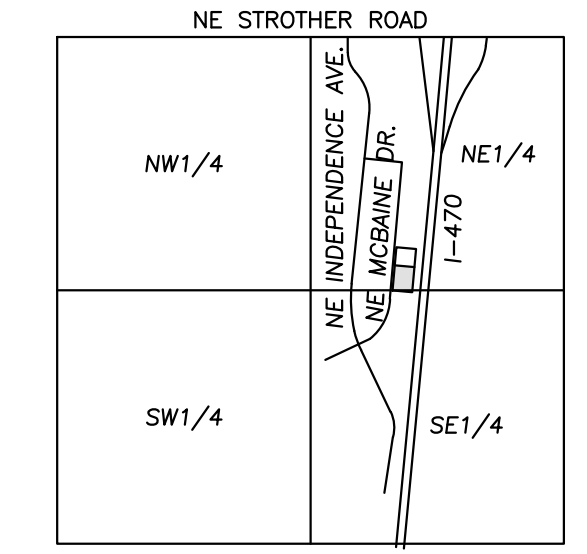
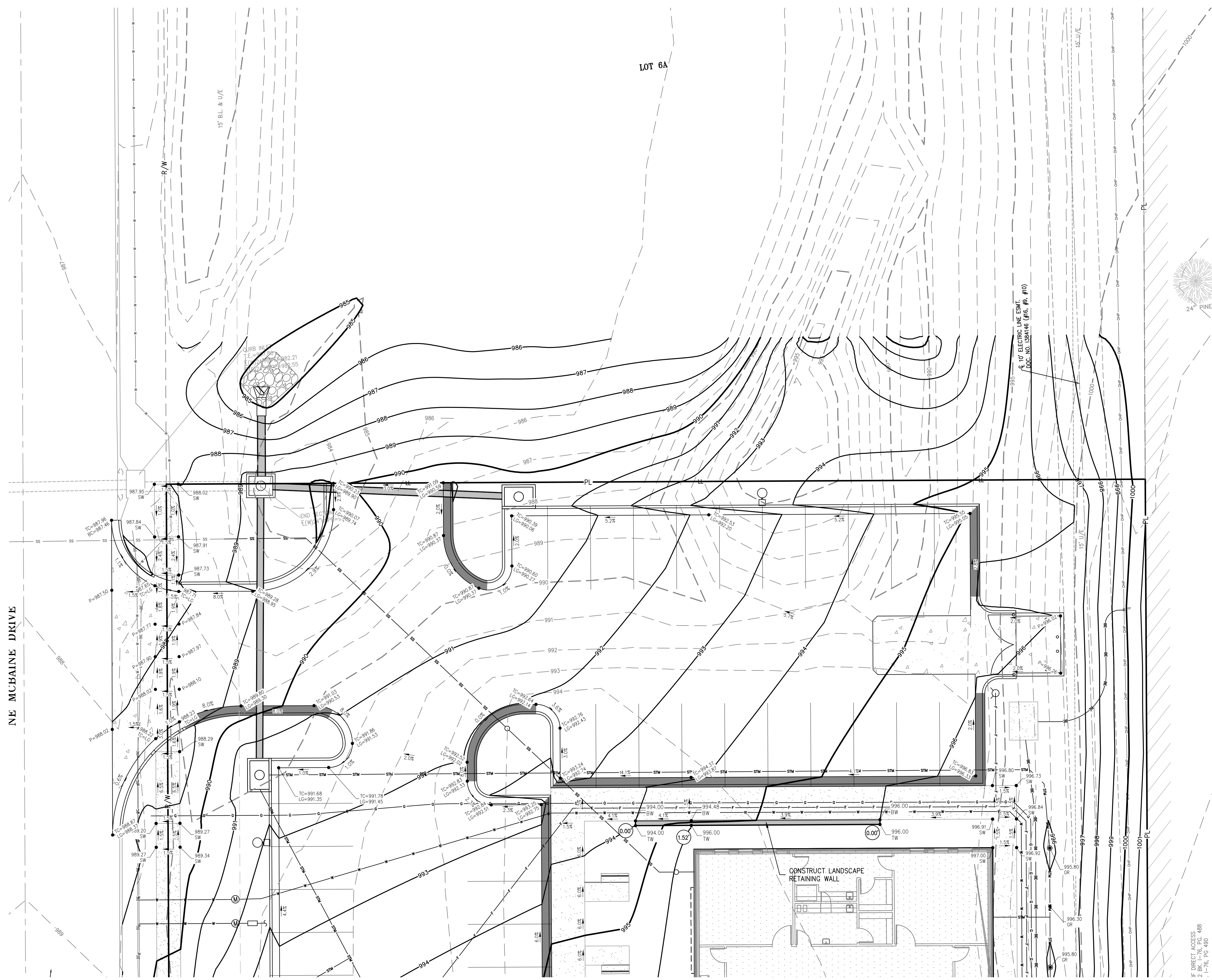
**ENLARGED GRADING PLAN**  
 1-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAINE DR  
 LEE'S SUMMIT, MISSOURI 64064

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**BENCHMARK:**

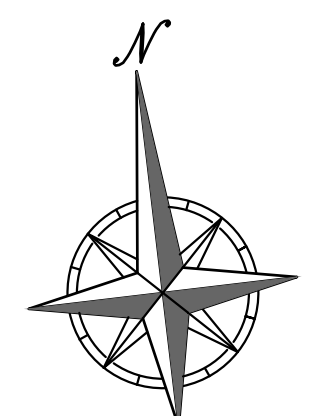
VERTICAL DATUM = NAVD88 BASED ON GPS OBSERVATION USING SMARTNET GPS NETWORK  
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 ELEVATION = 987.72



VICINITY MAP  
 SEC. 20-48N-31W

**LEGEND**

- PL — PROPERTY LINE
- LL — LOT LINE
- R/W- RIGHT-OF-WAY
- 2" CURB & GUTTER
- 920 — EXISTING CONTOURS
- 918 — PROPOSED CONTOURS
- XXX.XX TW — PROPOSED SPOT ELEVATION
- LC — UP OF GUTTER
- TC — TOP OF CURB
- SW — SIDEWALK
- ME — MATCH EXISTING
- HP — HIGH POINT
- LP — LOW POINT
- P — TOP OF PAVEMENT
- GR — TOP OF STRUCTURE
- BS — BOTTOM OF STEPS
- TS — TOP OF STEPS
- BW — BOTTOM OF WALL
- TW — TOP OF WALL
- — EXISTING STORM SEWER
- — PROPOSED STORM PIPE
- — PROPOSED WET CURB & GUTTER
- — PROPOSED DRY CURB & GUTTER
- — PROPOSED RETAINING WALL



SCALE: 1"=10'  
 0' 10' 20'

**UTILITY NOTES:**  
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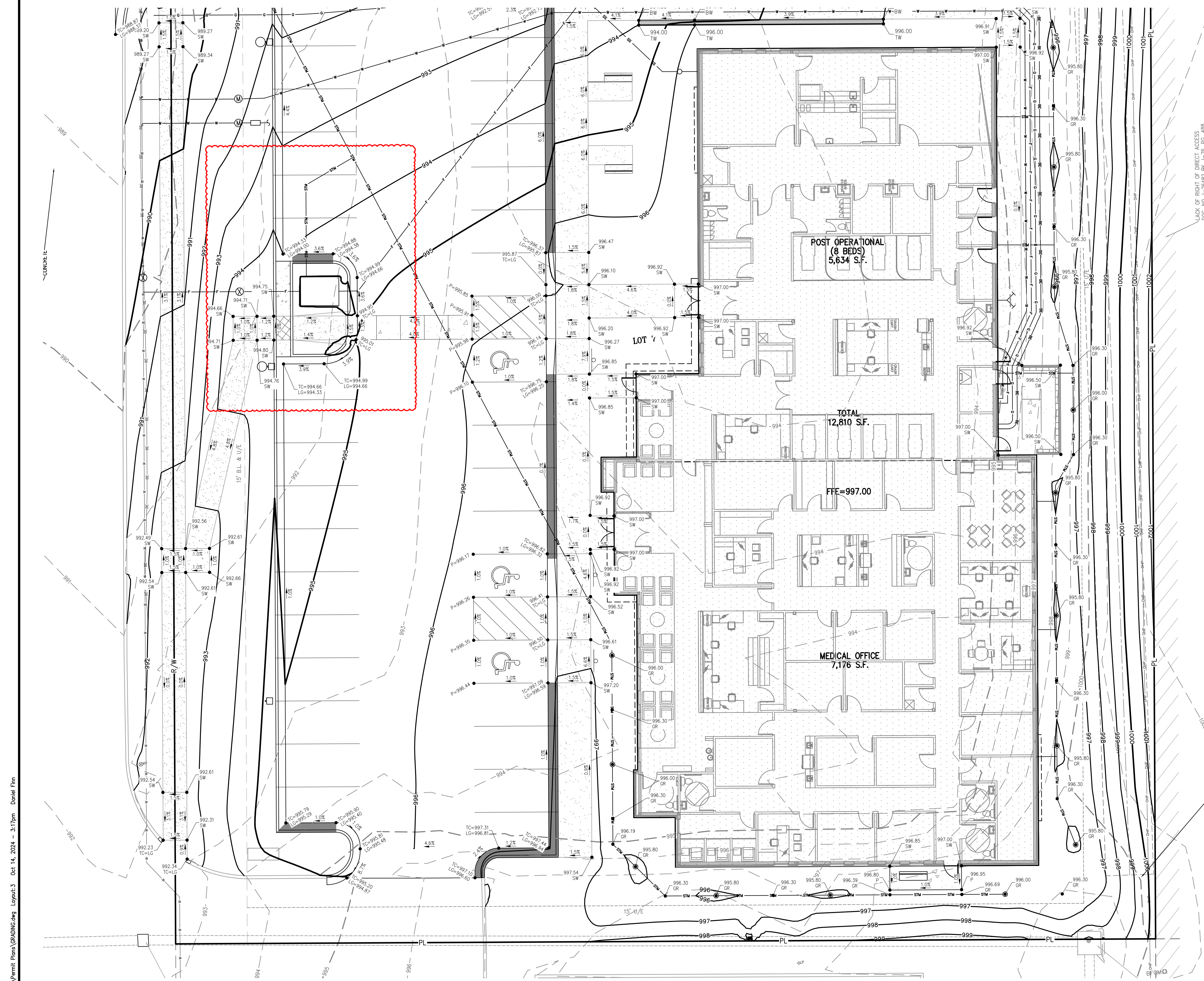
Know what's below.  
 Call before you dig.

PROJECT NO.	DATE	NO.	DATE	BY	APP.
240024	09-12-2024	1	09-12-2024	DAF	AEB
240024	10-02-2024	2	10-02-2024	DAF	AEB
240024	10-11-2024	3	10-11-2024	DAF	AEB

SHEET  
**C201**

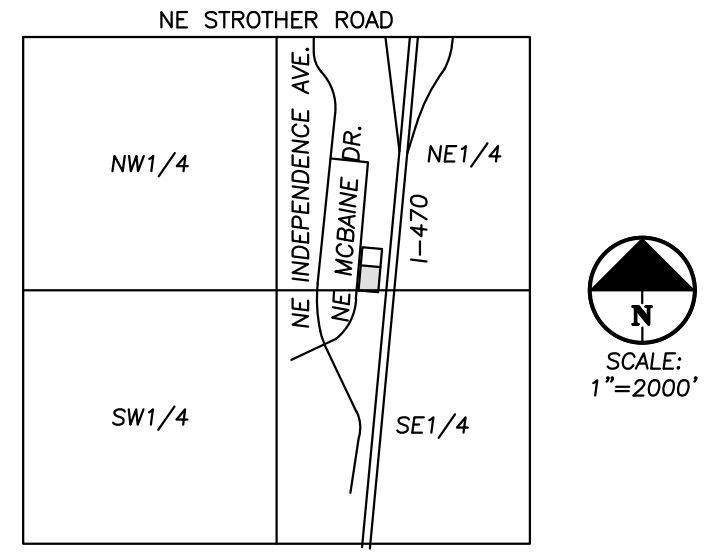
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**FLOOD NOTE:**  
 THIS PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 2906604306; AND DATED JANUARY 29, 2017.

**BENCHMARK:**  
 VERTICAL DATUM = NAVD88 BASED ON GPS OBSERVATION USING SMARTNET GPS NETWORK  
 1. SET "1" CUT IN CENTER FRONT FACE OF CURB INLET ON WEST SIDE OF NE MCBAIN DRIVE WEST OF LOT 7.  
 ELEVATION = 987.72

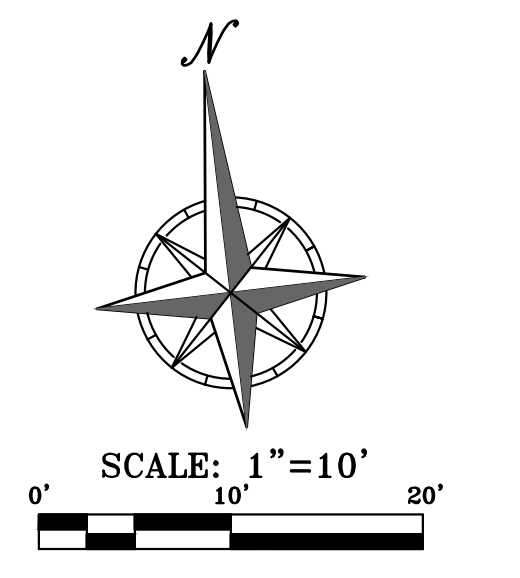


VICINITY MAP  
 SEC. 20-48N-31W

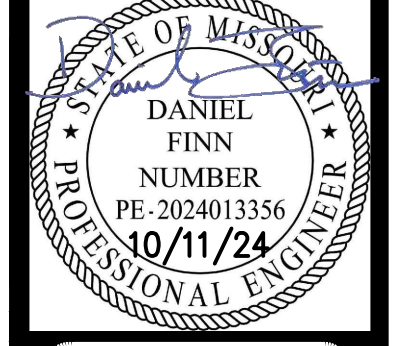
**LEGEND**

— PL	PROPERTY LINE
— LL	LOT LINE
— R/W	RIGHT-OF-WAY
—	2' CURB & GUTTER
— 920	EXISTING CONTOURS
— 918	EXISTING CONTOURS
— 920	PROPOSED CONTOURS
— 918	PROPOSED CONTOURS
xxx.xx	PROPOSED SPOT ELEVATION
LC	UP OF GUTTER
TC	TOP OF CURB
SW	SIDEWALK
ME	MATCH EXISTING
HP	HIGH POINT
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—	PROPOSED STORM PIPE
—	PROPOSED WET CURB & GUTTER
—	PROPOSED DRY CURB & GUTTER
—	PROPOSED RETAINING WALL

8, 10' ELECTRIC LINE (SWR #10)  
 DOC. NO. 1084451 SHORT OF THE  
 SOUTH LINE OF LOT 7, L-470 BUSINESS  
 AND TECHNOLOGY CENTER



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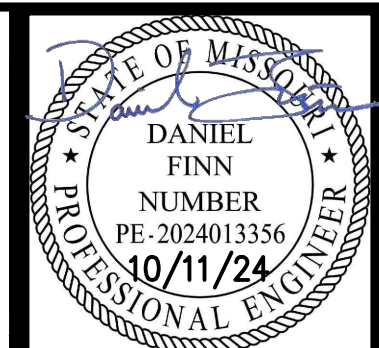
**ENLARGED GRADING PLAN**  
 1-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DR  
 LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	BY	APP.
240024	09-12-2024	AEB	DAF
240024	10-02-2024	AEB	DAF
240024	10-11-2024	AEB	DAF

**SHEET**  
**C202**

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 Olathe, Kansas 66061  
 (913) 993-1155  
 Fax: (913) 993-1165  
 www.philipsengineering.com

**PLANNING  
ENGINEERING  
IMPLEMENTATION**

**UTILITY PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DR  
 LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	BY	APP.	REVISIONS
240024	09-12-2024	AEB	DAF	REVISED PER CITY COMMENTS
	10-02-2024	AEB	DAF	REVISED PER CITY COMMENTS
	10-11-2024	AEB	DAF	REVISED PER CITY COMMENTS

**SHEET**  
**C300**

**UTILITY NOTES:**

- The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility companies at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to coordinate with and relocate &/or remove all existing utilities which conflict with the proposed improvements shown on the plans.
- The construction of storm sewers on this project shall conform to the requirements of the City's Technical Specifications and Design Criteria.
- The contractor shall field verify the exact location and elevation of the existing storm sewer lines and the existing elevation at locations where the proposed storm sewer collects or releases to existing ground. If discrepancies are encountered from the information shown on the plans, the contractor shall contact the design engineer. No pipes shall be laid until direction is received from the design engineer.
- It will be the contractor's responsibility to field adjust the top of all manholes and boxes as necessary to match the grade of the adjacent area. Tops of existing manholes shall be raised as necessary to be flush with proposed pavement elevations, and to be 6-inches above finished ground elevations in non-paved areas. No separate or additional compensation will be made to the contractor for making final adjustments to the manholes and boxes.
- Inlet locations, horizontal pipe information and vertical pipe information is shown to the center of the structure. Deflection angles shown for storm sewer pipes are measured from the center of curb inlets and manholes. The contractor shall adjust the horizontal location of the pipes to go to the face of the boxes. All roof drains shall be connected to storm sewer structures. Provide cleanouts on roof drain lines at 100' max. Spacing and at all bend points. Do not connect roof drains directly to storm sewer pipe.
- The contractor shall be responsible for furnishing and installing all fire and domestic water lines, meters, backflow devices, pits, valves and all other incidentals required for a complete operable fire protection and domestic water system. All costs associated with the complete water system for the buildings shall be the responsibility of the contractor. All work shall conform to the requirements of City.
- The contractor shall be responsible for furnishing and installing all sanitary sewer service lines from the buildings to the public line. All work shall conform to the requirements of the City.
- The contractor will be responsible for securing all permits, bonds and insurance required by the contract documents, City, and all other governing agencies (including local, county, state and federal authorities) having jurisdiction over the work proposed by these construction documents. The cost for all permits bonds and insurance shall be included in the bid for the work.
- By the use of these construction documents the contractor hereby agrees that he/she shall be solely responsible for the safety of the construction workers and the public. The contractor agrees to hold the engineer and owner harmless for any and all injuries, claims, losses or damages related to the project.
- The Contractor shall be responsible for furnishing all materials, tools and equipment and installation of electrical power, telephone and gas service from a point of connection from the public utility lines to the building structures. This will include all conduits, service lines, meters, concrete pads and all other incidentals required for a complete and operational system as required by the owner and the public utilities. Refer to building plans for exact tie-in locations of all utilities. Contractor shall verify connection points prior to installation of utility line.
- All fill material is to be in place, compacted, and consolidated before installation of proposed utilities. On-site geotechnical engineer shall provide written confirmation that this requirement has been met and that utilities may proceed in the fill areas. All utilities are to be placed in trench conditions.
- Contractor shall notify the utility authorities inspectors 48 hours before connecting to any existing line.
- Water lines shall be as follows (unless otherwise shown on plans):
  - Pipe sizes less than 3-inches that are installed below grade and outside building shall comply with the following:
    - Seamless Copper Tubing; Type "K" soft copper, ASTM B88.
    - Fittings: Wrought copper (85.5 Tin Antimony solder joint), ASME B 16.22.
- Minimum trench width shall be 2 feet.
- Contractor shall maintain a minimum of 42" cover on all waterlines. All water line joints are to be mechanical joints with thrust blocking as called out in specifications and construction plans. Water mains and service lines shall be constructed in accordance to City's specifications for commercial services.
- All waterlines shall be kept min. ten (10') apart (parallel) from sanitary sewer lines or manholes. Or when crossing, a 24" vertical clearance (outside edge of pipe to outside edge of pipe) of the water line above the sewer line is required.
- Sanitary conflicts will be resolved prior to permit issuance.
- All underground storm, sanitary, water and other utility lines shall be installed, inspected and approved before backfilling. Failure to have inspection approval prior to backfill will constitute rejection of work.
- All necessary inspections and/or certifications required by codes and/or utility service companies shall be performed prior to announced building possession and the final connection of service. Contractor shall coordinate with all utility companies for installation requirements and specifications.
- Refer to building plans for site lighting electrical plan, irrigation, parking lot security system and associated conduit requirements. Coordinate with Owner that all required conduits are in place & tested prior to paving.
- When a building utility connection from site utilities leading up to the building cannot be made immediately, temporarily mark all such site utility terminations.
- Refer to the building plans for site lighting electrical requirements, including conduits, pole bases, pull boxes, etc.

**UTILITY COMPANIES:**

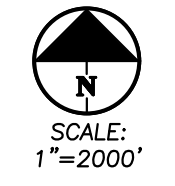
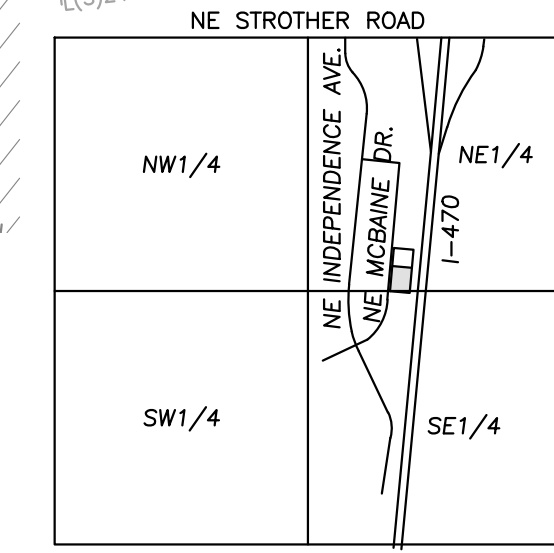
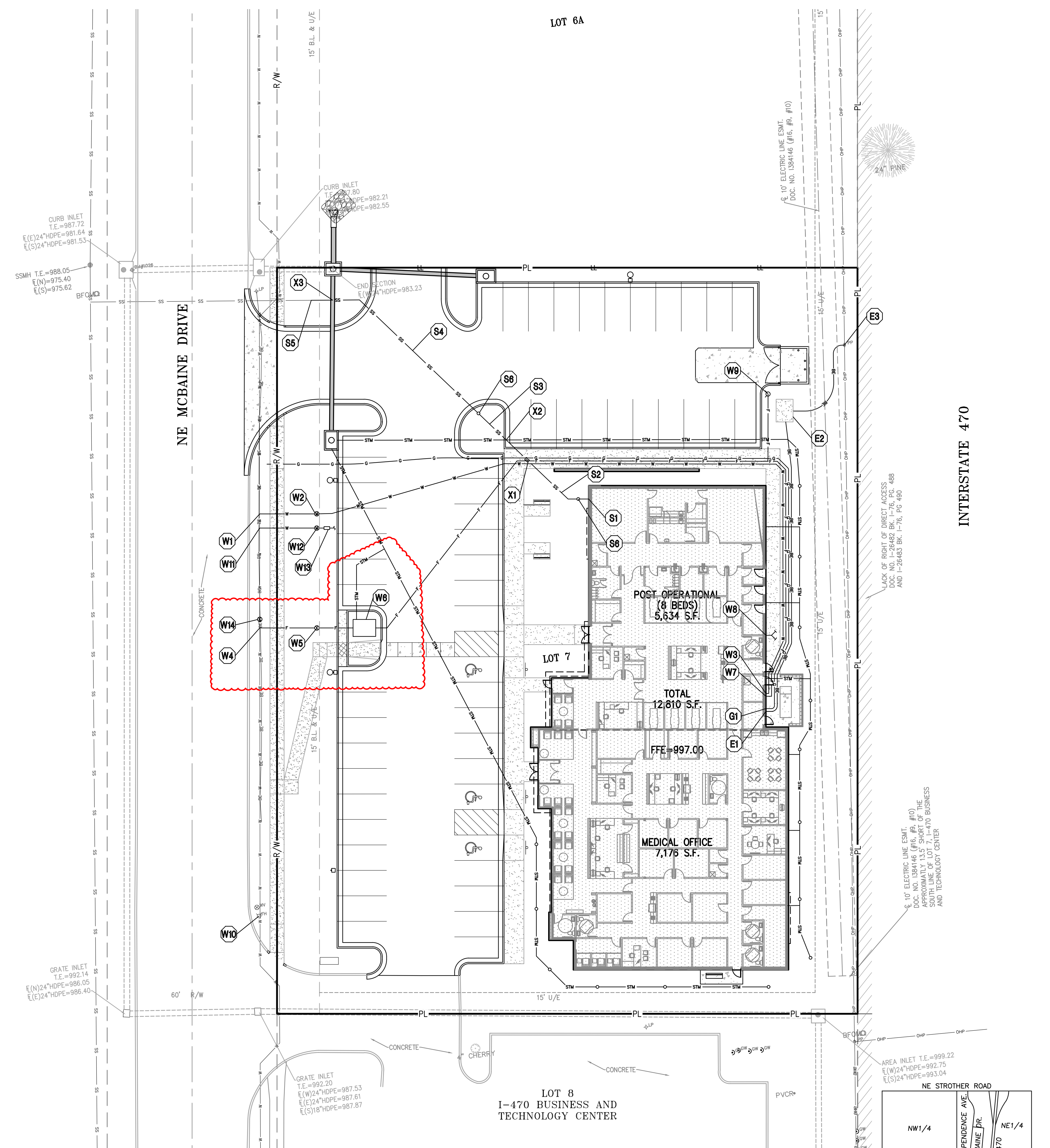
- MISSOURI GAS ENERGY (816) 969-2218  
 LUCAS WALLS (LUCAS.WALLS@SUG.COM)  
 3025 SOUTHEAST CLOVER DRIVE  
 LEE'S SUMMIT, MO 64082
- EVERGY (816) 347-4339  
 PHILLIP INGRAM (PHILLIP.INGRAM@KCPCL.COM)  
 RON DEJARNETTE (RON.DEJARNETTE@KCPCL.COM)  
 1300 HAMBLEN ROAD  
 LEE'S SUMMIT, MO 64081
- STORM SEWER (PUBLIC WORKS DEPARTMENT) (816) 969-1800  
 220 SE GREEN STREET  
 LEE'S SUMMIT, MO 64063
- SANITARY SEWER & WATER (WATER UTILITIES DEPT.) (816)-969-1900  
 1200 SE HAMBLEN ROAD,  
 LEE'S SUMMIT, MO 64081
- AT&T (913) 383-4929  
 MR. CLAYTON ANSPAUGH (CA4089@ATT.COM) (913) 383-4549-FAX  
 9444 NALL AVENUE  
 OVERLAND PARK, KANSAS 66207

**LEGEND**

- PL PROPERTY LINE
- LL LOT LINE
- R/W RIGHT-OF-WAY
- CATV EXISTING CABLE TELEVISION LINE
- FO EXISTING FIBER OPTIC LINE
- G EXISTING GAS LINE
- BE EXISTING BURIED ELECTRIC LINE
- OHP EXISTING OVERHEAD POWER LINE
- OH EXISTING OVERHEAD TELEPHONE LINE
- SS EXISTING SANITARY SEWER LINE
- 24"HDPE EXISTING STORM SEWER LINE (& SIZE)
- BT EXISTING BURIED TELEPHONE LINE
- W-6" PROPOSED WATER LINE (& SIZE)
- F-6" PROPOSED FIRE LINE (& SIZE)
- ST-6" PROPOSED ROOF DRAIN (& SIZE)

**UTILITY KEY NOTES:**

- E1** ELECTRIC ENTRY INTO BUILDING. FOLLOW IPL REQUIREMENTS (RE: BUILDING ELECTRIC PLAN.)
- E2** PROPOSED LOCATION OF CONCRETE TRANSFORMER PAD. CONTRACTOR TO VERIFY EXACT LOCATION & SIZE WITH IPL PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF CONCRETE PAD & CONDUIT AS REQUIRED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE SAID WORK WITH THE ELECTRIC COMPANY.
- E3** CONNECT TO EXISTING POLE FOR NEW SERVICE DROP. REFER TO SITE ELECTRICAL PLAN AND COORDINATE SAID WORK WITH THE ELECTRIC COMPANY.
- W1** CONTRACTOR TO COORDINATE 1-1/2" TAP ON EXISTING MAIN FOR DOMESTIC SERVICE LINE WITH CITY. THE CITY SHALL PERFORM THE TAP OF THE EXISTING MAIN. CONTACT CITY FOR TAPPING REQUIREMENTS. CONTRACTOR TO PAY ALL FEES FOR WATER MAIN TAP. OWNER WILL REIMBURSE CONTRACTOR FOR ACTUAL METER AND SYSTEM DEVELOPMENT FEES ASSESSED BY CITY.
- W2** INSTALL 1-1/2" DOMESTIC WATER METER PIT PER CITY REQUIREMENTS. THE CITY SHALL PROVIDE THE METER, THE PIT, AND ALL OTHER MATERIALS NECESSARY FOR THE INSTALLATION. CONTRACTOR TO COORDINATE AND PAY ALL FEES. INSTALLATION BY THE CONTRACTOR'S PLUMBER SHALL BE IN ACCORDANCE WITH CITY STANDARDS.
- W3** 2" DOMESTIC WATER LINE ENTRY TO BUILDING. CONTRACTOR SHALL TRANSITION FROM 1-1/2" DOMESTIC WATER LINE TO 2" DOMESTIC WATER LINE DOWNSTREAM OF METER. DOMESTIC WATER LINE SHALL BE 2" SOFT TYPE K COPPER. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ANY APPURTENANCES ON THE DOMESTIC LINE SUCH AS BACKFLOW PREVENTION DEVICES (RE: BUILDING PLANS), GATE VALVES, REDUCERS, BENDS, TEES, ETC., WHICH MAY BE REQUIRED. CONTRACTOR TO COORDINATE WITH THE DEVELOPMENT SERVICES INSPECTOR.
- W4** CONTRACTOR TO INSTALL 12"x12"x6" CUT-IN TEE FOR PROPOSED 6" PVC C900 PRIVATE FIRE LINE. CONNECT WITH A TEE WITH TWO VALVES AT THE MAIN AND A VALVE PROVIDED AT THE BACKFLOW PREVENTION VALVE. CONTRACTOR TO CONTACT CITY FOR CONNECTION REQUIREMENTS. CONTRACTOR TO PAY ALL FEES FOR WATER MAIN CONNECTION.
- W6** INSTALL 6" GATE VALVE.  
**W6** BACKFLOW PREVENTION: BACKFLOW PIT CONTAINING BACKFLOW PREVENTION DEVICE (DOUBLE CHECK DETECTOR ASSEMBLY (OCCA)) FOR 6" FIRE LINE. REFER TO LEE'S SUMMIT STANDARD DETAIL WAT-12 ON SHEET C702. INCLUDE 2" STORM DRAIN FROM SUMP (SEE SHEET C301).
- W7** 6" PRIVATE FIRE LINE ENTRY TO BUILDING (UPSTREAM OF BACKFLOW PREVENTION DEVICE). BACKFLOW PREVENTION DEVICE SHALL BE LOCATED INSIDE BUILDING (RE: BUILDING PLANS FOR BACKFLOW PREVENTION DEVICE DETAILS AND SPECIFICATIONS).
- WB** FIRE DEPARTMENT CONNECTION LOCATION (RE: MEP PLANS). CONNECTION SHALL BE A 4 INCH STORZ TYPE FITTING AND LOCATED WITHIN 100 FEET OF A FIRE HYDRANT, OR AS APPROVED BY THE CODE OFFICIAL.
- W9** CONTRACTOR TO INSTALL PRIVATE FIRE HYDRANT. PRIVATE FIRE HYDRANT SHALL BE PAINTED OPTIC YELLOW WITH THE BONNET SILVER. SEE SHEET C702, "PRIVATE FIRE HYDRANT" DETAIL.
- W10** EXISTING PUBLIC FIRE HYDRANT TO REMAIN.
- W11** CONTRACTOR TO COORDINATE 1" TAP ON EXISTING MAIN FOR IRRIGATION LINE WITH CITY. THE CITY SHALL PERFORM THE TAP OF THE EXISTING MAIN. CONTACT CITY FOR TAPPING REQUIREMENTS. CONTRACTOR TO PAY ALL FEES FOR WATER MAIN TAP. OWNER WILL REIMBURSE CONTRACTOR FOR ACTUAL METER AND SYSTEM DEVELOPMENT FEES ASSESSED BY CITY.
- W12** INSTALL 1" IRRIGATION METER PIT PER CITY REQUIREMENTS. THE CITY SHALL PROVIDE THE METER, THE PIT, AND ALL OTHER MATERIALS NECESSARY FOR THE INSTALLATION. CONTRACTOR TO COORDINATE AND PAY ALL FEES. INSTALLATION BY THE CONTRACTOR'S PLUMBER SHALL BE IN ACCORDANCE WITH CITY STANDARDS.
- W13** INSTALL 1" RPZ BACKFLOW FOR IRRIGATION SYSTEM (SEE SHEET XXX, "IRRIGATION BACKFLOW DETAIL").
- W14** INSTALL 1-8" GATE VALVE ON EXISTING 8" PVC PUBLIC WATER MAIN.
- S1** CONNECT TO BLDG. INTERIOR PLUMBING SANITARY SEWER LINE. TRANSITION FROM 4" (INTERIOR) TO 6" (EXTERIOR) AT FOUNDATION WALL (RE: MEP PLANS).  
 FG=997.00  
 FL 6"=992.00
- S2** INSTALL 40 L.F. 6" PVC SANITARY SEWER SERVICE LINE (SDR-26) @ 18.0% SLOPE.  
 FG=992.80  
 FL 6"=984.40
- S4** INSTALL 81 L.F. 6" PVC SANITARY SEWER SERVICE LINE (SDR-26) @ 7.2% SLOPE.
- S6** CONNECT TO EXISTING 78 L.F. 6" PVC SANITARY SEWER SERVICE STUB 20 L.F. UPSTREAM EXISTING MANHOLE.  
 EX. 6" FL =978.60± (PER AS-BUILTS)
- S8** INSTALL CLEAN OUT IN NON-PAVED AREA. SEE SHEET C702, "CLEANOUT (NON-PAVED AREAS)" DETAIL.
- G1** GAS ENTRY WITH GAS METER. CONTRACTOR SHALL COORDINATE WITH GAS COMPANY FOR TYING OF INDIVIDUAL METER. SIZE OF GAS MAIN SHALL BE AS DETERMINED BY UTILITY OR AS SHOWN ON BUILDING PLANS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH GAS COMPANY REGARDING THE SIZE & INSTALLATION OF GAS SERVICE LINE.
- X1** UTILITY CROSSING  
 FG=993.59  
 6" SANITARY FL= 987.1  
 1-1/2" WATER FL= 989.6 (2 FT CLEARANCE)  
 6" FIRE FL=989.6 (2 FT CLEARANCE)
- X2** UTILITY CROSSING  
 6" SANITARY FL= 984.9  
 12" STORM FL=988.0 (2.6' CLEARANCE)
- X3** UTILITY CROSSING  
 6" SANITARY FL= 979.1  
 15" STORM FL=984.1 (4.5' CLEARANCE)

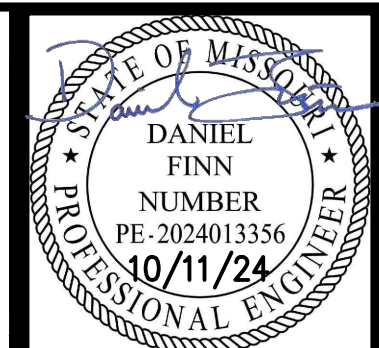


**UTILITY NOTES:**  
 VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN. UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.



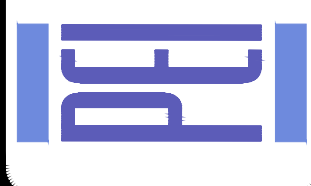
\\PHILIPS-SERVER\Projects\240024\Drawings\Permit Plans\UTILITY.dwg Layout:1 Oct 14, 2024 3:17pm Daniel Finn





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 Olathe, Kansas 66061  
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 Fax (913) 993-1165  
 www.philipsengineering.com

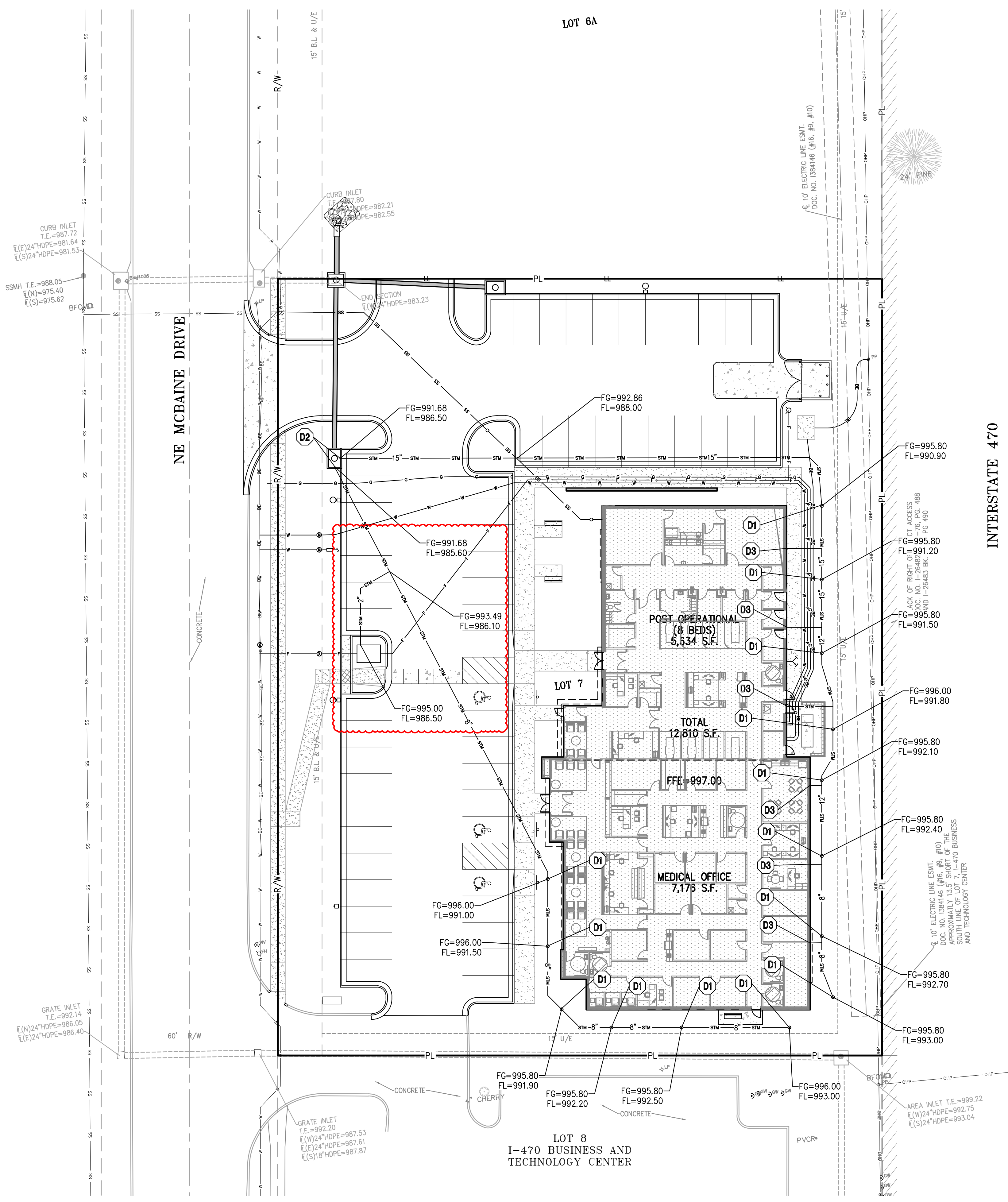
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**SECONDARY STORM SEWER PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAINE DR  
 LEE'S SUMMIT, MISSOURI 64064

Revisions:	By	App.
REVISED PER CITY COMMENTS	AEB	DAF
REVISED PER CITY COMMENTS	AEB	DAF
REVISED PER CITY COMMENTS	AEB	DAF

**SHEET**  
**C301**



INTERSTATE 470

**UTILITY KEY NOTES:**

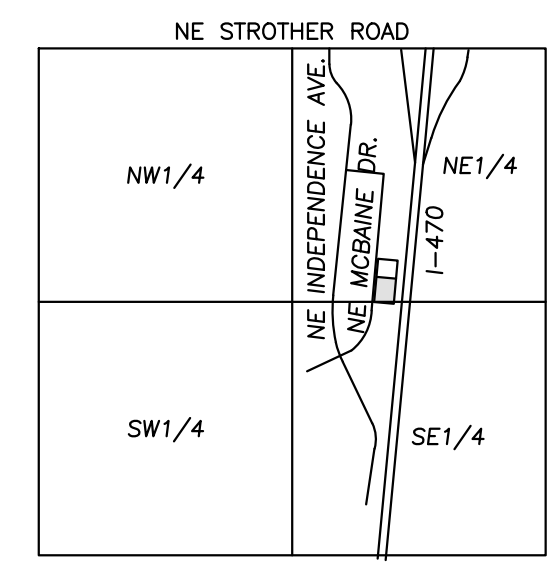
- (D1) INSTALL 18" NYOPLAST INLINE DRAIN W/ STANDARD GRATE.
- (D2) CONNECT SECONDARY STORM LINE TO STORM SEWER STRUCTURE. SEE STORM SEWER PLAN & PROFILES.
- (D3) INTERNAL ROOF DRAIN LOCATION (RE: BUILDING PLANS).
- (D4) INSTALL 2" SECONDARY STORM PIPE FROM BACKFLOW PREVENTION VAULT SUMP TO 8" SECONDARY STORM LINE.

**GENERAL NOTES:**

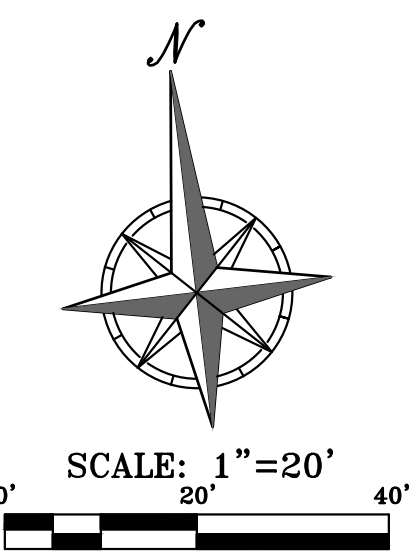
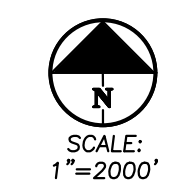
1. SECONDARY STORM LINES SHALL BE HDPE.
2. SECONDARY STORM LINES SHALL BE INSTALLED AT 1.0% MINIMUM SLOPE.
3. SECONDARY STORM LINES SHALL BE 8" MINIMUM.
4. CONNECTIONS BETWEEN SECONDARY STORM LINES SHALL BE MADE VIA INSERT-A-TEE CONNECTIONS.
5. ALL NYOPLAST DRAIN BASINS AND INLINE DRAINS LOCATED IN GREEN SPACE SHALL INCLUDE A CONCRETE BUFFER. SEE "DRAIN GRATE CONCRETE BUFFER DETAIL" ON SHEET C705.

**LEGEND**

- PL PROPERTY LINE
- LL LOT LINE
- R/W RIGHT-OF-WAY
- CATV EXISTING CABLE TELEVISION LINE
- FO EXISTING FIBER OPTIC LINE
- G EXISTING GAS LINE
- BE EXISTING BURIED ELECTRIC LINE
- OHP EXISTING OVERHEAD POWER LINE
- OHT EXISTING OVERHEAD TELEPHONE LINE
- SS EXISTING SANITARY SEWER LINE
- BT EXISTING BURIED TELEPHONE LINE
- W-6" EXISTING WATER LINE (& SIZE)
- F-6" EXISTING FIRE LINE (& SIZE)
- ST-6" EXISTING ROOF DRAIN (& SIZE)
- CATV PROPOSED CABLE TELEVISION LINE
- FO PROPOSED FIBER OPTIC LINE
- G PROPOSED GAS LINE
- BE PROPOSED BURIED ELECTRIC LINE
- SS PROPOSED SANITARY SEWER LINE
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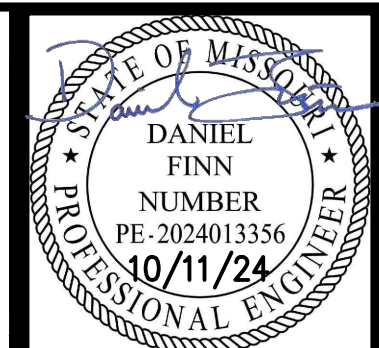
VICINITY MAP  
 SEC. 20-48N-31W



**UTILITY NOTES:**  
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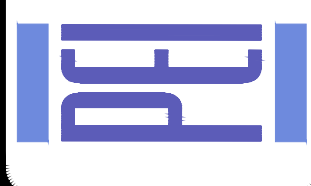
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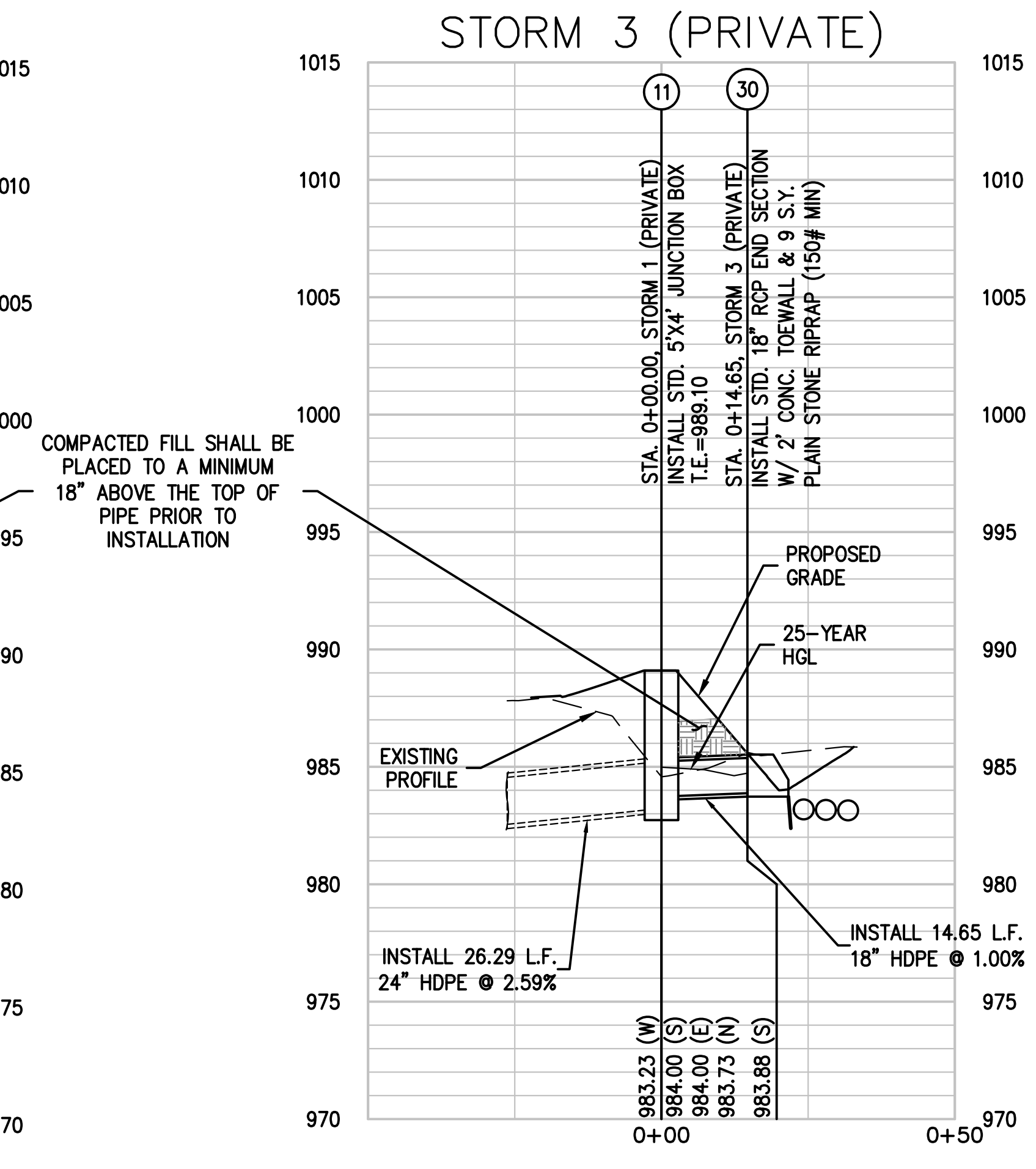
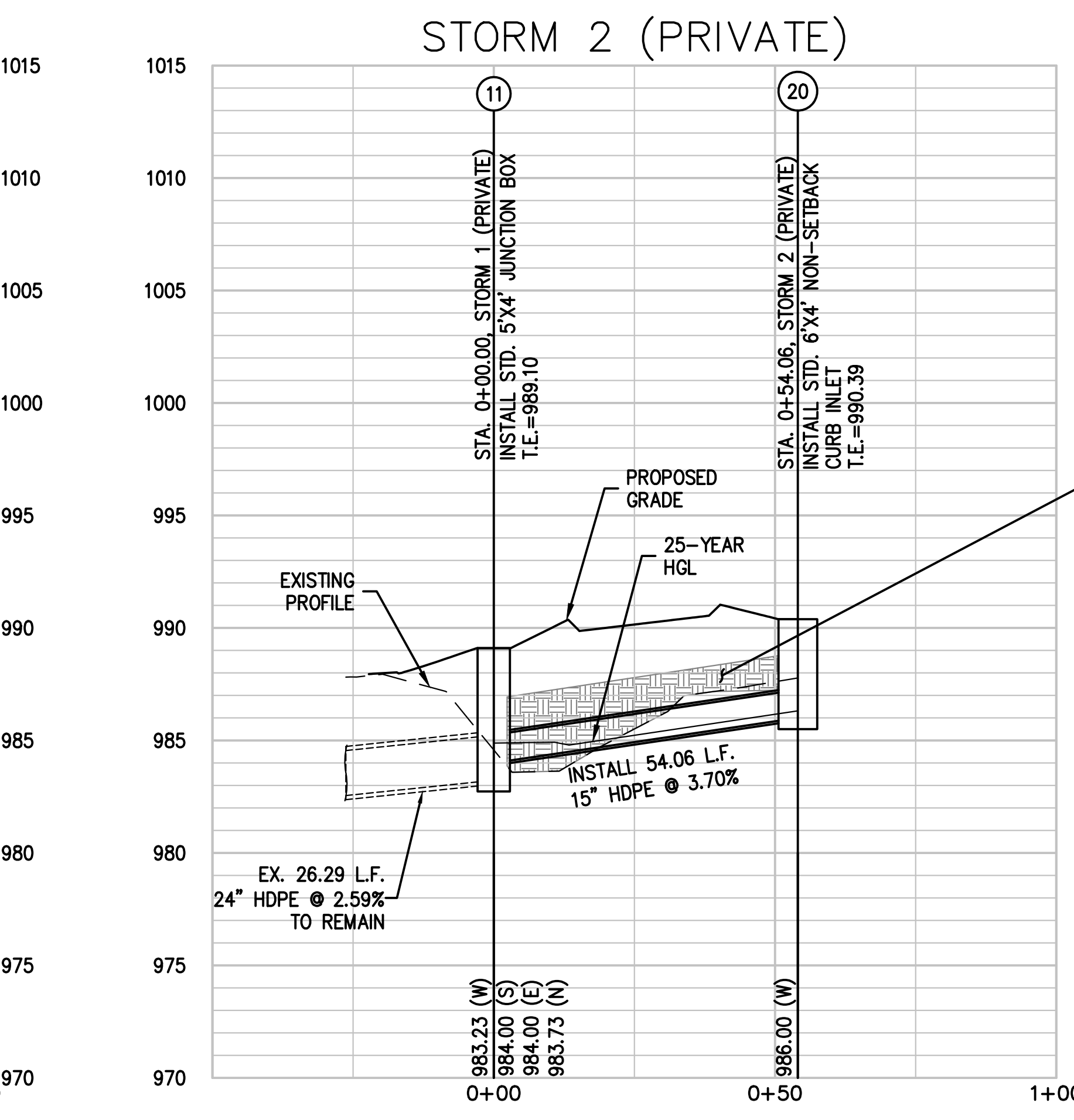
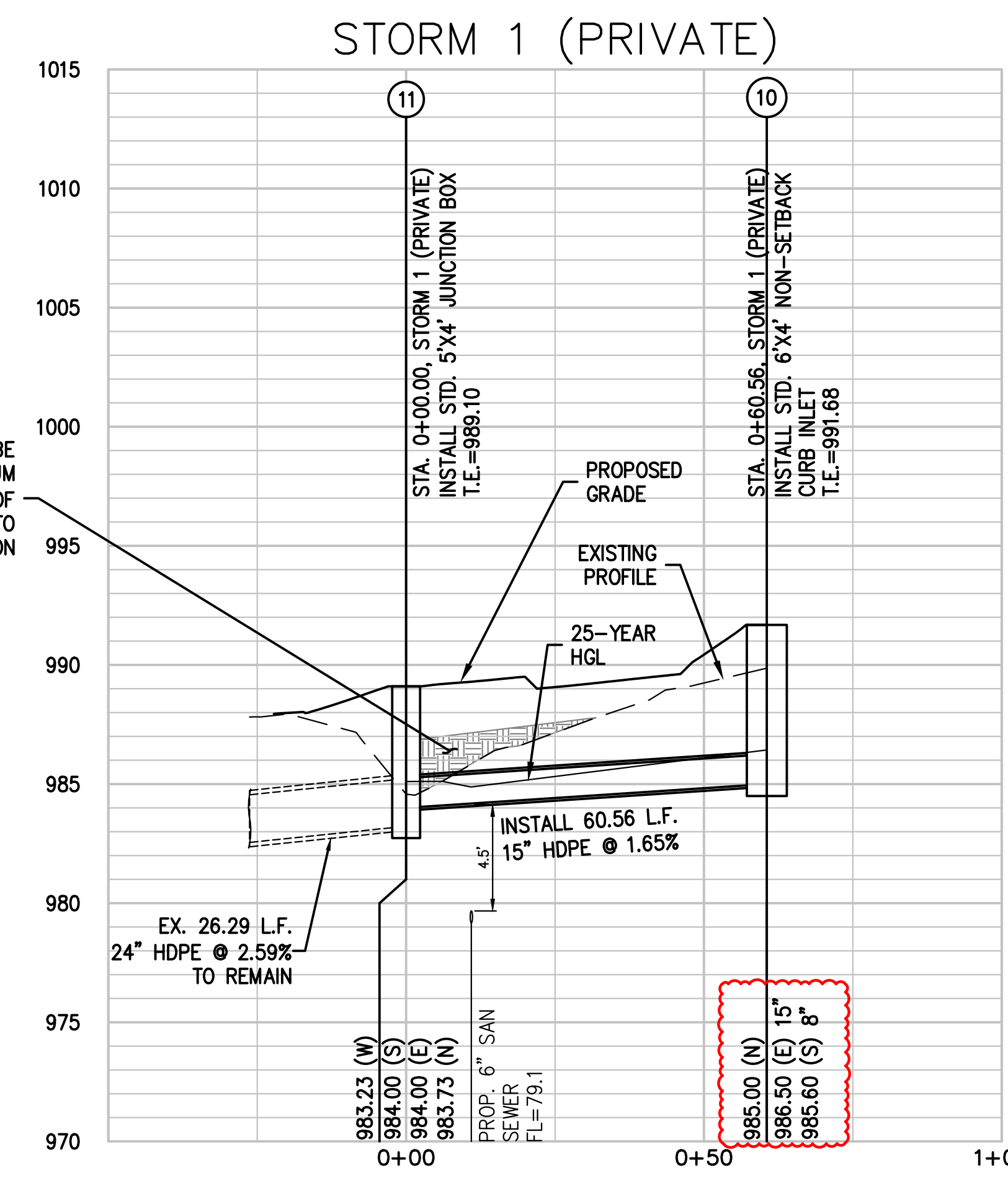
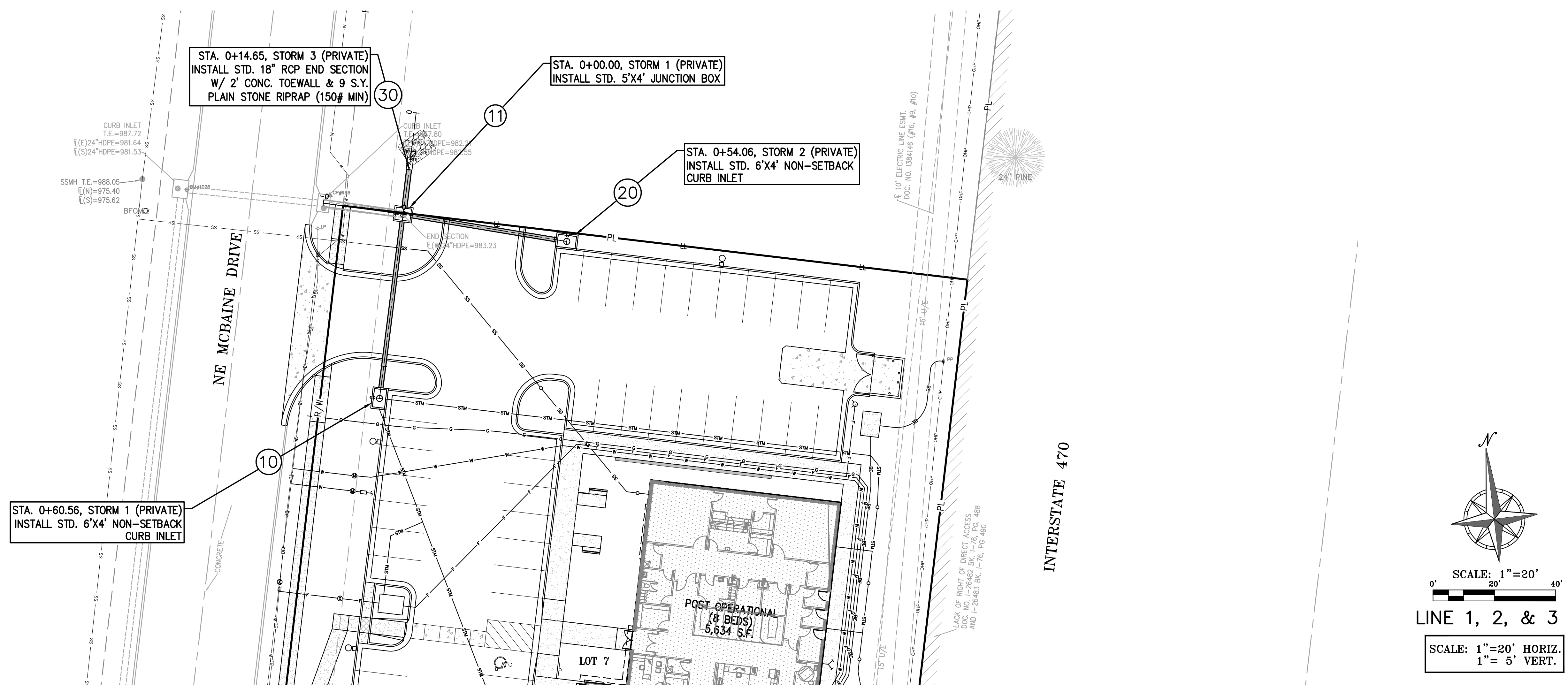
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**STORM SEWER PLAN & PROFILE**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DRIVE  
 LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	BY	APP.
240024	08-13-2024	DAF	AEB
240024	09-12-2024	DAF	AEB
240024	10-02-2024	DAF	AEB
240024	10-11-2024	DAF	AEB

**SHEET**  
**C400**

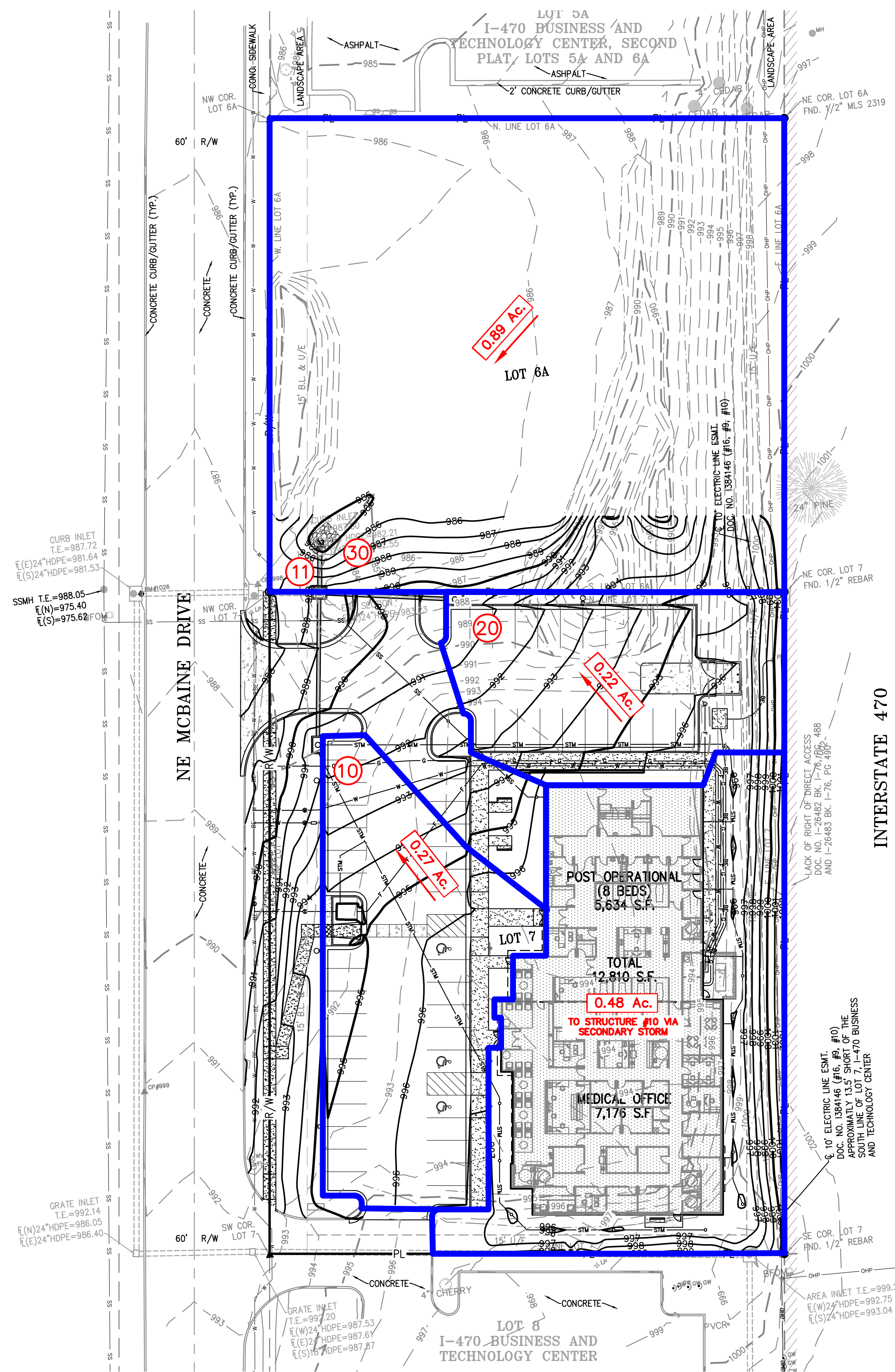






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UTILITY NOTES:  
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LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN  
THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL  
FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.

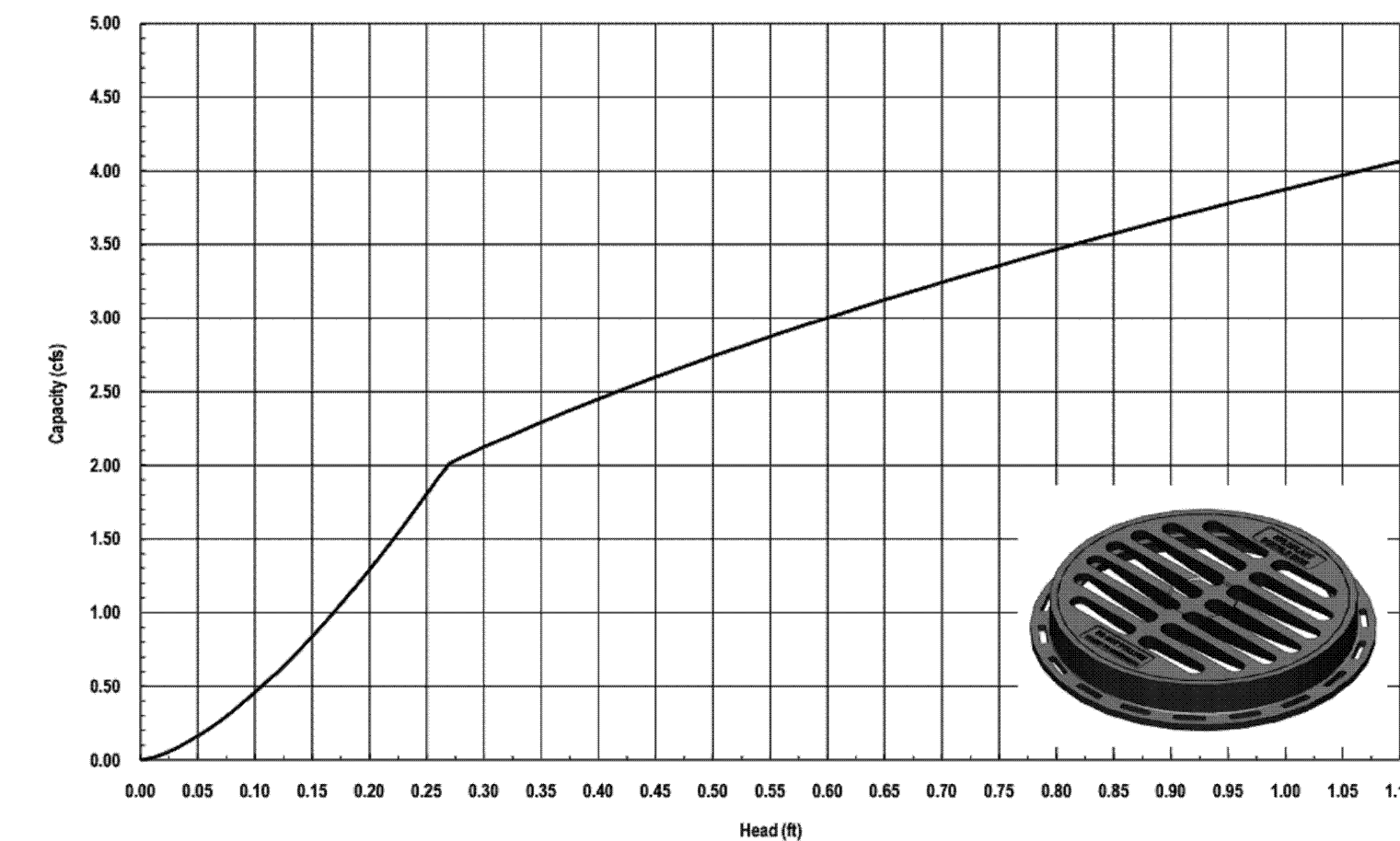


**STORM DRAINAGE CALCULATIONS**

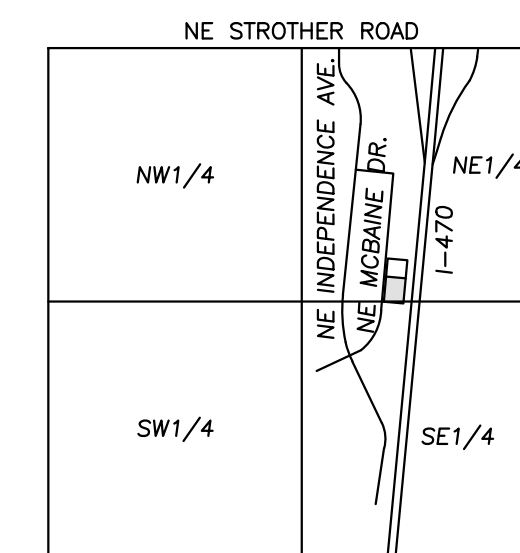
**DESIGN CRITERIA:**  $K_{25} = 1.1$ ;  $K_{100} = 1.25$ ;  $n = 0.013$  (RCP);

N L U M B E R	S T R U C T U R E	I. RUNOFF						III. PIPE DESIGN						REMARKS					
		INCREMENTAL RUNOFF COEFFICIENT "C"	AREA "A" (ACRES)	C x A	AREA "A" (ACRES)	C x A	SYSTEM TIME OF CONCENTRATION "T <sub>c</sub> " AT STRUCTURE (MIN)	RAINFALL INTENSITY " $I_{2,100}$ " (IN/HR)	ANTECEDENT PRECIPITATION FACTOR " $K_{2,100}$ "	RUNOFF " $Q_{2,100}$ " (CFS)	STRUCTURE		PIPE						
											Upstream Structure Number	Downstream Structure Number	Diameter "D" (IN)		Slope "S" (FT/FT)	Velocity Full $V_s$ (FPS)	Runoff $Q_{100}$ (CFS)	Runoff $Q_{25}$ (CFS)	Full Flow $Q_c$ (CFS)
1	10	0.81	0.75	0.61	0.75	0.61	5.00	8.53	1.10	5.7	10	11	15	0.0165	6.8	5.7	7.9	8.3	GOOD
	11	0.81	0.00	0.00	1.86	1.51	5.00	10.32	1.25	7.9	11	EX	24	0.0259	11.6	14.2	19.5	36.4	GOOD
2	20	0.81	0.22	0.18	0.22	0.18	5.00	8.53	1.10	1.7	20	11	15	0.0370	10.2	1.7	2.3	12.4	GOOD
	30	0.81	0.89	0.72	0.89	0.72	5.00	10.32	1.25	2.3	30	11	18	0.0100	6.0	6.8	9.3	10.5	GOOD

Nyloplast 18" Standard Grate Inlet Capacity Chart

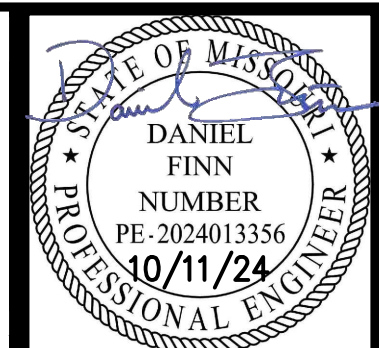
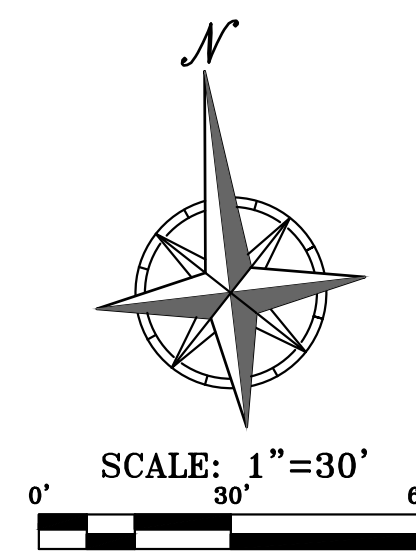


ALL SECONDARY STORM INLETS WILL CAPTURE 0.01-0.03 ACRES OF RUNOFF RESULTING IN < 0.5 CFS DURING THE 100-YEAR STORM. THIS WILL RESULT IN LESS THAN 0.1 FT OF HEAD OVER THE INLET PER THE CAPACITY CALCULATION ABOVE.



VICINITY MAP  
SEC. 20-48N-31W

- LEGEND**
- XXX--- EXISTING CONTOURS
  - XXX--- PROPOSED CONTOURS
  - DENOTES DRAINAGE AREA
  - DENOTES FLOW DIRECTION
  - X.XX Ac. DENOTES DRAINAGE AREA TO STRUCTURE
  - ⊗ DENOTES STRUCTURE NUMBER



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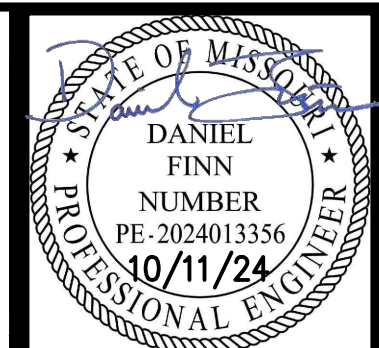
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**DRAINAGE MAP**  
I-470 BUSINESS & TECHNOLOGY CENTER  
2701 NE MCBAIN DR  
LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	Date	By	App.
240024	09-12-2024	AEB	DAF
DATE: 08-13-2024   DRAWN: AEB	10-02-2024	AEB	DAF
CHECKED: DAF   APPROVED: JCC	10-11-2024	AEB	DAF
CORRODATE OF AUTHORIZATION			
LAND SURVEYING - LS-82			
ENGINEERING - E-361			
CERTIFICATE OF AUTHORIZATION			
LAND SURVEYING - 200700128			
ENGINEERING - 200300308			

SHEET  
**C500**





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**EROSION CONTROL PLAN**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DR  
 LEE'S SUMMIT, MISSOURI 64064

By	App.	Date	Revisions:
AEB	DAF	10-12-2024	REVISED PER CITY COMMENTS
AEB	DAF	10-02-2024	REVISED PER CITY COMMENTS
AEB	DAF	10-11-2024	REVISED PER CITY COMMENTS

**SHEET**  
**C600**

**EROSION AND SEDIMENT CONTROL GENERAL NOTES:**

- Prior to Land Disturbance activities, the contractor shall:
  - Delineate the outer limits of any tree or stream preservation designated to remain with construction fencing.
  - Construct a stabilized entrance/parking/delivery area and install all perimeter sediment controls on the site.
  - Install and request the inspection of the preconstruction erosion and sediment control measures designated on the approved erosion and sediment control plan. Land disturbance work shall not proceed until there is a satisfactory inspection.
  - Identify the limits of construction on the ground with easily recognizable indications such as construction staking, construction fencing, placement of physical barriers or other means acceptable to the contractor and the City inspector.
- Erosion and sediment control devices protecting the public right-of-way shall be installed as soon as the right-of-way has been backfilled and graded.
- The contractor shall comply with all requirements of City Ordinances or State permit requirements, such as:
  - The contractor shall seed, mulch, or otherwise stabilize any disturbed area where the land disturbance activity has ceased for more than 14 days.
  - The contractor shall perform inspections of erosion and sediment control measures at least once every 14 days and within 24 hours following each rainfall event of 1/8" or more within any 24-hour period.
  - The contractor shall maintain an inspection log including the inspector's name, date of inspection, observations as to the effectiveness of the erosion and sediment control measures, actions necessary to correct deficiencies, when the deficiencies were corrected, and the signature of the person performing the inspection. The log shall be provided for review by the City, the State of Missouri, or other authorities having jurisdiction.
- The contractor shall maintain installed erosion and sediment control devices on a manner that preserves their effectiveness for preventing sediment from leaving the site or entering a sensitive area such as a natural stream corridor, tree preservation areas of the site intended to be left undisturbed, a storm sewer, or an on-site drainage channel. Failure to do so is a violation of the provisions of City Ordinances and State permit requirements.
- The contractor is responsible for providing erosion and sediment control for the duration of a project. If the City determines that the BMP's in place do not provide adequate erosion and sediment control at any time during the project, the contractor shall install additional or alternate measures that provide effective control.
- Concrete wash or rinsewater from concrete mixing equipment, tools and/or ready-mix trucks, tools, etc., may not be discharged into or be allowed to run directly into any existing water body or storm inlet. One or more locations for concrete wash out will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place and excess water evaporated or infiltrated into the ground.
- Chemicals or materials capable of causing pollution may only be stored onsite in their original container. Materials store outside must be in closed and sealed water-proof containers and located outside of drainageways or areas subject to flooding. Locks and other means to prevent or reduce vandalism shall be used. Spills will be reported as required by law and immediate actions taken to contain them.

**MAINTENANCE:** ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
- ALL SEEDING AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
- THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

**STAGING CHART**

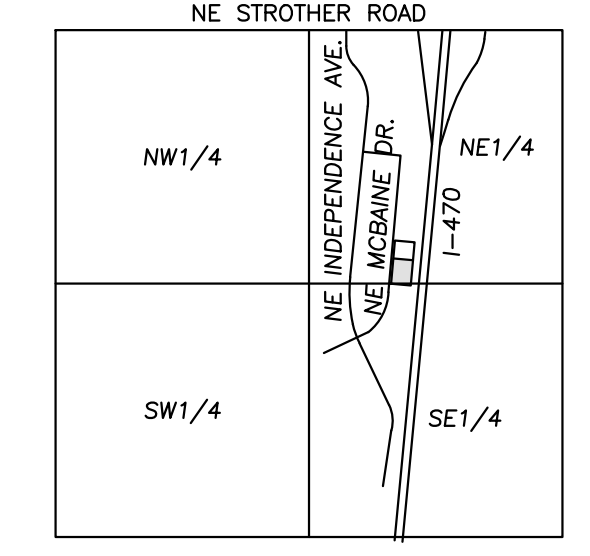
Project Stage	Order	BMP Description	Remove after Stage:	Notes:
Phase I A. Prior to Land Disturbance and During Construction.	①	Sediment Fence	C	Place downstream project site perimeter. (APWA ESC-10)
	②	Constr Entrance & Staging Area	C	Maintain during all construction. Include concrete washout. (APWA ESC-01)
	③	Inlet Protection at Existing Inlets	C	Install inlet protection. (APWA Details ESC-06 & ESC-07)
Phase II B. Mass Grading & Utility Installation	④	Inlet Protection at Proposed Inlets	C	Install inlet protection. (APWA Details ESC-06 & ESC-07)
Phase III C. Final Stabilization Prior to closure of Land Disturbance Permit		Final Stabilization	N/A	Final Stabilization of all disturbed areas.

Refer to Overall Grading Plan and Landscape Plan for final contours and final land cover.

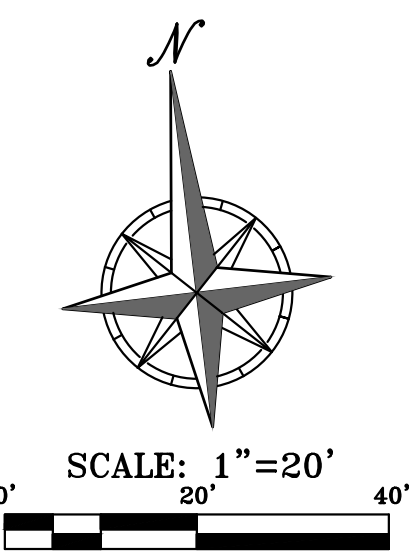
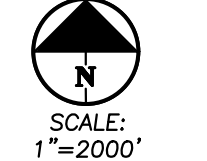
**DISTURBED AREA = 1.50± ACRES**

**LEGEND**

- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT PIT
- LIMITS OF DISTURBED AREAS
- SILT FENCE
- INLET PROTECTION



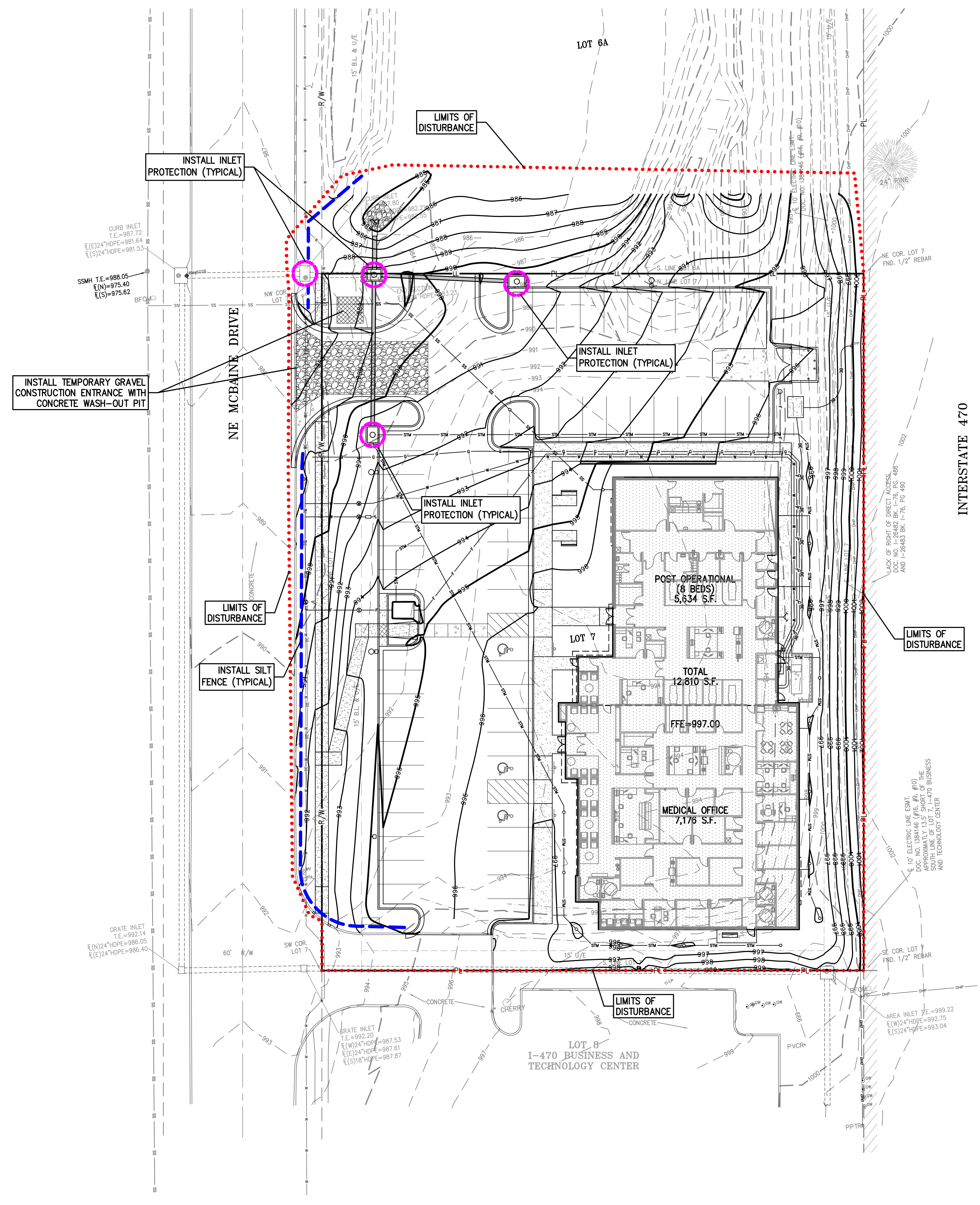
**VICINITY MAP**  
 SEC. 20-48N-31W



**SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE**

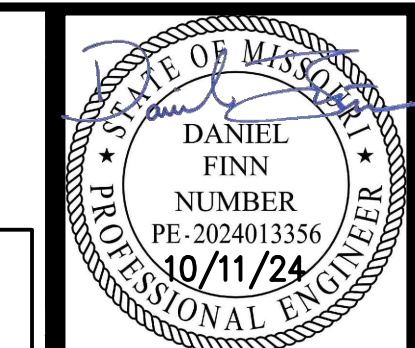
NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
ROUGH GRADE / SEDIMENT CONTROL																			
TEMPORARY CONTROL MEASURES																			
STRIP & STOCKPILE TOPSOIL																			
STORM FACILITIES																			
TEMPORARY CONSTRUCTION ROADS																			
FOUNDATION / BUILDING CONSTRUCTION																			
SITE CONSTRUCTION																			
PERMANENT CONTROL STRUCTURES																			
FINISH GRADING																			
LANDSCAPING/SEED/FINAL STABILIZATION																			



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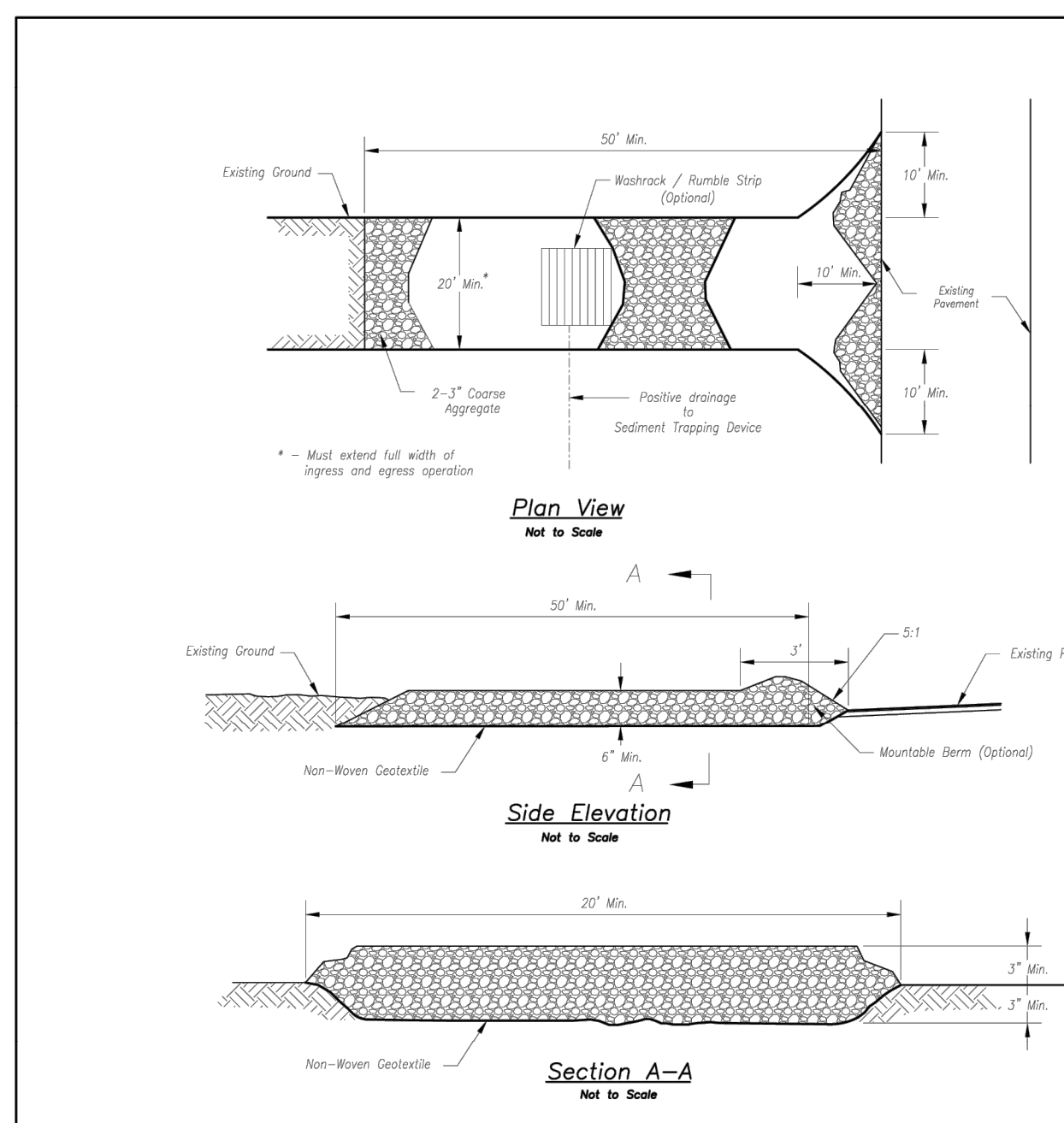




**PHILIPS ENGINEERING, INC.**  
 1270 N. Winchester  
 Olathe, Kansas 66066  
 (913) 993-1155  
 Fax: (913) 993-1165  
 www.philipsengineering.com



**EROSION CONTROL DETAILS**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCBAIN DR  
 LEE'S SUMMIT, MISSOURI 64064



**Notes for Construction Entrance:**

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed areas.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 3%, construct a 6- to 8-inch high ridge with 3/4\"/>

**Maintenance for Construction Entrance:**

1. Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

**Notes for Concrete Washout:**

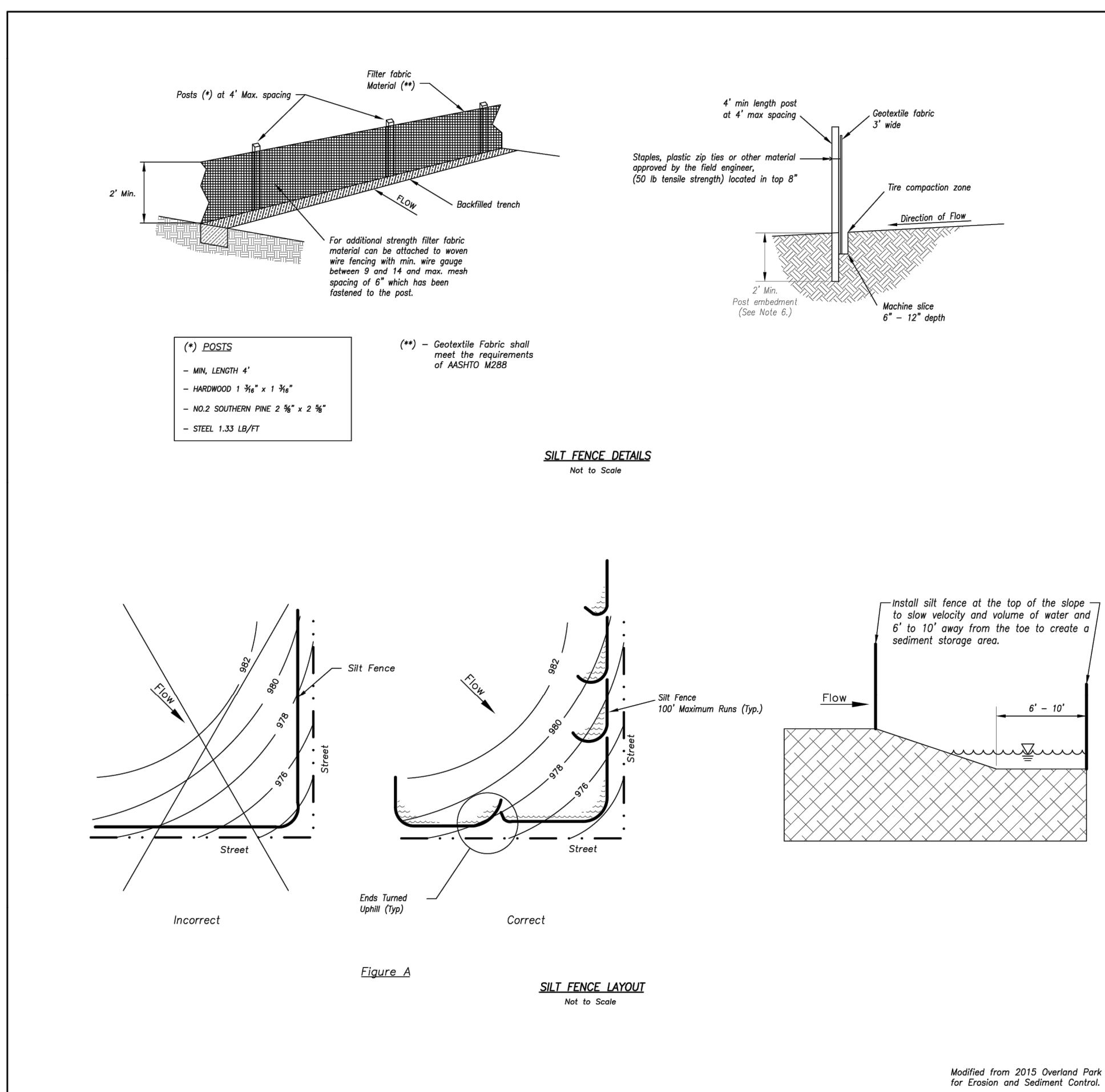
1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout areas shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slope leading out of the subsurface pit shall be 2:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete trucks and pumps.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

**Maintenance for Concrete Washout:**

1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
3. Concrete washout areas, washed concrete and all other debris shall be removed from the subsurface pit and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topped, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.

**CONCRETE WASHOUT**

AMERICAN PUBLIC WORKS ASSOCIATION  
 KANSAS CITY METRO CHAPTER  
 STANDARD DRAWING NUMBER ESC-01 ADOPTED 10/24/2016



**Notes:**

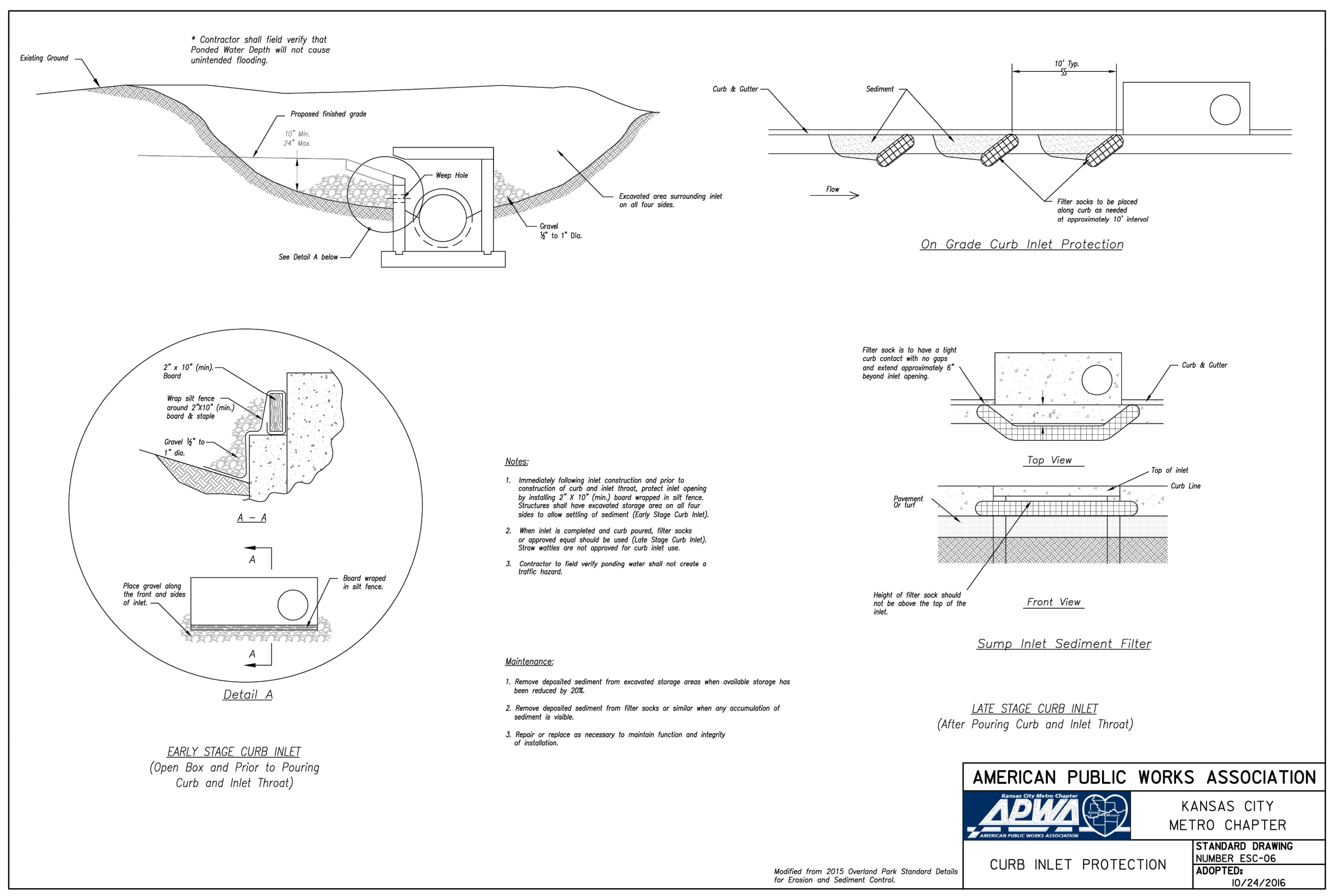
1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate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

**Maintenance:**

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

**SILT FENCE**

AMERICAN PUBLIC WORKS ASSOCIATION  
 KANSAS CITY METRO CHAPTER  
 STANDARD DRAWING NUMBER ESC-03 ADOPTED 10/24/2016



**Notes:**

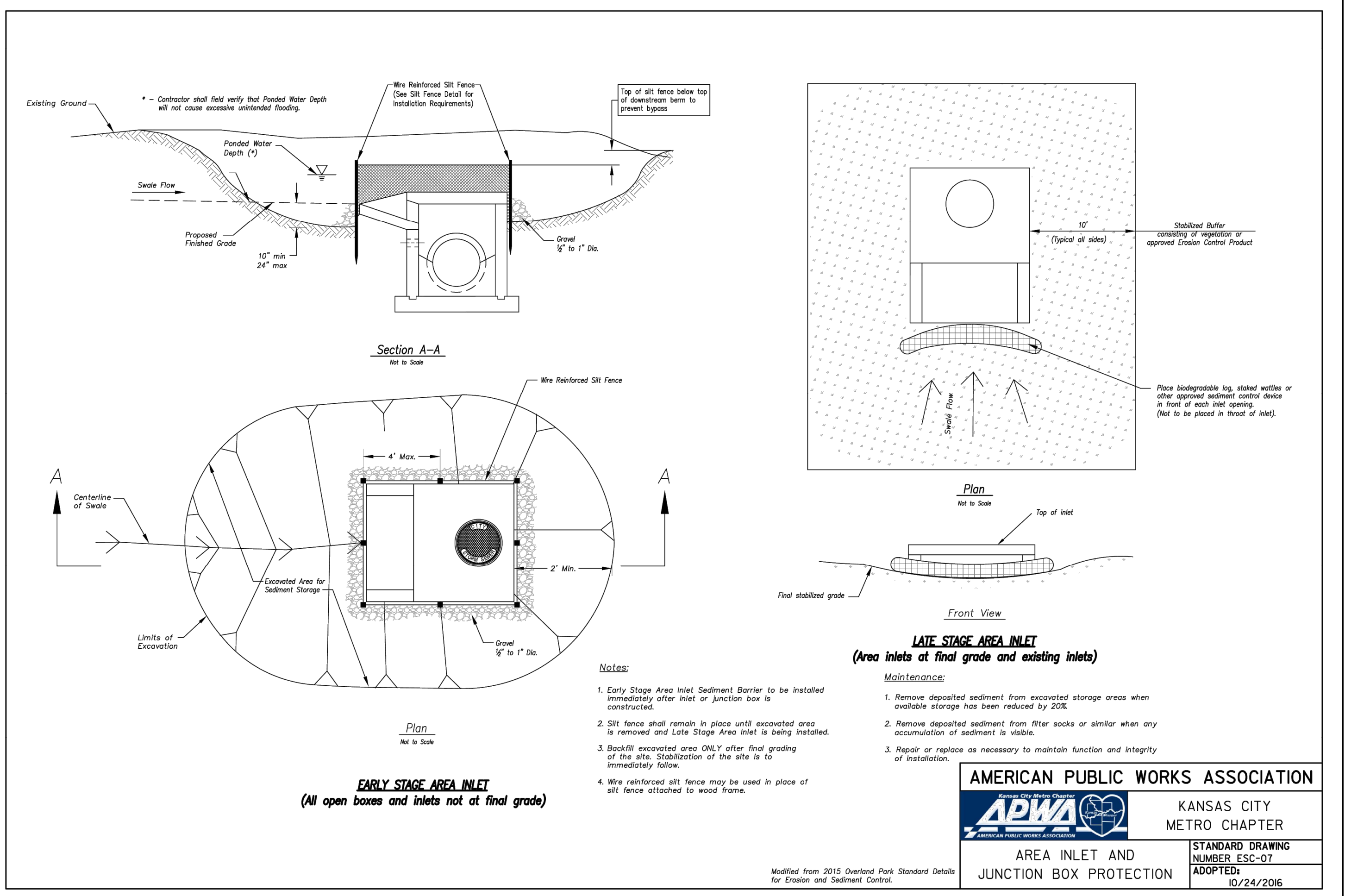
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2\"/>

**Maintenance:**

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

**CURB INLET PROTECTION**

AMERICAN PUBLIC WORKS ASSOCIATION  
 KANSAS CITY METRO CHAPTER  
 STANDARD DRAWING NUMBER ESC-06 ADOPTED 10/24/2016



**Notes:**

1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.

**AREA INLET AND JUNCTION BOX PROTECTION**

AMERICAN PUBLIC WORKS ASSOCIATION  
 KANSAS CITY METRO CHAPTER  
 STANDARD DRAWING NUMBER ESC-07 ADOPTED 10/24/2016

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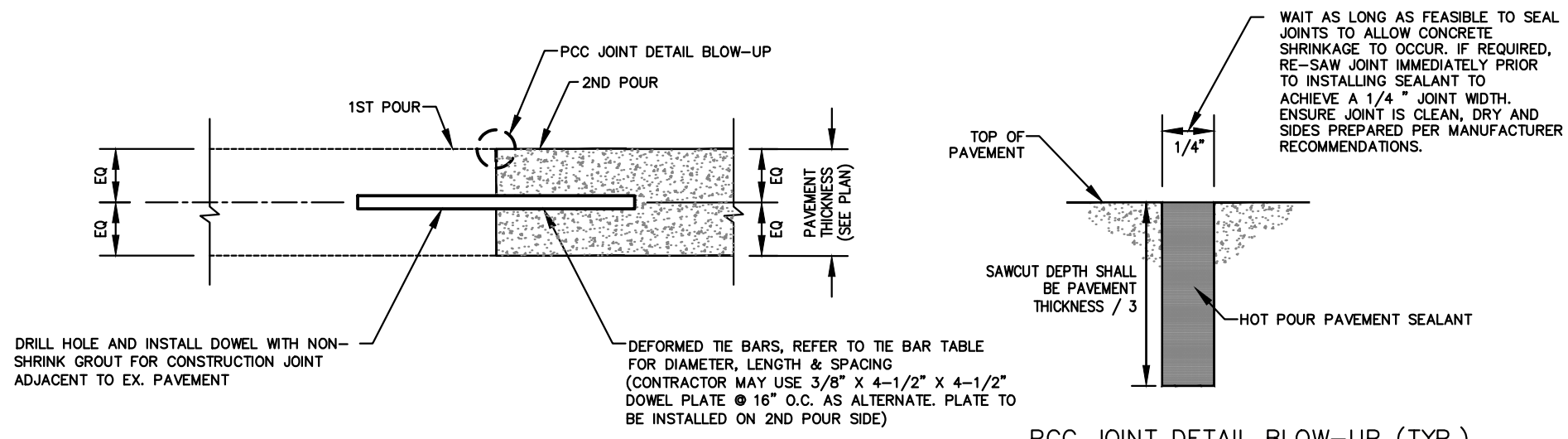
Revisions:	By	App.	Date
REVISOR PER CITY COMMENTS	AEB	DAF	09-12-2024
REVISOR PER CITY COMMENTS	AEB	DAF	10-02-2024
REVISOR PER CITY COMMENTS	AEB	DAF	10-11-2024



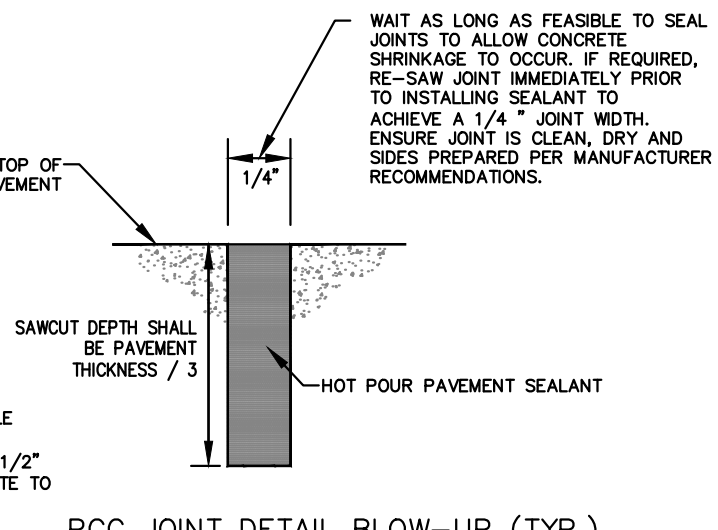
Dowel size*			
Slab depth, in. (mm)	Dowel diameter, in. (mm)	Dowel embedment, in. (mm) <sup>2</sup>	Total dowel length, in. (mm) <sup>2</sup>
5 (125)	5/8 (16)	5 (125)	12 (300)
6 (150)	3/4 (19)	6 (150)	14 (360)
7 (180)	7/8 (22)	6 (150)	14 (360)
8 (200)	1 (25)	6 (150)	14 (360)
9 (230)	1-1/8 (29)	7 (180)	16 (400)

\*All dowels spaced at 12 in. (300 mm) centers.  
<sup>1</sup>On each side of joint.  
<sup>2</sup>Allowance made for joint openings and for minor errors in positioning dowels.

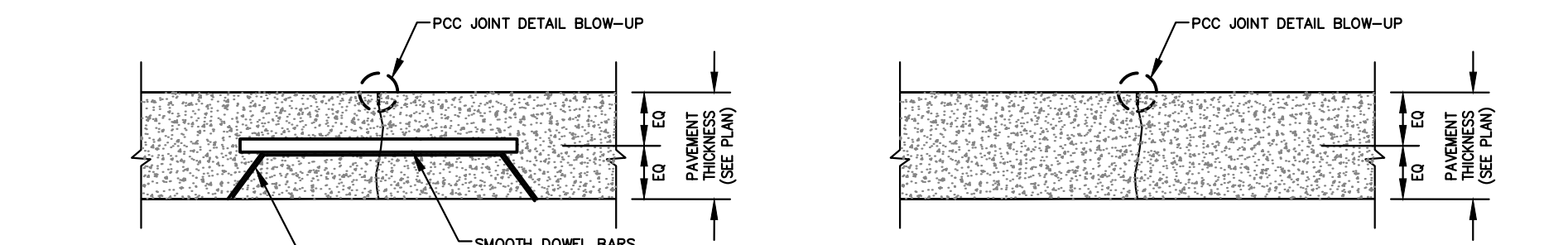
Slab depth, in. (mm)	Tiebar size, in. (mm)	Tiebar spacing			
		10 ft. in. (mm)	12 ft. in. (mm)	14 ft. in. (mm)	24 ft. in. (mm)
5 (125)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	30 (760)	28 (710)
5-1/2 (140)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	30 (760)	25 (630)
6 (150)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	30 (760)	23 (580)
6-1/2 (165)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	30 (760)	21 (530)
7 (180)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	30 (760)	20 (510)
7-1/2 (190)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	30 (760)	18 (460)
8 (200)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	28 (710)	17 (430)
8-1/2 (215)	1/2 x 24 (13 x 610)	30 (760)	30 (760)	36 (910)	16 (410)
9 (230)	1/2 x 30 (13 x 760)	36 (910)	36 (910)	—	24 (610)



CONSTRUCTION JOINT



PCC JOINT DETAIL BLOW-UP (TYP.)

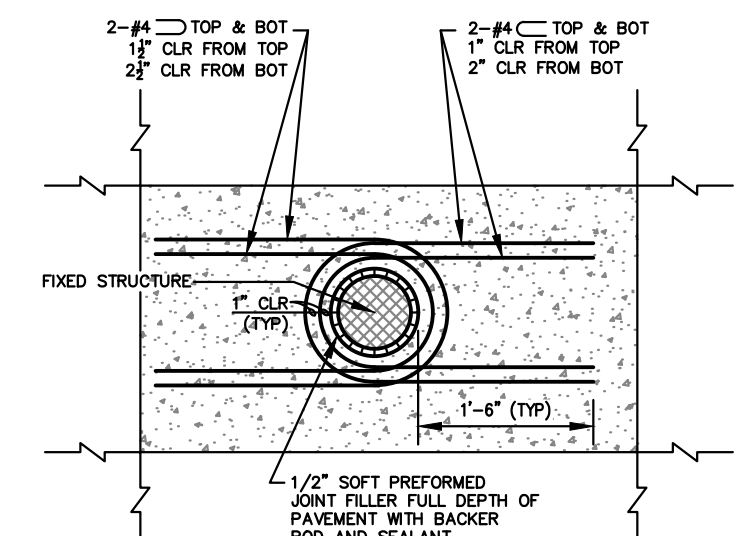


CONTRACTION JOINT (DOWELED)

CONTRACTION JOINT (UNDOWELED)

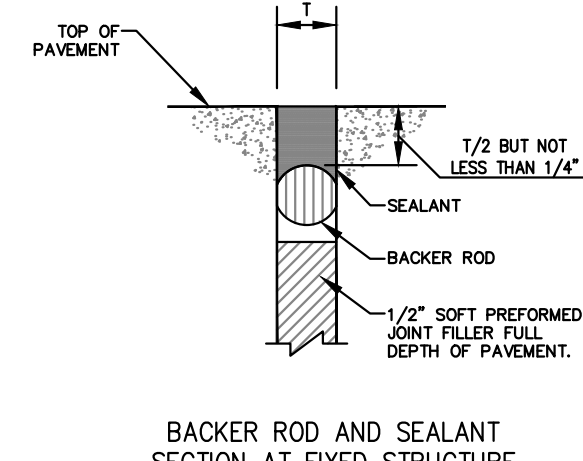
CONCRETE JOINT DETAILS

SCALE: N.T.S.

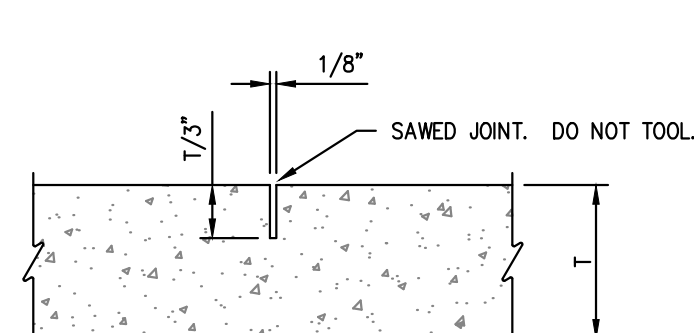


TYPICAL ROUND FIXED STRUCTURE PLAN DETAIL

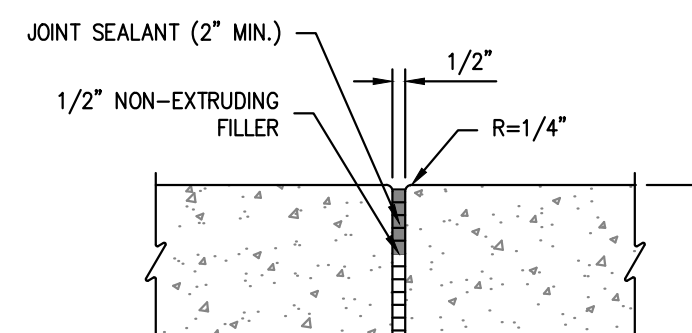
USES: MANHOLES, LIGHT POLE BASES AND BOLLARDS



BACKER ROD AND SEALANT SECTION AT FIXED STRUCTURE



TYPE A JOINT

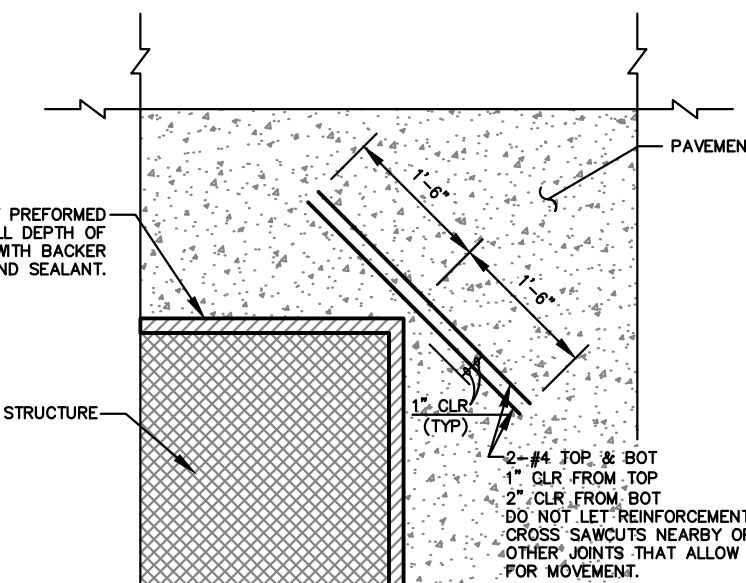


TYPE B JOINT

NOTE: TYPE A JOINTS SHALL NOT EXCEED 20 TIMES THE PAVEMENT THICKNESS (T).

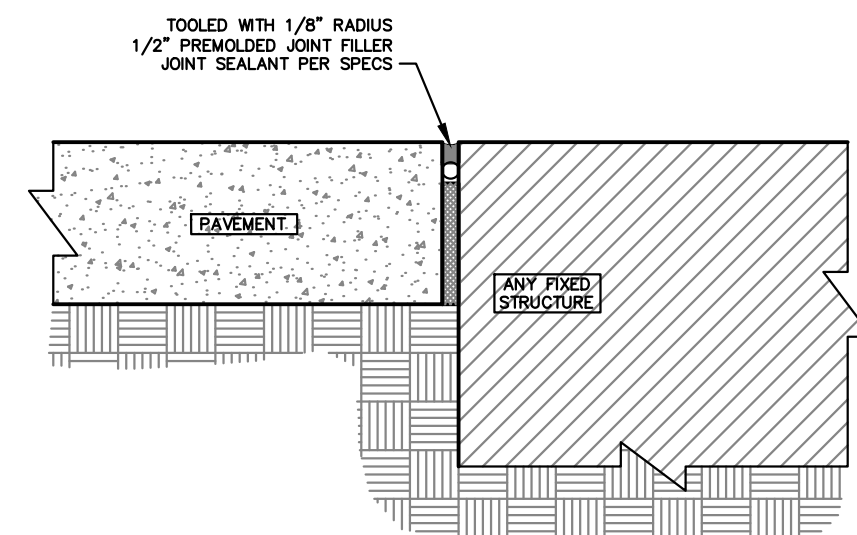
CONCRETE SIDEWALK JOINT DETAILS

SCALE: N.T.S.



TYPICAL RECTANGULAR FIXED STRUCTURE PLAN DETAIL

USES: BUILDINGS, RETAINING WALLS/DOCK WALLS AND DROP INLETS

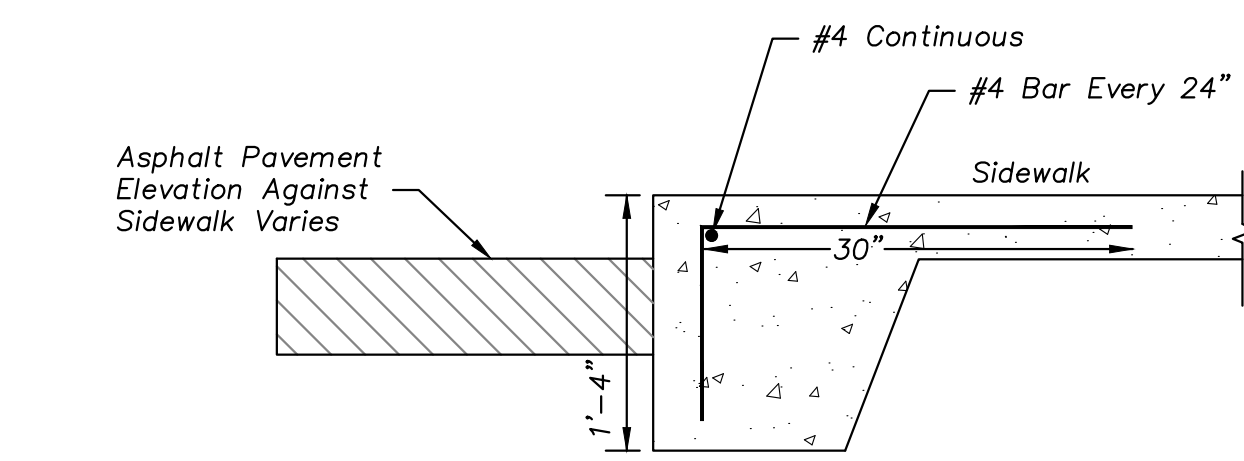


ISOLATION JOINT

NOTES:  
 ISOLATION JOINT TO BE USED FOR FIXED STRUCTURES SUCH AS BUILDINGS, RETAINING WALLS/DOCK WALLS, DROP INLETS, MANHOLES, LIGHT POLE BASES AND BOLLARDS.  
 PAVEMENT IS NOT CONSIDERED A FIXED STRUCTURE.

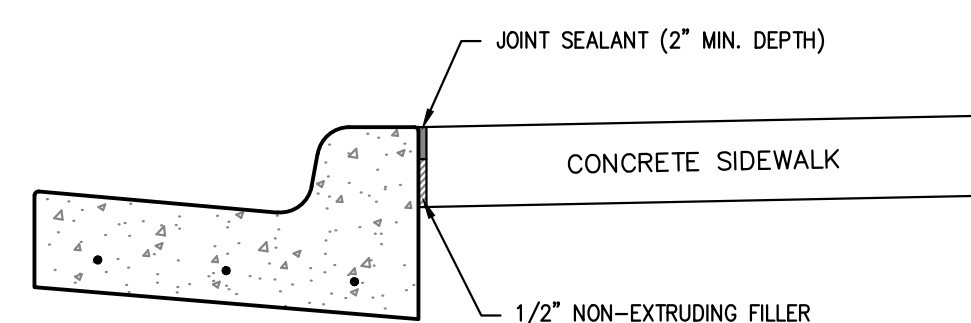
ISOLATION JOINT DETAILS

SCALE: N.T.S.



TURN DOWN SIDEWALK DETAIL

SCALE: N.T.S.



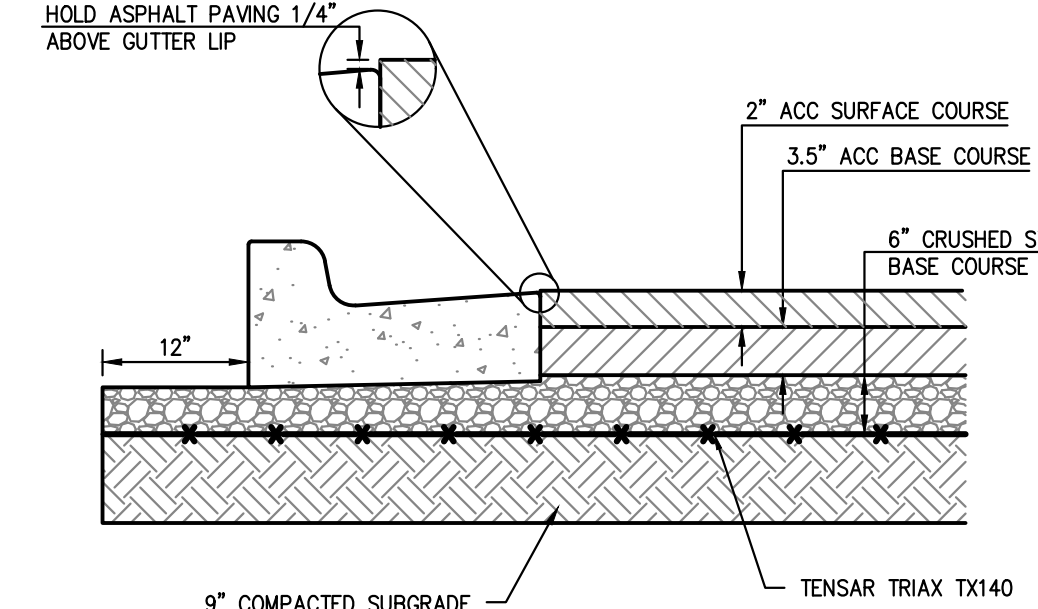
ALL OTHER DETAILS SAME AS SHOWN PER THIS SHEET.

SIDEWALK AT CURB DETAIL

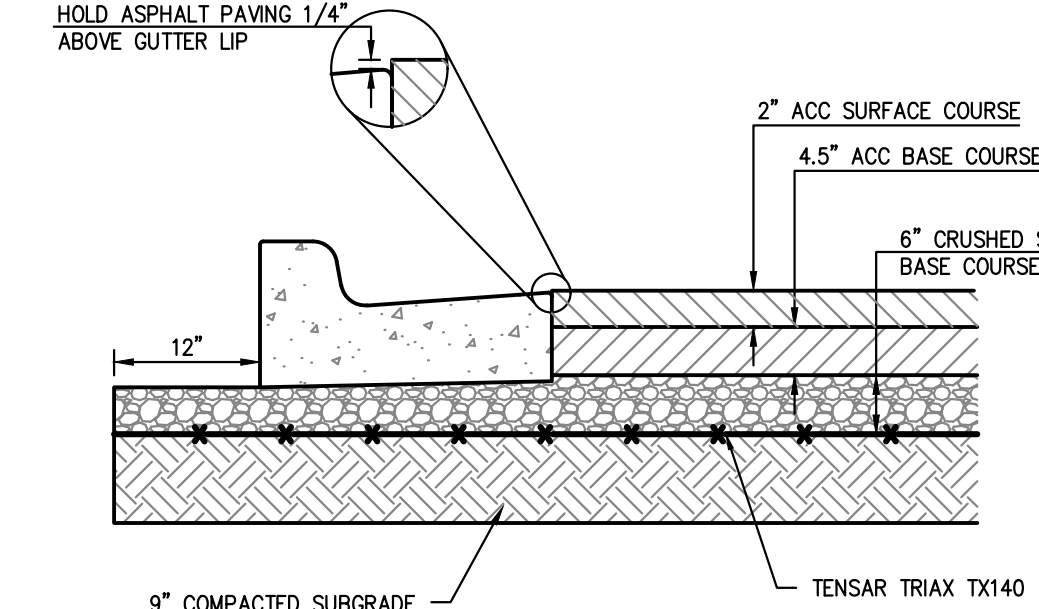
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GENERAL PAVING NOTES:

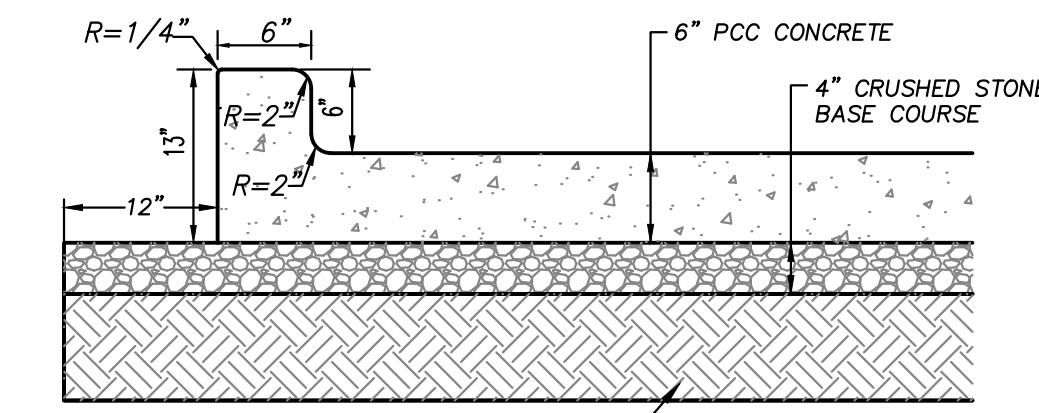
- PRIOR TO PLACEMENT OF GRANULAR BASE OR ASPHALT, PROOF ROLL AND RE-COMPACT THE EXPOSED SURFACES UP TO A MINIMUM LATERAL DISTANCE OF TWO (2) FEET OUTSIDE THE PAVEMENT. ANY LOCALIZED SOFT, WET, OR LOOSE AREAS IDENTIFIED DURING THE PROOF ROLLING SHOULD BE REPAIRED PRIOR TO PAVING. FILL MATERIAL SHOULD BE PLACED IN LOOSE LIFTS UP TO A MAXIMUM OF EIGHT (8) INCHES IN THICKNESS AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698 AT MOISTURE CONTENTS WITHIN 0% AND +4% OF THE OPTIMUM FOR SOILS WITH A LIQUID LIMIT OF GREATER THAN 40, AND - +3% OF THE OPTIMUM FOR SOILS WITH A LIQUID LIMIT OF LESS THAN 40. MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT SHOULD BE DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D 698).
- PROOFROLL WITH A 25 TON RUBBER TIRE VEHICLE AND REPAIR SUBGRADE DEFICIENCIES. IF ANY SIGNIFICANT EVENT, SUCH AS PRECIPITATION, OCCURS AFTER PROOFROLLING, THE SUBGRADE SHOULD BE REVIEWED BY QUALIFIED PERSONNEL IMMEDIATELY PRIOR TO PLACING THE PAVEMENT.
- CRUSHED STONE BASE COURSE USED BENEATH CONCRETE PAVING SHALL BE COMPACTED AB-3 OR EQUIVALENT.
- ASPHALTIC SURFACE COURSE SHALL BE APWA TYPE 3. THE SURFACE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 97% MARSHALL DENSITY (ASTM SPECIFICATION D 1559). 30% RAP IS ALLOWED.
- ASPHALTIC BASE COURSE SHALL BE APWA TYPE 1. THE BASE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 95% MARSHALL DENSITY (ASTM SPECIFICATION D 1559). 30% RAP IS ALLOWED.
- THE CONTRACTOR SHALL PROVIDE A TACK COAT BETWEEN LIFTS OF ASPHALT.
- ALL SITE CONCRETE (CURBS, PAVEMENTS, SIDEWALKS, ETC.) SHALL MEET KANSAS CITY MATERIALS METRO BOARD (KOMM) MIX DESIGN SPECIFICATIONS FOR 4,000 P.S.I. AIR ENTRAINED CONCRETE.
- IN NEW PAVEMENT AREAS, CONTRACTOR SHALL OVER EXCAVATE AS REQUIRED TO ESTABLISH NEW COMPACTED SUBGRADE ELEVATIONS.
- CONTRACTOR IS RESPONSIBLE FOR ALL PAVEMENT AND SUBGRADE MATERIALS TESTING.
- FIBER REINFORCEMENT:
  - FIBER REINFORCEMENT SHALL BE USED IN ALL CONCRETE CURB AND CONCRETE FLATWORK (SIDEWALKS, PAVEMENTS, ETC).
  - ALL FIBERS SHALL BE ALKALI-RESISTANT, NATURAL CELLULOSE FIBERS AS MANUFACTURED BY "SOLOMON ULTRAFIBER 500", OR POLY PROPYLENE FIBRILLATED FIBERS AS MANUFACTURED BY "SIKA FIBERMESH-300", OR AN APPROVED EQUAL IN ADVANCE BY THE ENGINEER. DELIVERY STORAGE AND HANDLING SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
  - COMPLY WITH ASTM C-1116 AND ASTM C-1018. UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER, FIBERS SHALL BE USED AT A RATE OF 2-2.5 LBS. PER CUBIC YARD OF CONCRETE.
  - FIBERS SHALL NOT BE USED AS A SUBSTITUTE FOR PRIMARY STRUCTURAL STEEL.
  - ADD REINFORCING FIBERS INTO CONCRETE MIXTURE DIRECTLY INTO CONCRETE MIXER AT THE BEGINNING OF BATCH CYCLE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND ASTM C94.
  - ALLOW A MINIMUM OF 5 MINUTES AT MIXING SPEED IN CONCRETE MIXER FOR FULL REINFORCING FIBER DISPERSION.



STANDARD DUTY ASPHALT PAVING



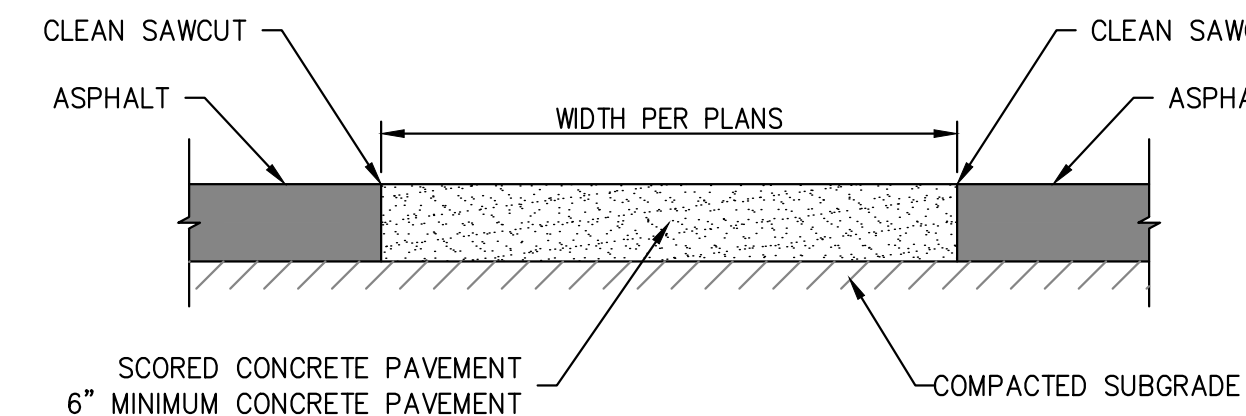
HEAVY DUTY ASPHALT PAVING



CONCRETE PAVING

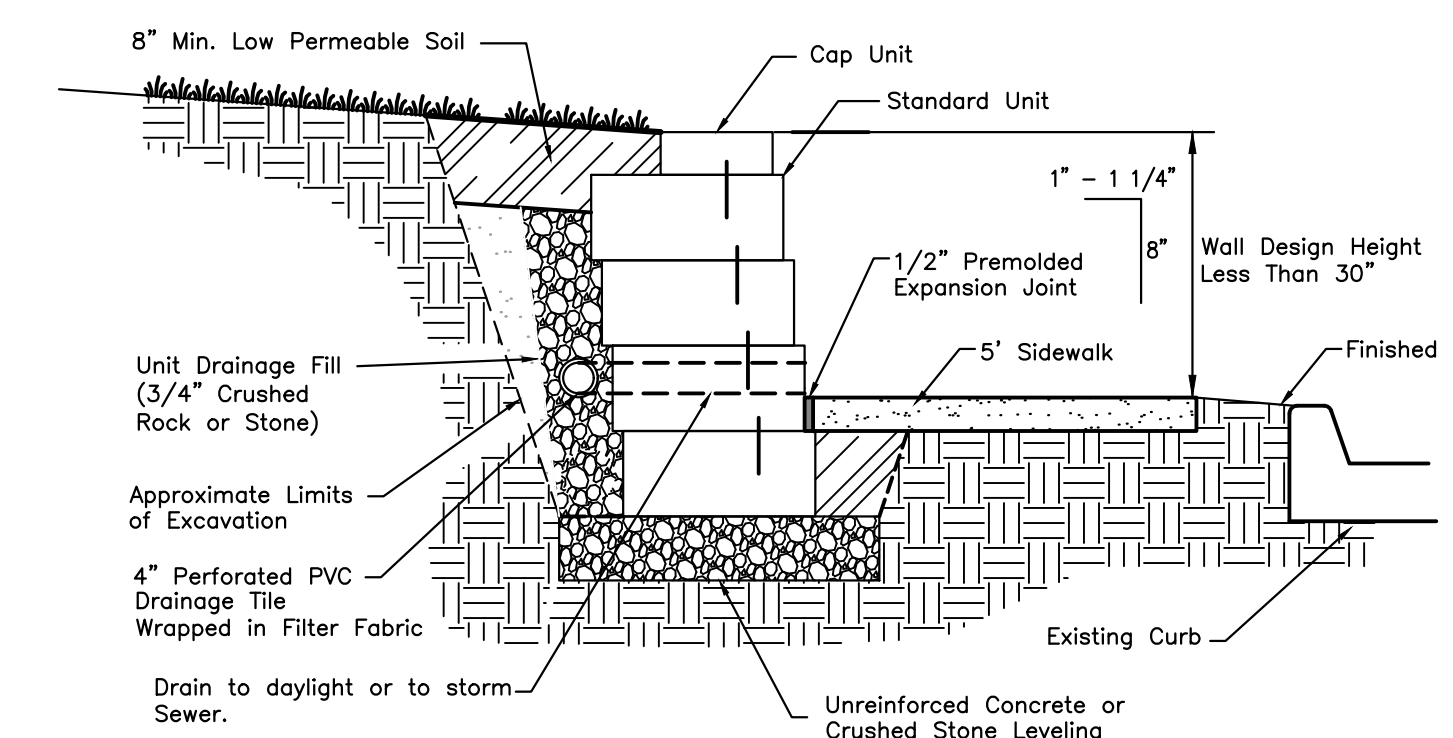
PAVING SECTIONS

SCALE: N.T.S.



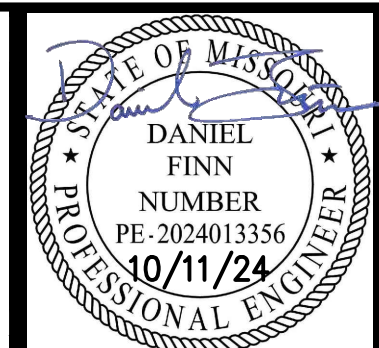
CROSSWALK DETAIL

SCALE: N.T.S.



LANDSCAPE RETAINING WALL

SCALE: N.T.S.



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 1370 N. Winchester  
 Olathe, Kansas 66061  
 (913) 993-1155  
 Fax: (913) 993-1165  
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PLANNING  
 ENGINEERING  
 IMPLEMENTATION



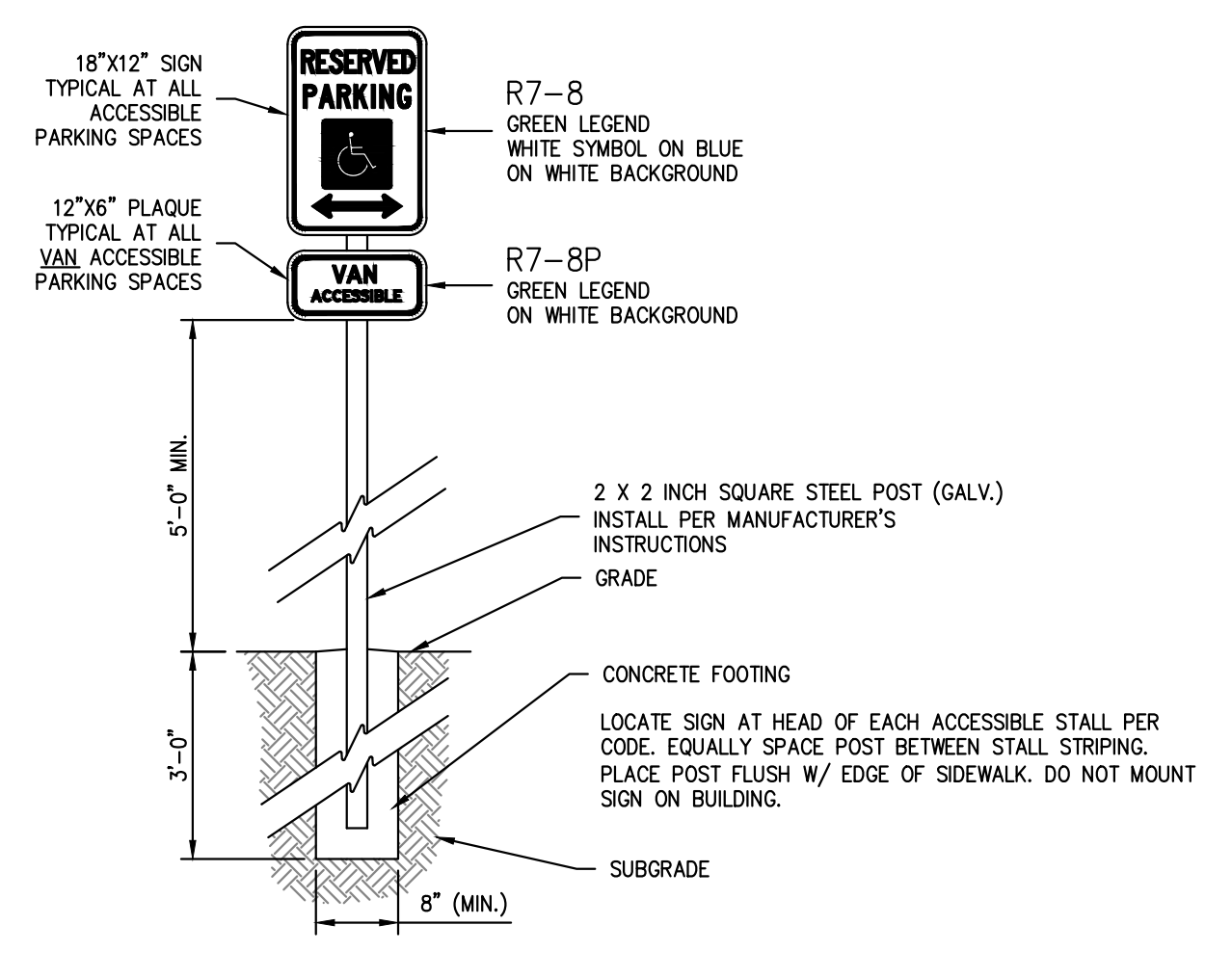
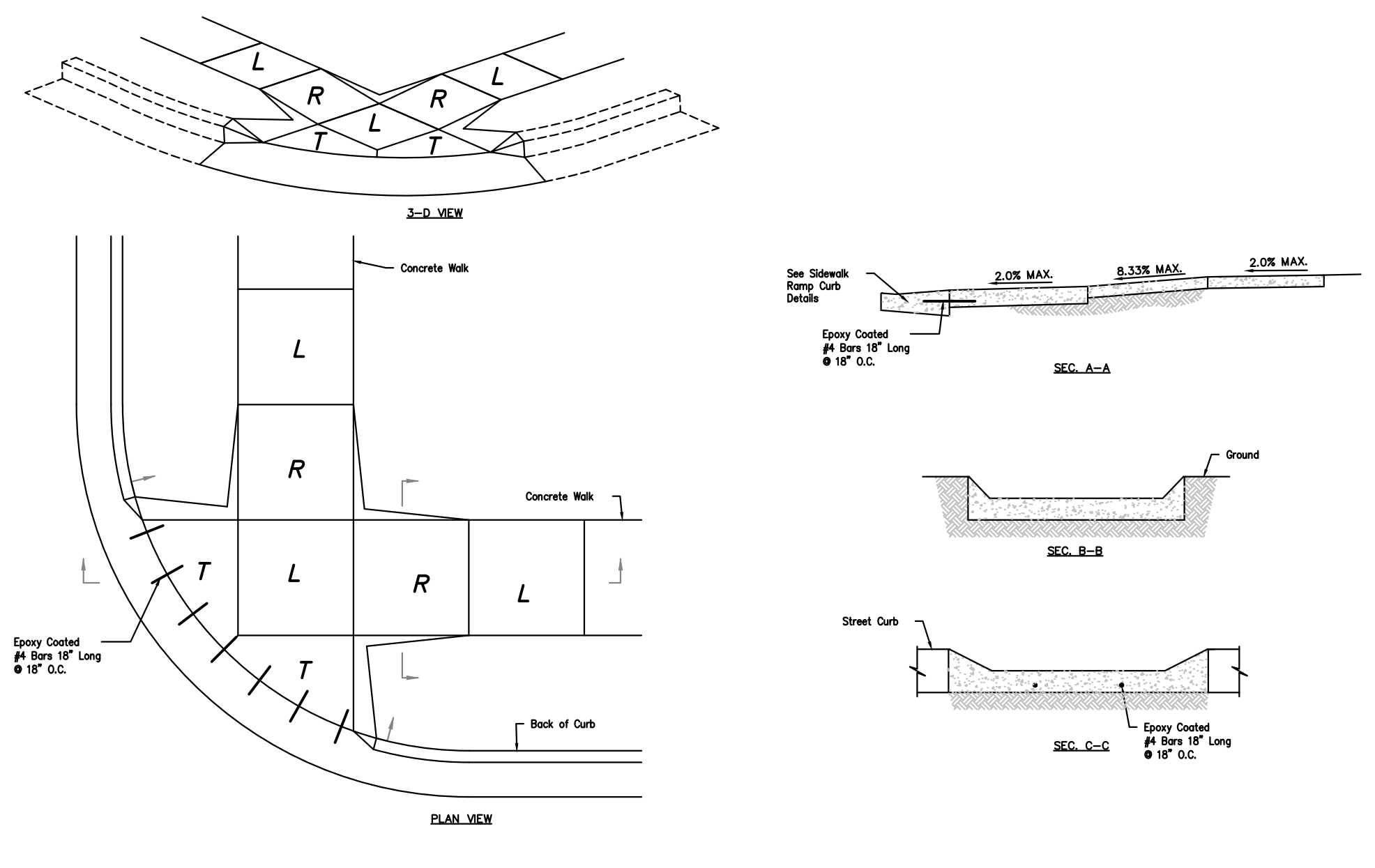
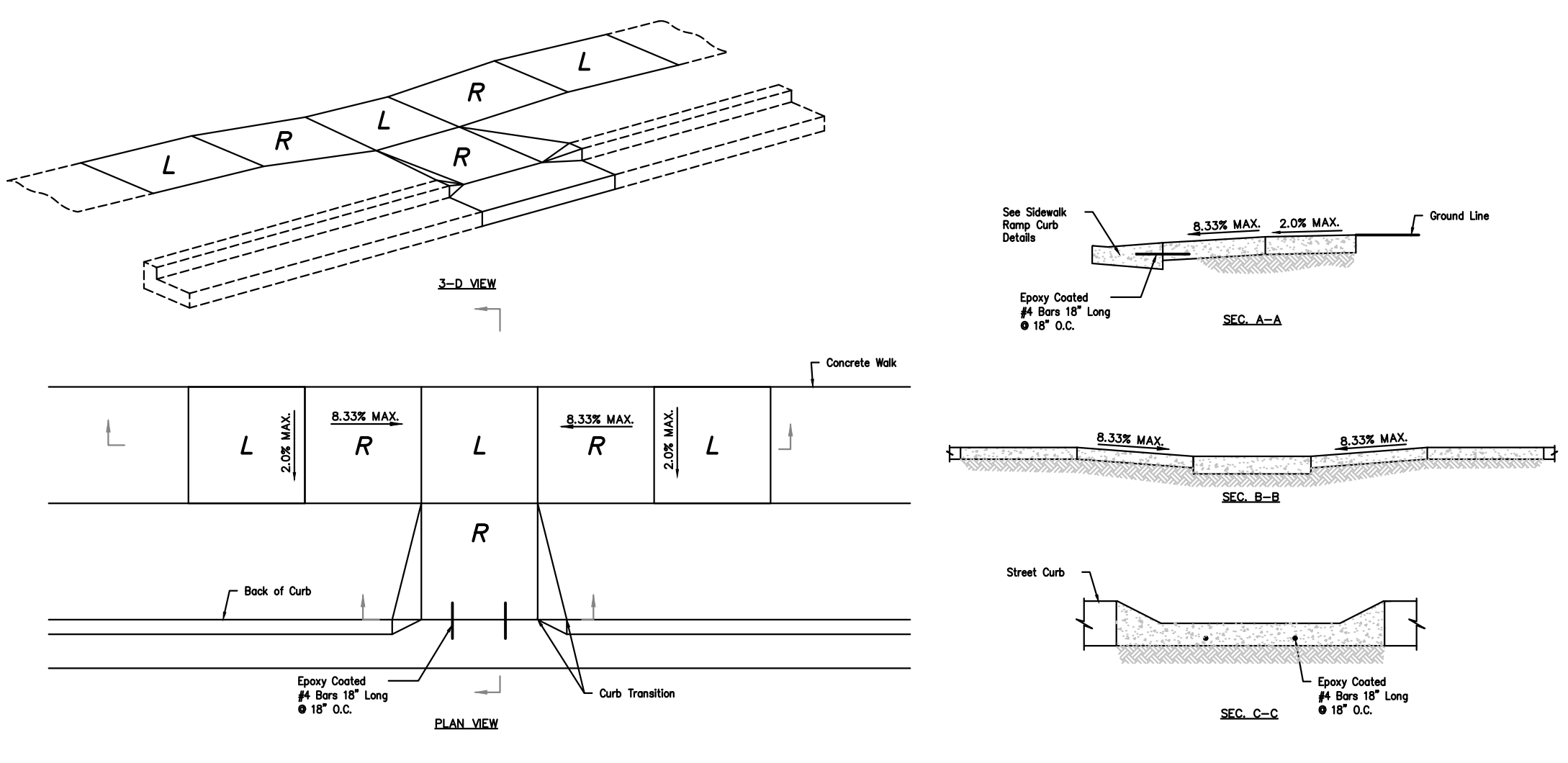
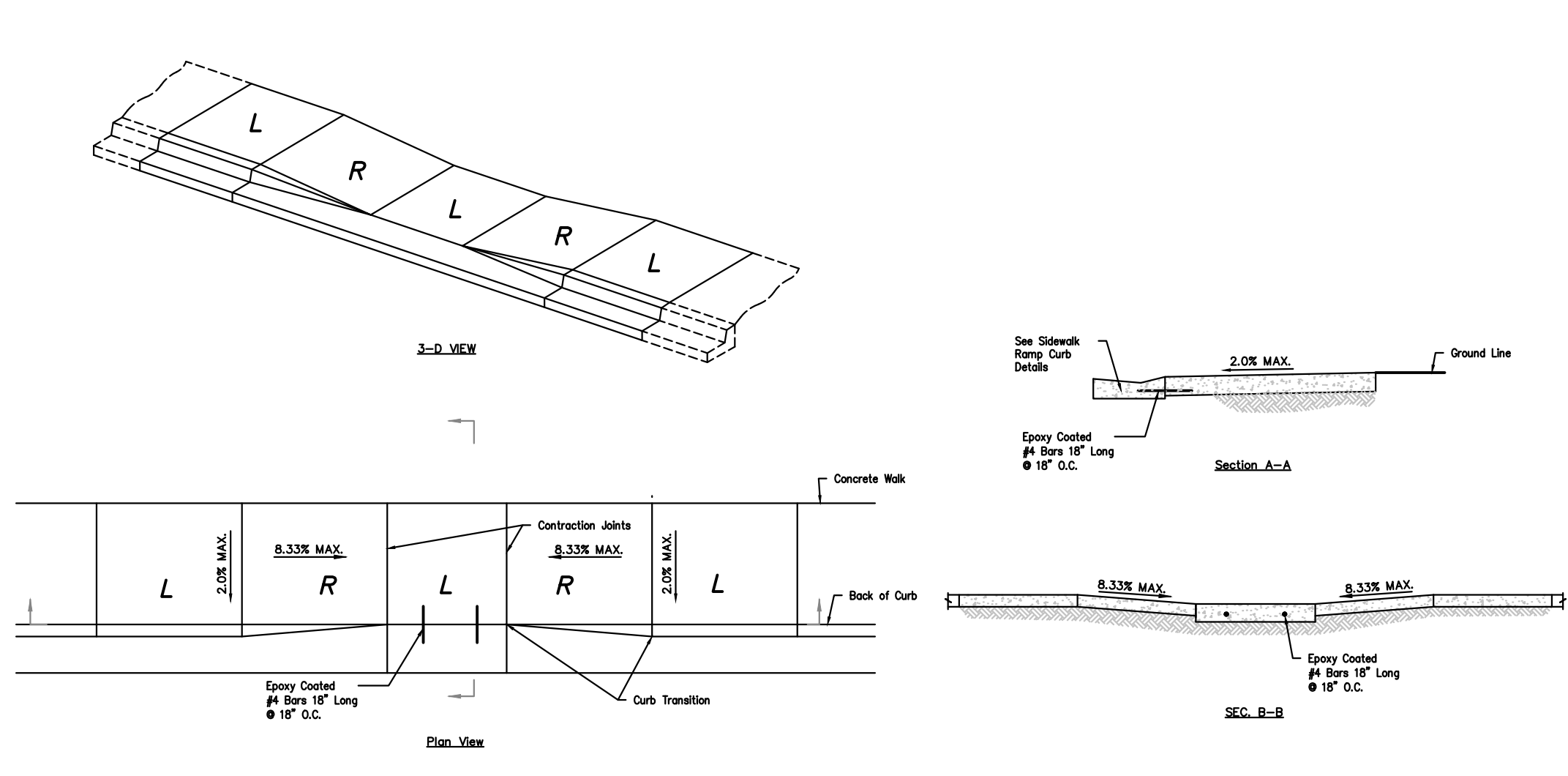
STANDARD DETAIL  
 1-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MCGAINE DR  
 LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	NO.	DATE	REVISIONS:
240024	09-12-2024	1.	09-12-2024	REVISED PER CITY COMMENTS
	10-02-2024	2.	10-02-2024	REVISED PER CITY COMMENTS
	10-11-2024	3.	10-11-2024	REVISED PER CITY COMMENTS

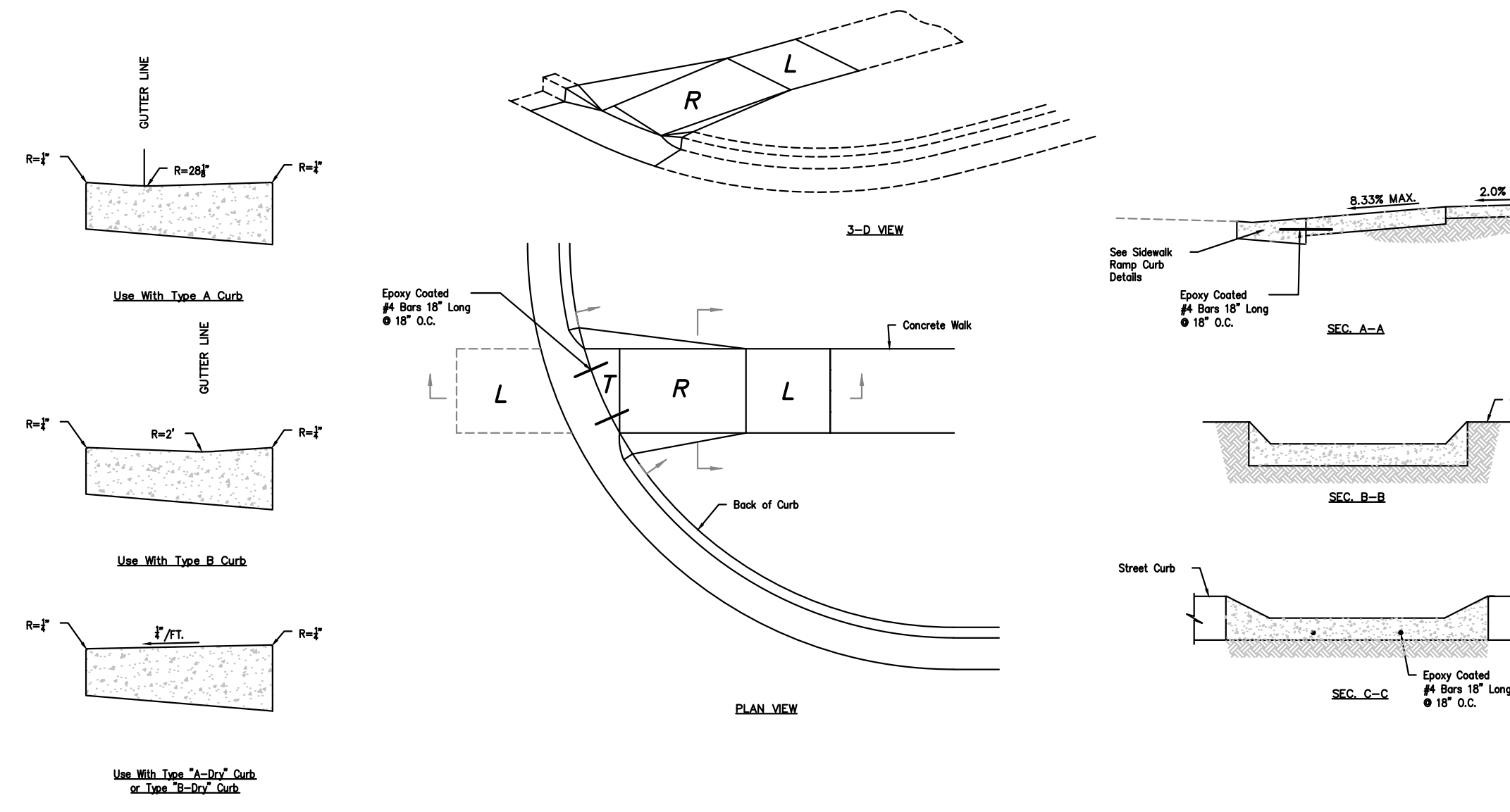
SHEET  
 C700

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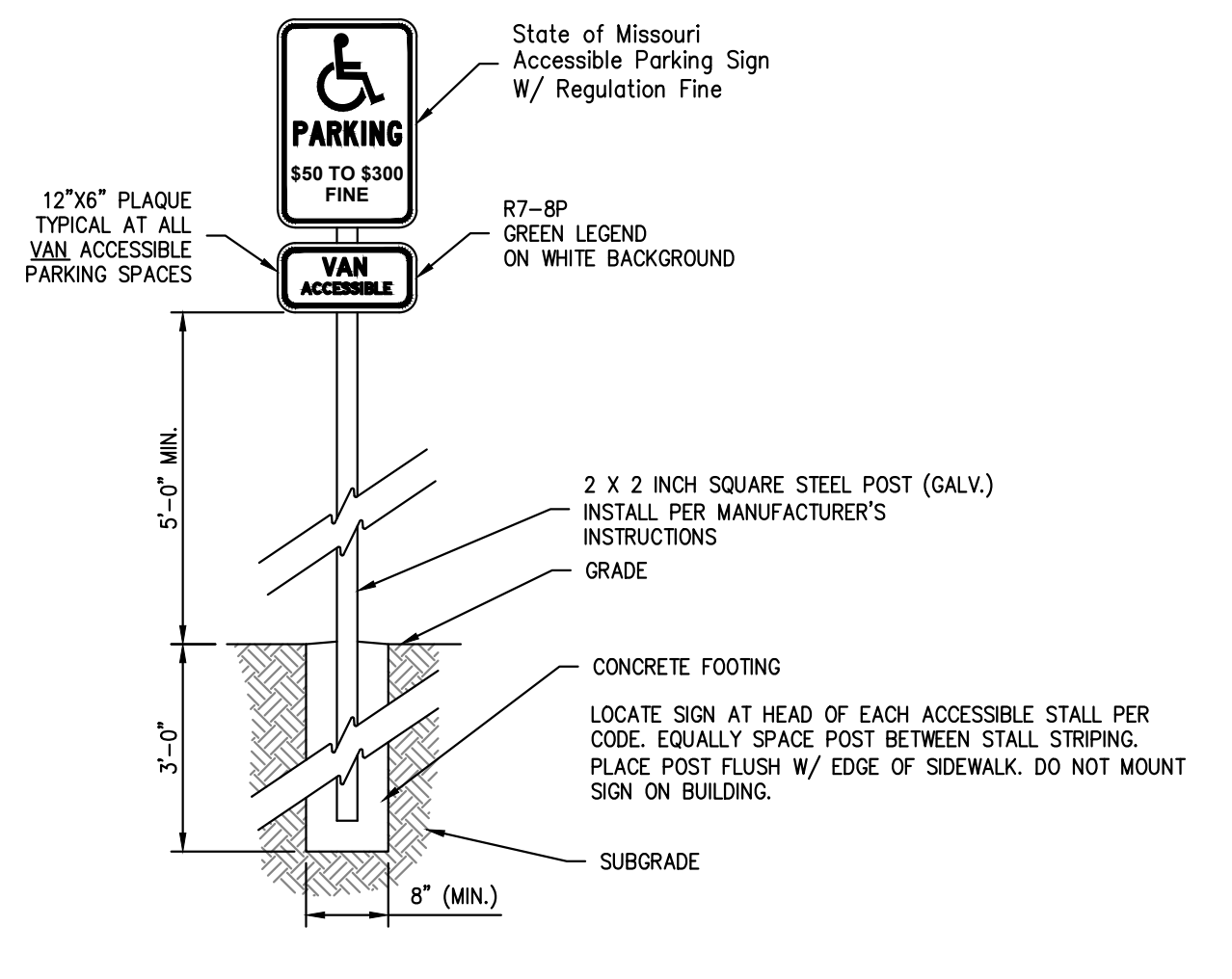
**ACCESSIBLE SIGN DETAIL  
IN GRASS AREA**  
SCALE: N.T.S.



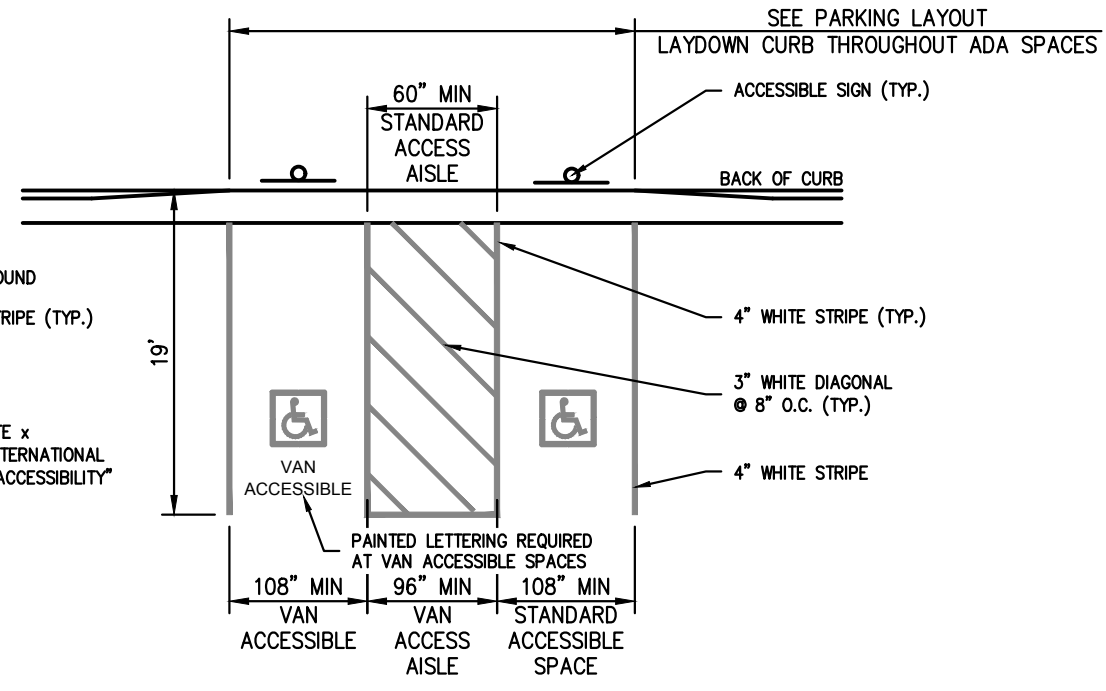
**MARKING SYMBOL  
MARKING DETAIL**  
SCALE: N.T.S.

- GENERAL NOTES:**
- ALL PAVEMENT MARKINGS SHALL BE APPLIED BY A QUALIFIED CONTRACTOR HAVING A MINIMUM 3 YEARS EXPERIENCE IN TRAFFIC GRADE PAVEMENT MARKING APPLICATIONS.
  - PAINT SHALL BE A NON-BLEEDING, QUICK-DRYING, ALKYL PETROLEUM BASE PAINT SUITABLE FOR TRAFFIC-BEARING SURFACE AND SHALL MEET FS TYP-BASE & MIXED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION.
  - SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL & DUST.
  - APPLY TWO (2) COATS OF PAINT AT MANUFACTURER RECOMMENDED RATE WITHOUT THE ADDITION OF THINNER, WITH A MAXIMUM OF 100 SQUARE FEET PER GALLON. APPLY WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. AT SIDEWALK, CURBS, AND CROSSWALKS USE A STRAIGHTEDGE TO ENSURE A UNIFORM, CLEAN, & STRAIGHT STRIPE.
  - THE FOLLOWING ITEMS SHALL BE PAINTED WITH THE COLORS NOTED BELOW:  
A. HANDICAP SYMBOLS: SEE DETAIL THIS SHEET.  
B. PARKING STALL STRIPING: WHITE.
  - ACCESSIBLE PARKING SPACE DESIGN LAYOUT SHALL BE IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
  - SEE SITE PLANS FOR COMPLETE PARKING LAYOUT.

**ACCESSIBLE PARKING SPACE DETAIL**  
SCALE: N.T.S.



**ACCESSIBLE SIGN DETAIL  
IN GRASS AREA**  
SCALE: N.T.S.

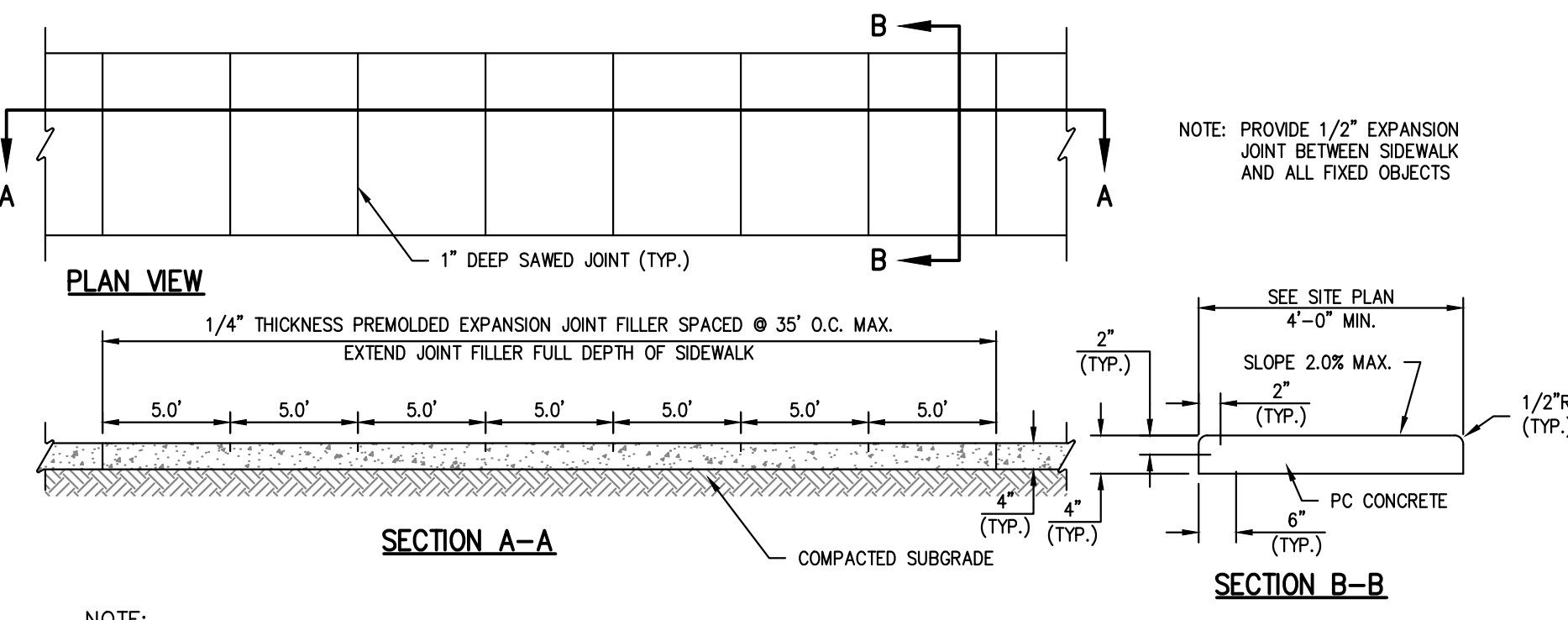


**PRIVATE SIDEWALK RAMPS**  
SCALE: N.T.S.

L = LANDING  
R = RAMP  
T = TRANSITION

RAMP (Required to transition elevation): Max. Longitudinal Slope = 8.33%  
Max. Cross Slope = 2.00%  
Min. Width = 5'  
Min. Length = 5'

LANDING (Required to change direction of travel): Max. Longitudinal Slope = 2.00%  
Max. Cross Slope = 2.00%  
Min. Width = 5'

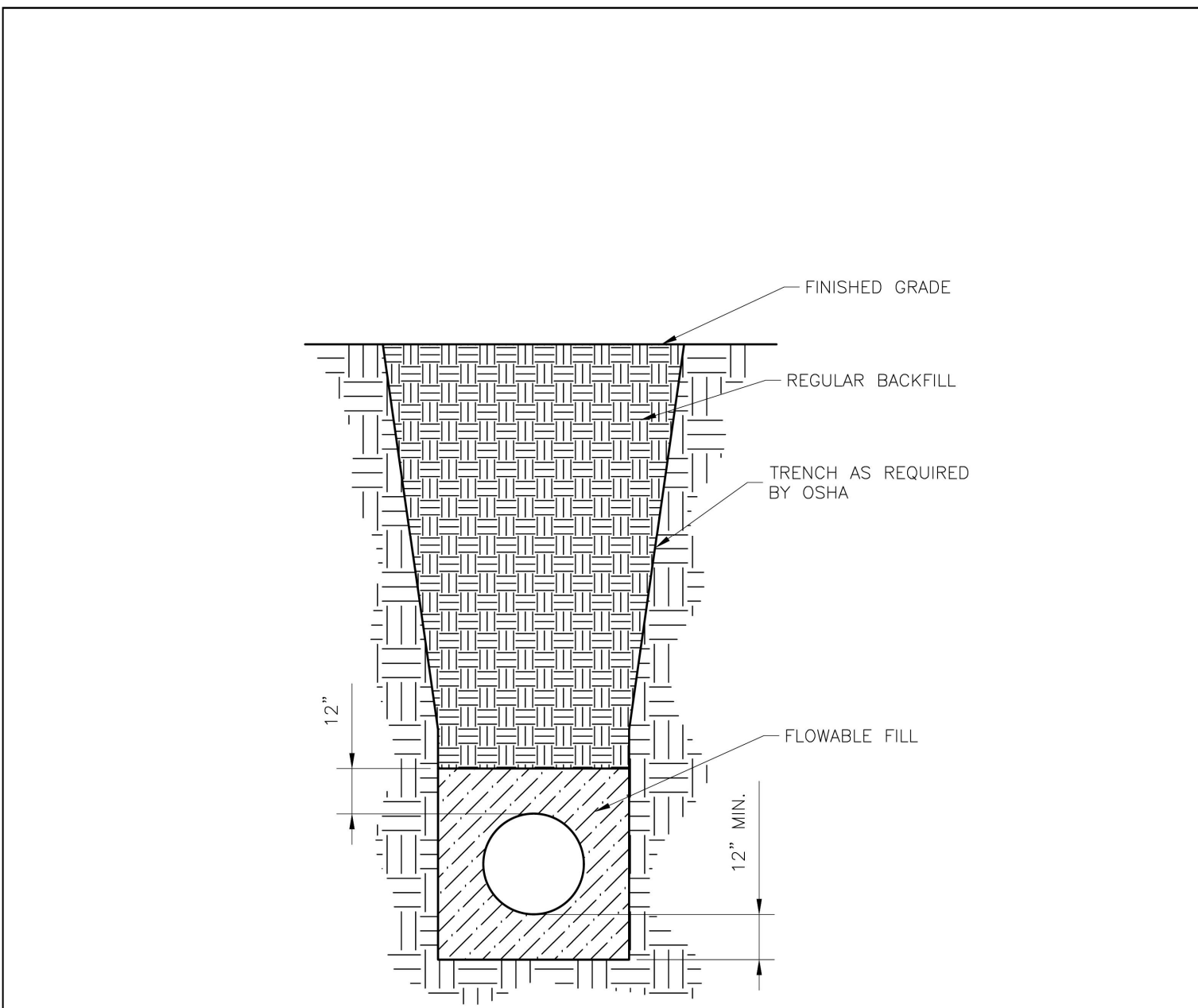


NOTE:  
1. USE KANSAS CITY MATERIALS METRO BOARD (KMMB) MIX DESIGN SPECIFICATIONS FOR 4,000 P.S.I. AIR ENTRAINED CONCRETE FOR ALL PRIVATE SIDEWALKS.

**PRIVATE CONCRETE SIDEWALKS (NON REINFORCED)**  
SCALE: N.T.S.

Revisions:	By	App.
1. REVISED PER CITY COMMENTS	AEB	DAF
2. REVISED PER CITY COMMENTS	AEB	DAF
3. REVISED PER CITY COMMENTS	AEB	DAF



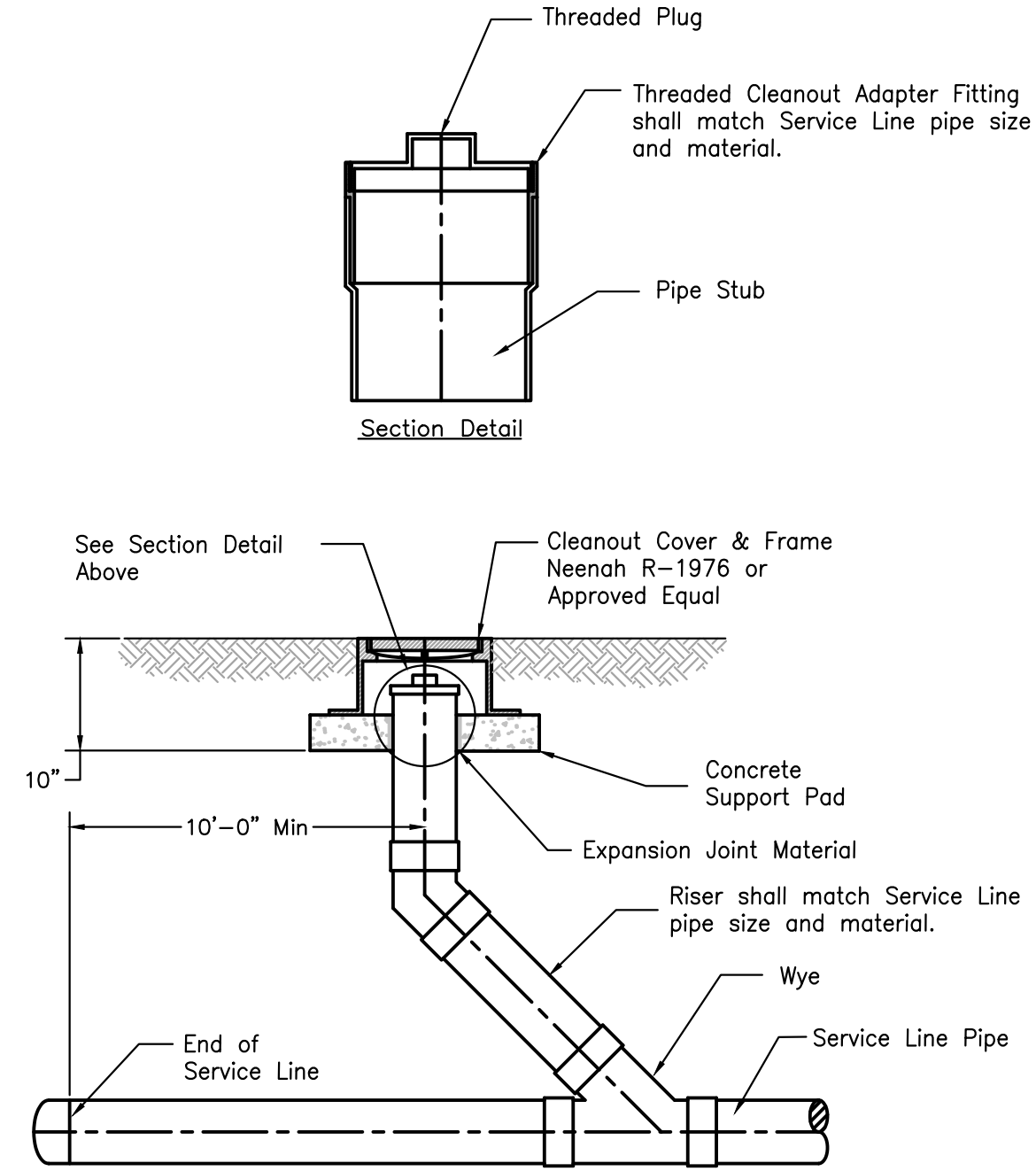


- NOTES:
1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
  2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
  3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
  4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".

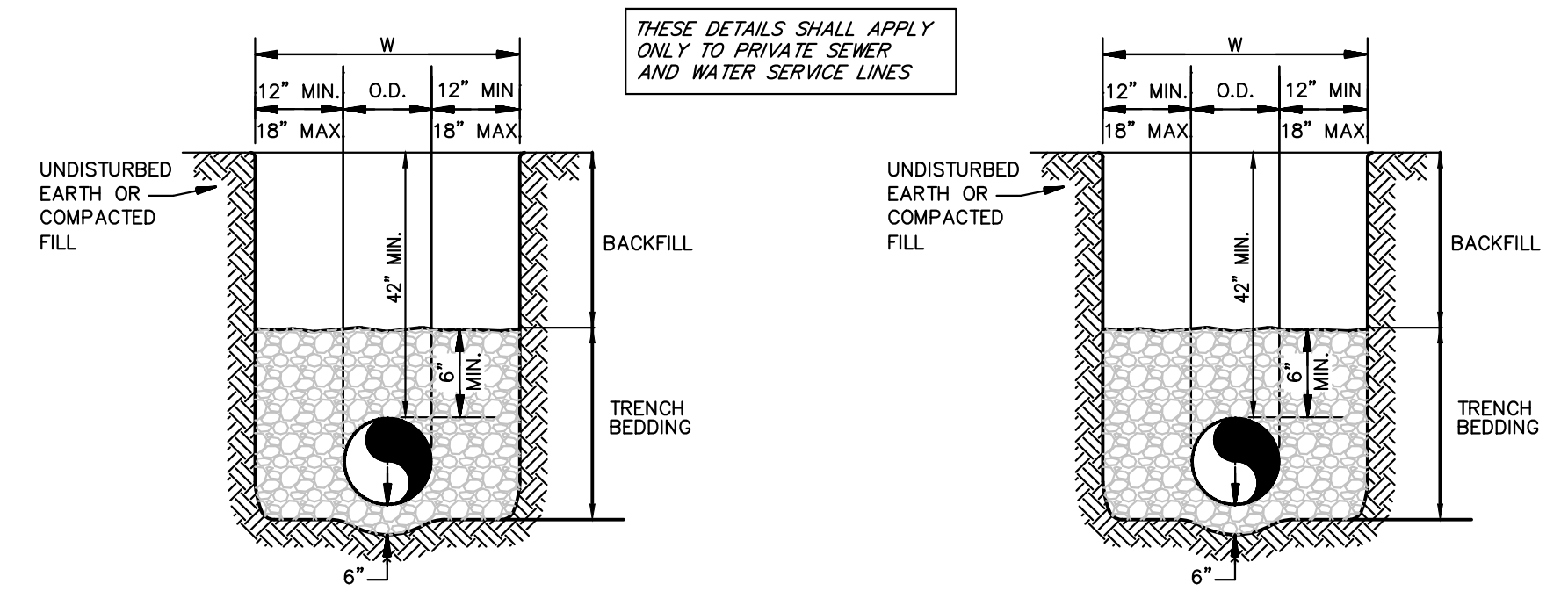
**LEE'S SUMMIT MISSOURI**  
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 08/2023  
 Drawn By: MJF  
 Checked By: KLV

**WAT-6**



**CLEANOUT DETAIL (NON-PAVED AREAS)**  
 SCALE: N.T.S.



**WATER LINE**  
 SCALE: NOT TO SCALE

**SANITARY SEWER**  
 SCALE: NOT TO SCALE

**TRENCH BEDDING**

1. GRANULAR EMBEDMENT SHALL BE KDOT STD. SPEC. SECT. 1100, PB-2 COURSE AGGREGATE FOR CONCRETE, WASHED STONE OR GRAVEL, MEETING THE FOLLOWING CONDITIONS:

SIEVE SIZE	PERCENT RETAINED
1-INCH	0
3/4-INCH	0-20
3-INCH	40-70
No. 8	95-100

GRANULAR EMBEDMENT FROM THE TOP OF PIPE DOWN SHALL BE COMPACTED TO 85% MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.

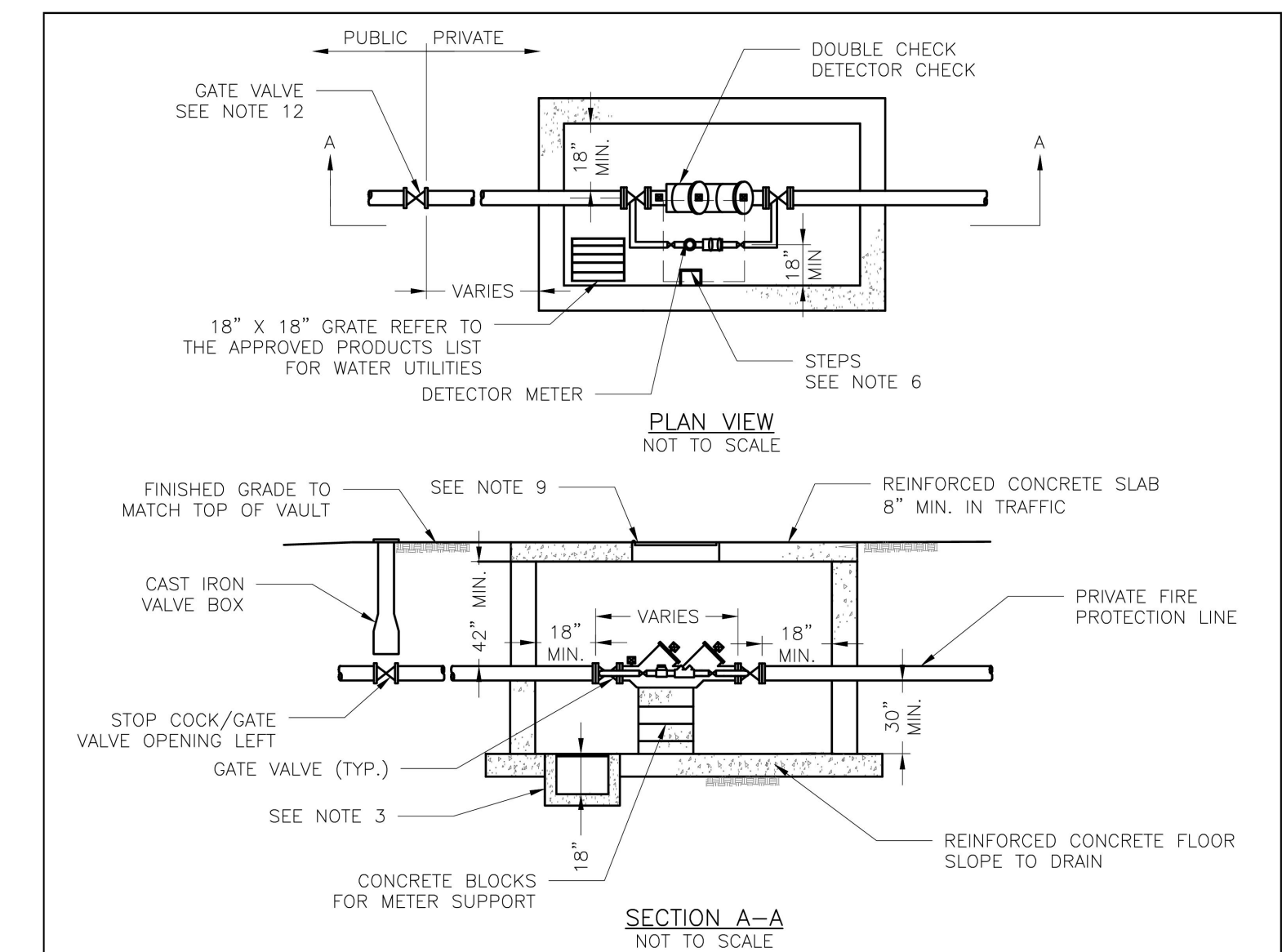
GRANULAR EMBEDMENT ABOVE TOP OF PIPE SHALL BE AN UN-COMPACTED LAYER FOR ALL INSTALLATIONS.

2. TRENCH OUTLINES DO NOT INDICATE ACTUAL TRENCH EXCAVATION SHAPE, SOIL CONDITIONS, OR PRESENCE OF SHEETING LEFT IN PLACE. EMBEDMENT MATERIAL SHALL EXTEND THE FULL WIDTH OF THE ACTUAL TRENCH EXCAVATION.

**BACKFILL**

1. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
2. 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.
3. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
4. 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**



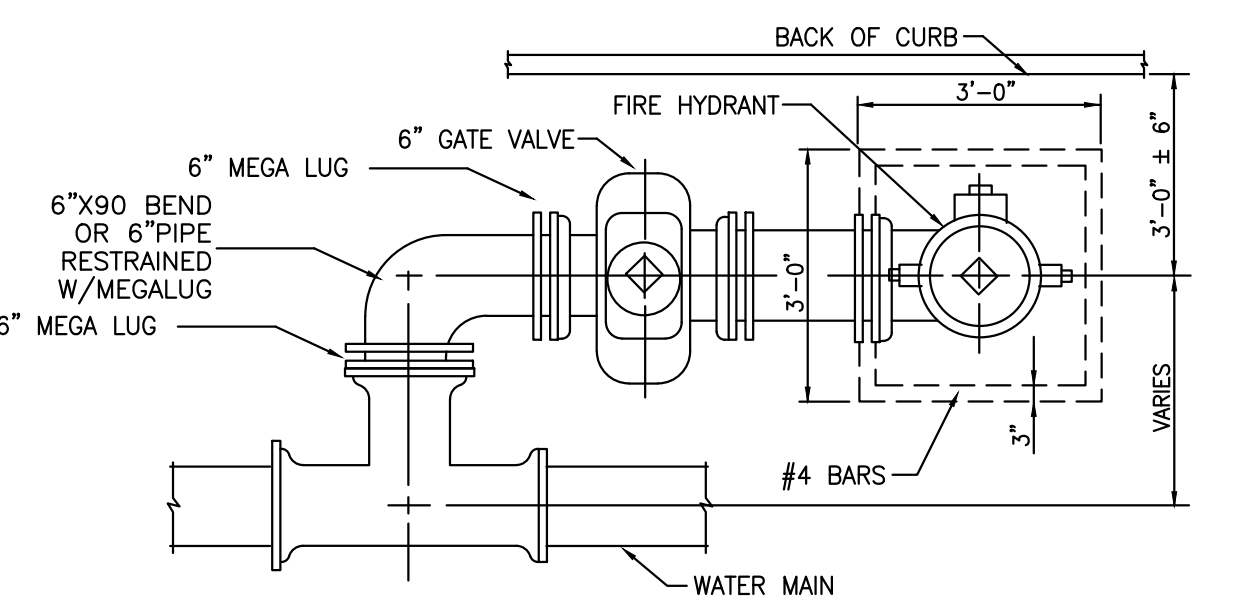
**GENERAL NOTES:**

1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE.
2. METER VAULT ROOF TO BE REINFORCED CONCRETE OPENING CENTERED OVER DETECTOR METER.
3. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA WHERE SURFACE WATER WILL NOT DRAIN INTO IT. VAULT MUST BE KEPT FREE OF WATER. PROVIDE CONCRETE SUMP AS A MINIMUM, WHERE PRACTICAL, PROVIDE A 2" PIPE DRAIN WITH AN ABOVE-GROUND DISCHARGE POINT. PROJECT OWNER MAY DESIRE A PERMANENTLY INSTALLED SUMP PUMP.
4. ALL PIPE SHALL BE DUCTILE IRON CLASS 50. ALL PIPE FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
5. ALL FITTINGS TO BE BRASS.
6. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
7. A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR CHECK BACKFLOW PREVENTER MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT THE WATER UTILITIES OPERATIONS DIVISION AT 816-969-1940. AS OF JANUARY 1, 1987, THE DNR REQUIRES FIRE SPRINKLER SYSTEMS USING CHEMICALS TO HAVE A DNR APPROVED PRESSURE BACKFLOW PREVENTER INSTALLED, PRIOR TO THE MIXING POINT.
8. ALL VALVES SHALL HAVE RISING STEMS.
9. FOR MANHOLE COVERS, SELECT A MANHOLE FOUND ON THE APPROVED PRODUCTS LIST FOR WATER UTILITIES SUITABLE FOR EITHER TRAFFIC OR NON-TRAFFIC CONDITIONS.
10. A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC. MINER SHALL BE OWNED AND MAINTAINED BY THE WATER UTILITIES DEPARTMENT.
11. IF PUBLIC WATER IS LOCATED ON THE OPPOSITE SIDE OF THE STREET, THEN THE PUBLIC WATER MAIN RESPONSIBILITY OF THE WATER UTILITIES DEPARTMENT ENDS AT THE GATE VALVE NEAREST THE VAULT.

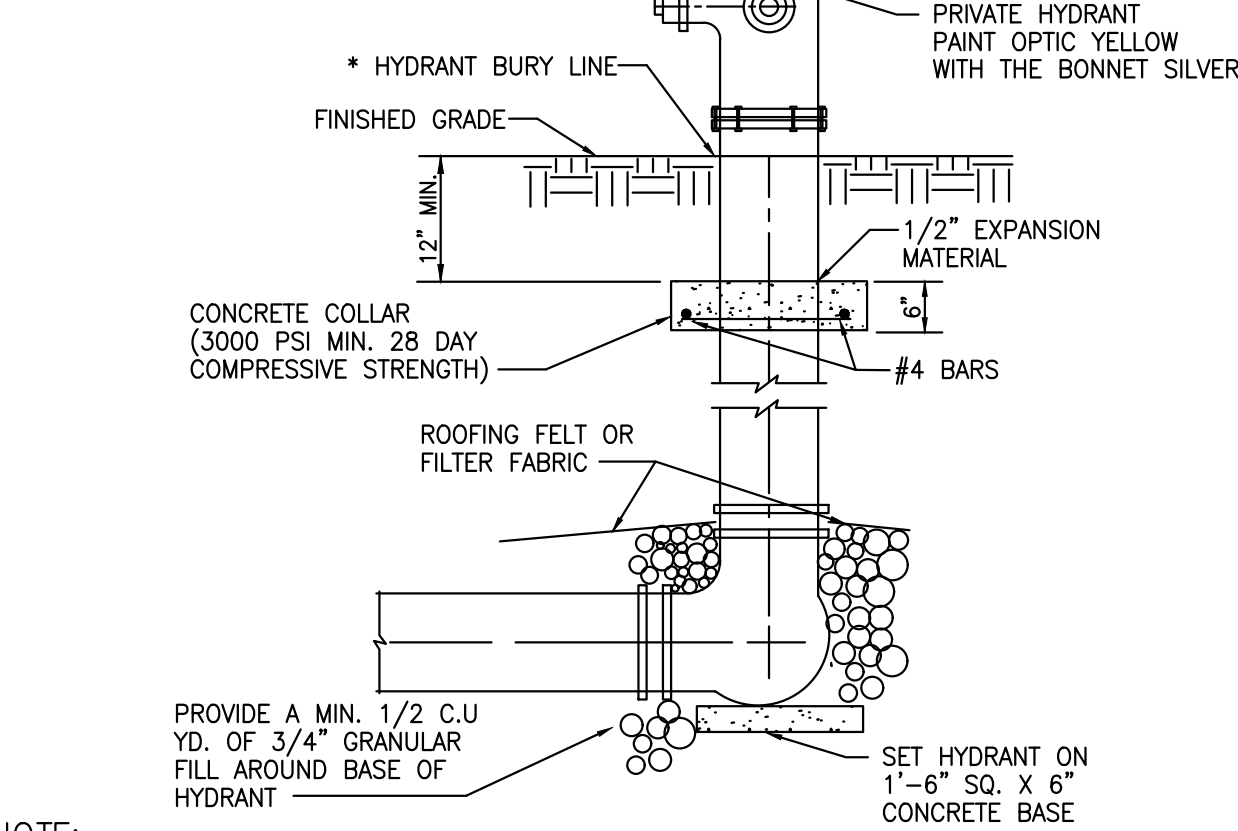
**LEE'S SUMMIT MISSOURI**  
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 08/2023  
 Drawn By: MJF  
 Checked By: KLV

**WAT-12**



NOTE:  
 ALL PIPING SHALL BE RESTRAINED JOINT PIPE.

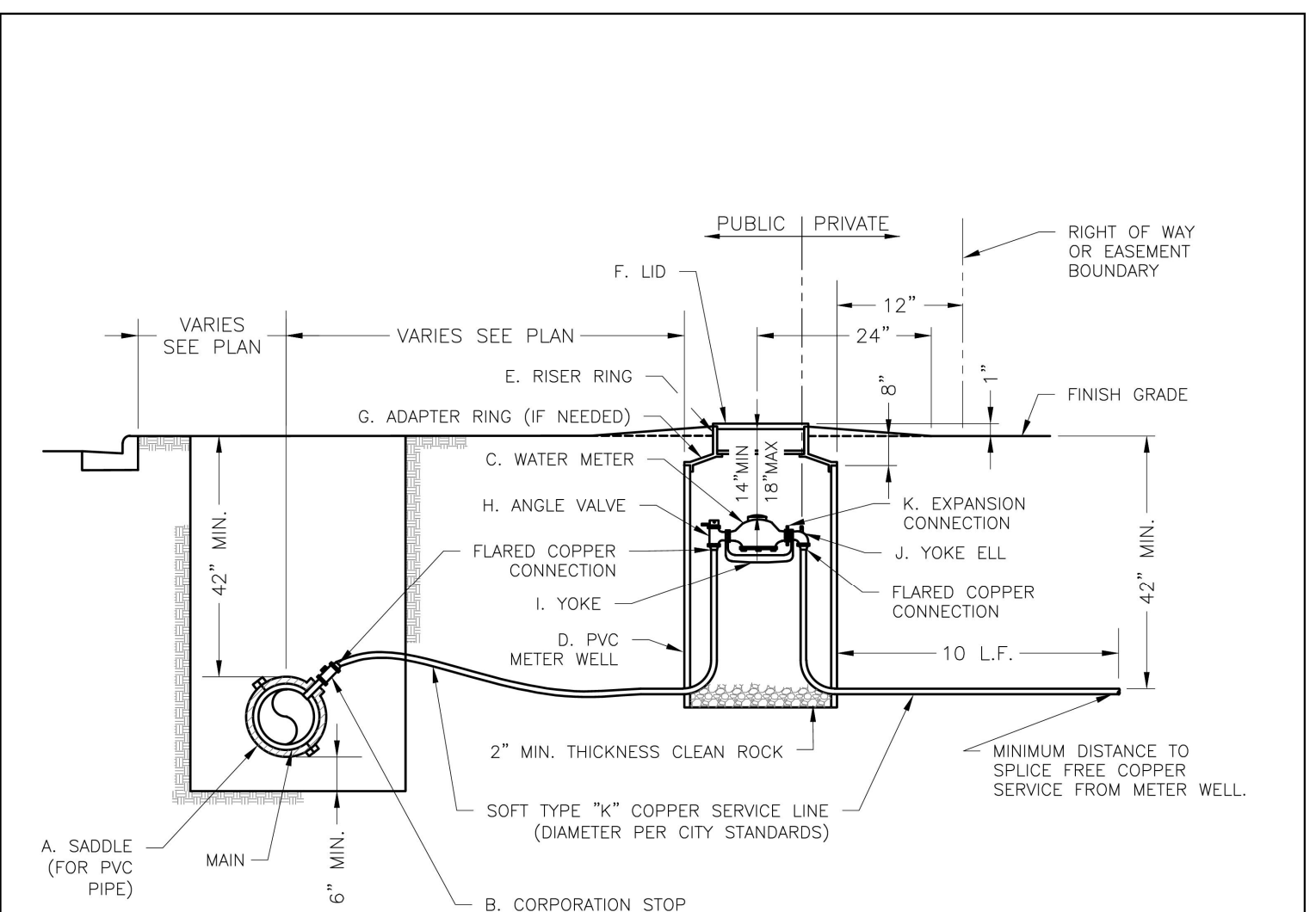


NOTE:  
 WHEN FIRE HYDRANT'S GATE VALVE EXCEEDS THE DISTANCE OF 5'-0" FROM CENTER OF GATE VALE TO CENTERLINE OF TEE. GATE VALVE SHALL BE ASSEMBLED TO WATER MAIN'S TEE.

**LEE'S SUMMIT MISSOURI**  
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 08/2023  
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 Checked By: KLV

**WAT-11**



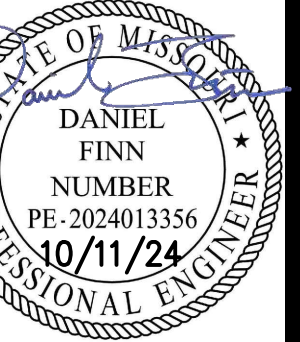
**NOTES:**

1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A-K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4' LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

**LEE'S SUMMIT MISSOURI**  
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 08/2023  
 Drawn By: MJF  
 Checked By: KLV

**WAT-11**



**PHelps ENGINEERING, INC.**  
 1270 N. Winchester  
 Olathe, Kansas 66066  
 (913) 993-1155  
 Fax (913) 993-1165  
 www.phelpsengineering.com

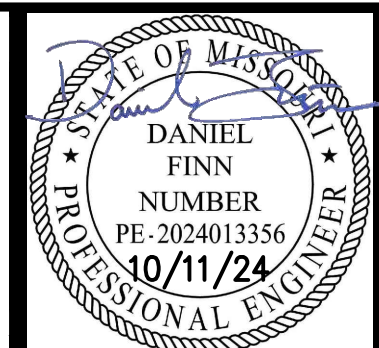


**STANDARD DETAIL**  
 I-470 BUSINESS & TECHNOLOGY CENTER  
 2701 NE MGBAINE DR  
 LEE'S SUMMIT, MISSOURI 64064

Revisions:	By	App.	Date
1. REVISED PER CITY COMMENTS	AEB	DAF	10-02-2024
2. REVISED PER CITY COMMENTS	AEB	DAF	10-11-2024
3. REVISED PER CITY COMMENTS	AEB	DAF	10-11-2024

**SHEET**  
**C702**

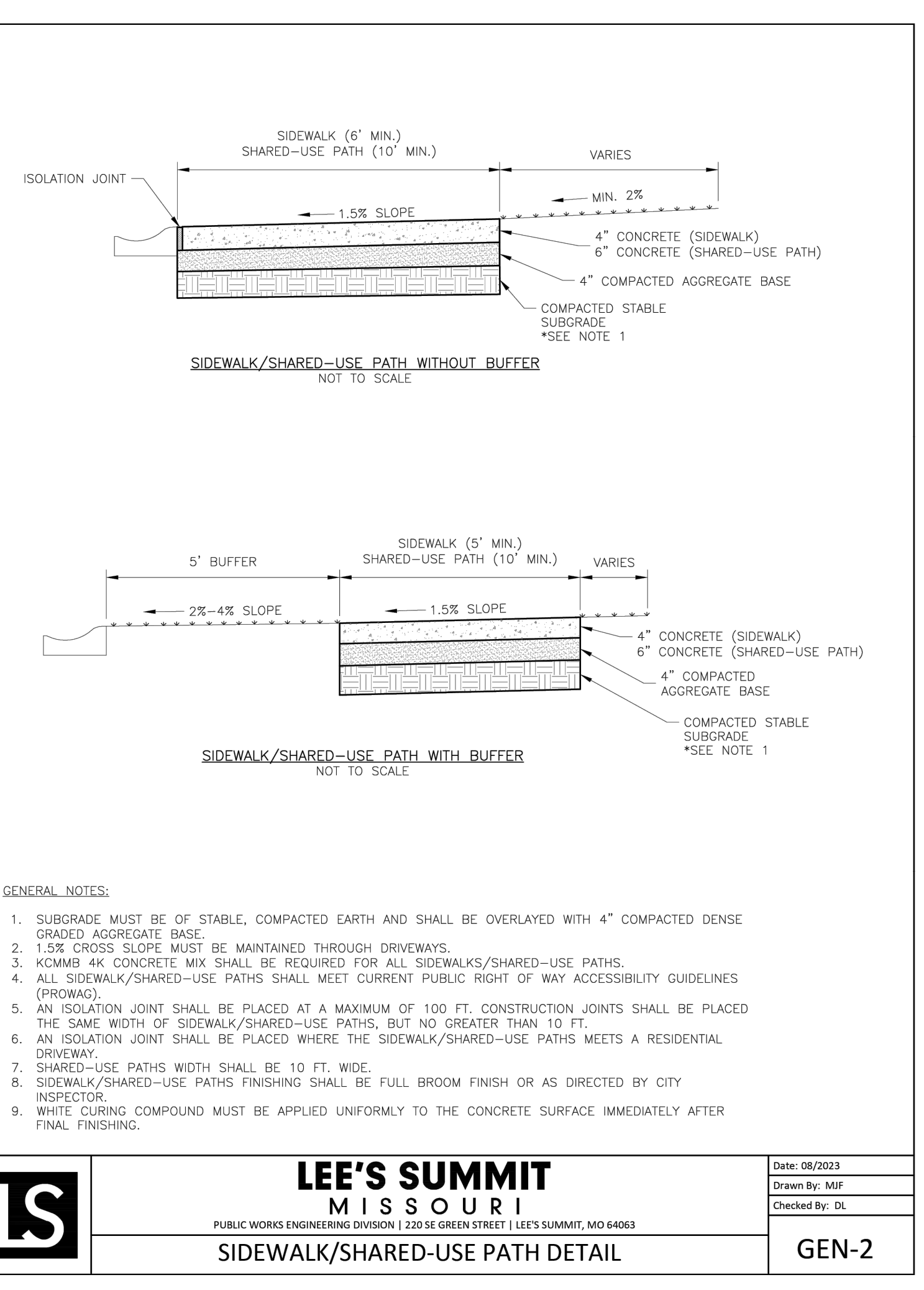




**PHILIPS ENGINEERING, INC.**  
1370 N. Winchester  
Olathe, Kansas 66061  
(913) 993-1155  
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www.philipsengineering.com

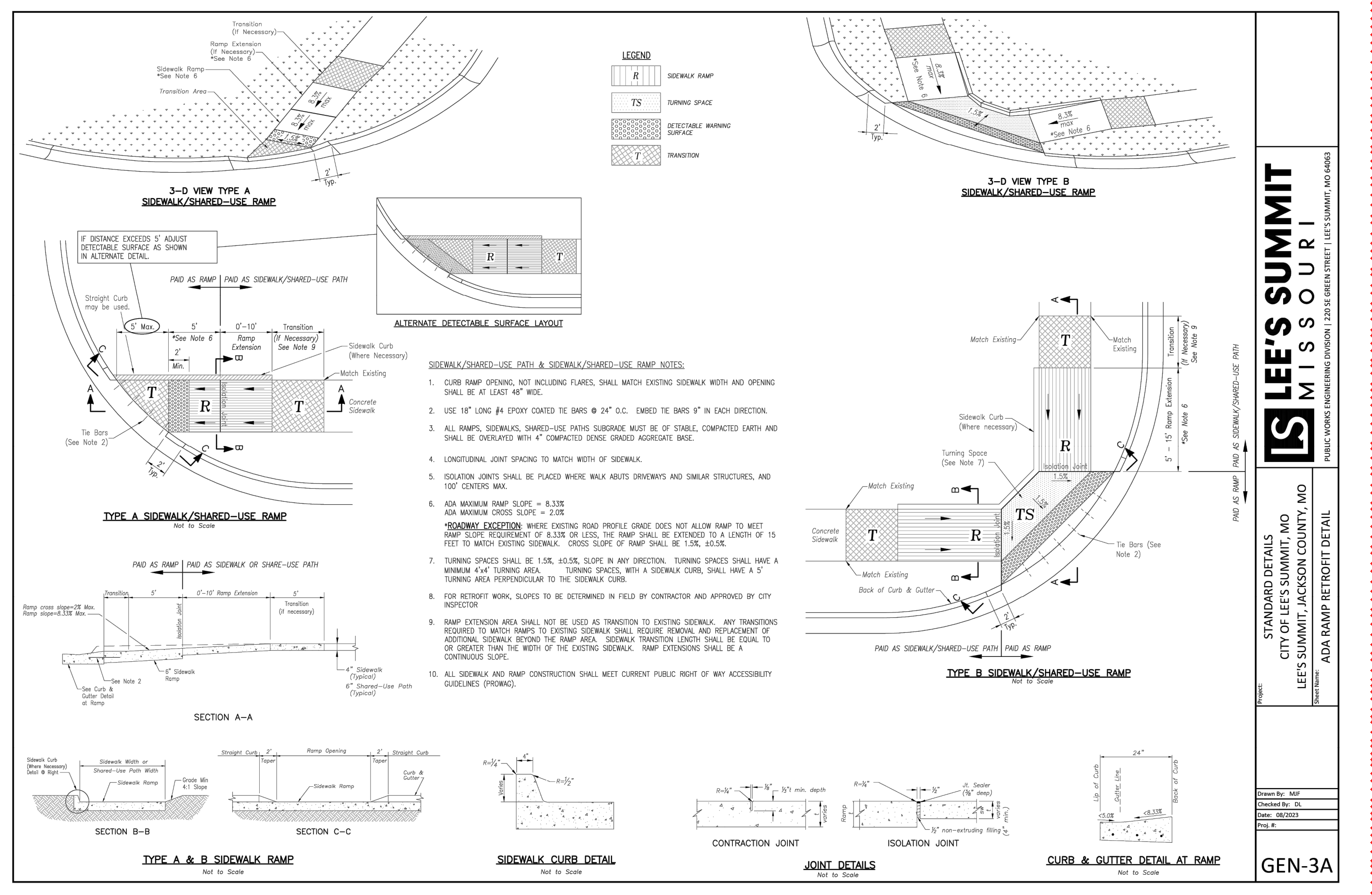


**STANDARD DETAIL**  
1-470 BUSINESS & TECHNOLOGY CENTER  
2701 NE MCBAIN DR  
LEE'S SUMMIT, MISSOURI 64064

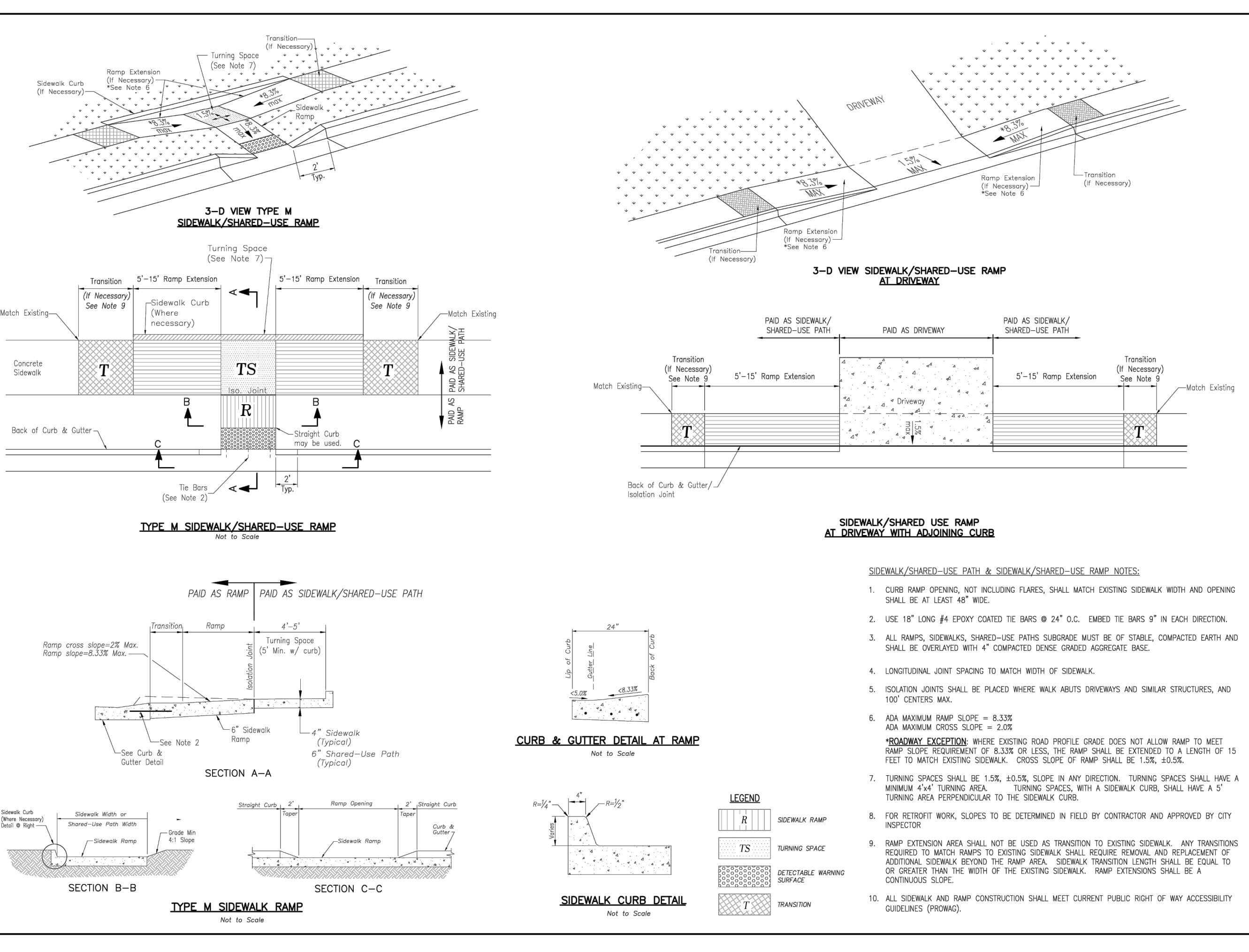


**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 120 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 08/2023  
Drawn By: MIF  
Checked By: DL  
Proj #: GEN-2

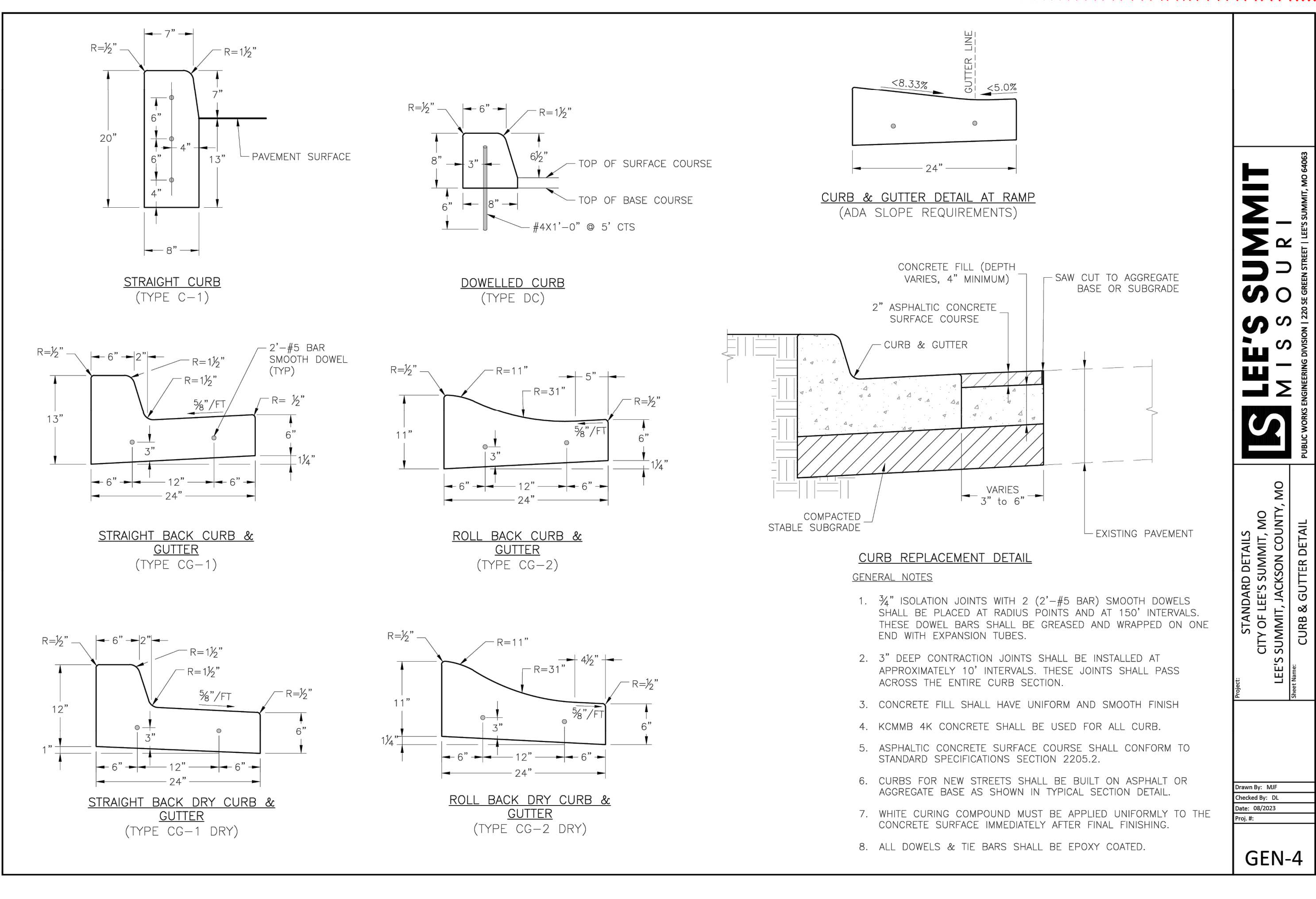


STANDARD DETAILS  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO  
PROJECT NAME: ADA RAMP RETROFIT DETAIL  
Drawn By: MIF  
Checked By: DL  
Date: 08/2023  
Proj #: GEN-3A



**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 120 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO  
PROJECT NAME: ADA RAMP RETROFIT DETAIL  
Drawn By: MIF  
Checked By: DL  
Date: 08/2023  
Proj #: GEN-3B



**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 120 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO  
PROJECT NAME: CURB & GUTTER DETAIL  
Drawn By: MIF  
Checked By: DL  
Date: 08/2023  
Proj #: GEN-4

PROJECT NO.	DATE	BY	APP.	REVISIONS
240024	09-12-2024	AEB	DAF	REVISED PER CITY COMMENTS
	10-02-2024	AEB	DAF	REVISED PER CITY COMMENTS
	10-11-2024	AEB	DAF	REVISED PER CITY COMMENTS

DATE: 08-13-2024  
DRAWN: AEB  
CHECKED: DAF  
APPROVED: JDC  
CITY OF LEE'S SUMMIT  
PUBLIC WORKS ENGINEERING DIVISION  
PROJECT NAME: ADA RAMP RETROFIT DETAIL  
PROJECT NO.: 240024  
DATE: 08/2023  
DRAWN BY: MIF  
CHECKED BY: DL  
DATE: 08/2023  
PROJ #: GEN-3A

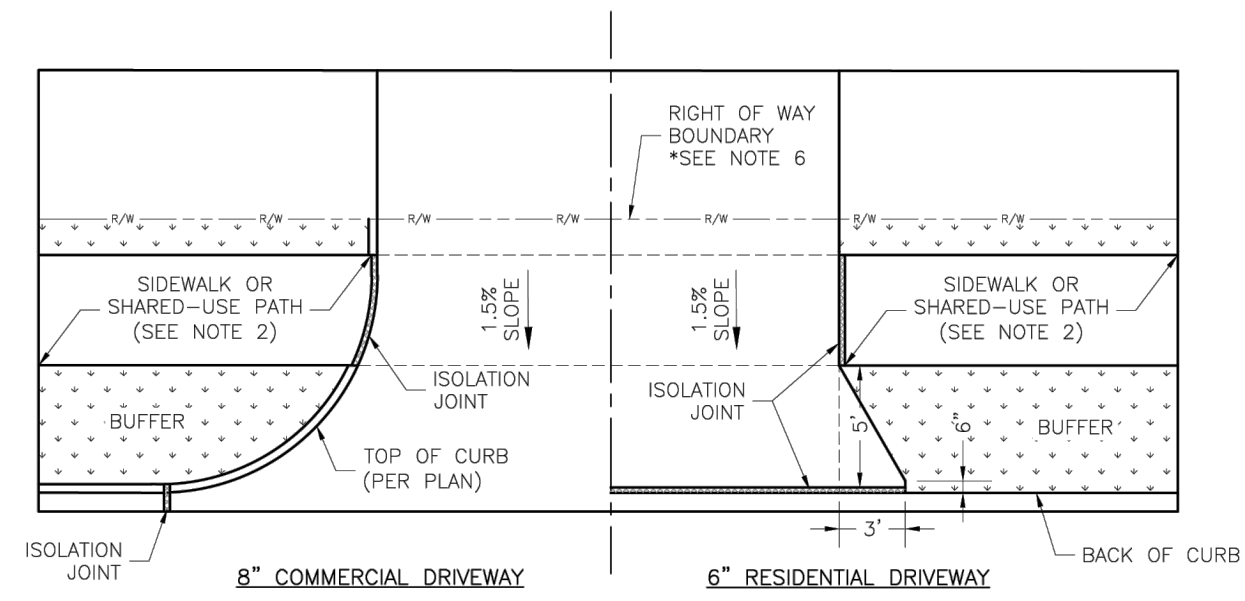
**REVISIONS:**

- 09-12-2024 AEB DAF REVISED PER CITY COMMENTS
- 10-02-2024 AEB DAF REVISED PER CITY COMMENTS
- 10-11-2024 AEB DAF REVISED PER CITY COMMENTS

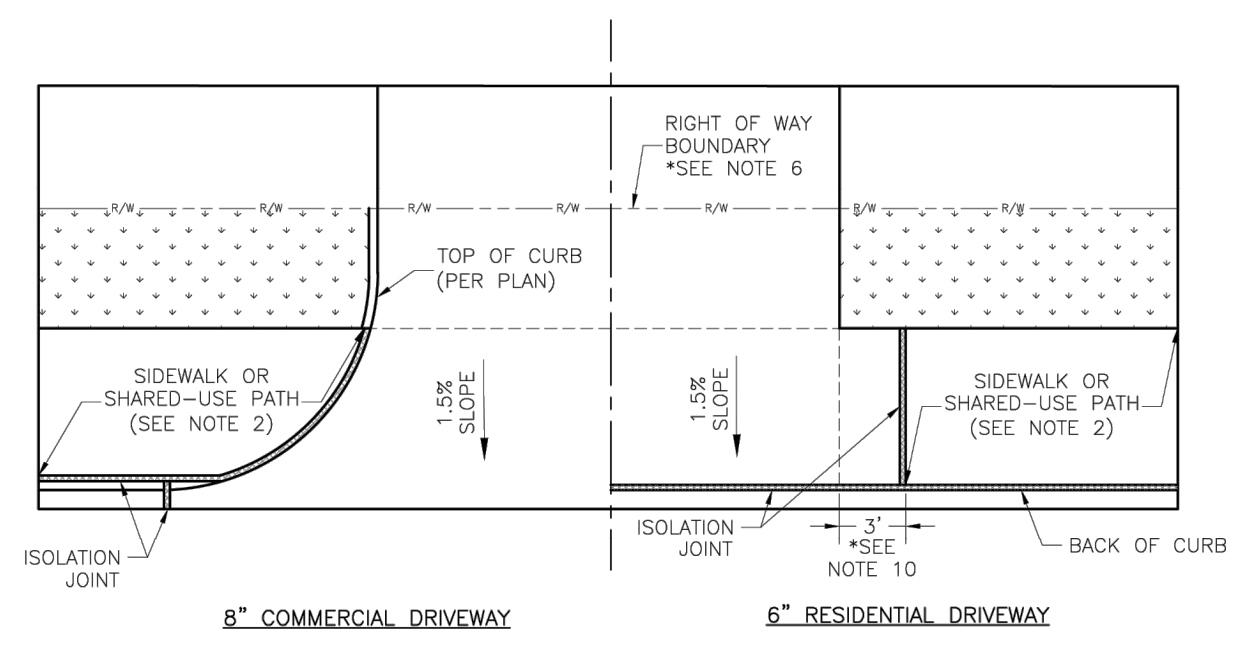
DATE OF AUTHORIZATION: 08-13-2024  
AUTHOR: JDC  
DESIGNER: MIF  
CHECKED: DAF  
APPROVED: JDC  
CITY OF LEE'S SUMMIT  
PUBLIC WORKS ENGINEERING DIVISION  
PROJECT NAME: ADA RAMP RETROFIT DETAIL  
PROJECT NO.: 240024  
DATE: 08/2023  
DRAWN BY: MIF  
CHECKED BY: DL  
DATE: 08/2023  
PROJ #: GEN-3A

SHEET  
**C703**



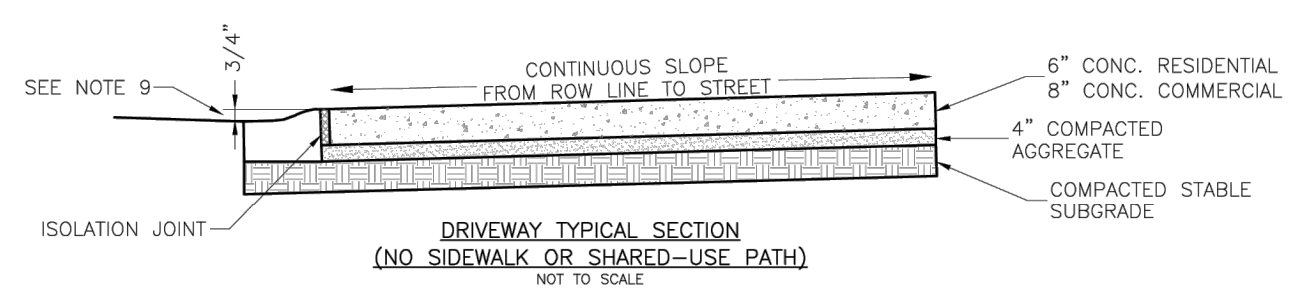


DRIVEWAY WITH BUFFER  
NOT TO SCALE

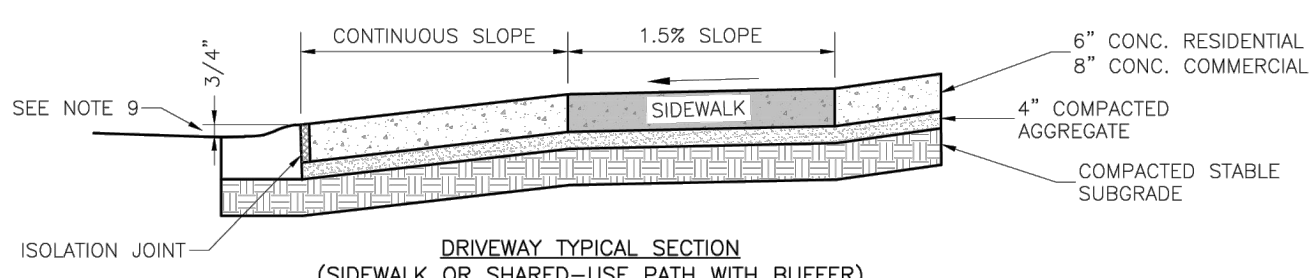


DRIVEWAY WITHOUT BUFFER  
NOT TO SCALE

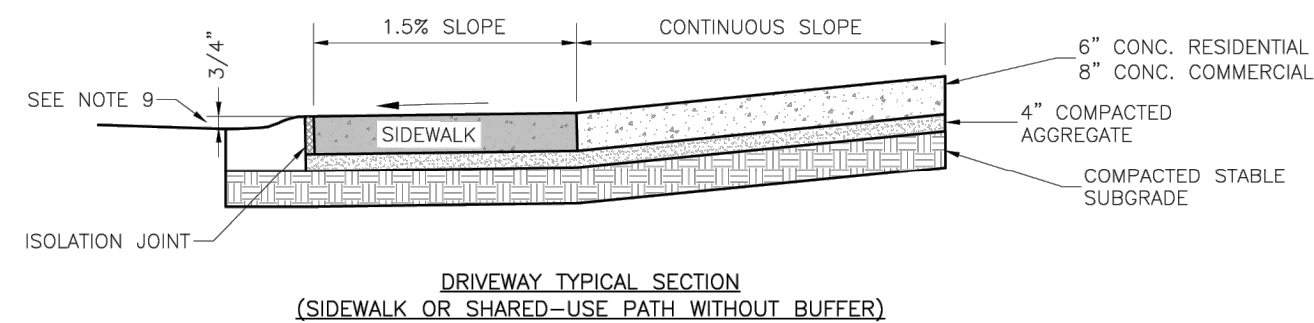
- GENERAL NOTES**
- SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
  - ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL GEN-3B, SIDEWALK/SHARED USE PATH RAMP AT DRIVEWAY DETAIL).
  - KCMBB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
  - JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
  - COMMERCIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMBB 4K CONCRETE MIX.
  - RESIDENTIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, KCMBB 4K CONCRETE MIX IS RECOMMENDED. OTHER CONCRETE MIXES NEED TO BE APPROVED BY CITY INSPECTOR.
  - A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
  - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
  - 3/4" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CG-1 CURB ONLY), MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
  - SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
  - THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.



DRIVEWAY TYPICAL SECTION  
(NO SIDEWALK OR SHARED-USE PATH)  
NOT TO SCALE



DRIVEWAY TYPICAL SECTION  
(SIDEWALK OR SHARED-USE PATH WITH BUFFER)  
NOT TO SCALE



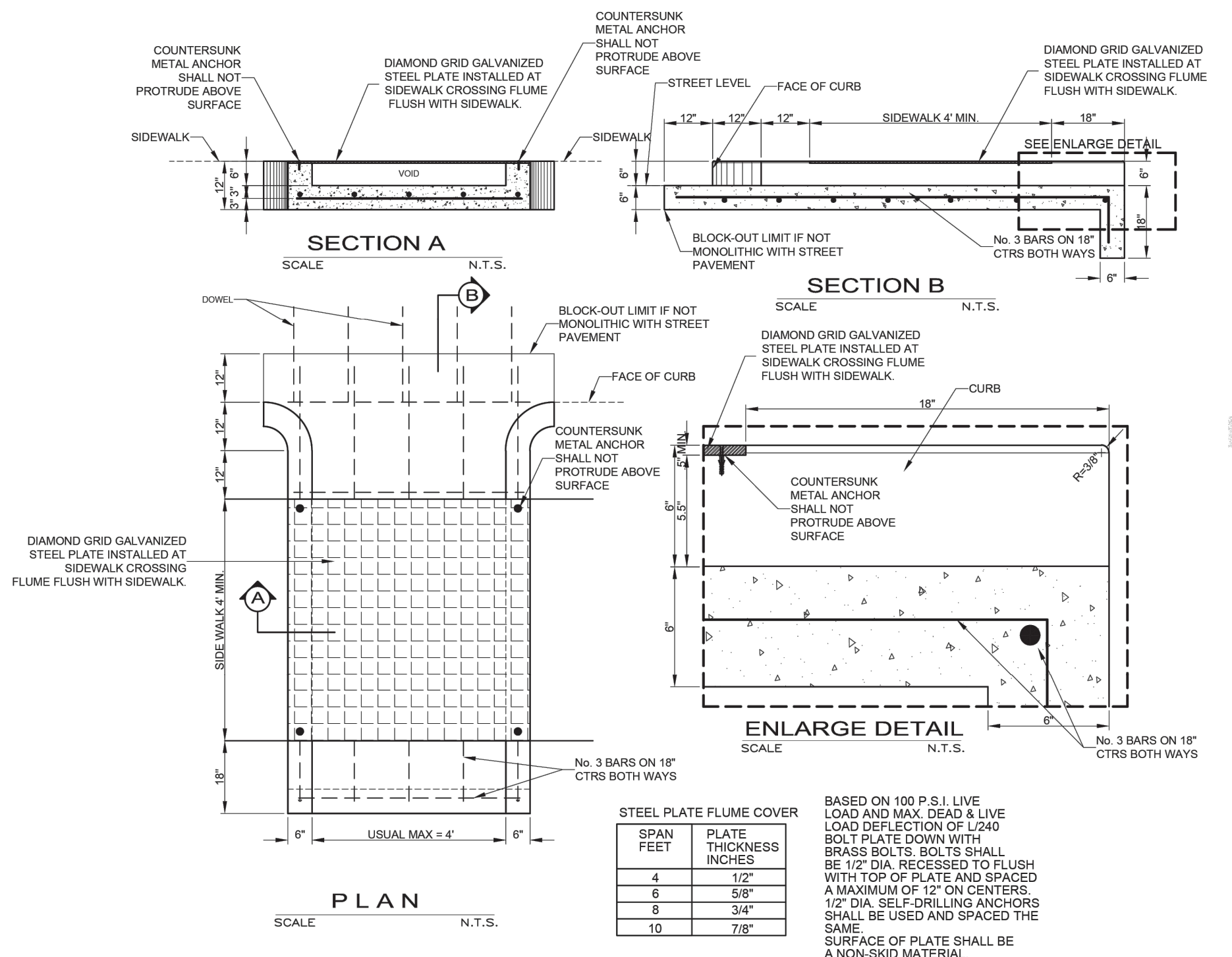
DRIVEWAY TYPICAL SECTION  
(SIDEWALK OR SHARED-USE PATH WITHOUT BUFFER)  
NOT TO SCALE

**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 1200 S. GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO

Drawn By: MEF  
Checked By: DL  
Date: 08/2023  
File: P

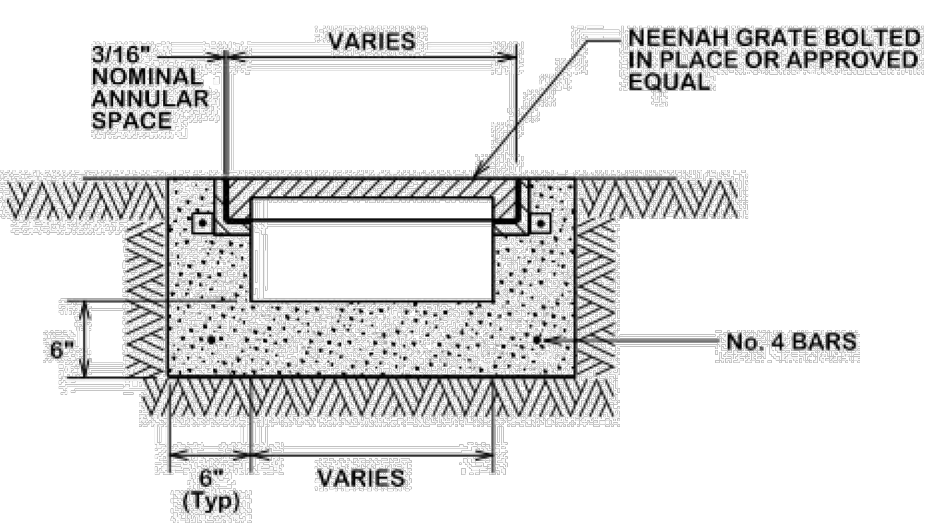
GEN-1



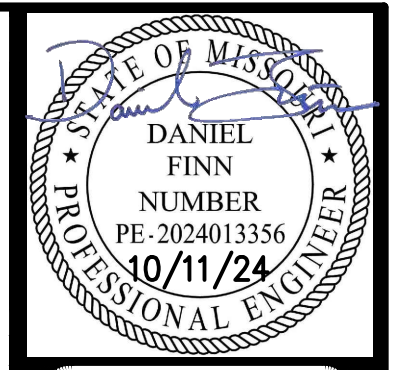
PLAN  
SCALE: N.T.S.

SPAN FEET	PLATE THICKNESS INCHES
4	1/2"
6	5/8"
8	3/4"
10	7/8"

BASED ON 100 P.S.F. LIVE LOAD AND MAX. DEAD & LIVE LOAD DEFLECTION OF L/240  
BOLT PLATE DOWN WITH BRASS BOLTS. BOLTS SHALL BE 1/2" DIA. RECESSED TO FLUSH WITH TOP OF PLATE AND SPACED A MAXIMUM OF 12" ON CENTERS  
1/2" DIA. SELF-DRILLING ANCHORS SHALL BE USED AND SPACED THE SAME.  
SURFACE OF PLATE SHALL BE A NON-SKID MATERIAL.



SIDEWALK FLUME DETAIL



**PHELPS ENGINEERING, INC.**  
1270 N. Winchester  
Olathe, Kansas 66061  
(913) 993-1155  
Fax: (913) 993-1165  
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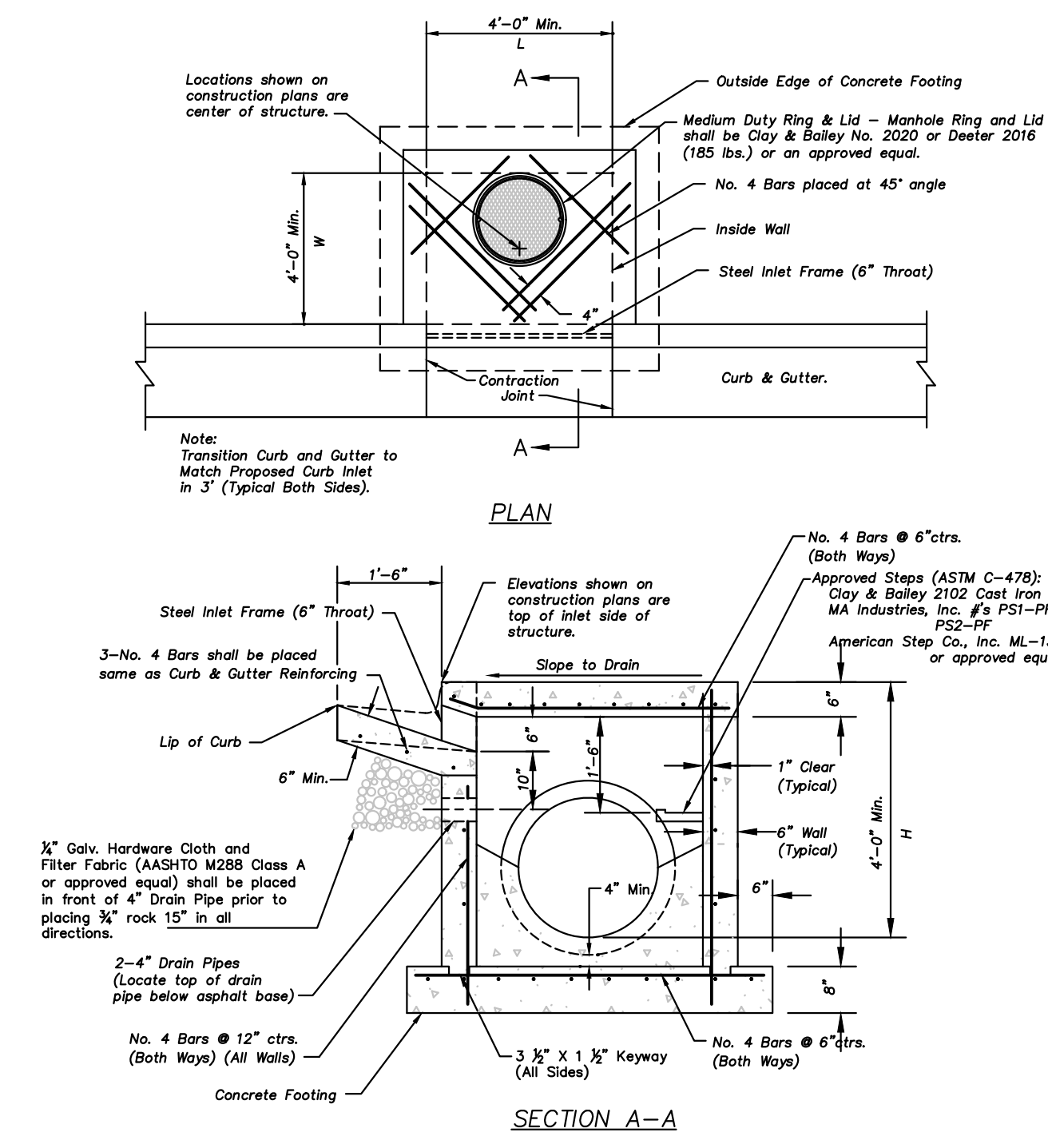
**STANDARD DETAILS**  
I-470 BUSINESS & TECHNOLOGY CENTER  
2701 NE MCBAIN DR  
LEE'S SUMMIT, MISSOURI 64064

PROJECT NO.	DATE	NO.	REVISIONS	BY	APP.
240024	09-12-2024	1.	REVISED PER CITY COMMENTS	AEB	DAF
	10-02-2024	2.	REVISED PER CITY COMMENTS	AEB	DAF
	10-11-2024	3.	REVISED PER CITY COMMENTS	AEB	DAF

SHEET  
**C704**



PROJECT NO.	DATE	BY	APP.	REVISIONS
240024	09-12-2024	AEB	DAF	1. REVISED PER CITY COMMENTS
	10-02-2024	AEB	DAF	2. REVISED PER CITY COMMENTS
	10-11-2024	AEB	DAF	3. REVISED PER CITY COMMENTS



**Non-Setback Curb Inlet Notes**

General

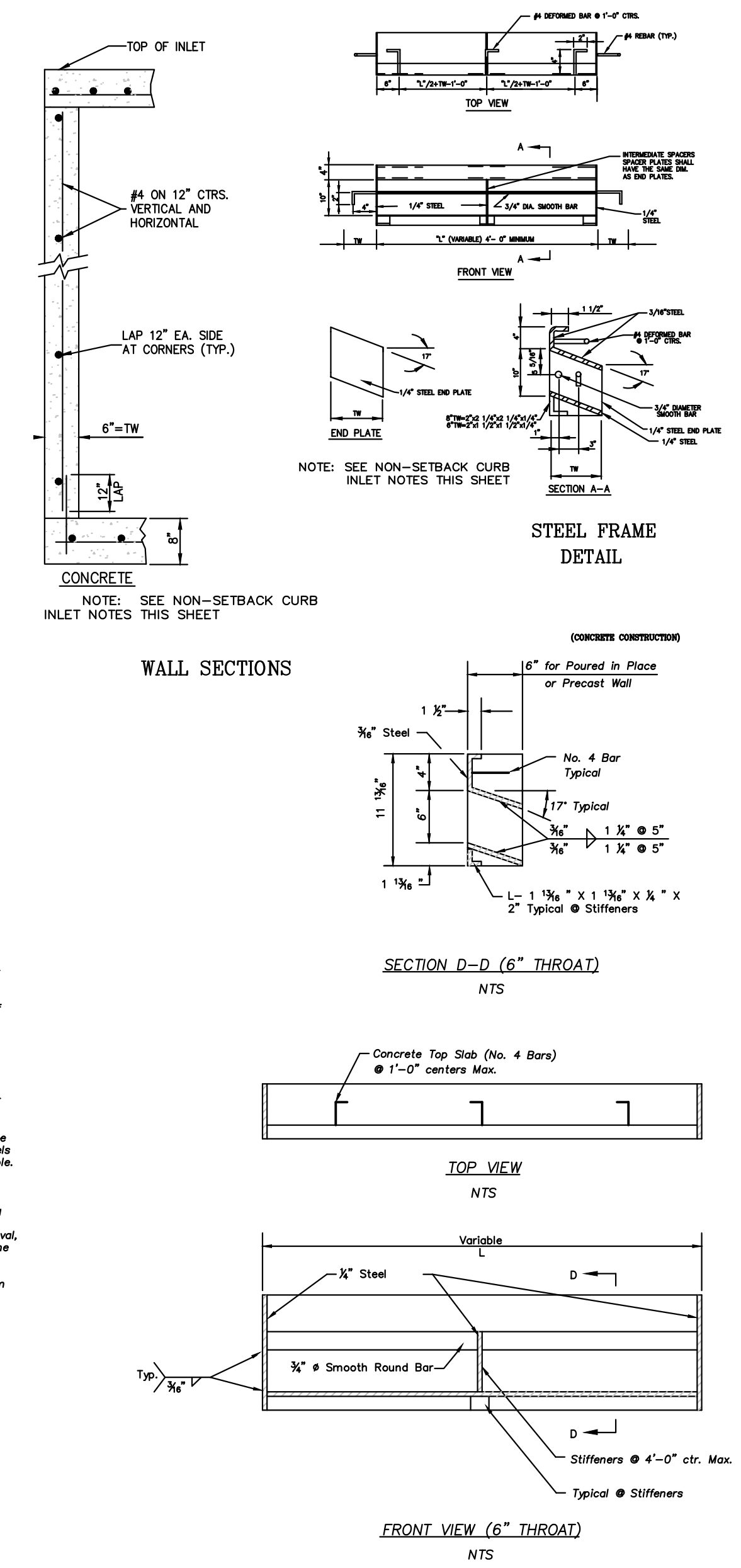
- All storm sewer structures shall be pre-cast or poured in place. If pre-cast structures are used for publicly financed, maintained or administered construction, the top shall be poured in place and the wall steel shall be left exposed to a height 2" below the finish top elevation, or as directed by the City Engineer.
- Pre-cast shop drawings are to be approved by the City Engineer for publicly financed or administered projects.
- Do not scale these drawings for dimensions or clearances. Any questions regarding dimensions shall be brought to the attention of the City Engineer prior to construction.
- The first dimension listed in the construction notes is the "L" dimension. The second dimension is the "W" dimension. The concrete thickness and reinforcement shown is for boxes with ("L" x "W") and ("W" x "W") less than or equal to 20. For boxes with either of these calculations greater than 20, a special design is required.

Concrete

- Concrete used in this work shall be KCMBAK, as approved by the Kansas City Metropolitan Materials Board, and shall meet the requirements of the City of Olathe.
- Concrete construction shall meet the applicable requirements of the City of Olathe's Technical Specifications.
- Interior floors shall be shaped with non-reinforced concrete inverts to provide smooth flow.
- Bevel all exposed edges with 3/4" triangular mounding.

Reinforcing Steel

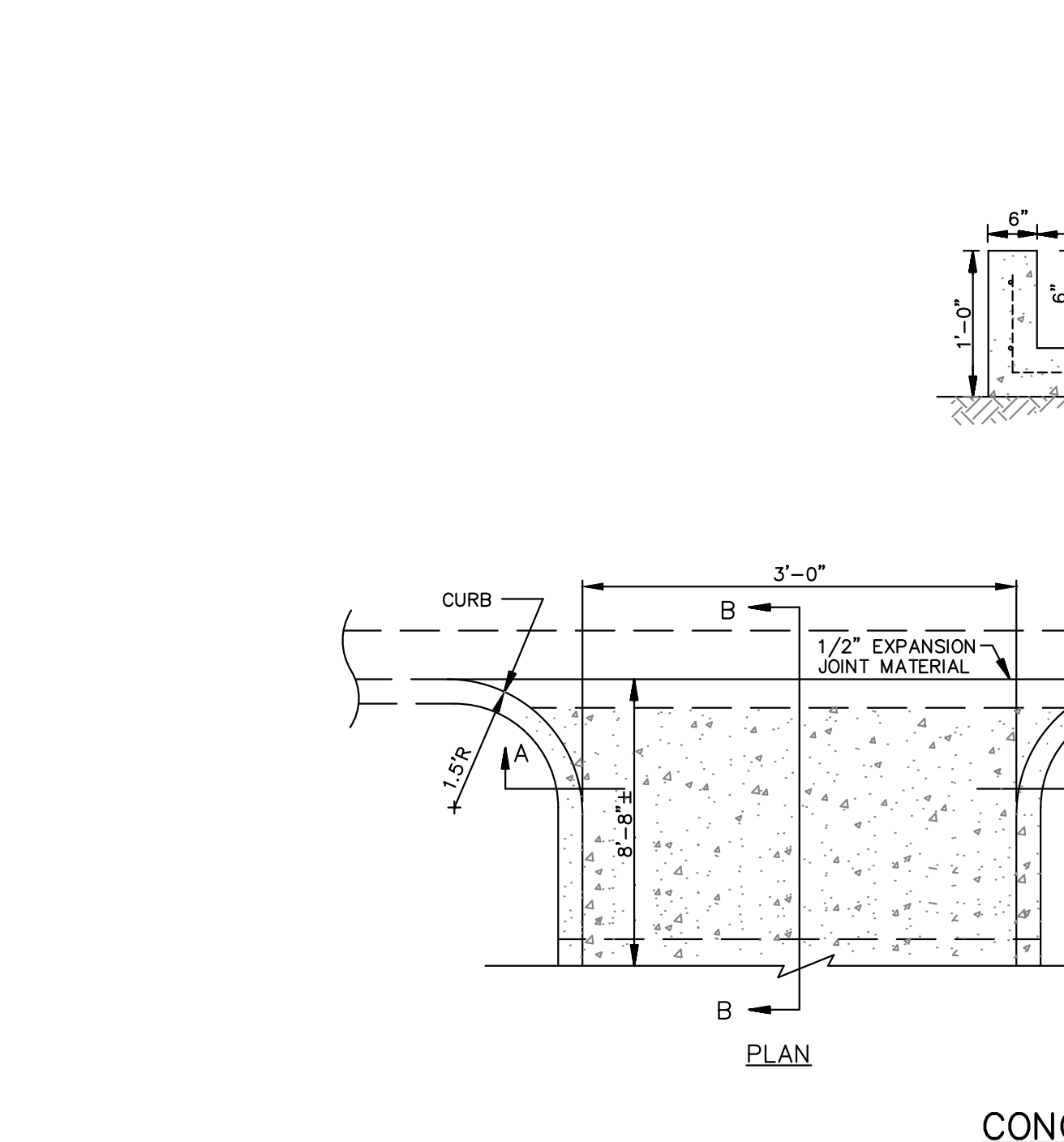
- Reinforcing steel shall be new billet, minimum Grade 40 as per ASTM A615, and shall be bent cold.
- All dimensions relative to reinforcing steel are to centerline of bars. 2" clearance shall be provided throughout unless noted otherwise. Tolerance of +/- 1/8" shall be permitted.
- All lap splices not shown shall be a minimum of 40 bar diameters in length.
- All reinforcing steel shall be supported on fabricated steel bar supports @ 3'-0" maximum spacing.
- All dowels shall be accurately placed and securely tied in place prior to placement of bottom slab concrete. Sliding of dowels into fresh or partially hardened concrete will not be acceptable.
- The bottom slab shall be at least 24 hours old before placing sidewalk concrete. All sidewalk forms shall remain in place a minimum of 24 hours after sidewalks are poured before removal, and after removal shall be immediately treated with membrane curing compound.
- Pipe connections to pre-cast structures shall have a minimum of 6" of concrete around the entire pipe within 2' of the structure.
- Material selection and compaction requirements for backfill around structures shall be as specified in City of Olathe's Technical Specifications.



**NON-SETBACK CURB INLET**  
 (6" Throat)  
 SCALE: N.T.S.

**SECTION A-A**

**SECTION B-B**

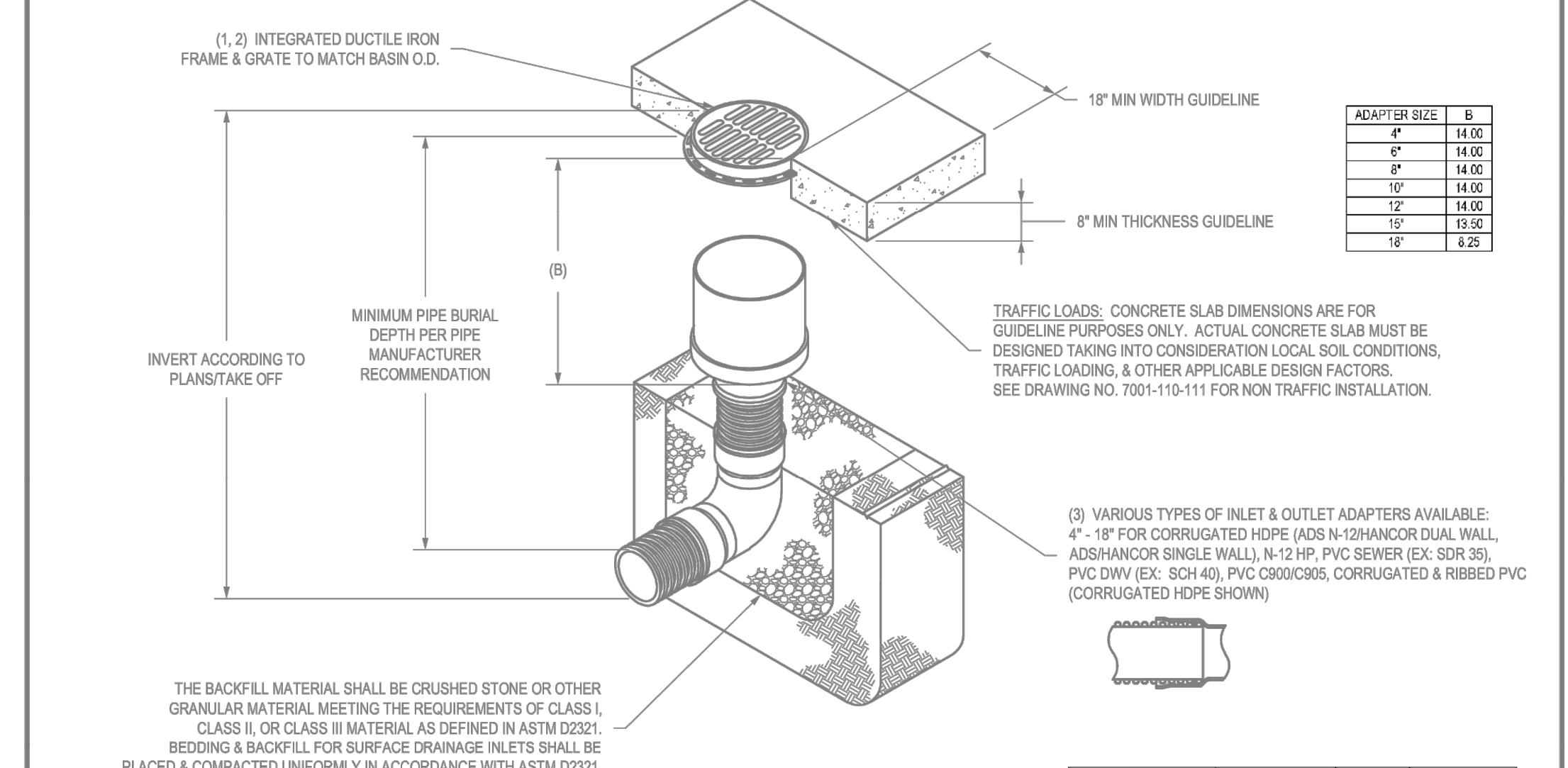


**CONCRETE FLUME DETAIL**  
 N.T.S.

**SECTION A-A**

**SECTION B-B**

**NYLOPLAST 18" INLINE DRAIN: 2718AG \_\_ X**



**EMBEDMENTS FOR STORM SEWER PIPE**  
 SCALE: N.T.S.

**TRENCH BEDDING**

- GRANULAR EMBEDMENT SHALL BE KDOT STD. SPEC. SECT. 1100, PB-2 COURSE AGGREGATE FOR CONCRETE, WASHED STONE OR GRAVEL, MEETING THE FOLLOWING CONDITIONS:  

SIEVE SIZE	PERCENT RETAINED
1-INCH	0
3/4-INCH	0-20
3-INCH	40-70
No. 8	95-100
- TRENCH OUTLINES DO NOT INDICATE ACTUAL TRENCH EXCAVATION SHAPE, SOIL CONDITIONS, OR PRESENCE OF SHEETING LEFT IN PLACE. EMBEDMENT MATERIAL SHALL EXTEND THE FULL WIDTH OF THE ACTUAL TRENCH EXCAVATION.
- TRENCH WIDTHS SHALL BE LIMITED BELOW AN ELEVATION OF ONE (1) FOOT ABOVE THE TOP OF THE INSTALLED PIPE AS FOLLOWS: NOT LESS THAN FIFTEEN (15) INCHES NOR MORE THAN TWENTY-FOUR (24) INCHES GREATER THAN THE NOMINAL OUTSIDE DIAMETER OF THE PIPE.

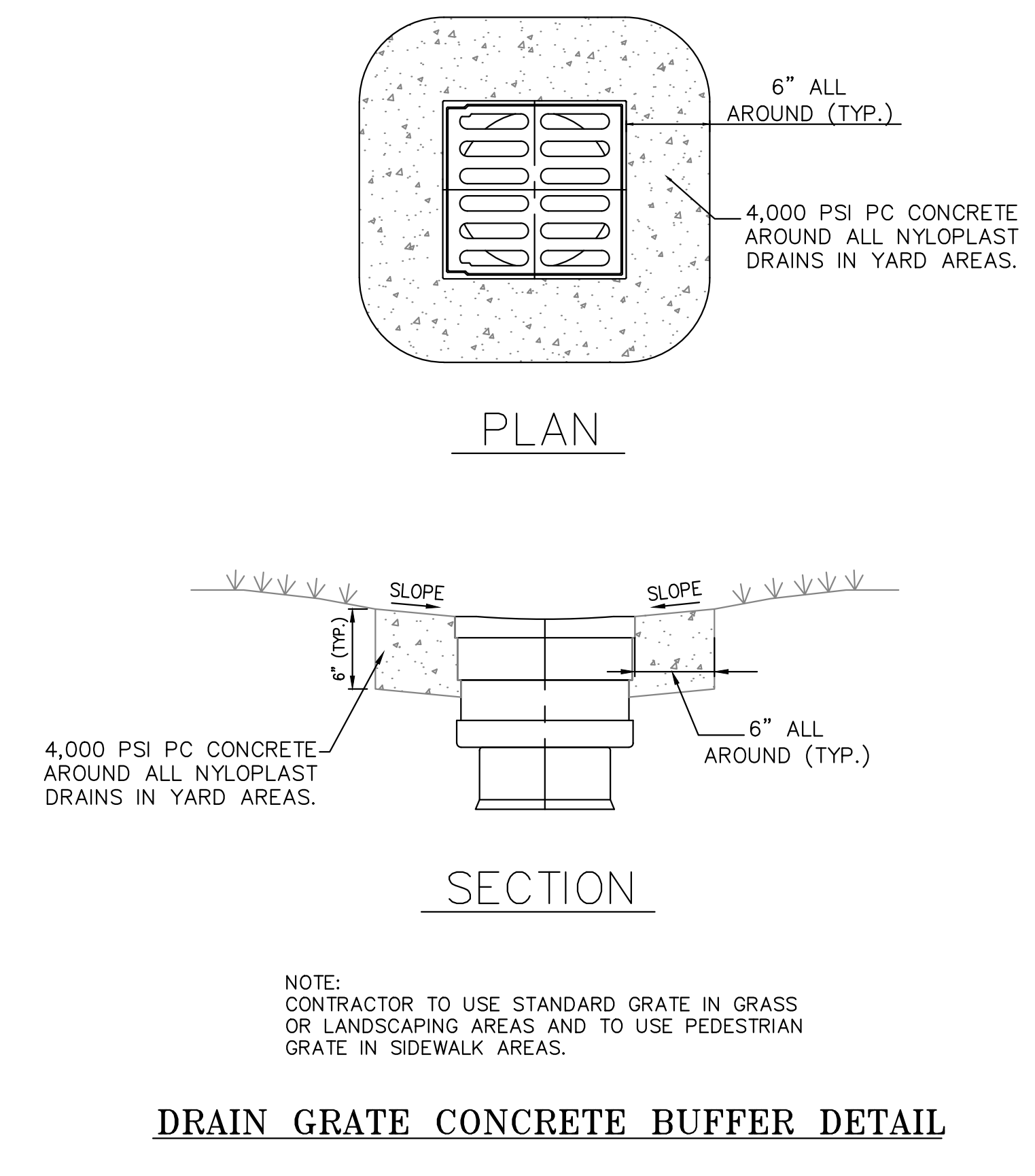
**BACKFILL**

- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
- 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)

**LEGEND**

D NOMINAL PIPE SIZE  
 o EMBEDMENT BELOW PIPE

GRANULAR EMBEDMENT



**DRAIN GRATE CONCRETE BUFFER DETAIL**  
 N.T.S.

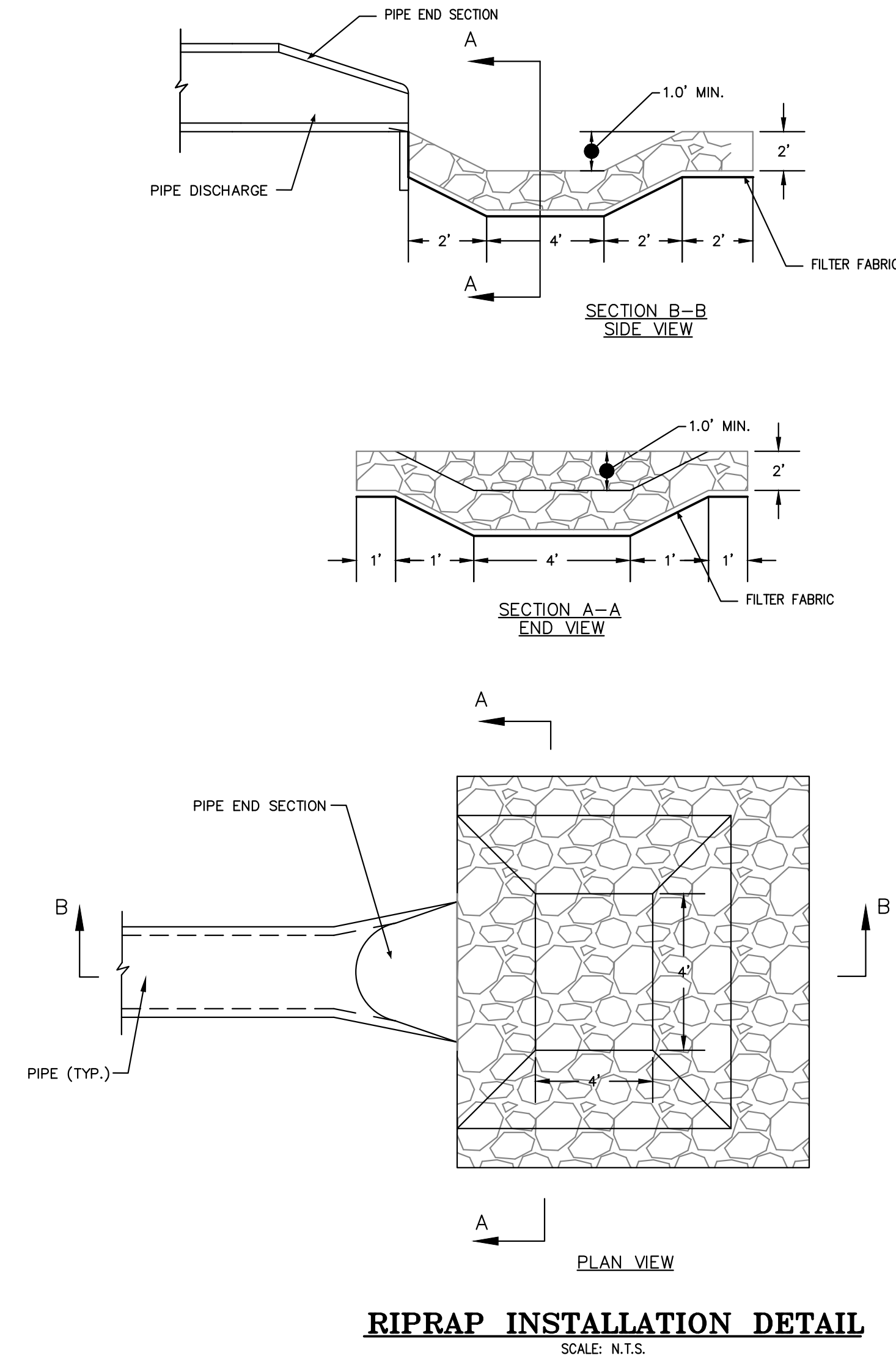
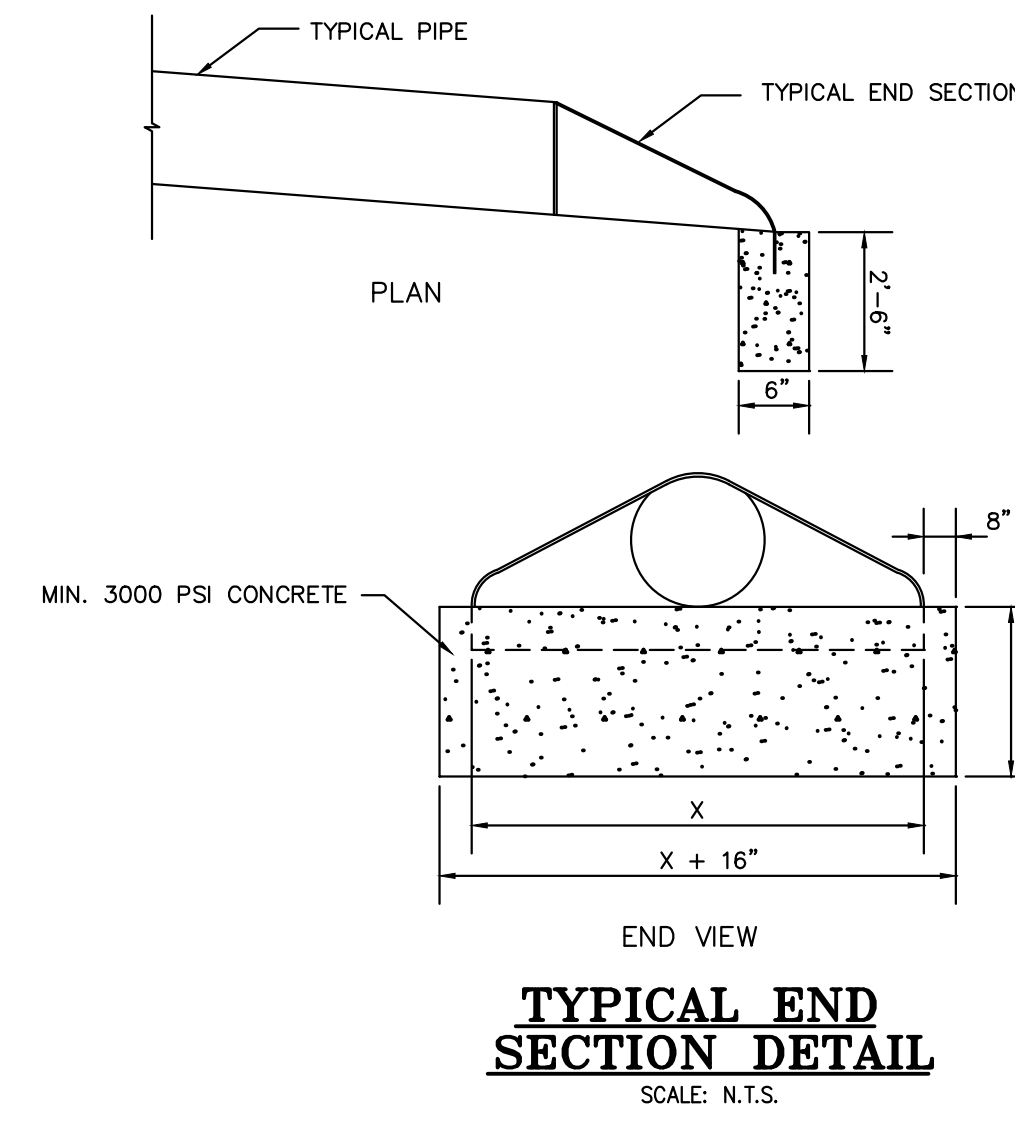
TABLE OF EMBEDMENT DEPTH BELOW PIPE	
D	MIN. SOIL
LESS THAN 60"	4"
60" OR LARGER	6"

TABLE OF EMBEDMENT DEPTH BELOW PIPE	
D	MIN. ROCK
LESS THAN 60"	6"
60" OR LARGER	12"

**EMBEDMENTS FOR STORM SEWER PIPE**  
 SCALE: N.T.S.

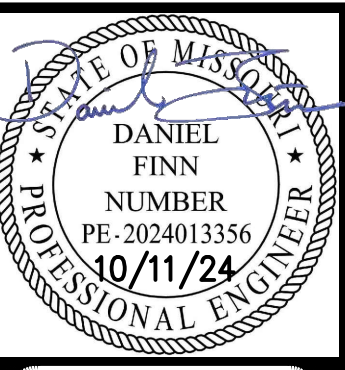


\\PHELPS-SERVER\Projects\240024\Drawings\Permit Plans\DETAILS - PRIVATE.dwg Layout7 STORM Oct 14, 2024 3:19pm Daniel Finn



**Filter Fabric:** Filter fabric shall consist of a synthetic fiber consisting of polypropylene, nylon or polyester filaments in either a woven or non-woven fabric. The percent of open area shall be not less than four percent nor more than ten percent. The fabric shall provide an Equivalent Opening Size (EOP) no finer than the U.S. Standard Sieve Size No. 70. In addition, the filter fabric shall meet the following physical requirements:

- a. Tensile Strength: Minimum grab tensile strength, both warpwise and fillingwise, shall be 200 pounds, when tested in accordance with ASTM D 5034, using a four inch by six inch specimen and a jaw speed of twelve inches per minute.
- b. Elongation: Grab elongation shall be not less than fifteen percent nor more than 60 percent, both warpwise and fillingwise, when tested in accordance with ASTM D 5034.
- c. Tear Strength: Minimum trapezoidal tear strength shall be 100 pounds, both warpwise and fillingwise. Method of test for woven fabrics shall be in accordance with ASTM D 1117.
- d. Bursting Strength: Minimum bursting strength shall be 200 psi when tested in accordance with ASTM D 3887.
- e. Width: Filter fabrics shall be furnished in widths of not less than six feet.



**PHELPS ENGINEERING, INC.**  
1270 N. Winchester  
Olathe, Kansas 66061  
(913) 393-1155  
Fax (913) 393-1165  
www.phelpengineering.com

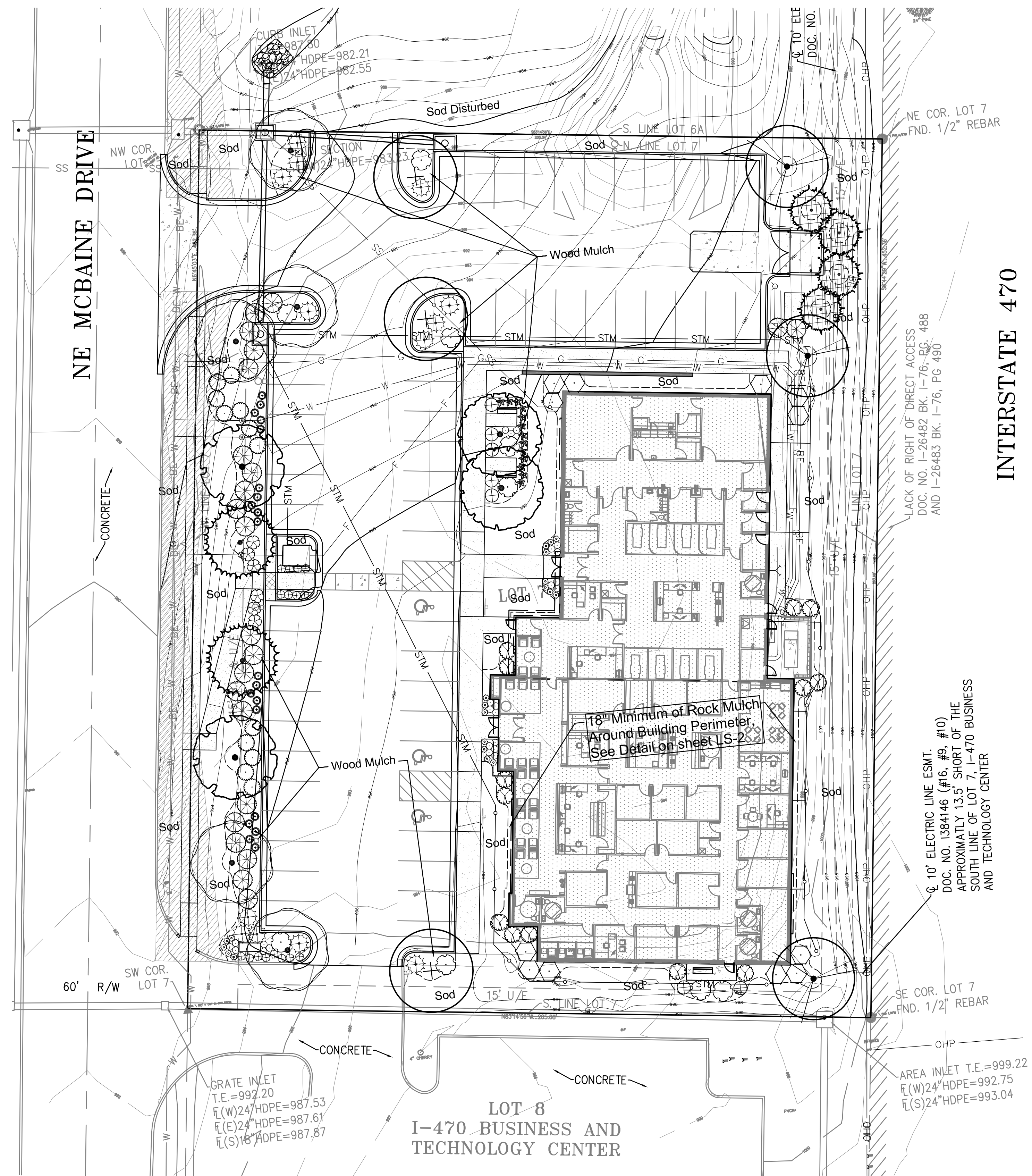
**PLANNING  
ENGINEERING  
IMPLEMENTATION**

**STANDARD DETAIL**  
**1-470 BUSINESS & TECHNOLOGY CENTER**  
**2701 NE MGBAINE DR**  
**LEE'S SUMMIT, MISSOURI 64064**

PROJECT NO.	No.	Date	Revisions:	
			By	App.
240024	1.	09-12-2024	AEB	DAF
	2.	10-02-2024	AEB	DAF
	3.	10-11-2024	AEB	DAF
DATE: 08-13-2024   DRAWN: AEB   CHECKED: DAF   APPROVED: JDC CORPORATE OF AUTHORIZATION: LAND SURVEYING - LS-82 ENGINEERING - E-381 EXPIRES: 08-13-2028 LICENSE NO.: 2003000128 LICENSE NO.: 2003000308				

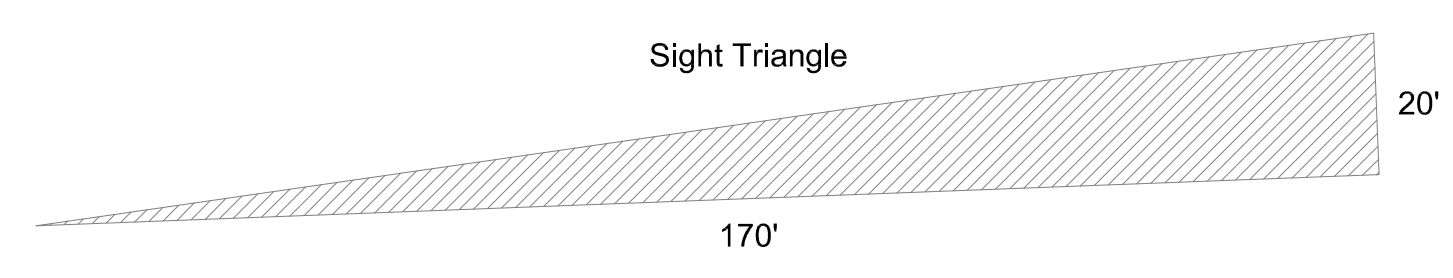
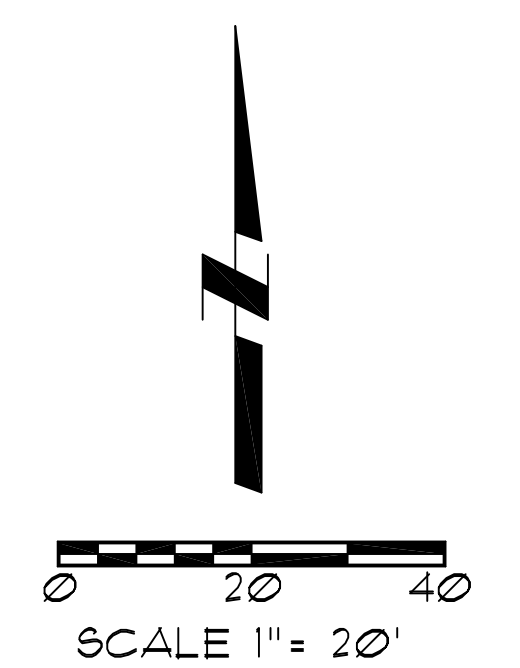
SHEET  
**C706**





PLANT SCHEDULE					
SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
<b>TREES</b>					
	2	Acer rubrum 'October Glory' TM / October Glory Maple	B & B		2"Cal
	2	Acer rubrum 'Red Pointe' / Red Pointe Red Maple	B & B		2.5"Cal
	3	Gleditsia triacanthos 'Skyline' / 'Skyline' Honey Locust	B & B		2.5"Cal
	5	Gymnocladus dioicus 'Espresso' / Kentucky Coffee Tree Seedless/Male Only	B & B		2.5"Cal
	4	Juniperus virginiana 'Hillspire' / Hillspire Juniper	B & B		6' hgt.
	3	Quercus bicolor / Swamp White Oak	B & B		2.5"Cal
	2	Taxodium distichum 'Shawnee Brave' TM / Bald Cypress	B & B		2"Cal
SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT		
<b>SHRUBS</b>					
	12	Cornus sericea 'Isanti' / Isanti Redtwig Dogwood 18"-24" hgt. & sp.	3 gal		
	13	Hosta x 'Dream Queen' / Dream Queen Hosta	1 gal		
	21	Juniperus chinensis 'Sea Green' / Sea Green Juniper 24"-30" hgt. & sp.	5 gal		
	13	Juniperus virginiana 'Grey Owl' / Grey Owl Juniper 24" sp.	3 gal		
	16	Nepeta x faassenii 'Walkers Low' / Walkers Low Catmint	1 gal		
	13	Physocarpus opulifolius 'Center Glow' / Center Glow Ninebark 24"-30" hgt. & sp.	3 gal		
	9	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac 18"-24" sp.	3 gal		
	12	Rhus typhina 'Tiger Eyes' / Tiger Eyes Sumac 24"-30" hgt. & sp.	5 gal		
	6	Spiraea x bumalda 'Anthony Waterer' / Anthony Waterer Spiraea 18"-24" hgt.	3 gal		
	7	Spiraea x bumalda 'Gold Flame' / Gold Flame Spirea 18"-24" hgt.	3 gal		
<b>GRASSES</b>					
	24	Calamagrostis acutiflora 'Karl Foerster' / Feather Reed Grass 24" hgt.	3 gal		
	20	Panicum virgatum 'Heavy Metal' / Blue Switch Grass 15"-18" hgt.	3 gal		
	20	Pennisetum alopecuroides 'Hameln' / Hameln Dwarf Fountain Grass 15"-18" hgt. & sp.	1 gal		

NOTES:  
 See sheet LS-2 for construction details and specification notes.  
 Only ornamental tree varieties may be planted in utility easements.



Utility Note:  
 Utilities shown on plan are diagrammatic and some may be missing. Before starting any construction call appropriate locating service. In Missouri call 1-800-DIG-RITE (344-7483) to have utilities located.



**Landscape Plan  
 Associated Plastic Surgeons**

2701 NE McBaine Drive  
 Independence, Missouri

**Oppermann LandDesign, LLC**  
 Land Planning + Landscape Architecture  
 22 Debra Lane  
 New Windsor, New York 12553

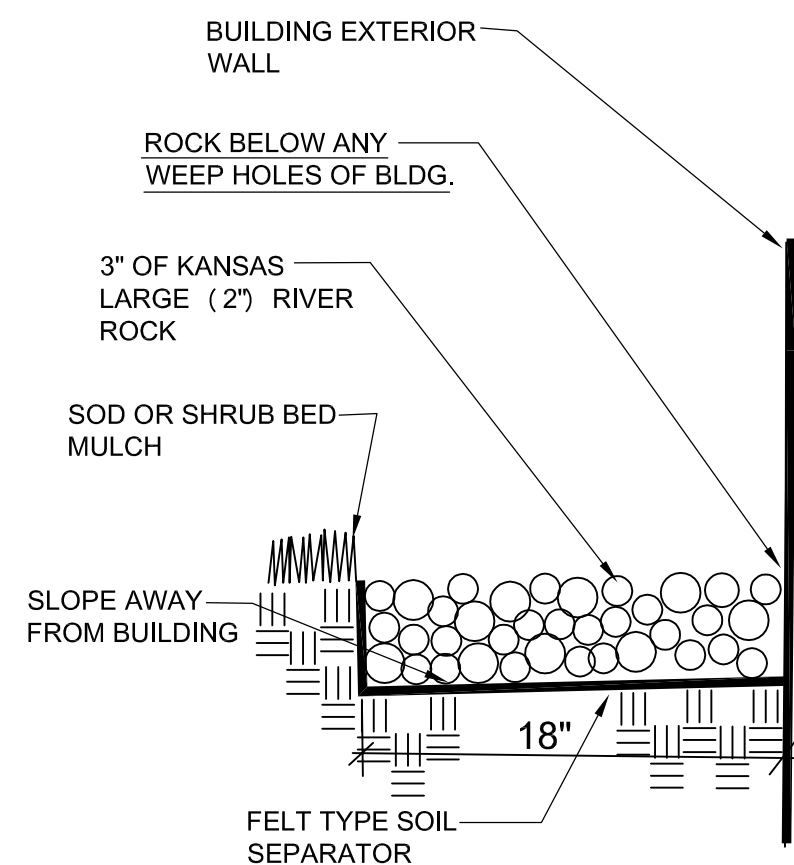
pete@oppermans.com  
 913.529.5598

10/14/2024



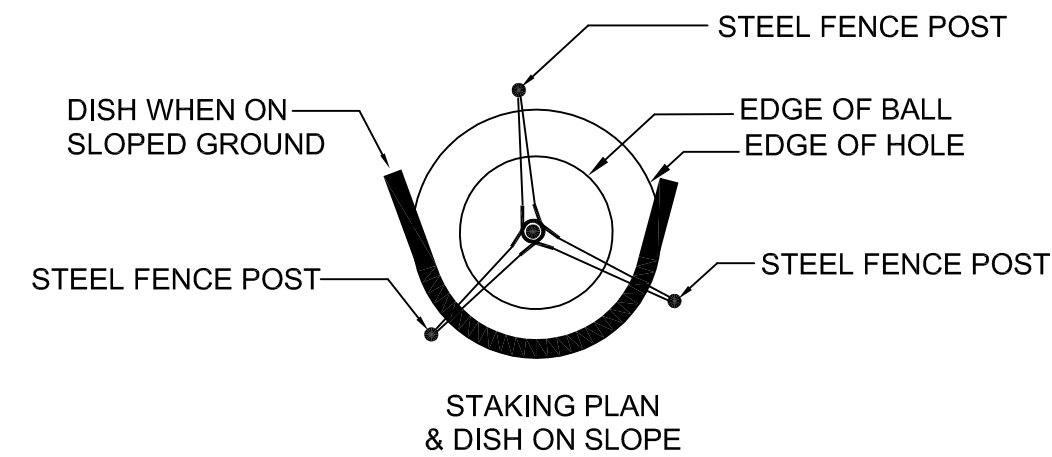
**Dedicated Design Irrigation System:**

1. If an irrigation system is not provided with the Landscape Plans, the Contractor is to design a 100 percent coverage irrigation system, including comprehensive engineering analysis by a qualified Professional Engineer, using performance requirements and design criteria indicated per Owner's direction.
2. Irrigation Contractor to design and install irrigation system and shall include all required components including, but not limited to, rain shut off sensor, controller, taps, backflow preventers, all approvals, and all fees required by city. Components to be manufactured by Rainbird or Hunter unless alternate manufacturer is expressly approved by the Owner or Owner's Representative.
3. Irrigation Contractor shall submit a copy of plan to Owner's Representative or Project Landscape Architect for review prior to installation of system.
4. Irrigation Contractor shall conduct a training session with the owner (or representatives) demonstrating the operation of the system and the controller. As part of this training, Contractor shall provide one spring start-up and one fall shut-down of the system.
5. Landscape Contractor to provide cost estimates for irrigation system for all plant material indicated on plans.
6. Irrigation system shall be tested and approved by Owner's Representative or Landscape Architect prior to backfilling trenches. Irrigation system shall be fully operational prior to the installation of any plant materials.
7. All planting beds shall be watered by the irrigation system.
8. General Contractor to supply all power required to operate irrigation system.
9. Irrigation Contractor shall notify Owner's Representative or Project Landscape Architect of any changes to irrigation conduit locations or sizes.
10. It is the Landscape Contractor's responsibility to determine water application rates and timer cycling. The Irrigation Contractor will instruct the Owner on the operation and programming of the controller.
11. All zones and main lines will be pressure-tested at the time of installation and again prior to building turnover. Results shall be submitted in writing to Project Landscape Architect and Owner or Owner's Representative.
12. Irrigation shall not spray on building, sidewalks, and drives.
13. Irrigation controller location shall be coordinated with other wall-mounted service panels per Owner's approval.
14. Landscape Contractor shall hand-water all trees, and turf grass areas until substantial completion.
15. Treegator bags (or approved equal) shall be used for all proposed trees on site.

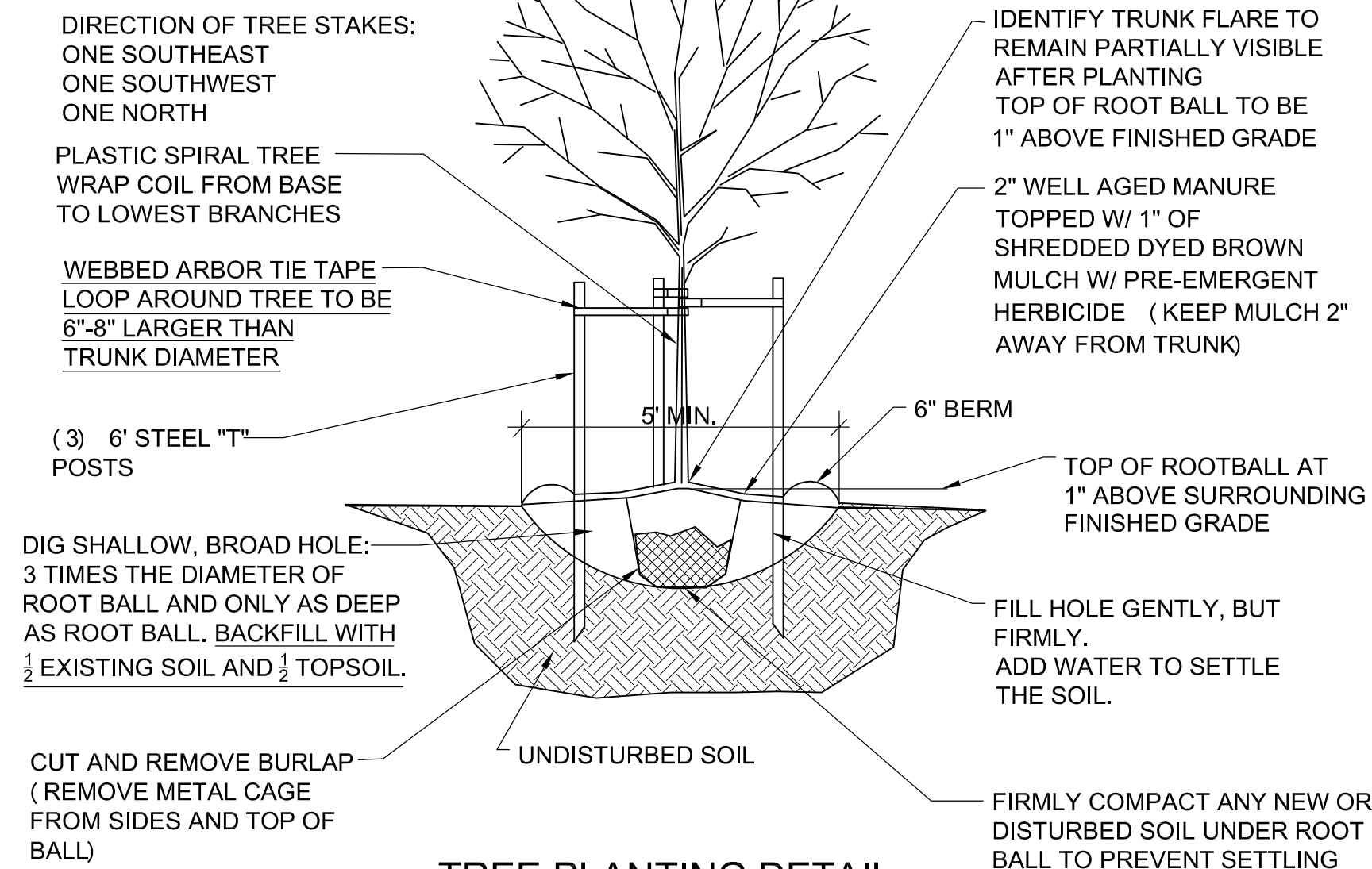


**BUILDING ROCK EDGE**  
NO SCALE

\*PLACE ROCK AROUND ENTIRE BLDG. PERIMETER WHEREVER THERE IS NOT CONCRETE OR ASPHALT



**STAKING PLAN & DISH ON SLOPE**



**TREE PLANTING DETAIL**  
NO SCALE

**ADDITIONAL IRRIGATION NOTES:**

All irrigation equipment shall be Rain Bird products or approved equal.

Drip Irrigation Note: Drip irrigation shall be 1/2" flex tubing with in line emitters and check valves spaced 12" on center. For individual shrubs an 18" diameter circle shall be placed around each shrub. For trees in landscape beds two loops shall be around tree. One at 3' diameter and one at 5' diameter. Groundcover areas shall have lines placed 18" apart covering entire bed.

Quick Couple Locations: Quick couples shall be placed in the main line of the irrigation so they may be used when irrigation is not running.

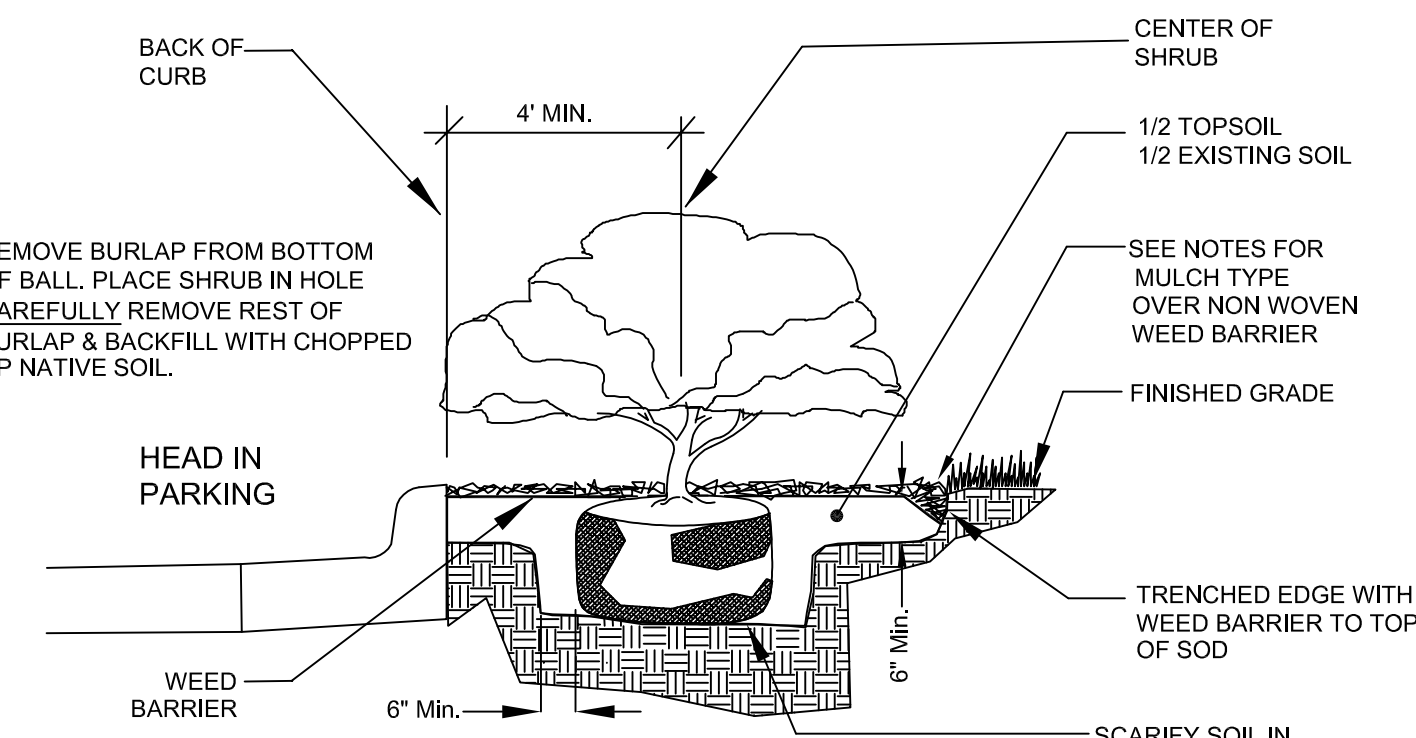
Irrigation controller shall be located as directed by Owner.

Seagreen Juniper	Juniperus Chinensis 'Seagreen'	24"-30" hgt. & sp.	5'o.c.
Heavy Metal Switch Grass	Panicum Virgatum 'Heavy Metal'	3 gal.	4'o.c.

**Typical Utility Box Screening Details**

No Scale Note: Quantities Not Included In Plant List  
UTILITY BOXES SHALL BE CLUSTERED AS MUCH AS POSSIBLE

\* In case of transformer tall than 3 ft. replace Seagreens with 6 ft. Keteeri Junipers



**SHRUB BED & PARKING SETBACK DETAIL**  
NO SCALE

**GENERAL LANDSCAPE NOTES:**

1. CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE STARTING ANY WORK.
2. CONTRACTOR SHALL VERIFY ALL LANDSCAPE MATERIAL QUANTITIES AND SHALL REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL MAKE NO SUBSTITUTIONS WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.
4. CONTRACTOR SHALL STAKE LAYOUT PLAN IN THE FIELD AND SHALL HAVE THE LAYOUT APPROVED BY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE INSTALLATION.
5. ALL LANDSCAPE BEDS SHALL BE TREATED WITH THE PRE-EMERGENT HERBICIDE PRE M 60 DG (GRANULAR) OR AN APPROVED EQUAL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
6. ALL LANDSCAPE BEDS SHALL RECEIVE A TRENCHED EDGE. SEE SHRUB PLANTING DETAIL. FINISH GRADE OF BEDS SHALL FLOW WITH SLOPE. NOT BE MOUNDED, AND BE AT ADJACENT PAVED SURFACE LEVEL.
7. FERTILIZER FOR FESCUE SODDED AREAS, TREES AND CONTAINER STOCK AREAS SHALL BE A BALANCED FERTILIZER BASED ON RECOMMENDATIONS FROM A SOIL TEST SUPPLIED BY THE LANDSCAPE CONTRACTOR FROM AN APPROVED TESTING LAB.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PLANTS UNTIL COMPLETION OF THE JOB AND ACCEPTANCE BY THE OWNER.
9. CONTRACTOR SHALL WARRANTY ALL LANDSCAPE WORK AND PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF THE WORK BY THE OWNER.
10. CONTRACTOR SHALL PROVIDE MAINTENANCE OF ALL TREES AND SHRUBS FOR A PERIOD OF ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION IF CONTRACTED BY THE OWNER.
11. ANY PLANT MATERIAL WHICH DIES DURING THE ONE YEAR WARRANTY PERIOD SHALL BE REPLACED BY THE CONTRACTOR DURING NORMAL PLANTING SEASONS.
12. ALL PLANT NAMES ON THE PLANT LIST CONFORM TO THE STANDARDIZED PLANT NAMES PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE OR TO NAMES GENERALLY ACCEPTED IN THE NURSERY TRADE.
13. ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY STOCK AS DETERMINED IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, FREE OF PLANT DISEASES AND PESTS, OF TYPICAL GROWTH OF THE SPECIES AND HAVING A HEALTHY, NORMAL ROOT SYSTEM.
14. SIZES INDICATED ON THE PLANT LIST ARE THE MINIMUM, ACCEPTABLE SIZE. IN NO CASE WILL SIZES LESS THAN THE SPECIFIED SIZES BE ACCEPTED.
15. PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY TO THE SITE OR AFTER INSTALLATION EXCEPT FOR THOSE BRANCHES THAT HAVE BEEN DAMAGED IN SOME WAY.
16. PLANTS SHALL NOT HAVE NAME TAGS REMOVED PRIOR TO FINAL INSPECTION.
17. ALL PLANTINGS SHALL RECEIVE A COMMERCIAL TRANSPLANT ADDITIVE PER MANUFACTURER'S RECOMMENDED RATES AND INSTRUCTIONS FOR APPLICATION.
18. WOOD MULCH SHALL BE 3" OF DYED BROWN SHREDDED HARDWOOD. MULCH SHALL BE OVER A FELT TYPE SOIL SEPARATOR CUT INTO THE GROUND WITH A TRENCHED EDGE. SEE TREE DETAIL FOR DIFFERENT MULCH AROUND TREES.
19. BUILDING MULCH SHALL BE 3" DEPTH OF KANSAS LARGE RIVER ROCK (2") SIZE OVER A FELT TYPE SOIL SEPARATOR CUT INTO THE GROUND WITH A TRENCHED EDGE.
20. SEE PLANTING DETAILS FOR SOIL MIX IN PLANTING HOLES.
21. SOD SHALL BE A TURF-TYPE-TALL FESCUE GRASS BLEND.
22. SUCCESSFUL LANDSCAPE BIDDER SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ANY IRRIGATION SYSTEM MODIFICATIONS TO BE APPROVED BY THE OWNER.

**Transplant Additives:**

1. Apply a commercial transplant additive (approved by the Landscape Architect) to all trees, shrubs and groundcover at rates recommended by the manufacturer during the planting. This item shall be subsidiary to other planting items.
2. Transplant additive shall be Horticultural Alliance "DIEHARD Transplant" (or approved equal) mycorrhizal fungal transplant inoculant or equivalent equal containing the appropriate species of mycorrhizal fungi and bacteria, fungi stimulant, water retaining agents, mineral & organic nutrients and inert ingredients.
3. Demonstrate installation of all transplant additives for this project to the Landscape Architect. Provide actual additive product as evidence of sufficient quantity of product. (Empty product bags to be stockpiled for inspection by the Landscape Architect prior to disposal).
4. Number of transplant additive packets per tree, shrub or groundcover shall be applied according to the manufacturer's recommended rates and instructions. For all plants the packet mix shall be evenly distributed into the upper approximately 8" of backfill soil next to the rootball. Do not place mix in the bottom of the planting pit.
5. Furnishing and application of transplant additive shall be subsidiary to the planting operations.

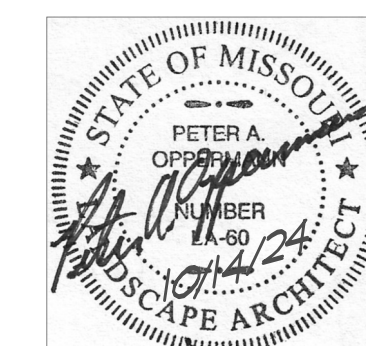
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**Landscape Details  
Associated Plastic  
Surgeons**

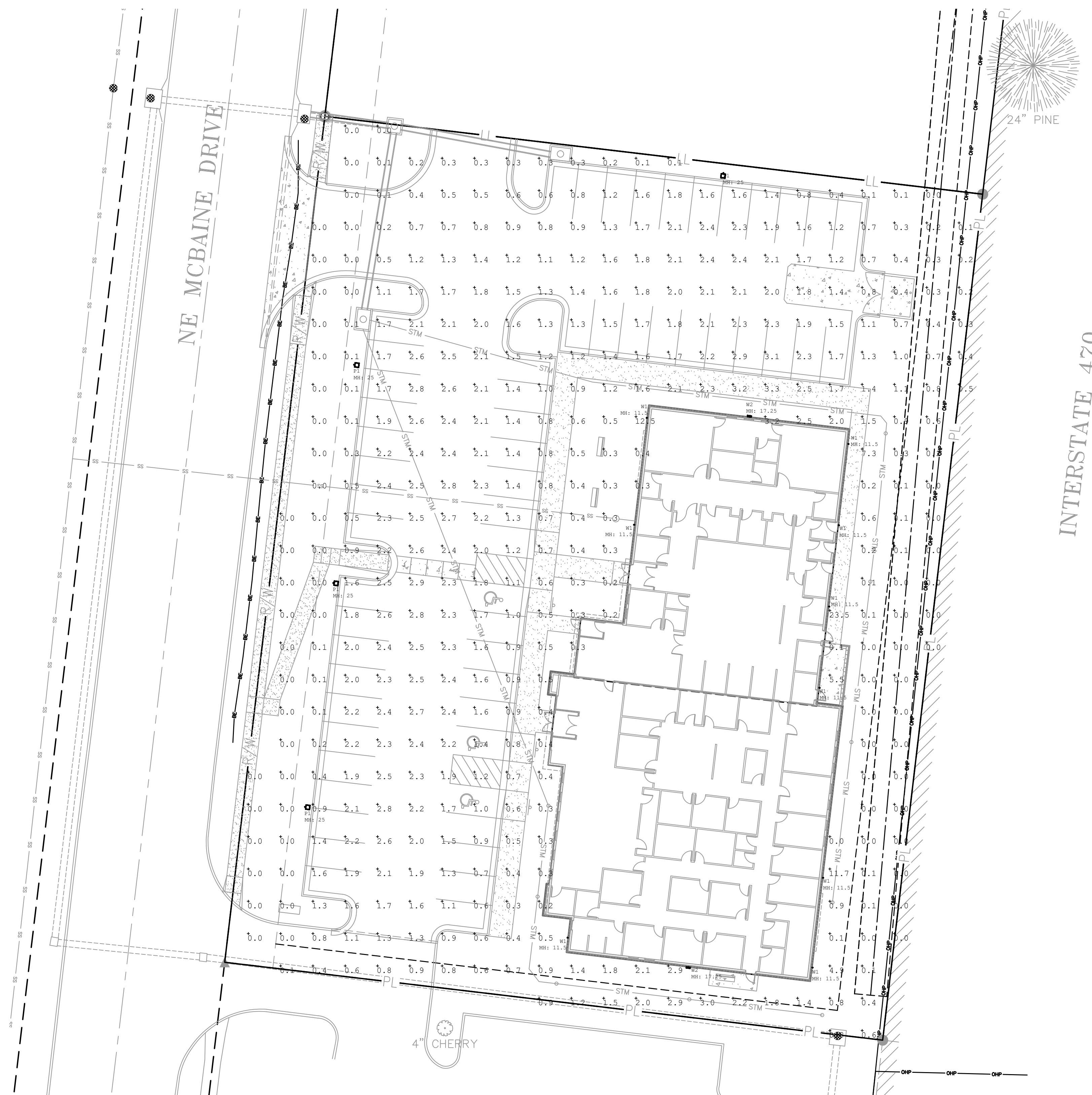
2701 NE McBaine Drive  
Independence, Missouri

LS-2



10/14/2024

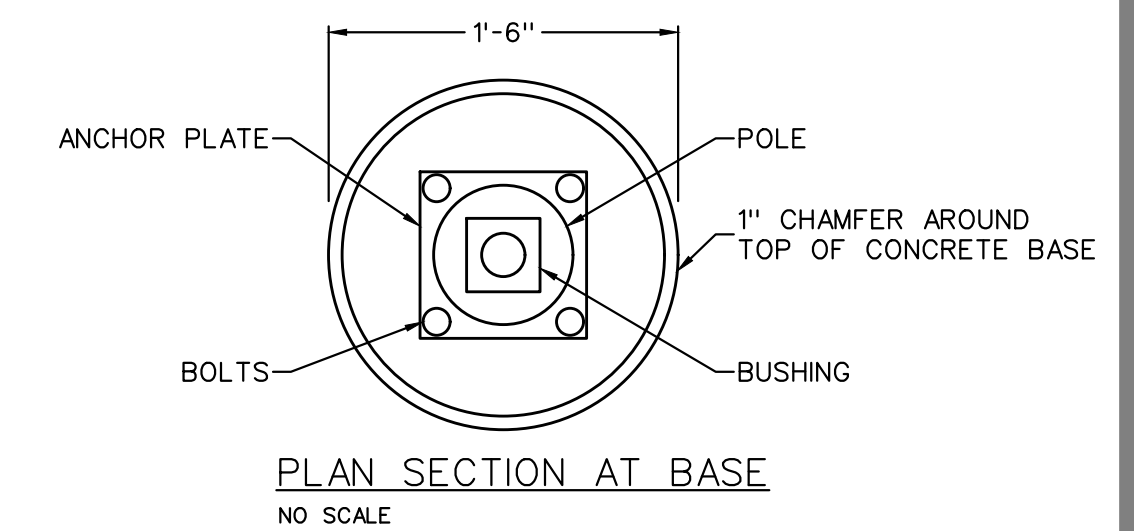
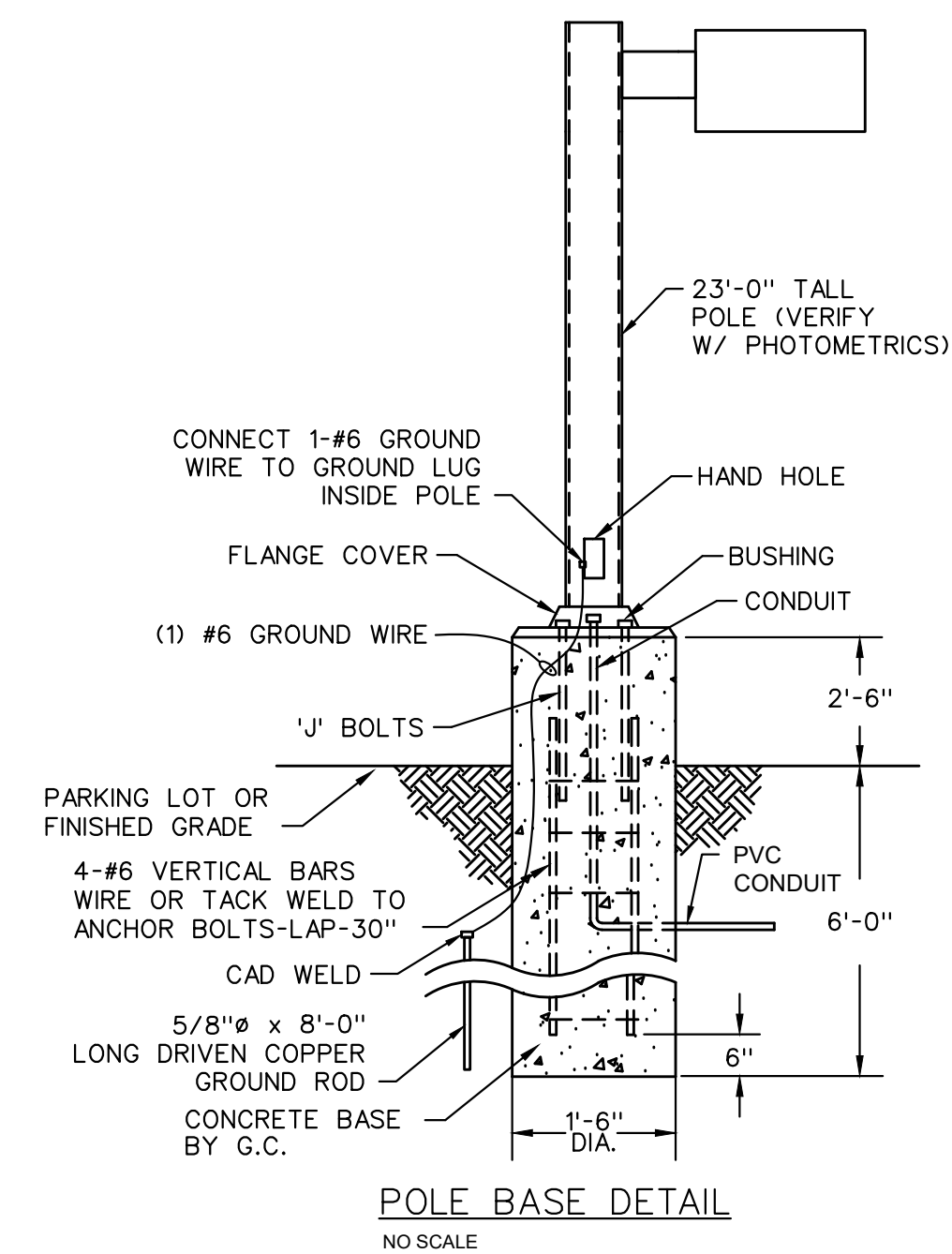




**PHOTOMETRIC SITE PLAN**  
1" = 20'-0"

Symbol	Qty	Label	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	9	SQP402-L1L10-FLD 1	Single	SQP402-L1L10-FLD	W1	1.000	1342	12	108
	2	DSXW1 LED 20C 1000 40K T2M MV	Single	DSXW1 LED 20C 1000 40K T2M MV	W2	1.000	7372	73.2	146.4
	4	DSX1 LED P3 40K 80CRI BLC3	Single	DSX1 LED P3 40K 80CRI BLC3	P1	1.000	9184	102.17	408.68

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts 1	Illuminance	Fc	1.21	23.5	0.0	N.A.	N.A.



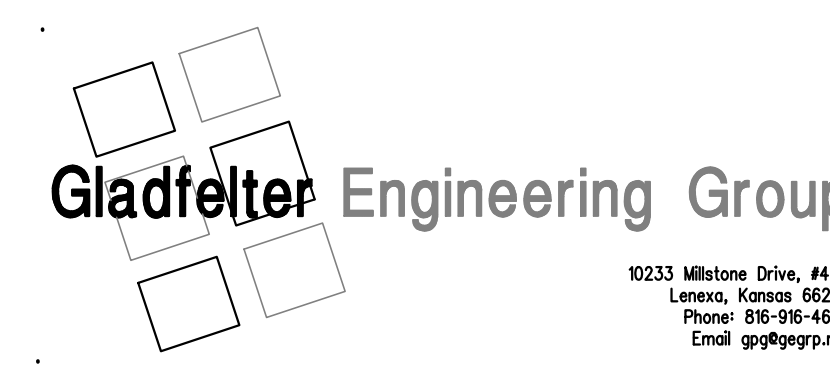
P1



W1



W2



2023 Millstone Drive, #112  
Lenexa, Kansas 66220  
Phone: 866-96-4675  
Email: ggg@eggr.com

Gladfelter Engineering Group assumes design responsibility for this project for only the mechanical, plumbing and electrical disciplines with drawing sheet number beginning with M, P and E. All other drawings should be considered the work of others. Further, drawings in this project set may contain drawing information, including but not limited to: architectural plans, sections and elevations, site plans and surveys and other information pertinent to showing the mechanical, plumbing and electrical work which is furnished by others, generally indicated by screened or light type. Gladfelter Engineering Group assumes no responsibility or liability for the accuracy or regulatory compliance for work prepared by others even though shown on MPE drawings. Gladfelter Engineering Group assumes responsibility only for the design of mechanical, plumbing and electrical disciplines contained herein, generally indicated in bold type.



Dev Anand  
President & CEO

Kevin Campbell  
Senior Architect

8807 Monrovia Street  
Lenexa, Kansas 66215

Phone: 913.322.8882  
Fax: 913.322.8886  
Email: kevin@dev-inc.com

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A NEW BUILDING FOR:

**ASSOCIATED PLASTIC SURGEONS**

I-470 BUSINESS & TECHNOLOGY CENTER  
NE MCBAIN DRIVE  
LEAWOOD, KANSAS

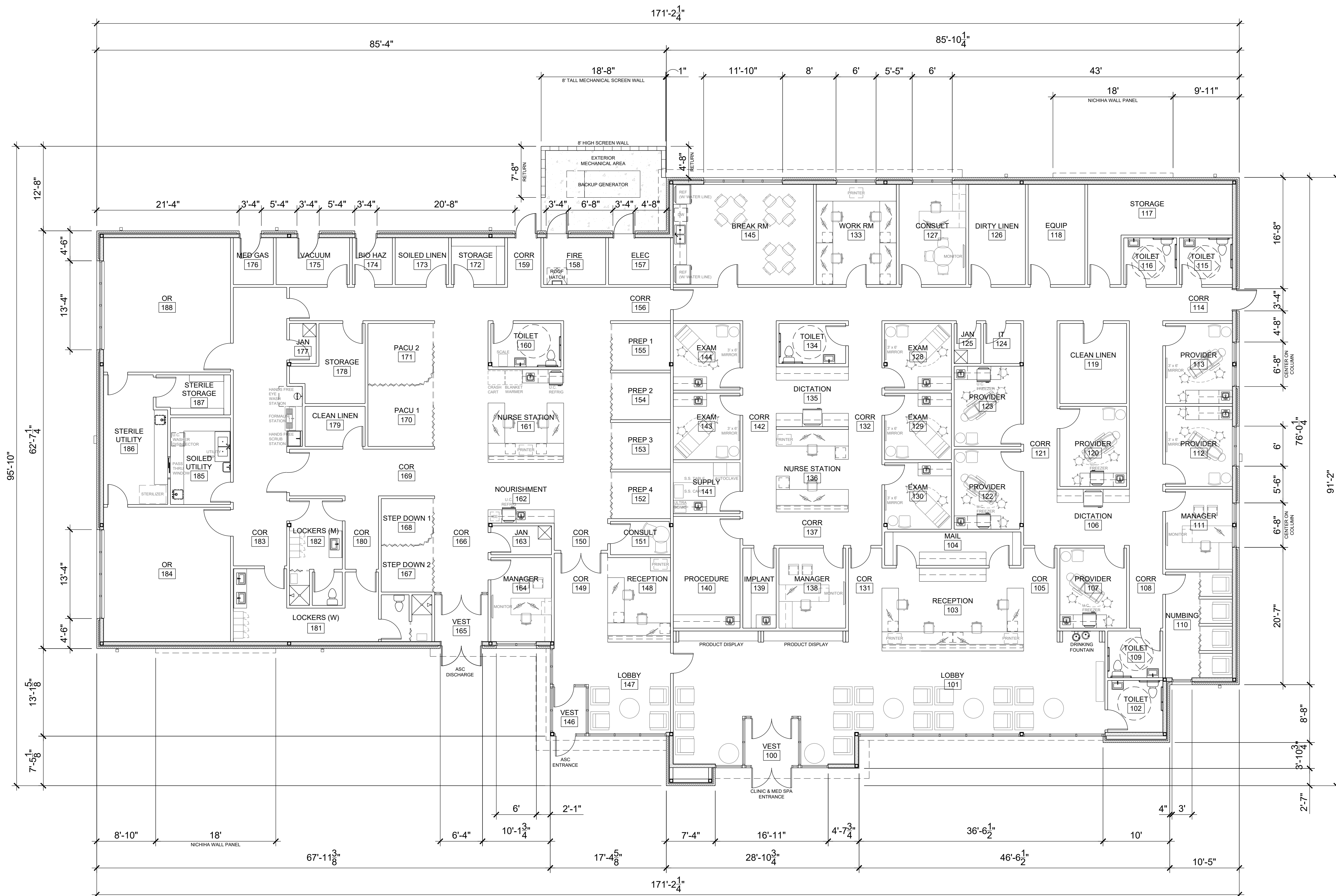
PROJECT NO. 231206

**DRAWING ISSUANCE**  
08/09/2024 FINAL DEVELOPMENT

SHEET NUMBER

**E1.0**  
SITE PLAN





**1 FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

A NEW BUILDING FOR:

**ASSOCIATED PLASTIC SURGEONS**

1-470 BUSINESS & TECHNOLOGY CENTER  
NE McBAIN DRIVE  
LEE'S SUMMIT, MISSOURI

PROJECT NO. 231206  
**DRAWING ISSUANCE**  
08/09/2024 FINAL DEVELOPMENT

SHEET NUMBER  
**A1.0**  
FLOOR PLAN





Dev Anand  
President & CEO

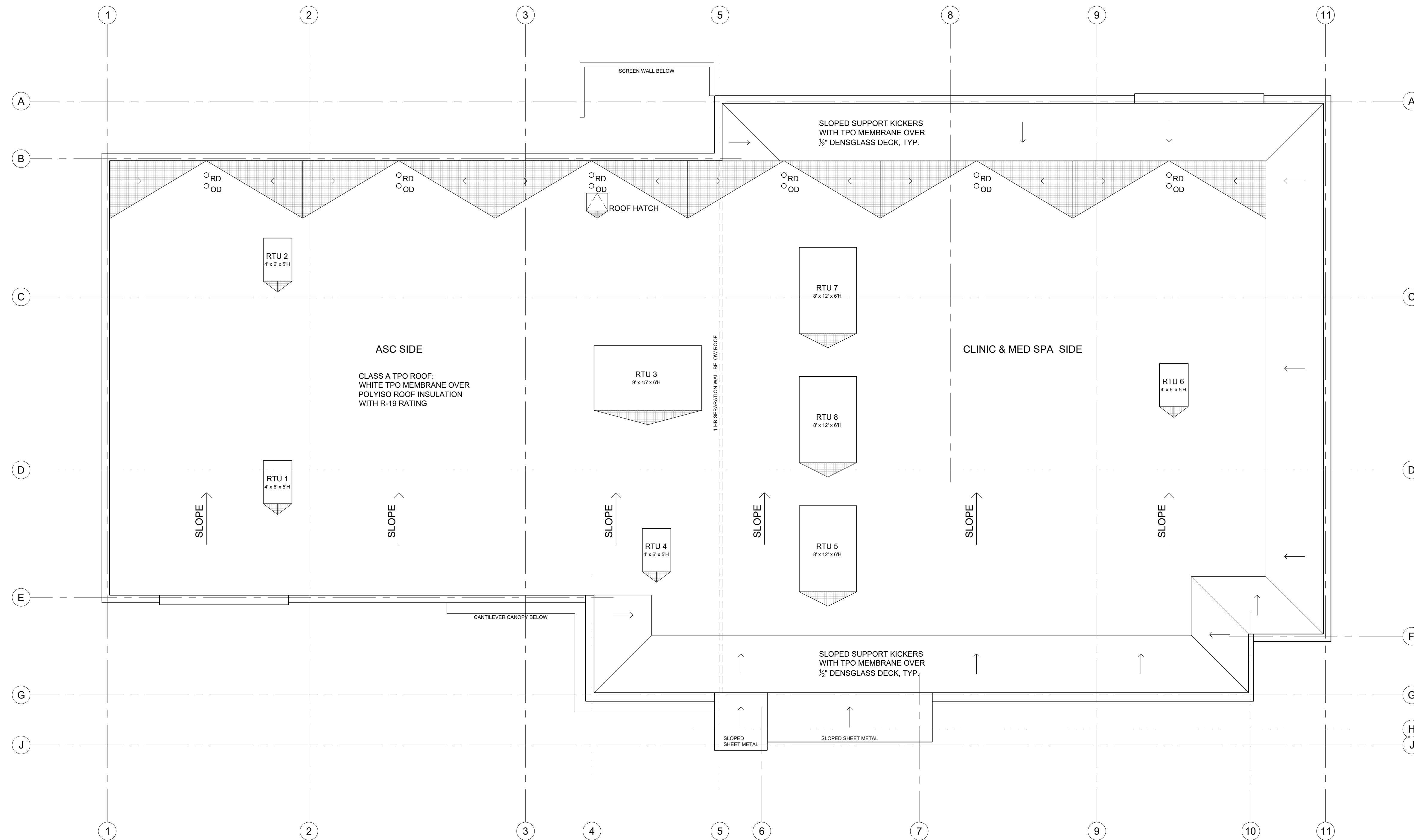
Kevin Campbell  
Senior Architect

8807 Monrovia Street  
Lenexa, Kansas 66215

Phone: 913.322.8892  
Fax: 913.322.8886  
Email: kevin@dev-inc.com

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**1** ROOF PLAN  
SCALE: 1/8" = 1'-0"

A NEW BUILDING FOR:  
**ASSOCIATED PLASTIC SURGEONS**

1-470 BUSINESS & TECHNOLOGY CENTER  
NE McBAIN DRIVE  
LEE'S SUMMIT, MISSOURI

PROJECT NO. 231206  
**DRAWING ISSUANCE**  
08/09/2024 FINAL DEVELOPMENT

SHEET NUMBER  
**A1.1**  
ROOF PLAN





8A



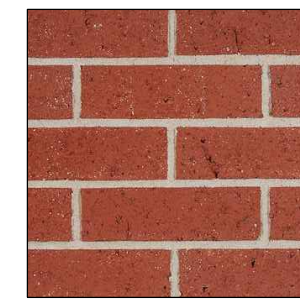
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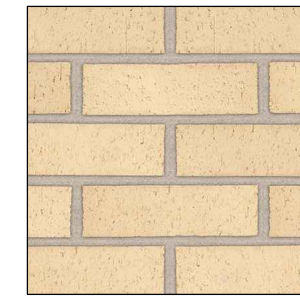
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### LIGHTING SCHEDULE

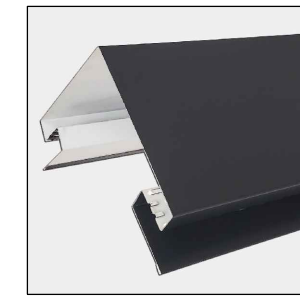
SYMBOL	TYPE	DESCRIPTION	REMARKS
	UP/DOWN	RE: SHEET E1 LED, BLACK FINISH	WALL WASH AT WEST & EAST ELEVATIONS WITH HIGH VISIBILITY
	LINEAR	CONTINUOUS, BUILT-IN, CONCEALED LED STRIP	HORIZONTAL HIGHLIGHT AT WEST & EAST ELEVATIONS WITH HIGH VISIBILITY
	WALL PACK	RE: SHEET E1 LED, BLACK FINISH	GENERAL ILLUMINATION AT NORTH & SOUTH ELEVATIONS



1



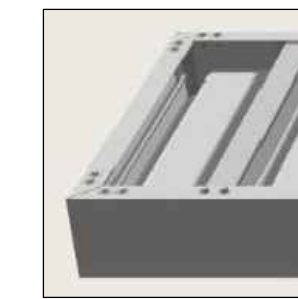
2



3



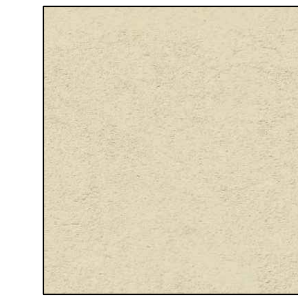
4



5



6



7

### EXTERIOR SCHEDULE

KEY	MATERIAL	DESCRIPTION
1	BRICK	RED BRICK (RUNNING BOND)
2	BRICK	BEIGE BRICK (ROWLOCK BASE CAP & ACCENT BRICK)
3	PREFINISHED METAL	BLACK COPING/CAP FLASHING
4	ALUMINUM STOREFRONT	BLACK FRAME WITH 1" INSULATED GLASS
5	PREFINISHED METAL	BLACK 18" DEEP CANTILEVER CANOPY
6	FIBER CEMENT PANEL	NICHIHA VINTAGE WOOD CEDAR
7	EIFS SYSTEM	BEIGE WITH SMOOTH FINISH & SCORING PATTERN
8	BUILDING LIGHTING	REFER LIGHTING SCHEDULE



Dev Anand  
President & CEO

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8807 Monrovia Street  
Lenexa, Kansas 66215

Phone: 913.322.8892  
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A NEW BUILDING FOR:

**ASSOCIATED PLASTIC SURGEONS**

I-470 BUSINESS & TECHNOLOGY CENTER  
NE McBAIN DRIVE  
LEE'S SUMMIT, MISSOURI

PROJECT NO. 231206

DRAWING ISSUANCE  
08/09/2024 FINAL DEVELOPMENT

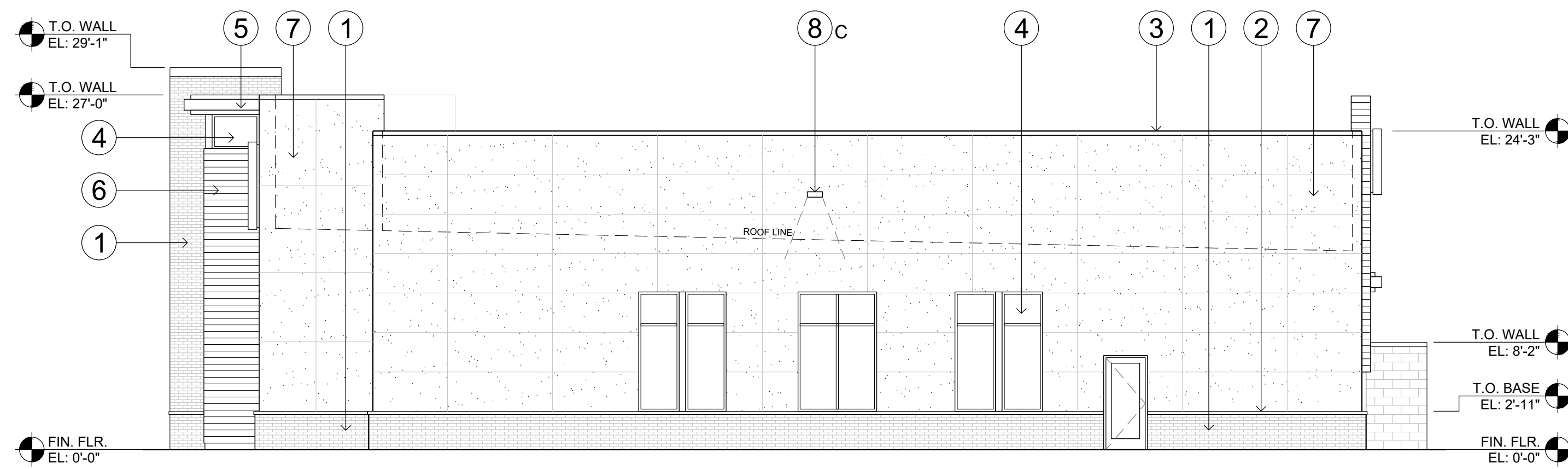
SHEET NUMBER

**A2.0**  
EXTERIOR RENDER

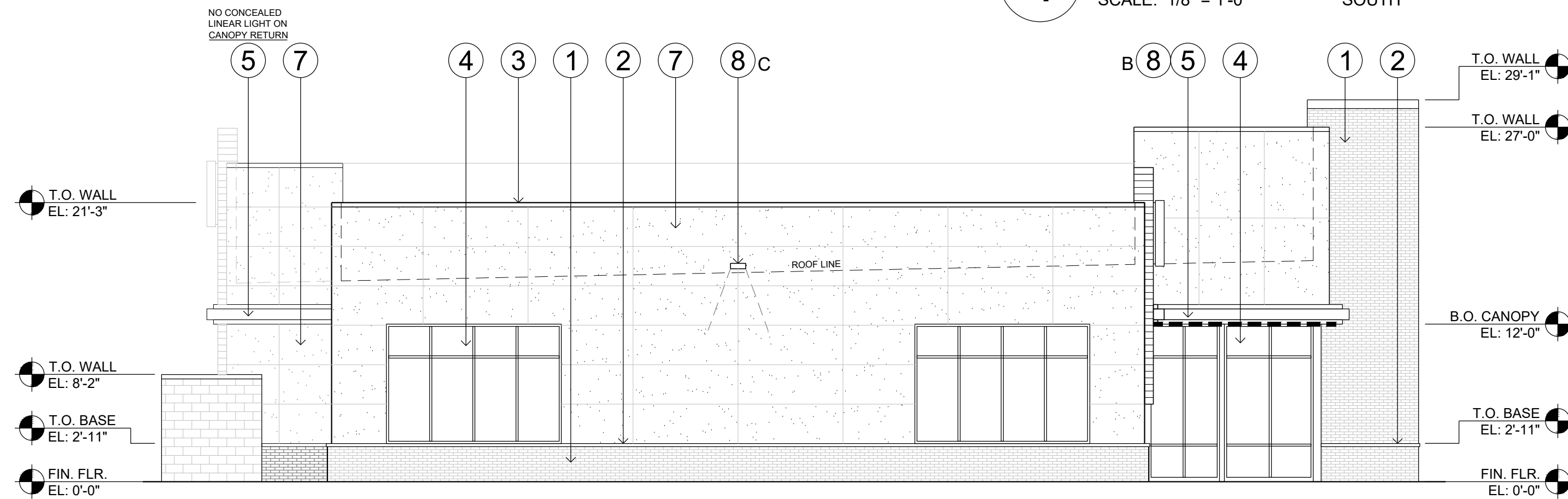


**1** ELEVATION RENDER  
N.T.S. WEST

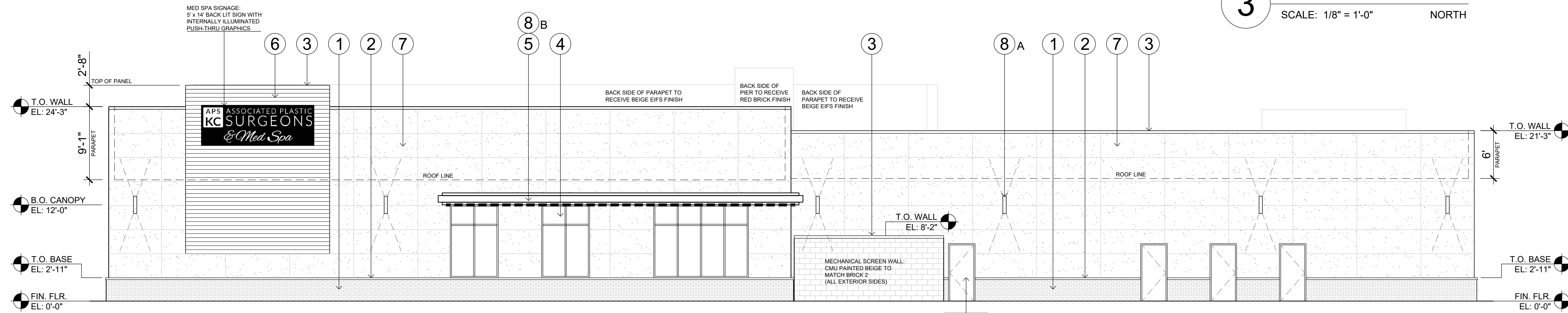




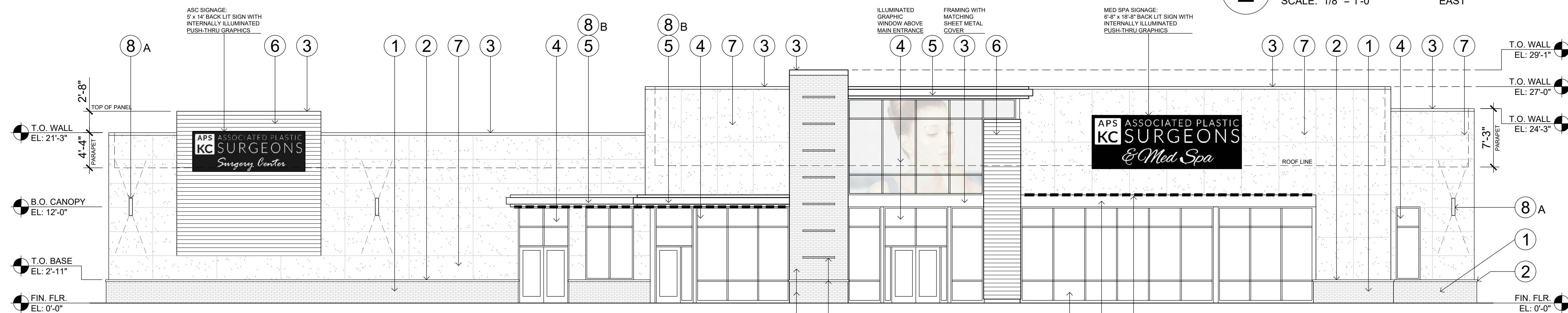
**4 ELEVATION**  
SCALE: 1/8" = 1'-0" SOUTH



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



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



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

A NEW BUILDING FOR:

**ASSOCIATED PLASTIC SURGEONS**

I-470 BUSINESS & TECHNOLOGY CENTER  
NE McBAIN DRIVE  
LEE'S SUMMIT, MISSOURI

PROJECT NO. 231206

**DRAWING ISSUANCE**  
08/09/2024 FINAL DEVELOPMENT

SHEET NUMBER

**A2.1**  
ELEVATIONS