

PROPERTY DESCRIPTION  
LOT 8, OLDHAM VILLAGE.

ALL PAVING ON THE PARKING LOT WILL COMPLY WITH THE  
UNIFIED DEVELOPMENT ORDINANCE ARTICLE 8 IN TERMS  
OF PAVING THICKNESS AND BASE

#### GENERAL NOTES:

- 1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- 2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR ON THE FINAL PLAT.
- 3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
- 4 ~THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH AN INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.
- 5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.
- 6 ~ THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM TO STATE REGULATIONS AND LOCAL ORDINANCES.

#### UTILITY COMPANIES:

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

EVERGY ~ 298-1196  
MISSOURI GAS ENERGY ~ 756-5261  
SOUTHWESTERN BELL TELEPHONE ~ 761-5011  
COMCAST CABLE ~ 795-1100  
WILLIAMS PIPELINE ~ 422-6300  
CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800  
CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200  
CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900  
MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

#### OIL - GAS WELLS

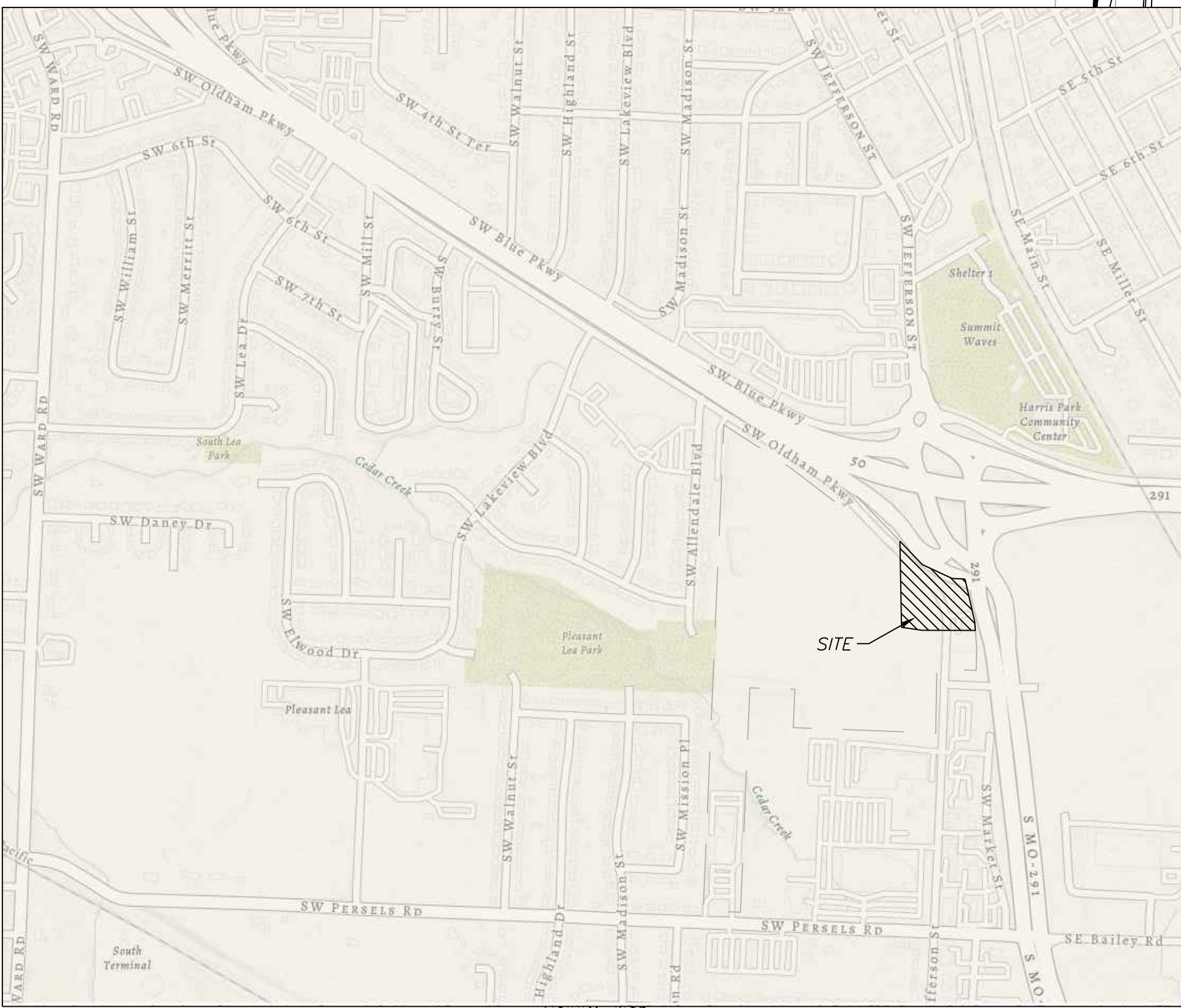
ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

#### FLOOD INFORMATION:

The property is located in Zone "X" areas outside the 100 year flood plain per FEMA Map 29095C0419G, dated January 20, 2017

#### NOTE :

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.



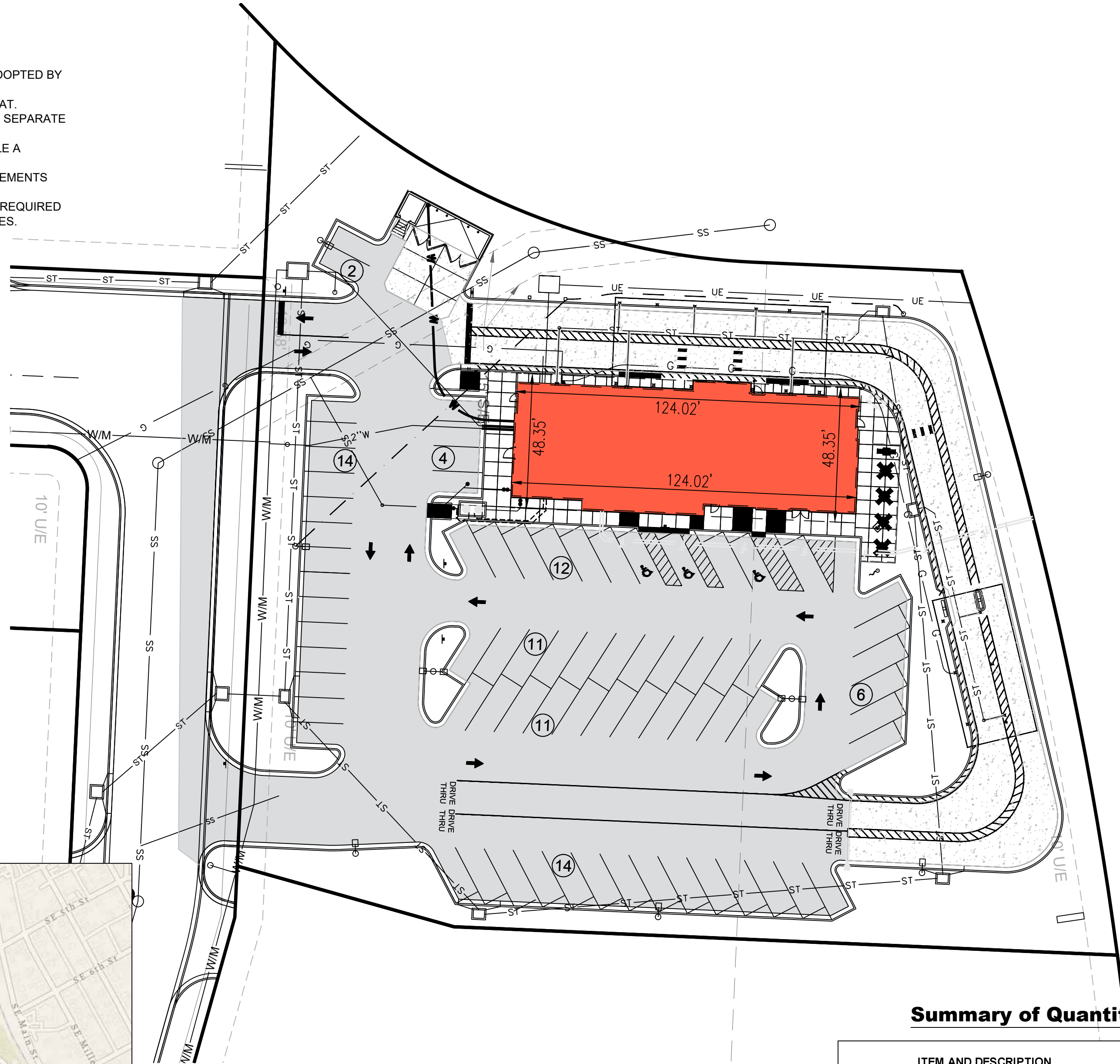
# CHICK-FIL-A

## FINAL DEVELOPMENT PLAN

### LOT 8, OLDHAM VILLAGE

#### Section 7, Township 47 North, Range 31 West

#### LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



### SITE LOCATION MAP

SCALE" 1"= 30'

#### Summary of Quantities:

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
ASPHALT PAVING	S.Y.	3,735.00
SIDEWALK	S.F.	3,593.00
GEOGRID	S.Y.	4,551.00
MoDOT Type 5 Base	S.Y.	4,551.00
CURBING	FT	2,138.00
ADA SIDEWALK RAMP	UNIT	4
SANITARY 6" PVC SDR 26 Service Line	FT	80.00
TRACER WIRE AND EQUIPMENT	FT	80.00
CLEARING, GRADING & GRUBBING	LS	1
SILT FENCE	FT	2,175.00
INLET PROTECTION	UNIT	6.00
SEEDING / MULCHING/ FERTILIZING	AC	1.68
CONST. ENTRANCE	UNIT	1
STORM		
15" HDPE	FT	428.14
5' x 4' STORM CURB INLET	EA	4.00
10" HDPE (Roof Drain)	LN FT	300.00
2" Type K Soft Copper Water Service Line	FT	90.00
WATER METER	UNIT	1
6" C900 PVC CLASS 200	FT	162.00
BACKFLOW VAULT	UNIT	1
6" GATE VALVE/ VALVE BOX & COVER	UNIT	1

DEVELOPER:  
Chick-Fil-A  
5200 Buffington  
Atlanta, GA 30349

RELEASED FOR CONSTRUCTION  
As Noted on Plan Review

Development Services Department  
Lee's Summit, Missouri  
07/14/2025

#### INDEX OF SHEETS:

- C.001 ~ COVER SHEET
- C.050 ~ ESC PHASE 1 - PRE CLEARING PLAN
- C.051 ~ ESC PHASE 2 - INACTIVE AREA STABILIZATION PLAN
- C.052 ~ ESC PHASE 3 - FINAL RESTORATION PLAN
- C.053 ~ ESC - STANDARD DETAILS
- C.100 ~ SITE PLAN
- C.200 ~ GRADING PLAN
- C.201 ~ SPOT ELEVATIONS
- C.202 ~ SPOT ELEVATIONS
- C.300 ~ UTILITY PLAN
- C.600 ~ STANDARD DETAILS
- C.601 ~ STANDARD DETAILS
- C.602 ~ STANDARD DETAILS
- C.603 ~ STANDARD DETAILS
- C.604 ~ STANDARD DETAILS
- L.100 ~ LANDSCAPE PLAN
- L.101 ~ LANDSCAPE DETAILS
- L.102 ~ LANDSCAPE AND MAINTENANCE SPECIFICATIONS

#### Site Impervious Area

Total Area	1.68 acres (73,122.83 sq. ft.)
Commercial Office Site	
Site Area	1.67 Acres
Building	5,361 sq. ft.
Parking	3,966 sq. ft.
Sidewalk	2,640 sq. ft.
Impervious Area	47,666 sq. ft. (65.19% of Site)
Floor-Area-Ratio	7.33%

Parking:  
Provided  
71 Standard (3 ADA Accessible)

Parking:  
Required  
71 Standard (3 ADA Accessible)

#### Site Improvement Notes

Sanitary Sewer Improvements  
~The site will utilize the existing sanitary sewer on the west side of property.

Water Main Improvements  
~The site will utilize the existing water on the west side of property.

Storm Sewer  
~Enclosed pipe systems and inlets will collect and convey the onsite storm water runoff and direct it toward the existing public storm sewer system.

Storm Water Detention  
~N/A

Current Zoning: PMIX

#### LEGEND:

Existing Underground Power	UGP	UGP
Existing Conc. Curb & Gutter		
Existing Wood Fence	X	X
Existing Gas Main	GAS	
Existing Water Main	X-W/M	X-W/M
Existing Storm Sewer	X-STM	X-STM
Existing Sanitary Sewer	X-SAN	X-SAN
Existing Underground Telephone	UGT	UGT
Existing Overhead Power	OHE	
Proposed Storm Sewer	ST	ST
Proposed Sanitary Sewer	SS	SS
Proposed Underground Power	UGT	UGT
Proposed Gas Service	GAS	
Proposed 8" D.I.P. Water	W	
Proposed Electrical Service	UGP	UGP

#### ENGINEER'S CERTIFICATION:

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

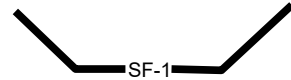




PRE CLEARING PLAN

SCALE: 1" = 40'

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



SILT FENCE PROTECTION  
TO BE MAINTAINED BY CONTRACTOR

LEGEND

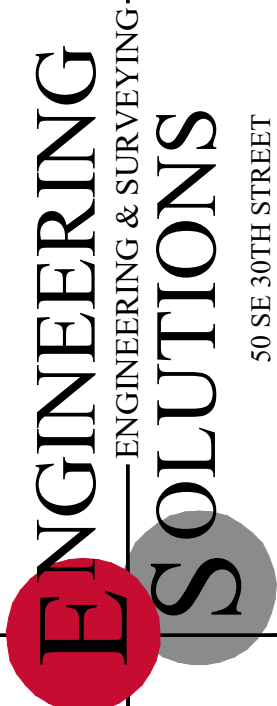
PHASE 1 SILT FENCE



PHASE 2 SILT FENCE



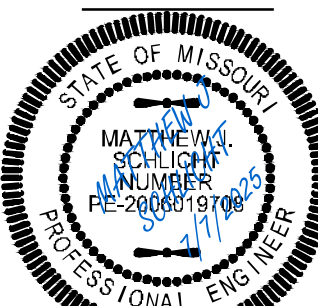
DURING ALL PHASES OF CONSTRUCTION,  
INACTIVE AREA STABILIZATION METHODS AS  
DESCRIBED IN APWA SECTION 5111.3 SHALL BE  
USED TO CONTROL EROSION AND SILTATION.



Professional Registration  
Missouri  
Engineering 200502186-D  
Surveying 2005008318-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Lot 8, Oldham Village  
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Pre-Clearing Plan  
Construction Plans for:  
Lot 8, Oldham Village  
Lee's Summit, Jackson County, Missouri



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

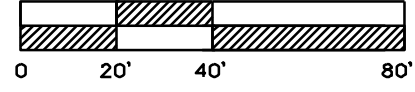
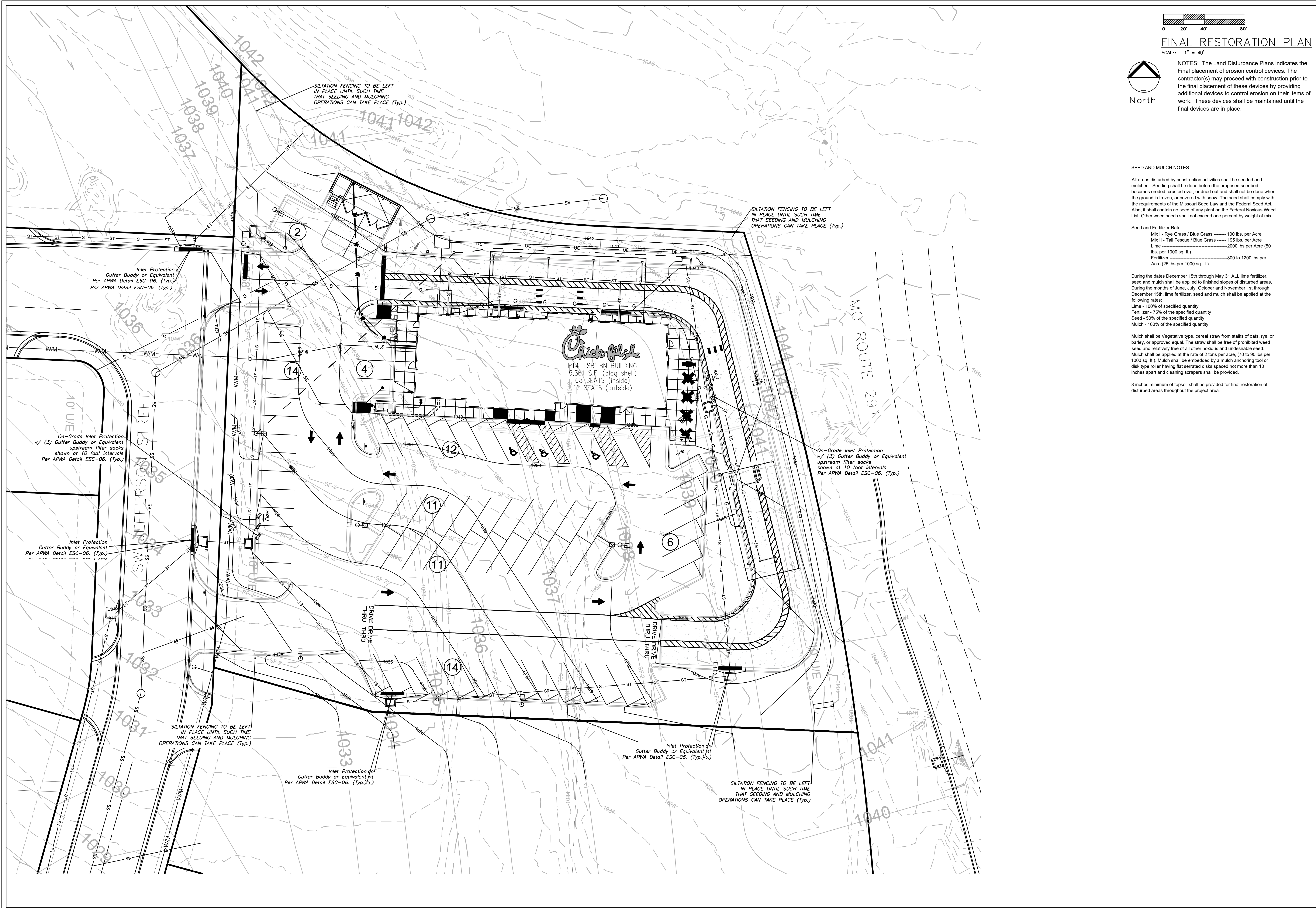
REVISIONS

- REV. 6/2/2025
- REV. 6/23/2025
- REV. 7/7/2025









FINAL RESTORATION PLAN

SCALE: 1" = 40'



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

SEED AND MULCH NOTES:

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

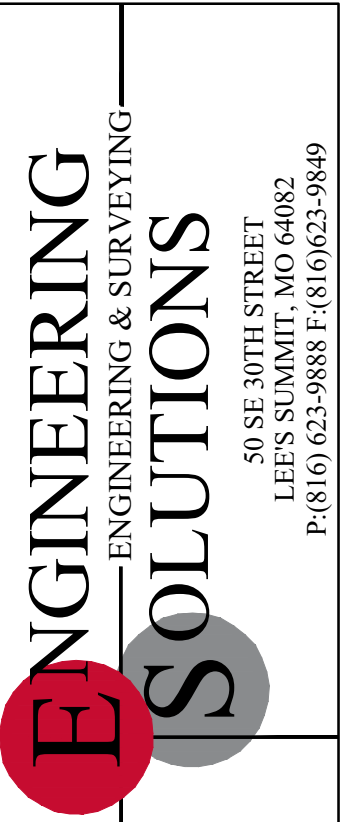
Seed and Fertilizer Rate:  
Mix I - Rye Grass / Blue Grass ..... 100 lbs. per Acre  
Mix II - Tall Fescue / Blue Grass ..... 195 lbs. per Acre  
Lime ..... 2000 lbs per Acre (50 lbs. per 1000 sq. ft.)  
Fertilizer ..... 800 to 1200 lbs per Acre (25 lbs per 1000 sq. ft.)

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

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

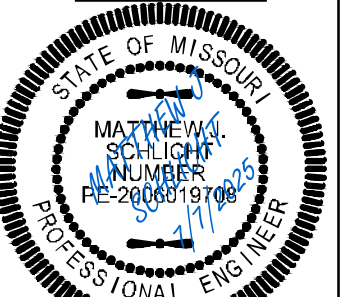
Mulch shall be Vegetative type, cereal straw from stalks of oats, rye, or barley, or approved equal. The straw shall be free of prohibited weed seed and relatively free of all other noxious and undesirable seed. Mulch shall be applied at the rate of 2 tons per acre, (70 to 90 lbs per 1000 sq. ft.). Mulch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

8 inches minimum of topsoil shall be provided for final restoration of disturbed areas throughout the project area.



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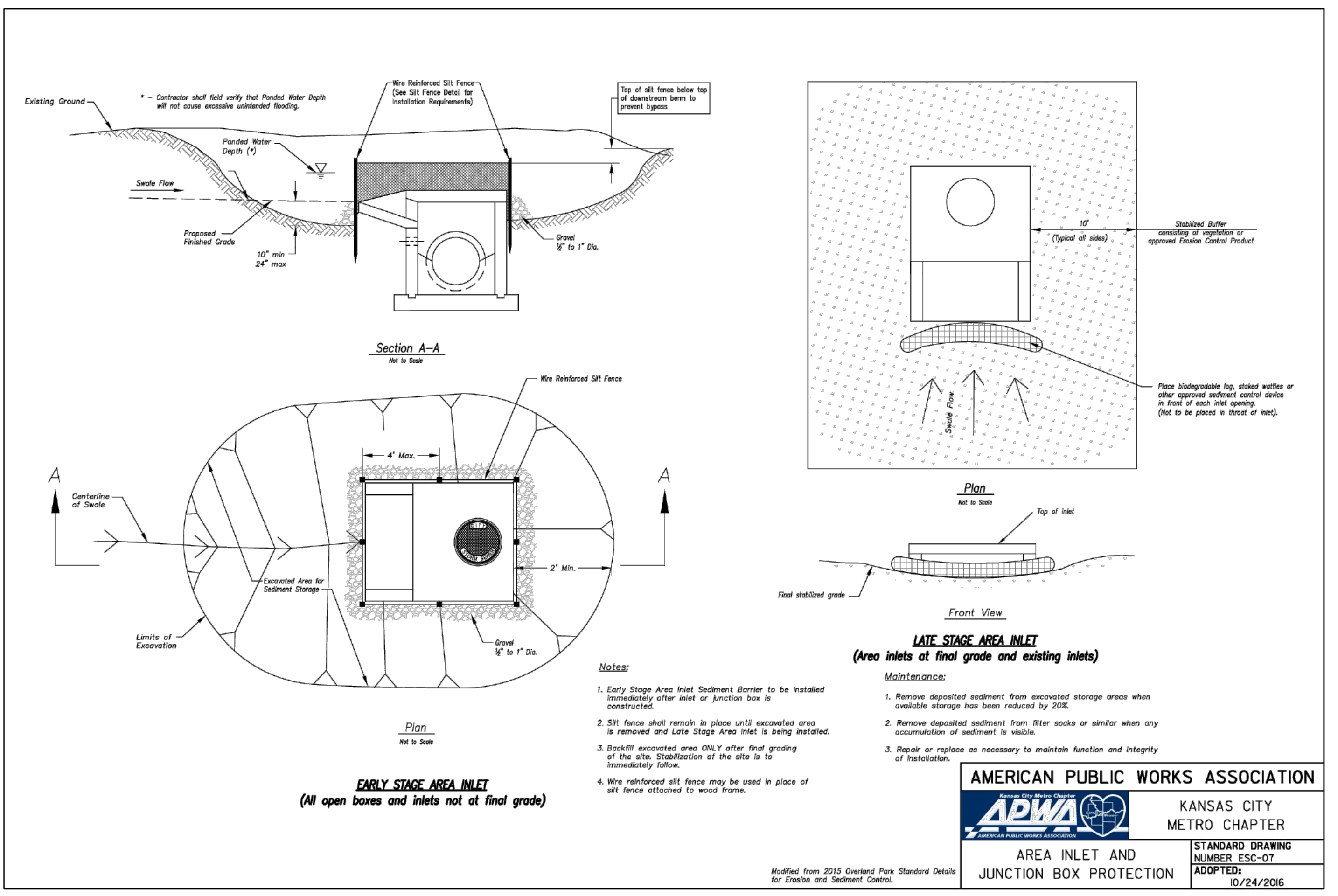
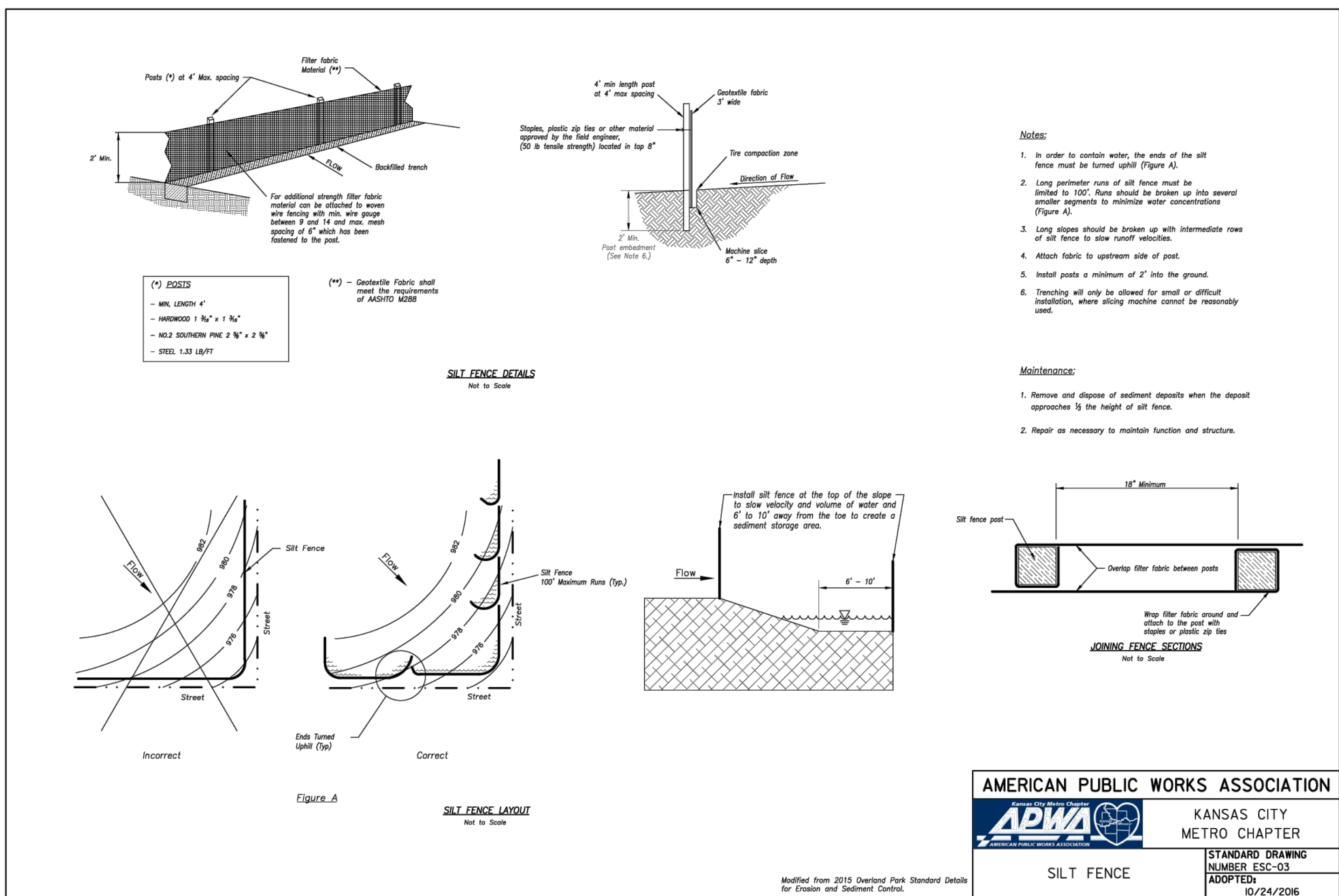
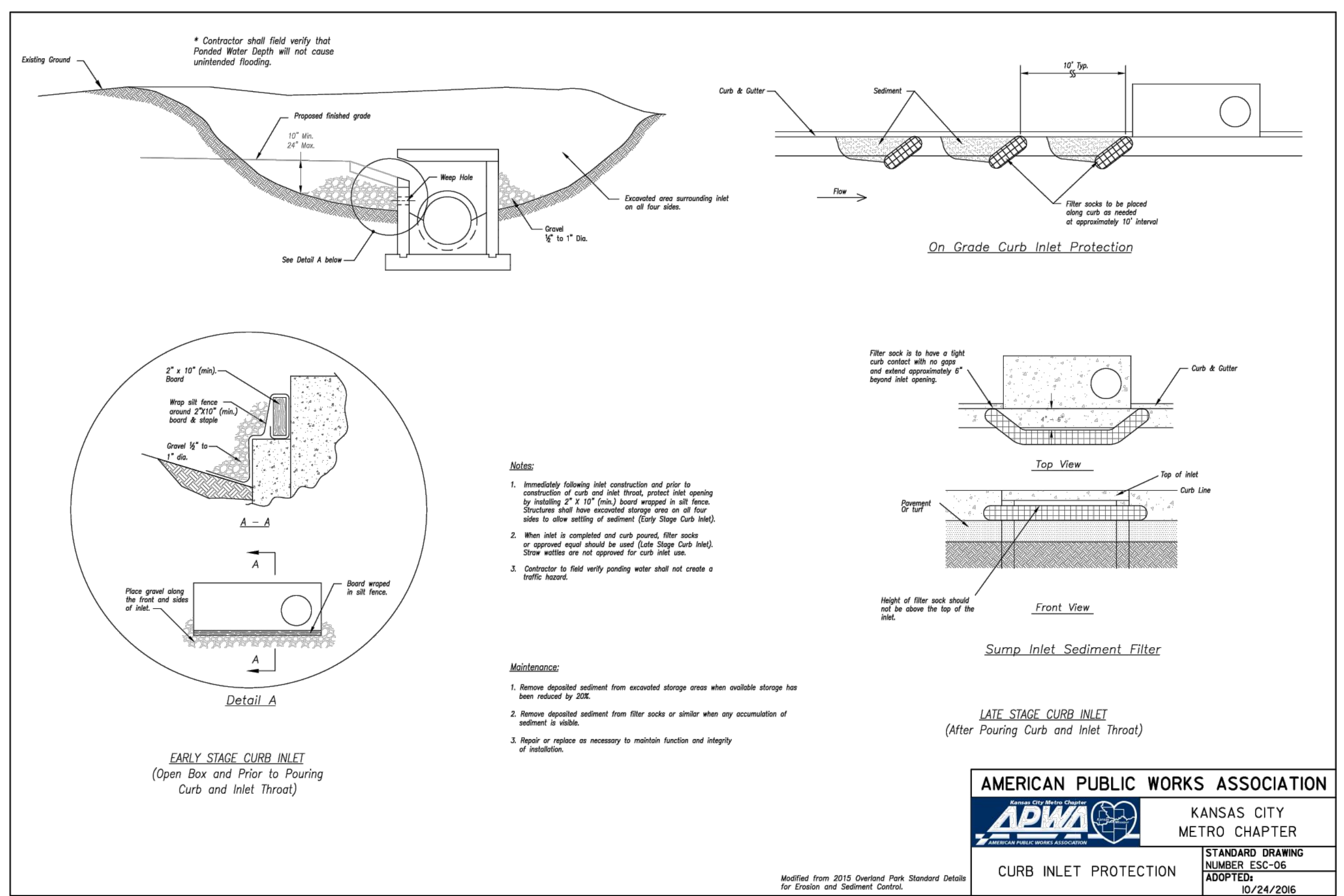
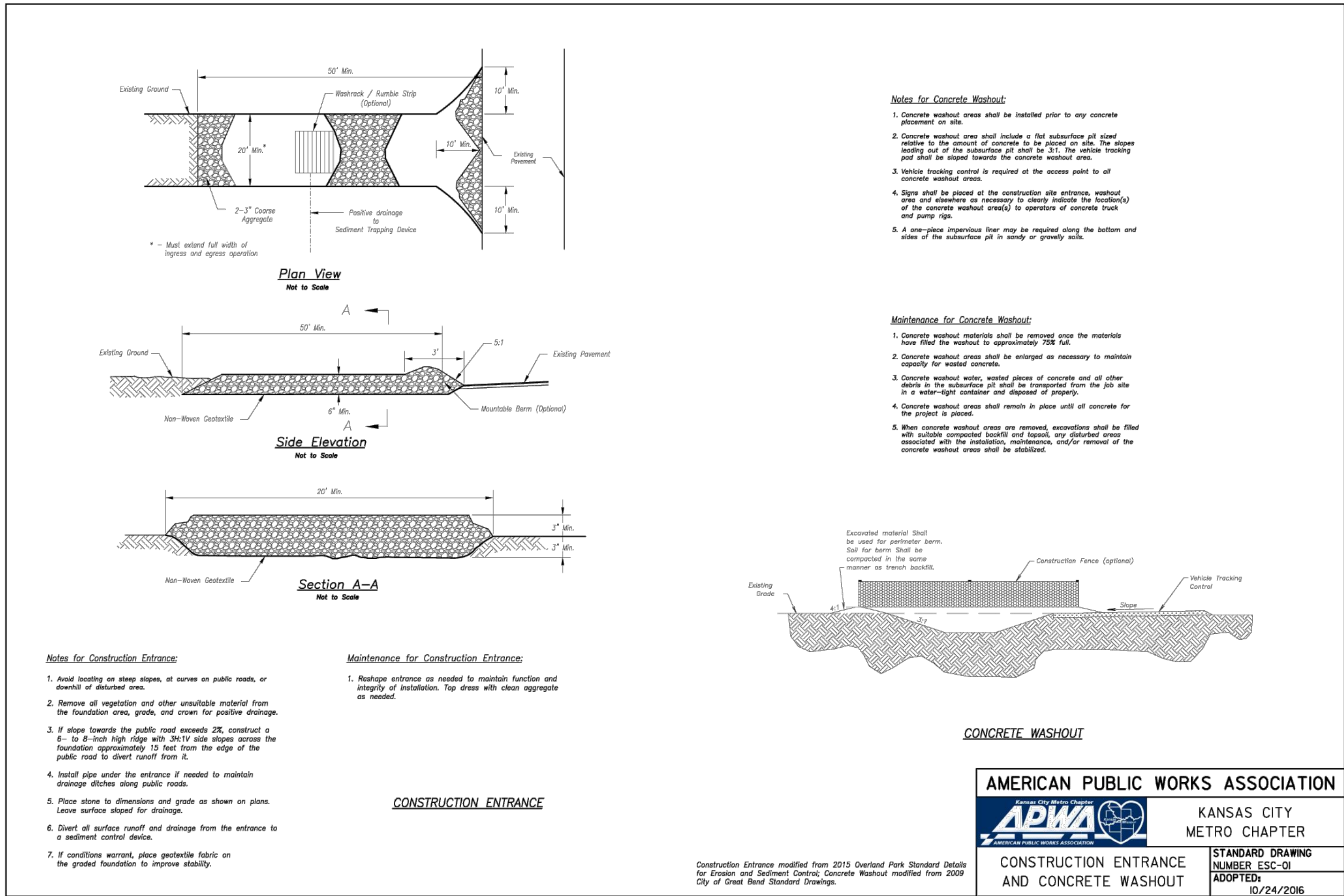
Project: Lot 8, Oldham Village  
FDP, Ltd 8  
Issue Date: December 2, 2024  
Final Restoration Plan  
Construction Plans for:  
Lot 8, Oldham Village  
Lee's Summit, Jackson County, Missouri



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

REVISIONS	
REV. 6/2/2025	
REV. 6/23/2025	
REV. 7/7/2025	







# SITE PLAN DESIGN NOTES & KEY PLAN

- 1A DIRECTIONAL ARROW
- 1B PAINTED HANDICAP PARKING SYMBOL
- 2A DRIVE-THRU GRAPHICS
- 2B STOP BAR GRAPHIC
- 3 CROSSWALK MARKINGS
- 4 MULTI-LANE DIRECTIONAL GRAPHICS
- 5 STANDARD OR HANDICAP PARKING STALL PER CODE
- 5A 4" SOLID WHITE STRIPING
- 5B 4" SOLID YELLOW STRIPING
- 5C 4" SKIP DASH YELLOW STRIPING
- 6 SOLID PLASTIC WHEEL STOP
- 7 BOLLARD MOUNTED SIGN
- 8 CURB RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)
- 9 CURB RAMP w/ FLARED SIDES (IN SIDEWALK)
- 10 RETURNED CURB HANDICAP RAMP
- 11 SIDEWALK ACCESSIBLE RAMP
- 12 DETECTABLE WARNING DEVICE
- 13 TYPICAL ADA RAMP & HANDRAIL
- 14 CONCRETE SIDEWALK
- 15 CONCRETE SIDEWALK w/ CURB & GUTTER
- 16 ENTRY DOOR FROST SLAB DETAIL
- 17 CONCRETE BOLLARD
- 18 CONCRETE CURB & GUTTER
- 18A SPILLING CURB & GUTTER
- 18B CATCHING CURB & GUTTER
- 18C DEPRESSED SPILLING CURB & GUTTER
- 18D DEPRESSED CATCHING CURB & GUTTER
- 18E SPILLING GUTTER SECTION AT ACCESSIBLE RAMP
- 18F CATCHING GUTTER SECTION AT ACCESSIBLE RAMP
- 18G MOUNTABLE CURB & GUTTER
- 19 LANDSCAPE & IRRIGATION PROTECTOR
- 20 TYPICAL HMAc PAVEMENT SECTION
- 21 BUTT JOINT
- 22 CONCRETE PAVEMENT DRIVE-THRU LANE
- 23 CONCRETE APRON AT TRASH ENCLOSURE
- 24 PAVEMENT EDGE DETAIL (START & END OF DRIVE-THRU LANES)
- 25 CONCRETE PAVEMENT SECTIONS
- 26 TRANSVERSE & LONGITUDINAL CONTRACTION JOINT
- 27 TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT
- 28 CONTRACTION JOINT
- 29 KEYED CONSTRUCTION JOINT
- 30 LONGITUDINAL BUTT JOINT
- 31 EXPANSION JOINT
- 32 DRIVE-THRU PLAN - FLUSH WITH FFE
- 33 DRIVE-THRU ISOMETRIC
- 34 DRIVE-THRU ORDER POINT ISLAND
- 35 MENU BOARD LOOP DETECTION SYSTEM
- 36 BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)
- 37 CANOPY DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)
- 38 SCREENED REFUSE ENCLOSURE (REFER TO ARCH PLANS FOR ADDITIONAL DETAILS)
- 39 CLEAN-OUT (OUTSIDE OF BUILDING)
- 40 THICKENED PAVEMENT @ STRUCTURES
- 41 STORM STRUCTURE WEEP HOLE DETAILS
- 42 ALUMINUM HANDRAIL (REFER TO ARCH PLANS)
- 43 DRIVE-THRU CLEARANCE BAR (REFER TO SIGNAGE PACKAGE)
- 44 GREASE TRAP
- 45 EXISTING POLE MOUNTED TRANSFORMER (TO BE REUSED)
- 46 BIKE RACK
- 47 LANDSCAPED AREA
- 48 TYPICAL LOCATION FOR OUTDOOR TABLES (REFER TO ARCH PLANS)
- 49 CONCRETE PAD FOR OPTIONAL CASH STATION
- 50 FREE-STANDING ORDER POINT CANOPY
- 51 FREE-STANDING OUTSIDE MEAL DELIVERY CANOPY
- 52 COLORED CONCRETE CROSSWALK (RED)
- 53 4" SOLID YELLOW STRIPING

## SITE DATA:

- TAX KEY #:
- ZONING: PMIX
- PARCEL SIZE: 7,312.2± SQ. FT. (1.68 ACRES)
- PROP. PROPERTY ACQUISITION: 0± SQ. FT. (0.000 ACRES)

## BUILDING DATA:

- BUILDING FLOOR AREA: 5,361± SQ. FT.
- NUMBER OF EMPLOYEES DURING LARGEST SHIFT = 20 EMPLOYEES
- TOTAL NUMBER OF SEATS = 80
- INDOOR SEATS = 68
- OUTDOOR SEATS = 12

## PARKING DATA:

- NUMBER OF REGULAR PARKING SPACES: 23
- NUMBER OF ADA SPACES: 1
- TOTAL NUMBER OF SPACES PROVIDED: 24
- MAXIMUM NUMBER OF SPACES ALLOWED: 19
- TYPICAL PARKING WIDTH: 9.0'
- TYPICAL 90° PARKING LENGTH: 18.0'
- MINIMUM ISLE WIDTH: 24.0' (90°)

## PARKING FORMULA:

- MINIMUM 1 PARKING SPACE FOR EACH 1,000 SF OF GROSS FLOOR AREA; MAXIMUM 3.5 FOR 1,000 SF OF GROSS FLOOR AREA (5,361/1000 x 3.5 = 18.8)
- MINIMUM PARKING REQUIRED = 5 SPACES
- MAXIMUM PARKING ALLOWED = 19 SPACES

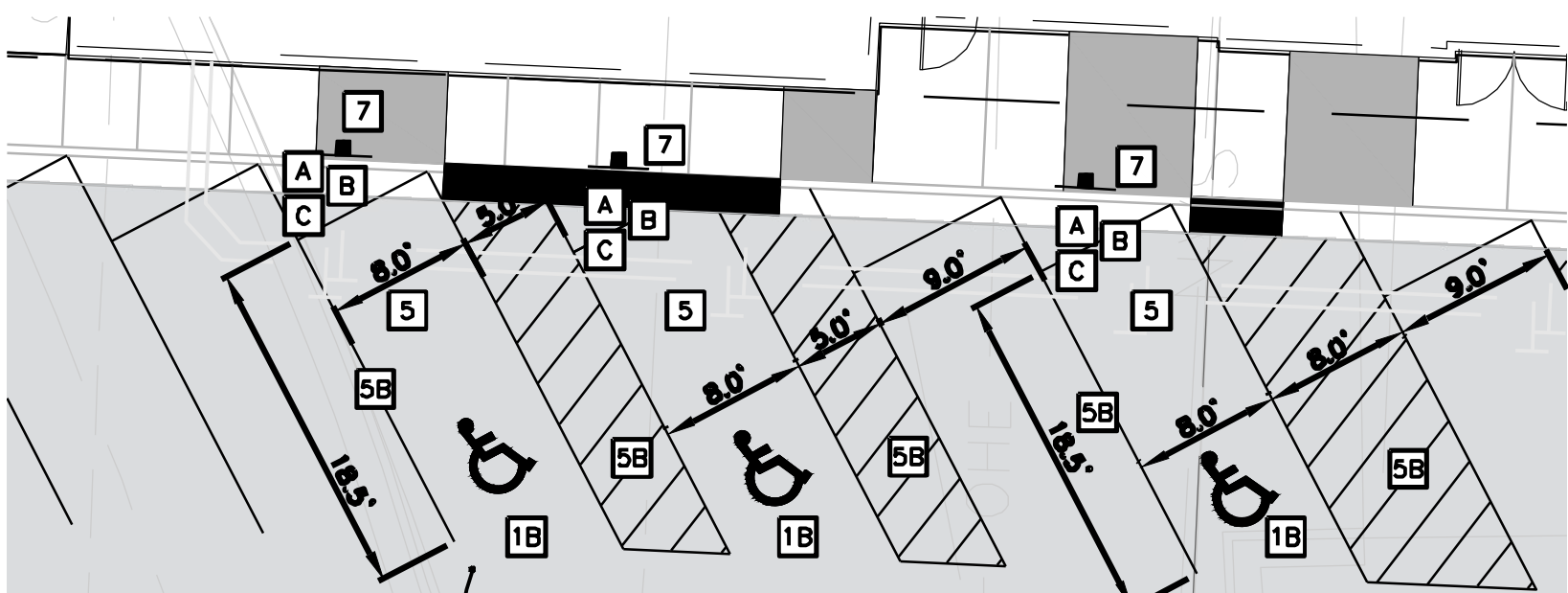
## HATCH LEGEND

- DENOTES STANDARD PAVEMENT SECTION
- DENOTES CONCRETE SECTION
- DENOTES PROP. SIDEWALK
- DENOTES AREA OF DEPRESSED SIDEWALK
- DENOTES AREA OF DEPRESSED CURB AND GUTTER WITH LENGTH NOTED ON PLANS.
- DENOTES REVERSE CURB & GUTTER

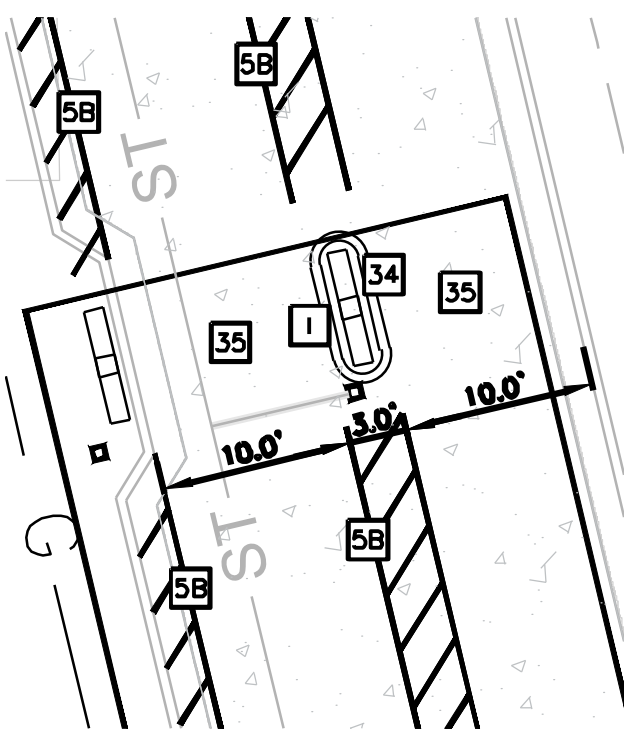
## SIGN LEGEND

\*\* CONTRACTOR TO REFER TO THE SIGNAGE PACKAGE FOR PLACEMENT AND SPECIFICATIONS OF ALL SIGNS \*\*

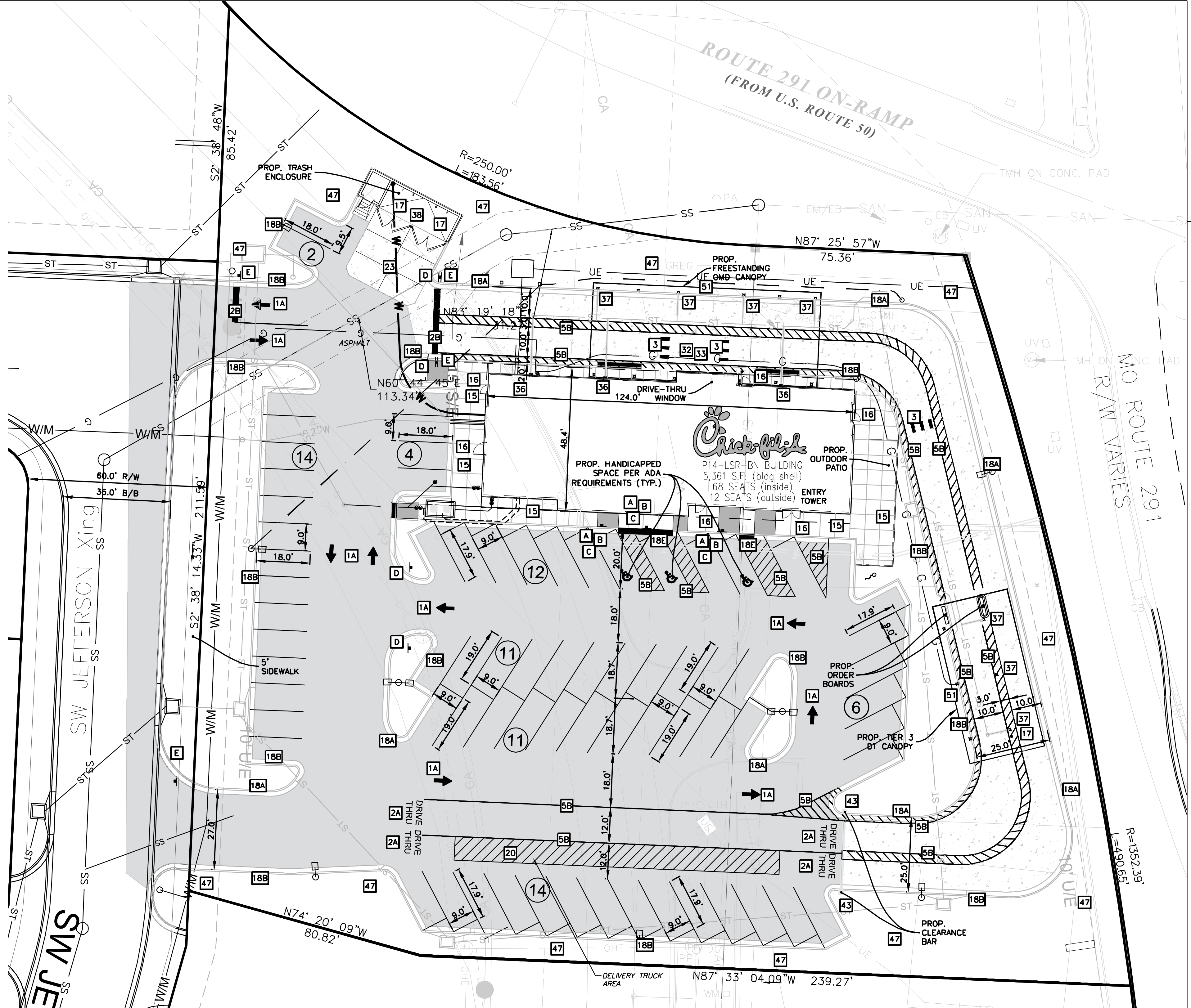
- A HANDICAP PARKING SIGN (SEE SIGNAGE PACKAGE) R7-B; 12" x 18" (TYP.)
- B HANDICAP PARKING FINE SIGN (SEE SIGNAGE PACKAGE) R7-BP; 6" x 12" (TYP.)
- C "VAN ACCESSIBLE" SIGN (SEE SIGNAGE PACKAGE) R7-BP; 6" x 12" (TYP.)
- D "DO NOT ENTER" SIGN (SEE SIGNAGE PACKAGE) R5-1; 24" x 24" (TYP.)
- E STOP SIGN (SEE SIGNAGE PACKAGE) R1-1; 30" x 30" (TYP.)
- F CFA PEDESTRIAN CROSSING SIGN (SEE SIGNAGE PACKAGE)
- G FLAG POLE (SEE SIGNAGE PACKAGE)
- H CFA PYLON SIGN (SEE SIGNAGE PACKAGE)
- I DIGITAL DRIVE-THRU MENU BOARDS



1 ADA PARKING STALL LAYOUT DETAIL  
SCALE: 1"=10'



2 ORDER CANOPY LAYOUT DETAIL  
SCALE: 1"=10'



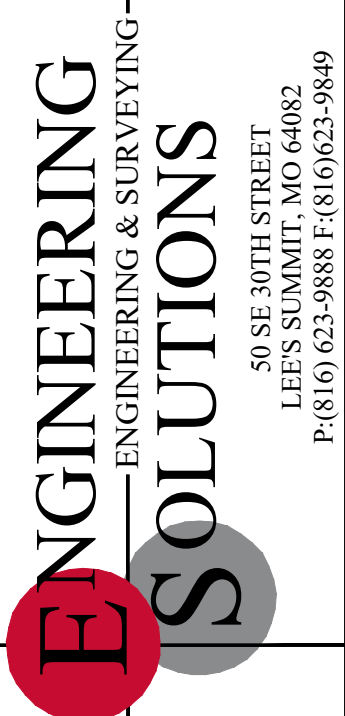
## PROJECT NOTES:

- ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND OR CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE CITY OF LEE'S SUMMIT STANDARD CONSTRUCTION SPECIFICATIONS.
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE CITY TO OBTAIN APPLICABLE CITY PERMITS.
- INGRESS/EGRESS WILL BE PROVIDED INTERNAL AND EXTERNAL TO THIS SITE.
- ALL CONCRETE CURB & GUTTER SHALL BE 24" (B6.18) UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL CONSTRUCTION MATERIALS, DUMPSTER, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC RIGHT-OF-WAY.



0 20'  
1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS  
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY



Professional Registration  
Missouri  
Engineering 200502186-D  
Surveying 2005008319-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Lot 8, Oldham Village  
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Project:  
FDP, Lot 8  
Issue Date:  
December 2, 2024

SITE PLAN  
Construction Plans for:  
Lot 8, Oldham Village  
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
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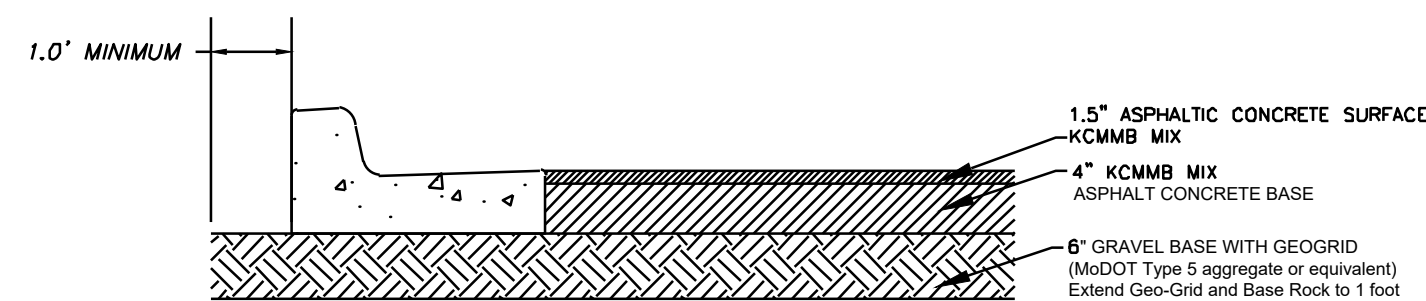
REVISIONS  
REV. 6/2/2025  
REV. 6/23/2025  
REV. 7/7/2025



**Notes:**  
- Trash enclosures shall be constructed of masonry walls or steel architecturally designed walls with either a solid steel opaque gate painted to be compatible with the color of the masonry or steel walls and building it is to serve as a steel framed semi-opaque gate with a screen mesh material approved by the Director that provides an appropriate visual barrier.  
- Trash enclosure areas shall be improved with a Portland cement concrete pad and a Portland cement concrete approach 50 feet in length, measured from the enclosure opening. The pad and approach shall be improved with a minimum six inches of full depth unreinforced Portland cement concrete constructed on a sub-grade of four inches of granular base course.

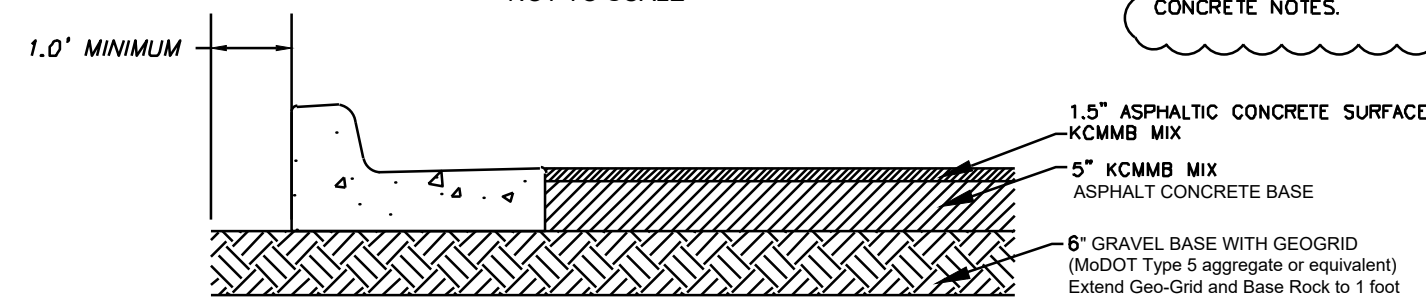


5 EXTERIOR ELEVATION  
TRASH ENCLOSURE - FRONT ELEVATION



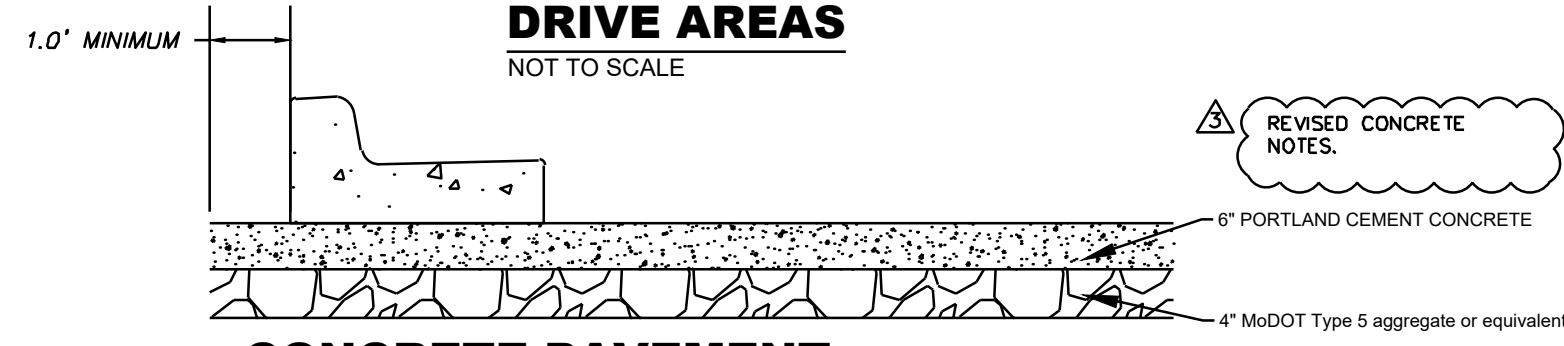
PRIVATE ASPHALT PAVEMENT -  
PARKING AREAS  
NOT TO SCALE

REVISED ASPHALT  
CONCRETE NOTES.

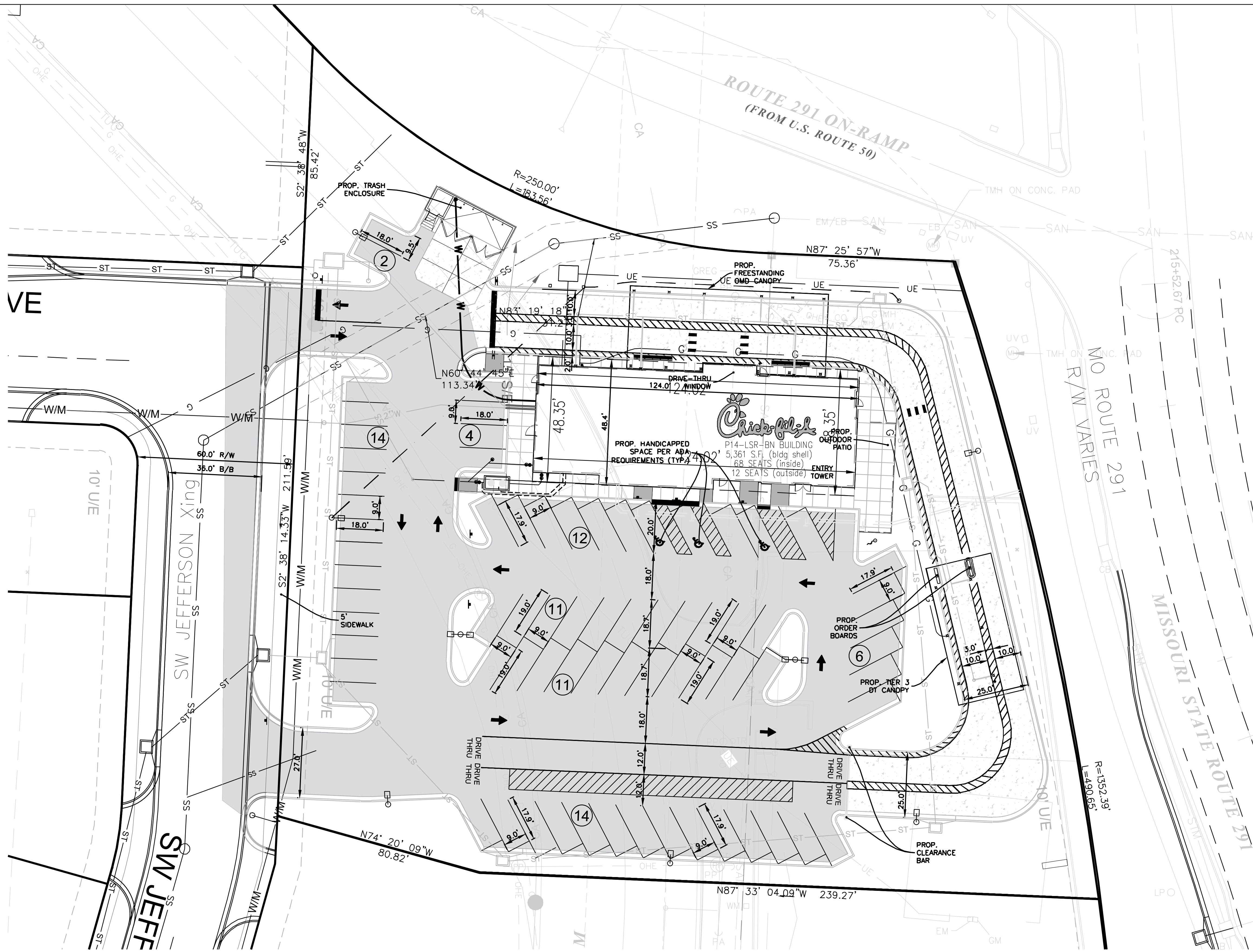


PRIVATE ASPHALT PAVEMENT -  
DRIVE AREAS  
NOT TO SCALE

REVISED CONCRETE  
NOTES.



CONCRETE PAVEMENT  
NOT TO SCALE



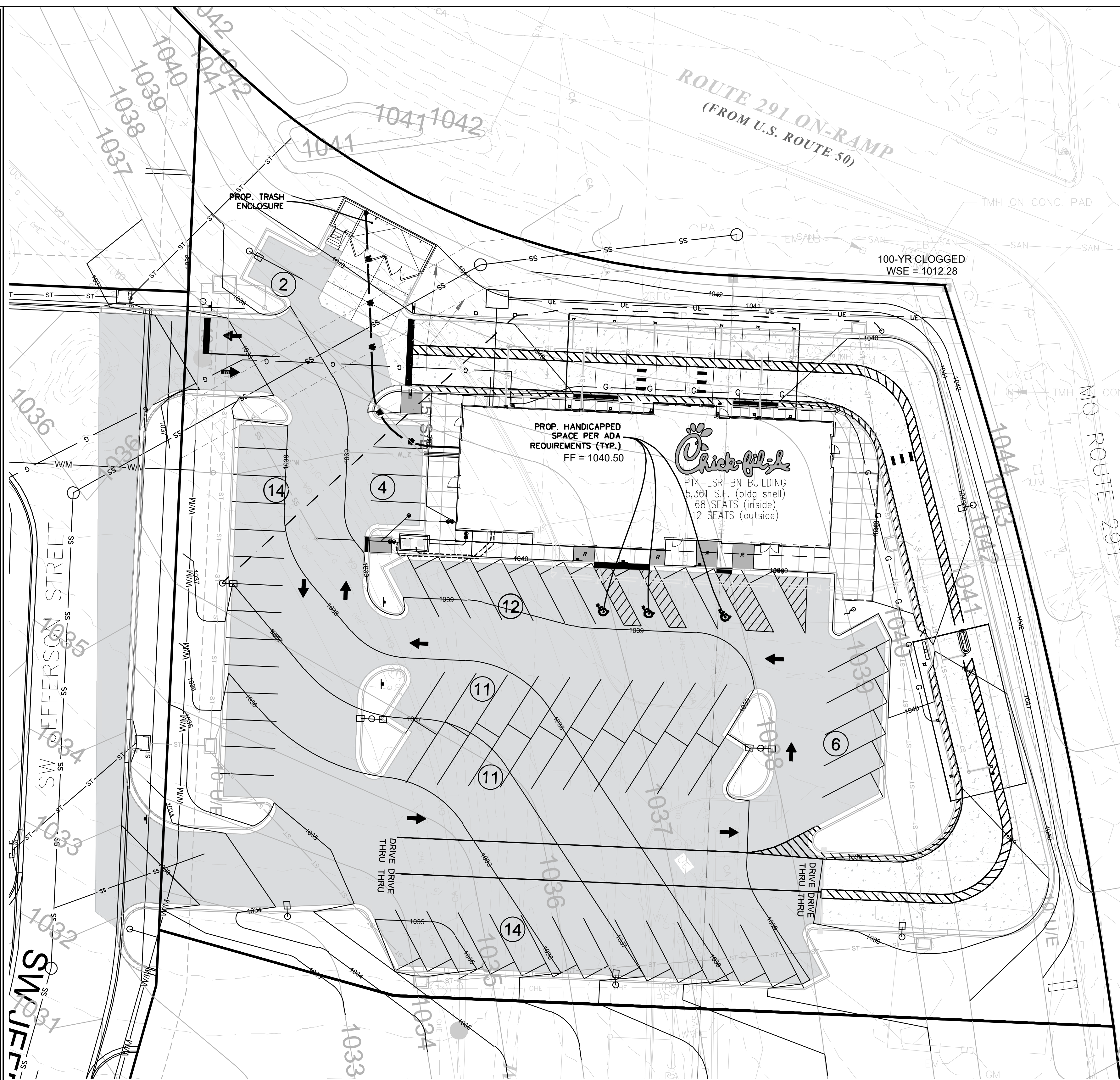


# GRADING & DRAINAGE NOTES

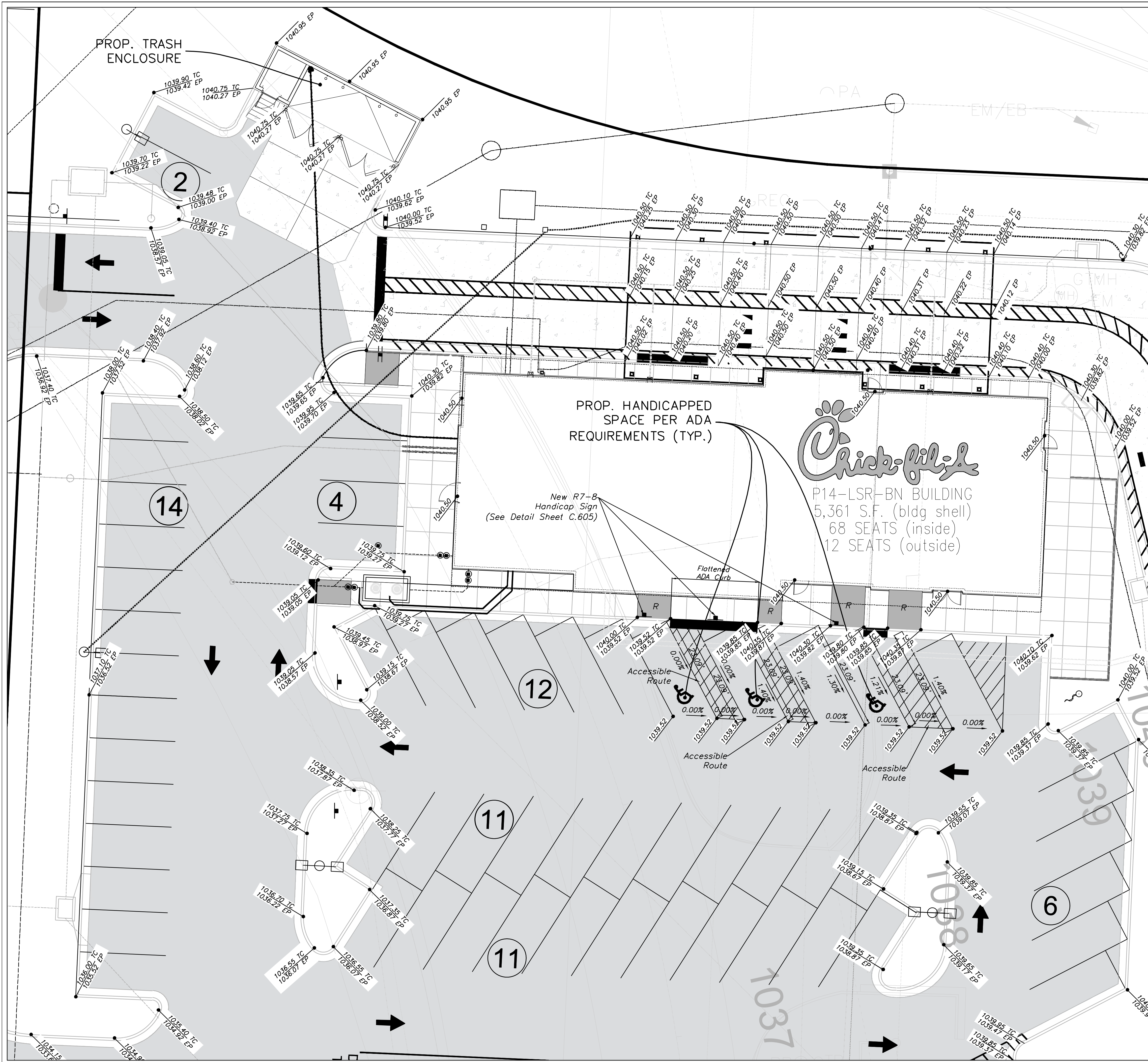
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN TO BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURBS, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
- ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
- PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
- IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
- CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- SEE EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES AND NOTES.
- ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. NO ON SITE BURNING WILL BE ALLOWED
- ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
- GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
- NO PART OF THE PROPOSED PROJECT IS LOCATED WITHIN A FLOOD HAZARD AREA
- SPOT ELEVATIONS SHOWN ARE @ EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.
- ALL CONCRETE CURB & GUTTER SHALL BE TYPE B-6.18 CURB UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL STORM SEWER JOINTS SHALL HAVE O-RING GASKETS.
- MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
- BACKFILL TO THE TOP OF CURBS.
- SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS
- ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 1.5%.
- DESIGNATED HANDICAP PARKING AREAS SHALL BE GRADED TO A MAXIMUM OF 1.5%
- SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING OF PAVEMENT.
- THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
- ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.
- ALL STORM DRAINAGE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT VILLAGE OF NILES STANDARDS & SPECIFICATIONS AND THE METROPOLITAN WATER RECLAMATION DISTRICT STANDARDS.

## HATCH LEGEND

	DENOTES REVERSE (SPILLING) CURB & GUTTER		DENOTES AREA OF DEPRESSED SIDEWALK
	DENOTES CONCRETE CURB & GUTTER (CATCHING)		DENOTES EXISTING AND OR PROPOSED SPOT ELEVATIONS.
	DENOTES AREA OF DEPRESSED SPILLING CURB & GUTTER		DENOTES PROPOSED DRAINAGE DIRECTION ARROW.
	DENOTES AREA OF DEPRESSED CATCHING CURB & GUTTER		DENOTES PROPOSED OVERFLOW DIRECTION ARROW.



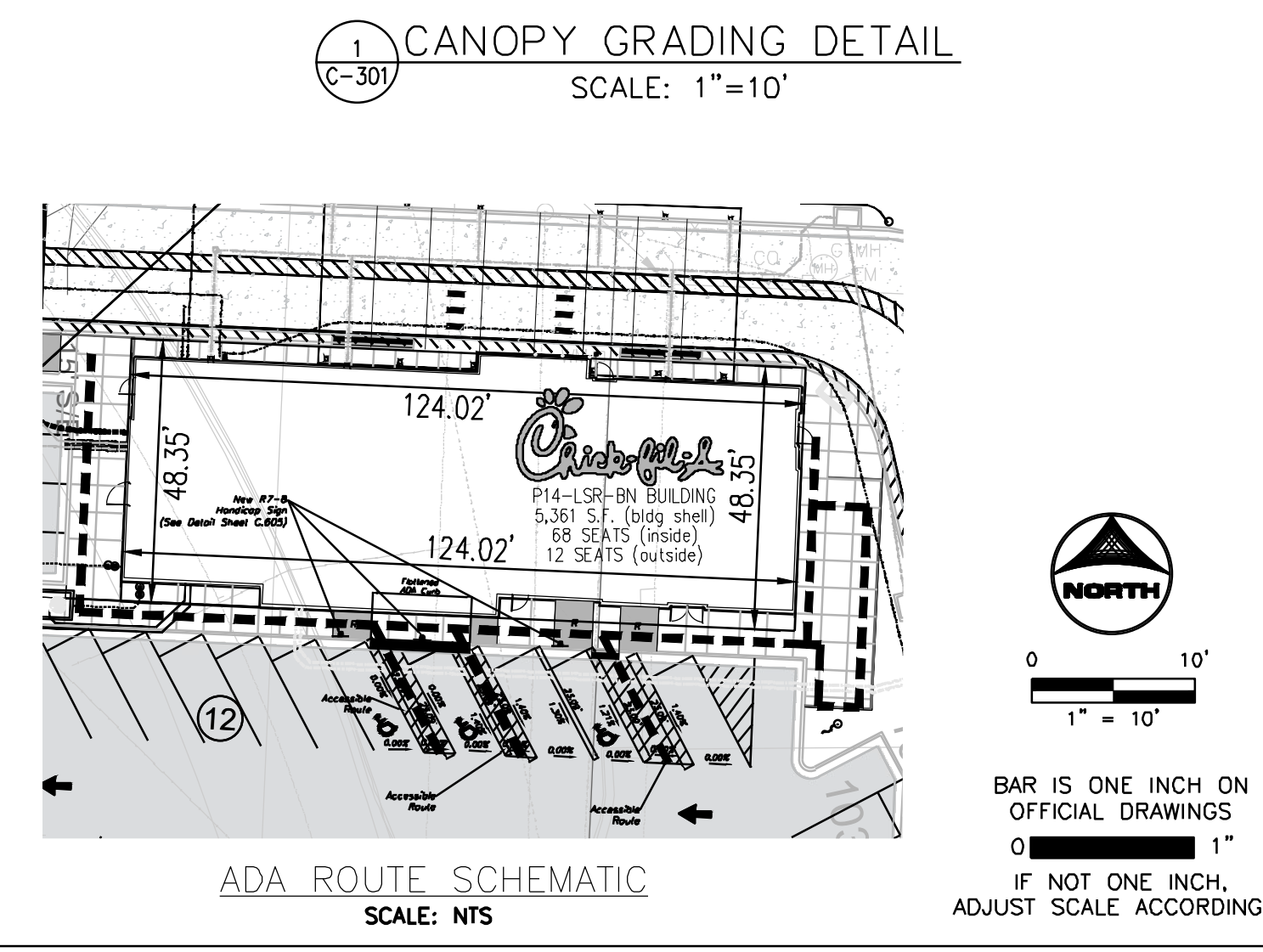
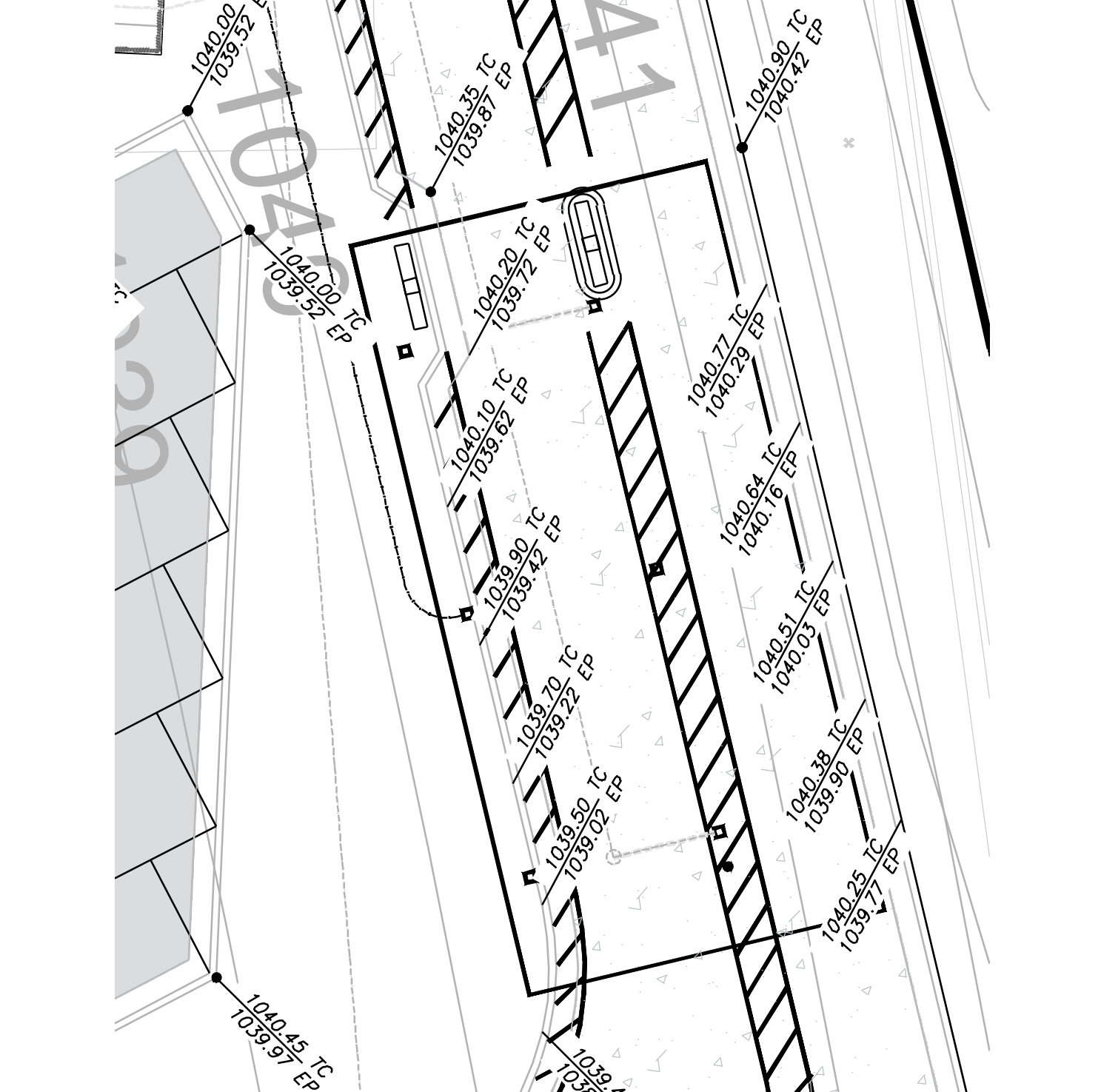




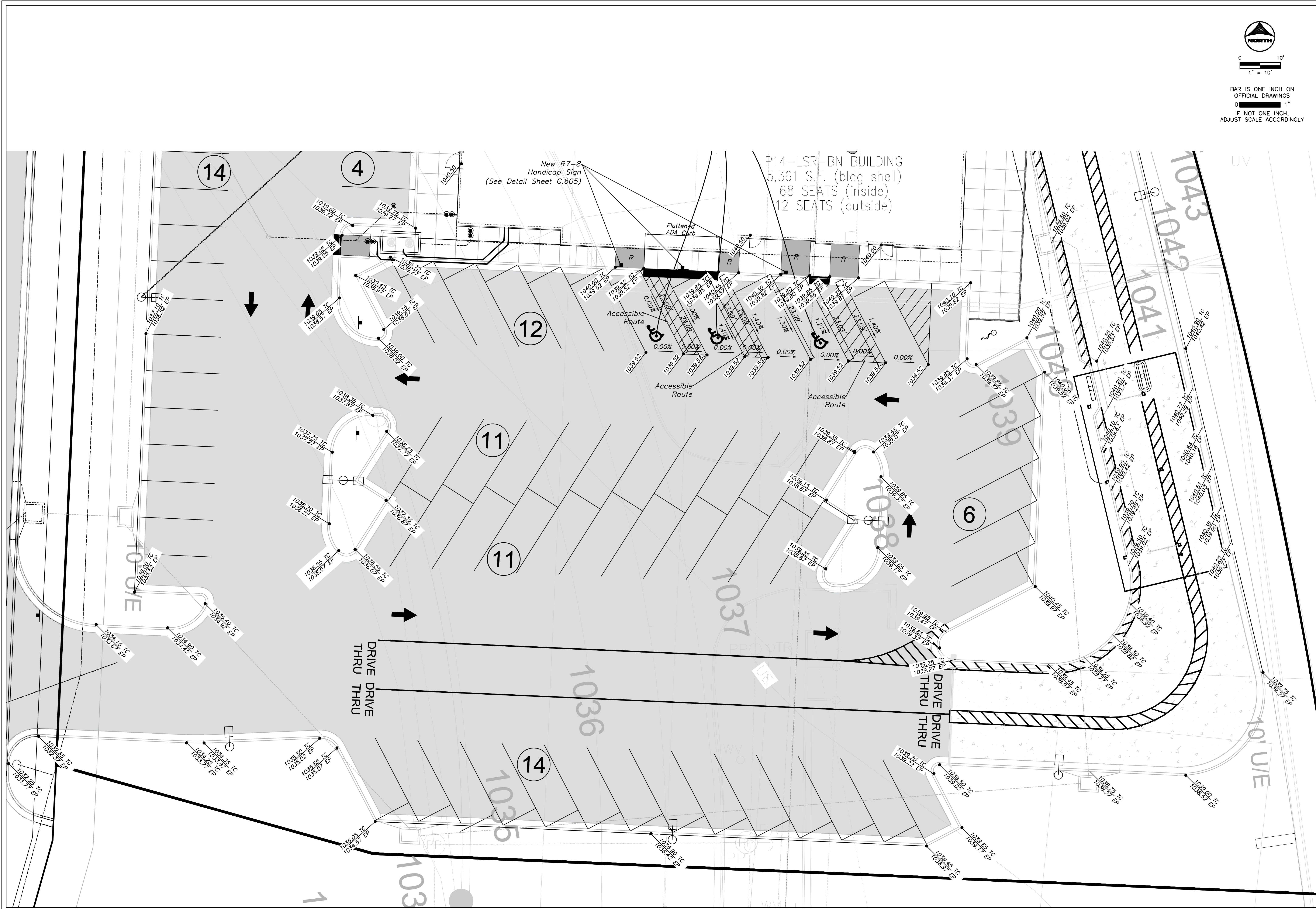
- GENERAL NOTES:**
- ACCESSIBLE PARKING, RAMPS, AND SIGNAGE SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
  - ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
  - 1 WEEK PRIOR TO CONSTRUCTION WITHIN VILLAGE OR STATE ROW OR ANY CONNECTION TO PUBLIC SEWERS, CONTRACTOR SHALL NOTIFY THE APPROPRIATE VILLAGE ENGINEERING DIVISION.
  - CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/ SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT. CUT/TRIM EXPANSION JOINTS TO BE FLUSH WITH SURFACE.
  - ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
  - DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT-OF-WAY.
  - THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OR MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
  - THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
  - THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE VILLAGE.
  - ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE VILLAGE CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS AND LATEST EDITION OF 1001 DESIGN STANDARDS.
  - EXCAVATION SHALL BE IN ACCORDANCE WITH THE GEO TECHNICAL REPORT PREPARED FOR THIS PROJECT.
  - CONTRACTOR TO GRADE 4" BELOW THE BACK OF CURB TO ALLOW FOR THE PLACEMENT OF TOPSOIL. A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED IN ALL PLANTING BEDS AND ALL GRASSED AREAS. GRADED AREAS TO BE HELD DOWN TO THE APPROPRIATE ELEVATION TO ACCOUNT FOR TOPSOIL. SEE SHEET L-101 FOR DETAILS.

**HATCH LEGEND**

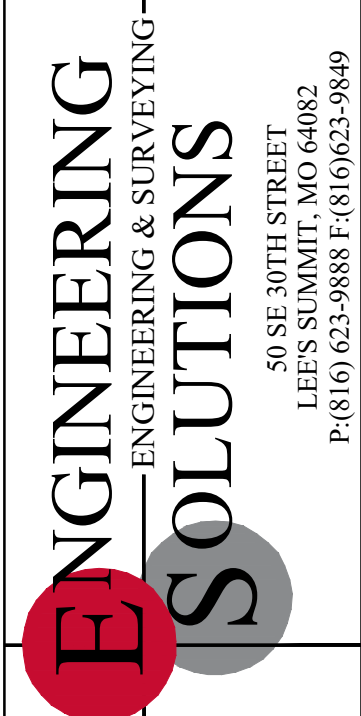
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0 10'  
1" = 10'  
BAR IS ONE INCH ON  
OFFICIAL DRAWINGS  
0 1"  
IF NOT ONE INCH,  
ADJUST SCALE ACCORDINGLY

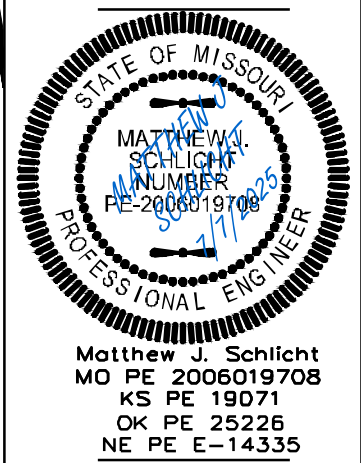


Professional Registration  
Missouri  
Engineering 200502186-D  
Surveying 2005008318-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Project:  
FDP, Ltd. 8  
Issue Date:  
December 2, 2024

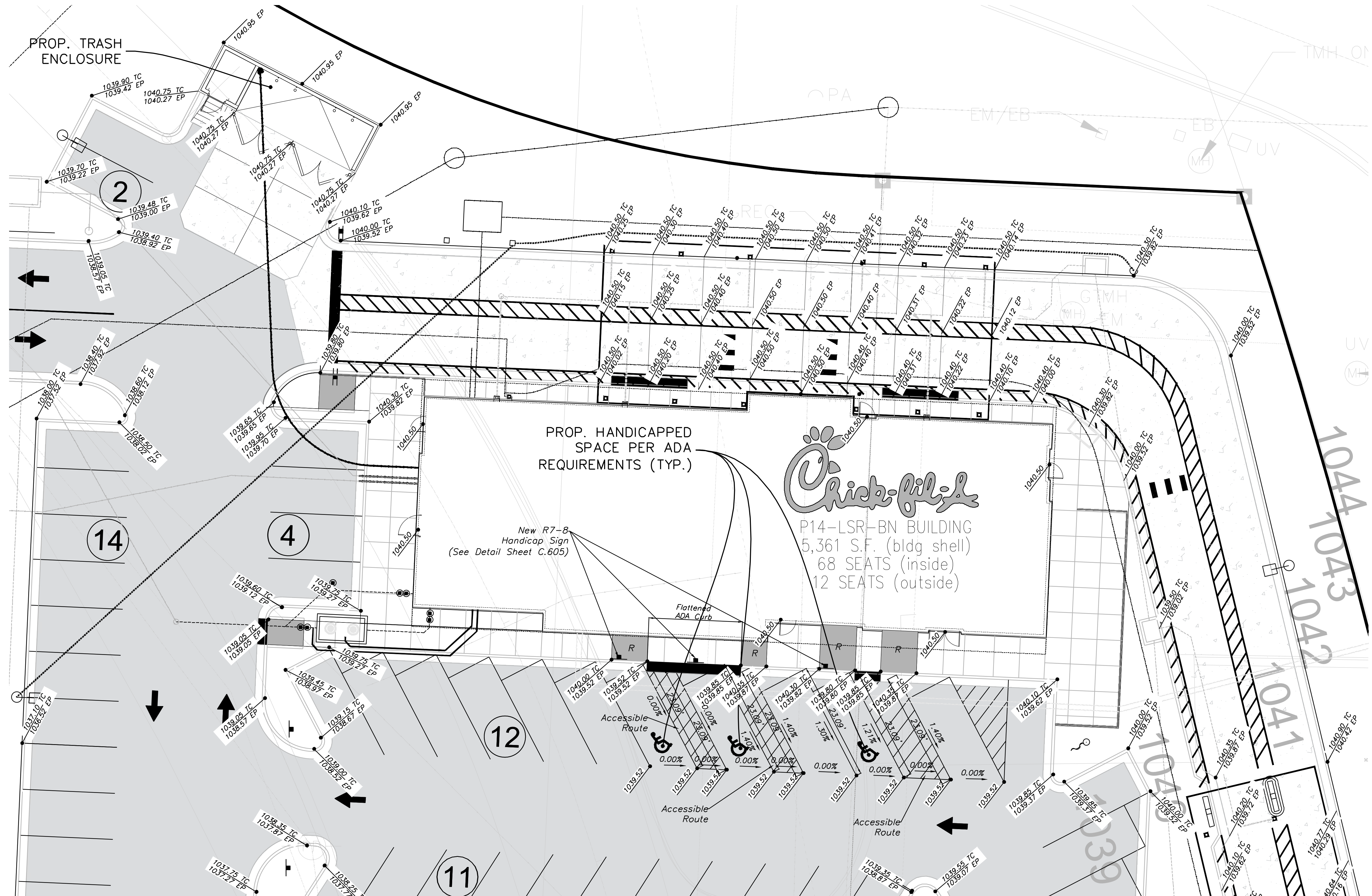
Lot 8, Oldham Village  
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SPOT ELEVATIONS  
Construction Plans for:  
Lot 8, Oldham Village  
Lee's Summit, Jackson County, Missouri



REVISIONS  
REV. 6/2/2025  
REV. 6/23/2025  
REV. 7/7/2025





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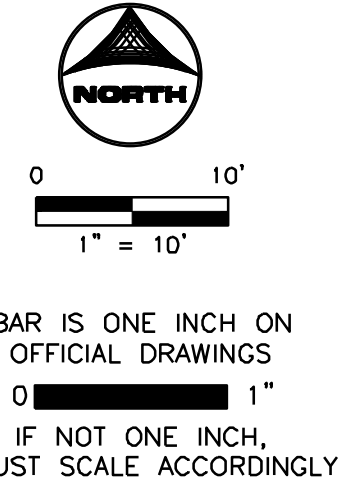
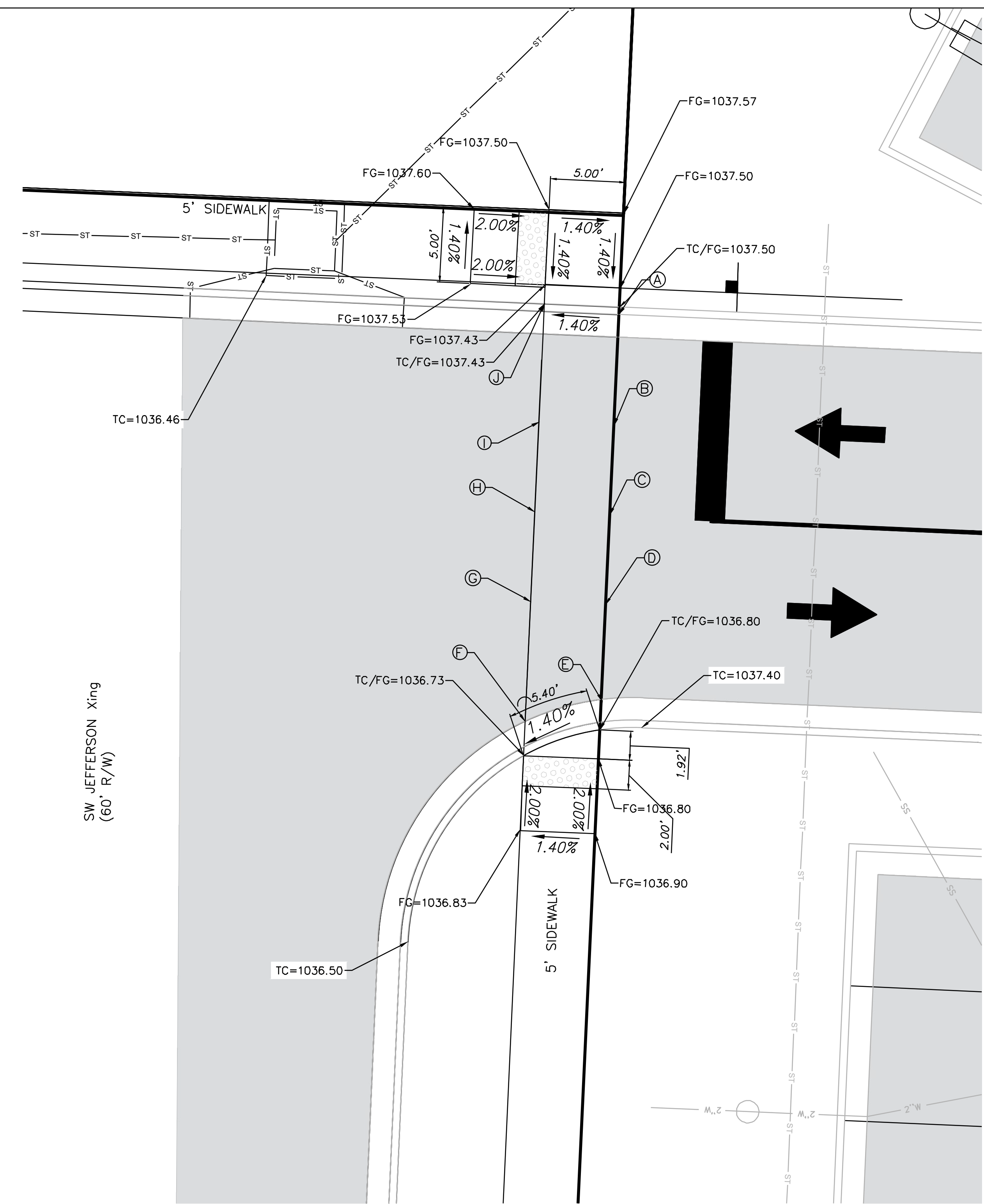
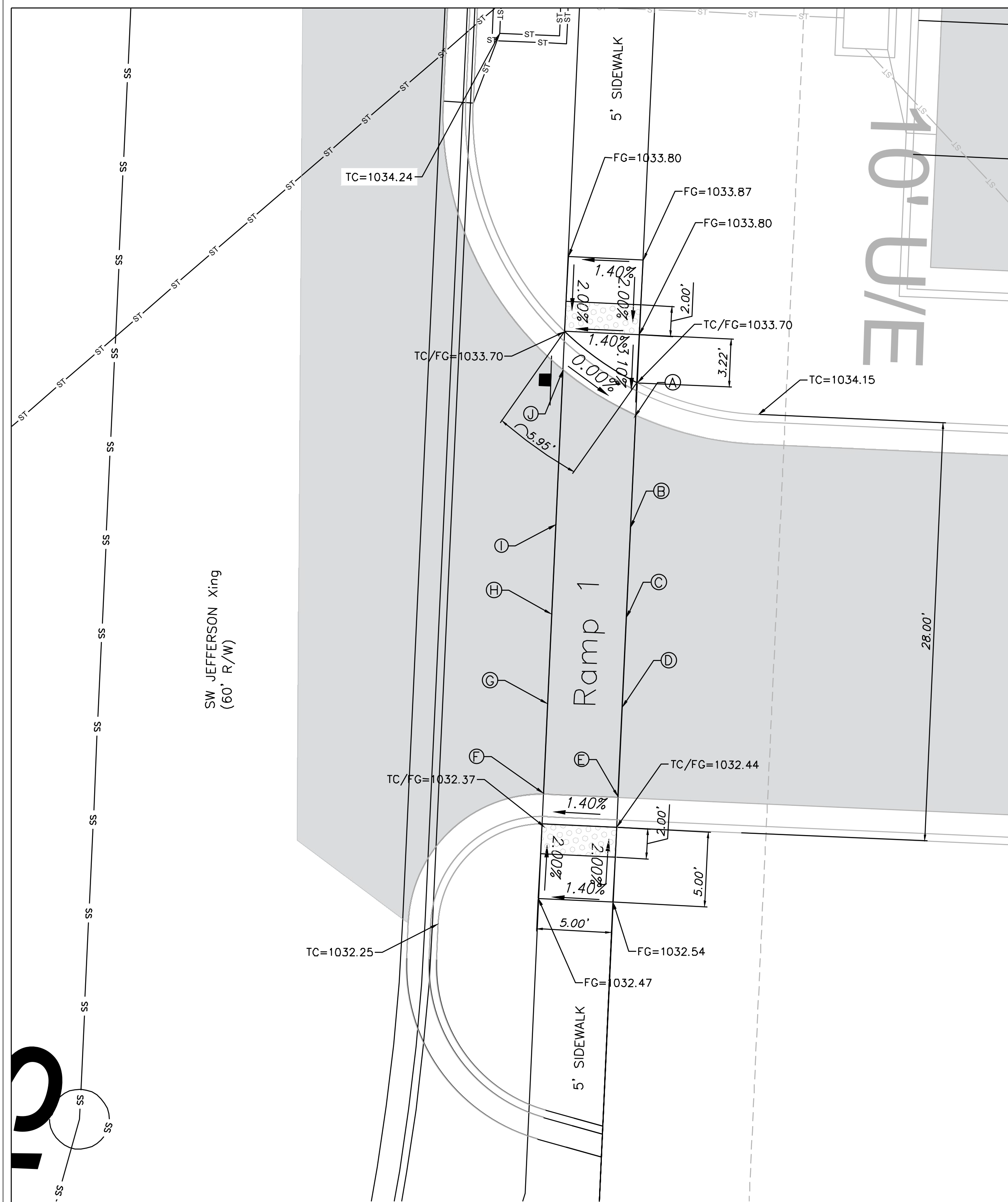
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**Legend:**

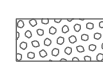
EX TC = Existing Top of Curb

EX FG = Existing Finished Grade

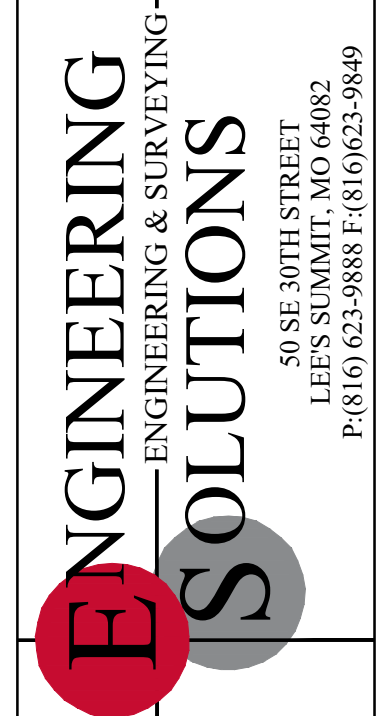
FG = Finished Grade

TC = Top of Curb

TC/FG = Top of Curb/Finished Grade

 Detectable Warning

SPOT ELEVATION TABLE				
	Ramp 1	Ramp 2		
Spot	Elevation	Elevation		
A	1033.70	1037.50		
B	1033.38	1037.33		
C	1033.07	1037.15		
D	1032.75	1036.98		
E	1032.44	1036.80		
F	1032.37	1036.73		
G	1032.70	1036.90		
H	1033.03	1037.08		
I	1033.36	1037.18		
J	1033.70	1037.43		

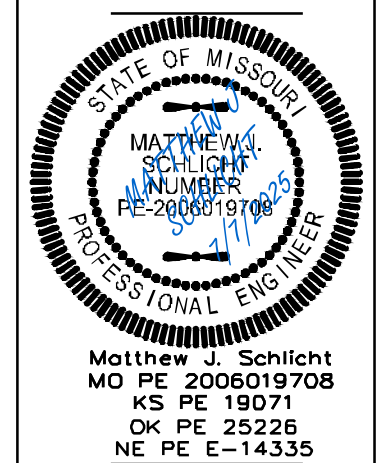


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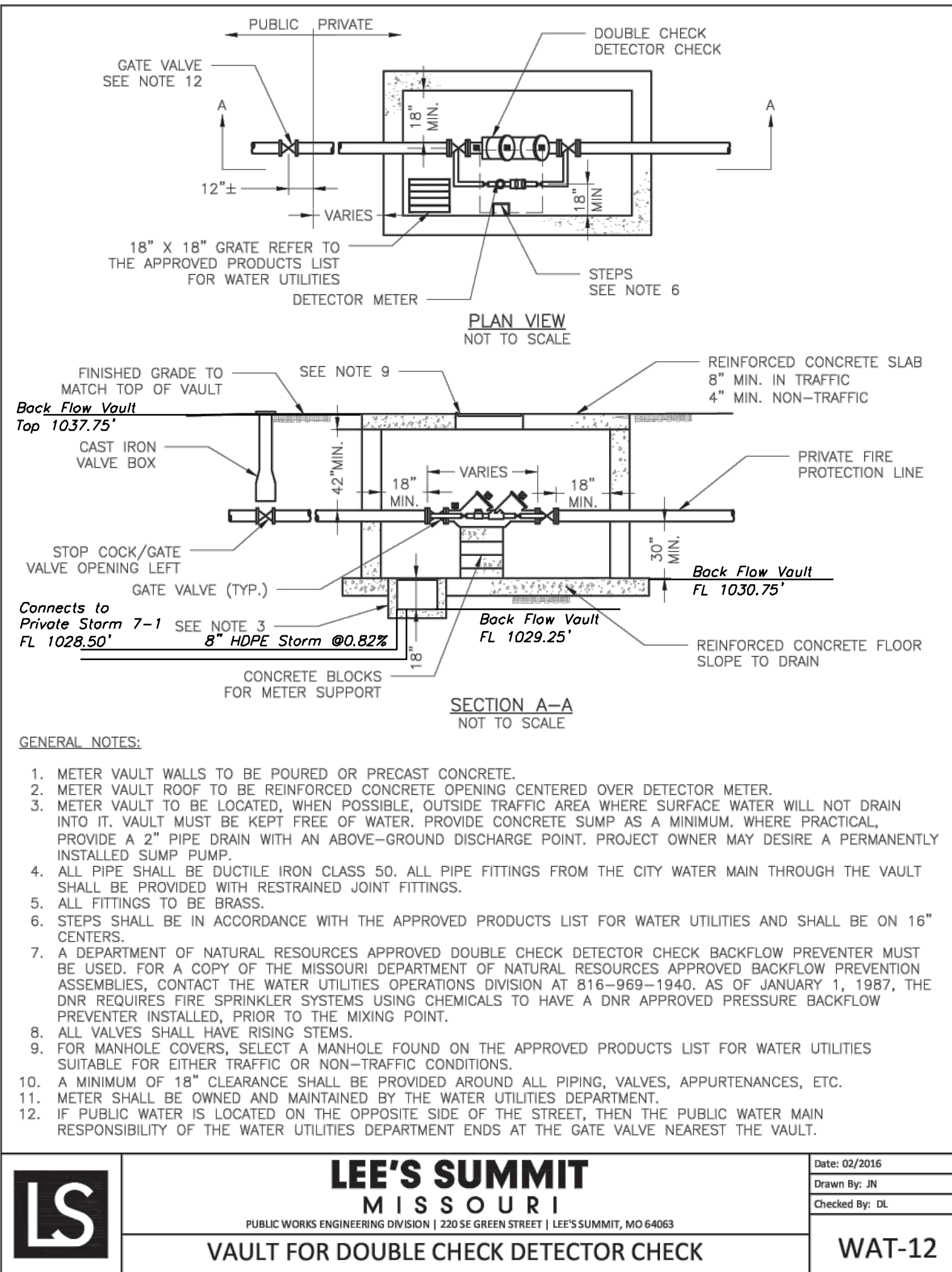


# UTILITY NOTES

- REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING PLANS FOR DUTY SERVICE SIZES AND EXACT LOCATIONS. CONTRACTOR TO CONFIRM SIZES OF ALL SERVICES PRIOR TO INSTALLATION. REFER TO ELECTRICAL PLANS FOR ELECTRICAL AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
- FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
- MAINTAIN A MINIMUM OF 5.5' COVER OVER ALL WATER SERVICES.
- MAINTAIN A MINIMUM OF 3.5' COVER OVERALL SANITARY SEWER.
- ADJUST ALL MANHOLES AND FRAMES TO FINISHED GRADES.
- ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT, MO. 12" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY/STORM SEWER AND WATER MAIN.
- MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND PUBLIC WATER MAIN.
- WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICE. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY CALL JULIE AT 1-800-892-0123 AT LEAST 72 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
- LOCATION OF SITE UTILITIES SHALL BE VERIFIED WITH PROPER UTILITY COMPANY PROVIDING SERVICE.
- ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
- SEE SITE SPECIFICATIONS "UNDERGROUND UTILITIES" FOR BACKFILLING AND COMPACTION REQUIREMENTS.
- GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
- ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM EXIST. PRIMARY WIRE ALONG EAST SIDE OF PROPERTY TO TRANSFORMER LOCATION. ASSOCIATED COST BY GENERAL CONTRACTOR.
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- FOR EXACT LIGHT POLE LOCATIONS SEE PHOTOMETRICS PLAN.
- MATERIAL PERMITTED FOR USE AS SANITARY SEWER PIPES SHALL BE SDR 26 FOR 4" & 6".
- NICOR WILL FURNISH AND INSTALL THE GAS MAINS AND GAS SERVICE UP TO AND INCLUDING THE METER. CONTRACTOR TO PROVIDE (1) 2" SCHEDULE 40 PVC CONDUIT UNDER PAVED AREAS IS PAVING IS COMPLETE PRIOR TO NICOR INSTALLING SERVICE LINE.
- CONTRACTOR TO FURNISH AND INSTALL (2) 4" SCHEDULE 40 PVC CONDUITS FOR TELEPHONE SERVICE FROM ATT. PEDESTAL TO BUILDING. ATT TO SUPPLY, PROVIDE AND INSTALL PRIMARY TELEPHONE SERVICE. CONDUITS TO BE INSTALLED A MINIMUM 24" BELOW FINISHED GRADE.
- CONTRACTOR TO FURNISH AND INSTALL (2) 4" SCHEDULE 40 PVC CONDUITS WITH PULL WIRE FOR PRIMARY ELECTRIC SERVICE. COMED TO PROVIDE AND INSTALL PRIMARY ELECTRIC SERVICE. CONTRACTOR TO FURNISH AND INSTALL (4) 4" SCHEDULE 40 PVC CONDUITS WITH PULL WIRE FOR SECONDARY ELECTRIC SERVICE. CONDUITS SHALL HAVE A MINIMUM OF 36" OF COVER. CONTRACTOR TO PROVIDE AND INSTALL TRANSFORMER PAD AND SECONDARY SERVICE IN ACCORDANCE WITH COMED SPECIFICATIONS AND REQUIREMENTS. TRANSFORMER PAD SHALL BE INSTALLED TO FINAL GRADE AND LEVELLED.
- CONTRACTOR TO FURNISH AND INSTALL (1) 3" SCHEDULE 40 PVC CONDUIT WITH PULL STRING FOR ISP SERVICE FROM ATT MAIN TO BUILDING. ATT TO SUPPLY, PROVIDE AND INSTALL ISP SERVICE. CONDUIT TO BE INSTALLED MINIMUM 24" BELOW FINISHED GRADE.
- ALL SEWER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE METROPOLITAN WATER RECLAMATION DISTRICT.
- ALL CONNECTIONS TO PUBLIC SANITARY SEWERS SHALL BE CITY OF LEE'S SUMMIT, MO STANDARD SPECIFICATIONS.
- THE CFA FIRE SERVICE PIPE SHALL BE DIP CLASS 52 PIPE.
- ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.
- ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- PROVIDE UNDERDRAINS FROM SEEPS OR SPRINGS ENCOUNTERED. EXTEND TO STORM SEWER SYSTEM OR DAYLIGHT AT THE BOTTOM OF THE FILL SLOPE.
- ALL PROPOSED PIPE CONNECTIONS TO EXISTING OR PROPOSED MANHOLES SHALL CONFORM TO ASTM-C923.
- TRACER WIRE IS REQUIRED PER STATE AND CITY OF LEE'S SUMMIT, MO STANDARDS.
- IF EXISTING SANITARY/WATER LATERALS ARE NOT TO BE USED/REUSED, THEY SHALL BE ABANDONED AT MAIN PER CITY OF LEE'S SUMMIT, MO STANDARDS.

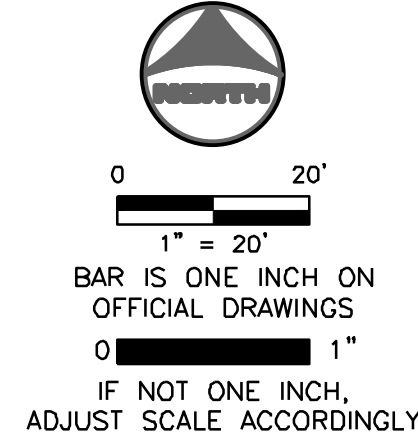
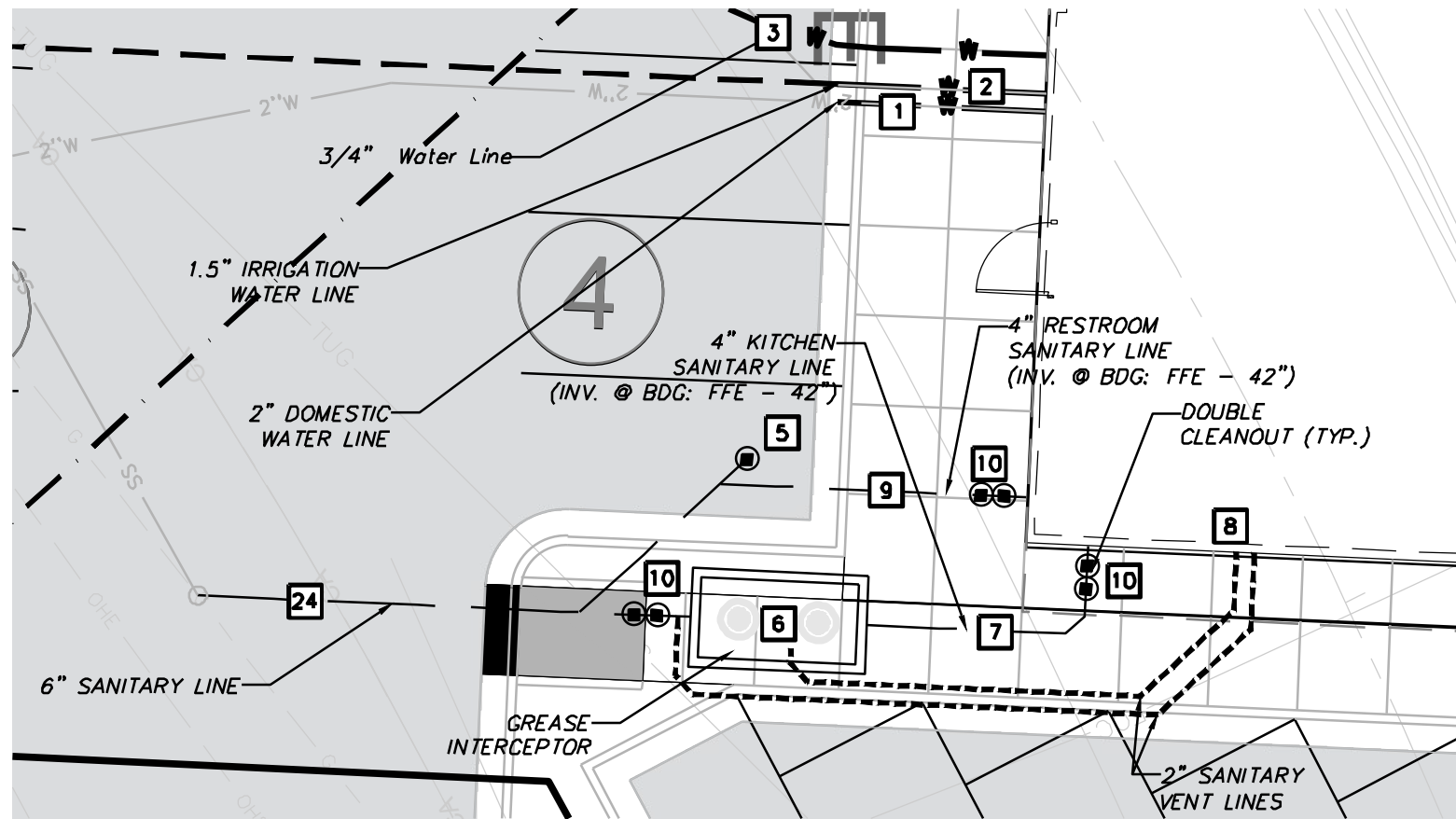
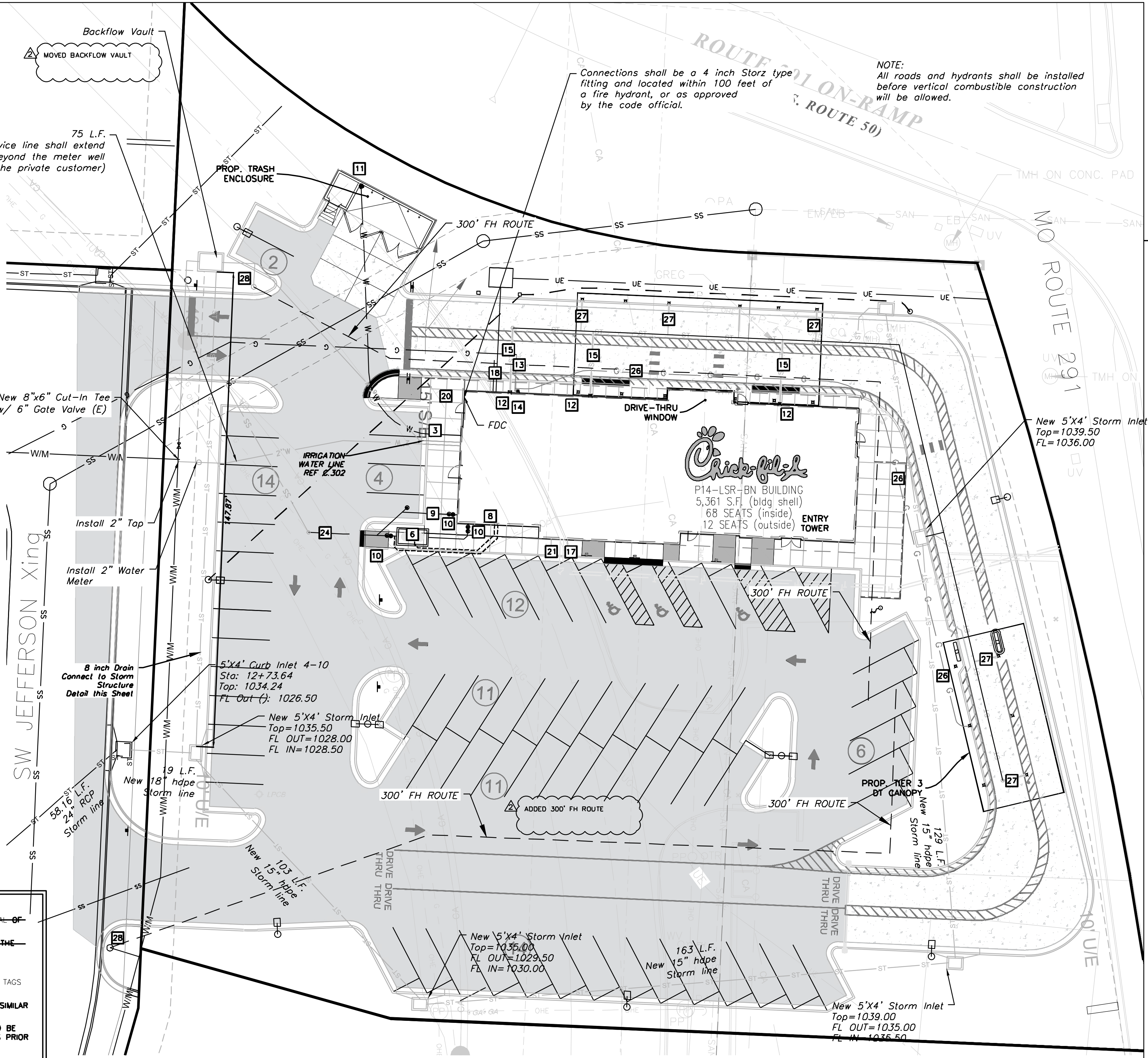
# MISCELLANEOUS NOTES:

- ALL BUILDING UTILITY SERVICE LOCATIONS TO BE VERIFIED W/ ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- FOR EXACT LIGHT POLE LOCATIONS SEE PHOTOMETRICS PLAN
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE VILLAGE AND/OR IDOT TO OBTAIN APPLICABLE PERMITS.
- WORK WITHIN THE ROW SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE SPECIFICATIONS.
- ONLY THE VILLAGE OF NILES PUBLIC WORKS DEPARTMENT MAY OPERATE EXISTING VALVES.
- THE CONTRACTOR MUST CONTACT THE VILLAGE OF NILES PUBLIC WORKS DEPARTMENT TO SCHEDULE INSPECTIONS FOR ALL WORK WITHIN THE ROW.
- TRACER WIRE ON THE WATER SERVICE SHALL BE CONNECTED TO THE TRACER WIRE ON THE WATER MAIN AND INSTALLED IN ACCORDANCE WITH THE VILLAGE SPECIFICATIONS.
- ANY WORK PERFORMED IN THE ROW SHALL BE PERFORMED BY A VILLAGE "QUALIFIED" CONTRACTOR AND MONITORED BY PUBLIC WORKS.



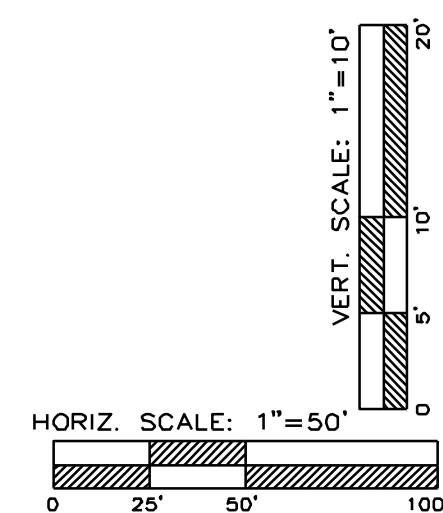
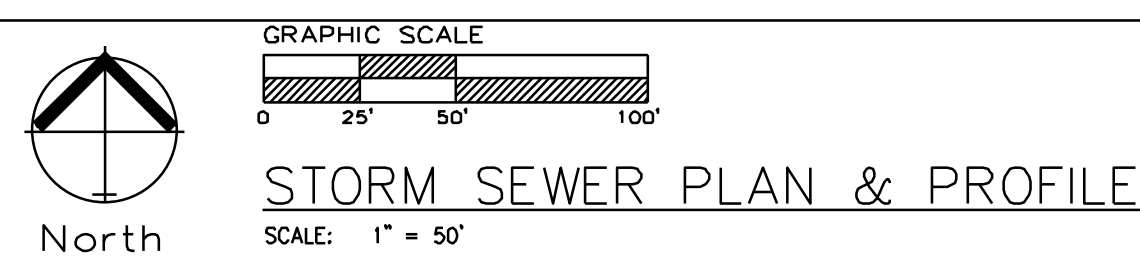
# LAYOUT NOTES

1. PAV. CONNECTION FEES FOR 2" DOMESTIC / 4" FIRE WATER SERVICE AND METER. DOMESTIC SERVICE TO SPLIT OFF FIRE SERVICE INTERNAL OF BUILDING.
2. 1/2" SOFT COPPER (TYPE K) IRRIGATION LINE TO HAVE SEPARATE METER LOCATION ADJACENT TO DOMESTIC WATER METER INTERNAL TO THE BUILDING. MAINTAIN MIN. 5.5' COVER.
3. 3/4" CW TO DUMPSTER POST HYDRANT (SOFT COPPER TYPE K). MAINTAIN MIN. 3.5' COVER.
4. CONNECTION TO EXIST. 15" SANITARY SEWER. CONTRACTOR TO VERIFY INVERT AT MAIN PRIOR TO ORDERING STRUCTURES. SEE SANITARY TAGS FOR INFO.
5. 4" OR 6" CLEAN OUT (SEE DETAIL). CLEANOUT SHALL BE FLUSH W/ PAVEMENT & INSTALLED UNDER A PROTECTIVE METAL BOX COVER SIMILAR TO A METER PIT COVER WITH A TRAFFIC BEARING LID.
6. PRECAST 1500 GAL. CAPACITY GREASE TRAP. PLUMBING CONTRACTOR TO COORDINATE WITH BUILDING CONTRACTOR. TOP OF MANHOLE TO BE 0.2' ABOVE FINISH GRADE AND MATCH SIDEWALK GRADES WHERE REQUIRED. VERIFY GREASE TRAP MEETS VILLAGE/COUNTY SPECIFICATIONS PRIOR TO INSTALLATION. REFER TO PLUMBING PLAN, SHEET P-101.
7. 4" KITCHEN WASTE LINE (SEE SANITARY TAGS FOR INFO).
8. 3" VENT LINE. CONNECT TO GREASE INTERCEPTOR. (SEE SHEET P-101 FOR LOCATION).
9. 4" RESTROOM WASTE LINE (SEE SANITARY TAGS FOR INFO).
10. 4" OR 6" TWO-WAY CLEAN OUT (REFER TO PLUMBING PLANS) (SEE DETAIL 37/C-403).
11. DUMPSTER POST HYDRANT. REFER TO THE FIXTURE CONNECTION SCHEDULE (P-303) DEPICTED ON THE PROJECT PLUMBING PLANS.
12. DOWNSPOUT FOR ROOF DRAINAGE (REFER TO ARCHITECTURAL PLANS).
13. PROPOSED GAS SERVICE (SEE NOTE 19).
14. COORDINATE GAS METER INSTALLATION WITH GAS COMPANY.
15. 8" PVC SDR 26 ROOF DRAIN PIPE SYSTEM (CONNECT TO SITE STORM DRAIN).
16. UNDERGROUND PRIMARY ELECTRIC SERVICE. (SEE NOTE 21).
17. UNDERGROUND PRIMARY TELEPHONE SERVICE. (SEE NOTE 20).
18. UNDERGROUND SECONDARY ELECTRIC SERVICE TO BUILDING. (SEE NOTE 21).
19. PROPOSED PAD MOUNTED TRANSFORMER PER ELECTRIC COMPANY STANDARDS. SEE SERVICE UTILITY NOTES, THIS SHEET.
20. 6" DUCTILE IRON PIPE - FIRE SERVICE. MAINTAIN MIN. 5.5' COVER.
21. UNDERGROUND ISP SERVICE (SEE NOTE 22).
22. INSTALL TRANSFORMER PAD (SEE NOTE 21).
23. EXISTING WATERMAIN (APPROX. LOCATION. CONTRACTOR TO VERIFY LOCATION, DEPTH, & SIZE.)
24. 6" SCHEDULE 40 PVC WATERMAIN QUALITY PIPE - SANITARY SERVICE PIPE
25. 6" PRESSURE TAP WITH VALVE & VALVE VAULT (CONTRACTOR TO VERIFY SIZE OF MAIN PRIOR TO ORDERING STRUCTURES)
26. 1.5" GAS SERVICE LINE TO DRIVE-THRU CANOPY
27. 6" PVC SDR 26 CANOPY DRAIN SYSTEM (CONNECT TO SITE STORM DRAIN)
28. FIRE HYDRANT ASSEMBLY AND 6" LEAD

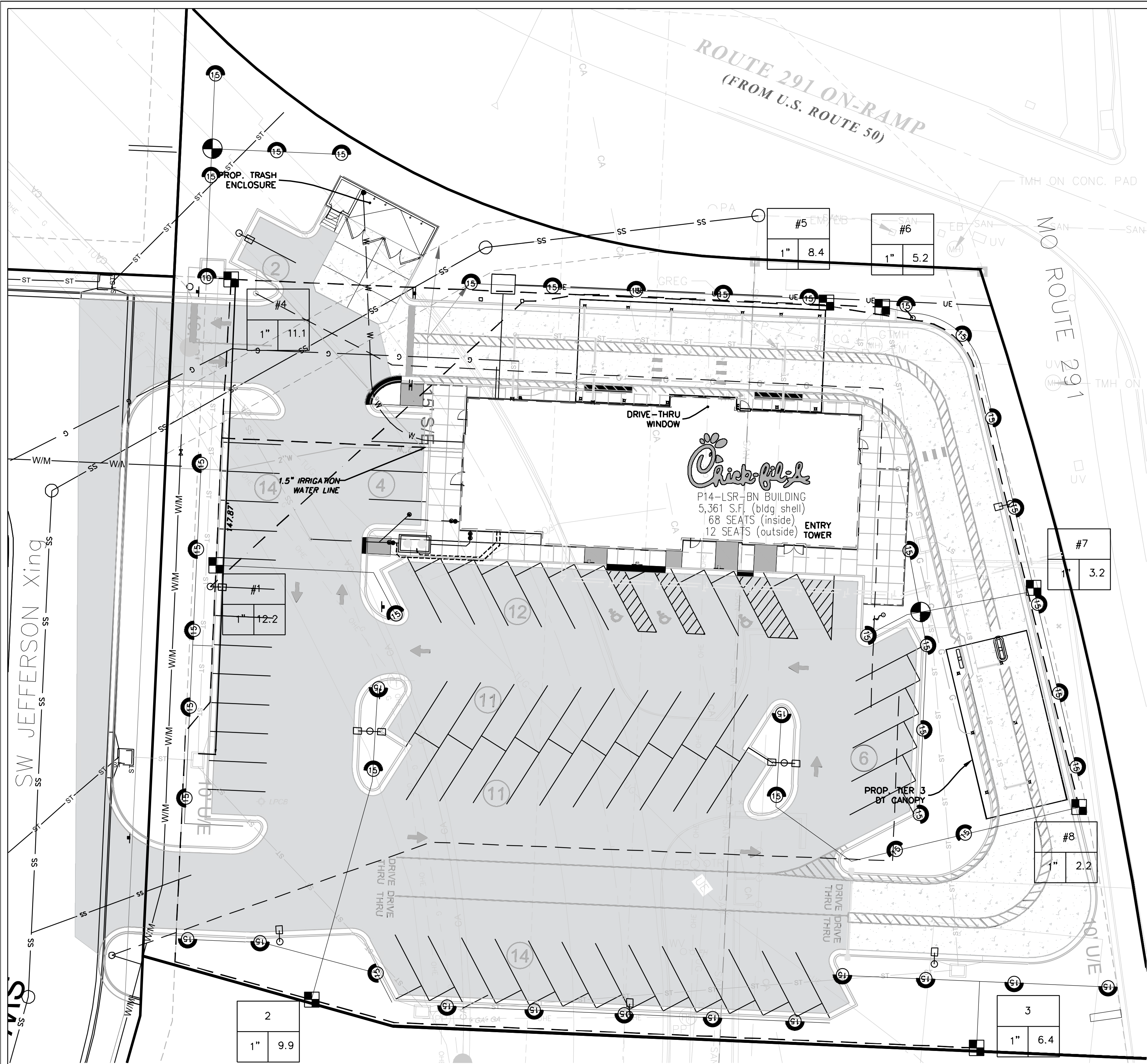


- ## ONSITE WATERLINE NOTES:
- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
  - ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED AUXILIARY GATE VALVE.
  - ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
  - ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
  - GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
- ## LEGEND:
- DENOTES MAINTAIN 18" VERTICAL SEPARATION PER IEPA & MWRD REQUIREMENTS











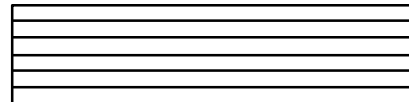
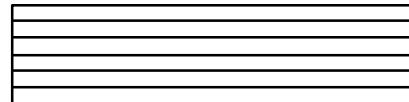






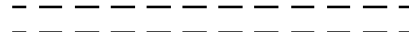
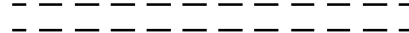
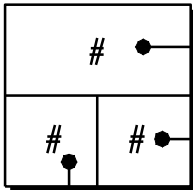








IRRIGATION SCHEDULE

<u>SYMBOL</u>	<u>MANUFACTURER/MODEL</u>	<u>QTY</u>	<u>ARC</u>	<u>PSI</u>	<u>RADIUS</u>
	Rain Bird 1804 15LCS	4	LCS	30	4'x 15'
	Rain Bird 1804 15RCS	5	RCS	30	4'x 15'
	Rain Bird 1804 15SST	2	SST	30	4'x 30'
	Rain Bird 1804 10H	16	180	30	10'
	Rain Bird 1804 10Q	3	90	30	10'
	Rain Bird 1804 12H	4	180	30	12'
	Rain Bird 1804 12Q	6	90	30	12'
	Rain Bird 1804 15H	9	180	30	15'
	Rain Bird 1804 15Q	8	90	30	15'
<u>SYMBOL</u>	<u>MANUFACTURER/MODEL</u>	<u>QTY</u>		<u>PSI</u>	
	Rain Bird XCZPGA-100-PRF 1"	4			
	Area to Receive Dripline	2415 l.f.		20	
	Rain Bird XFD-09-18				
<u>SYMBOL</u>	<u>MANUFACTURER/MODEL</u>	<u>QTY</u>			
	Rain Bird PGA Globe 1"	4			
	Rain Bird 44-NP 1"	1			
	Rain Bird ESP-LXD	1			
	Point of Connection 1"	1			
	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	1001 l.f.			
	Irrigation Mainline: PVC Class 200 SDR 21 1 1/2"	424.0 l.f.			
	Pipe Sleeve: PVC Class 200 SDR 21 2"	20.0 l.f.			
	Pipe Sleeve: PVC Class 200 SDR 21 4"	59.4 l.f.			
	Valve Callout				
	#	Valve Number			
	#	Valve Flow			
	#	Valve Size			

CRITICAL ANALYSIS

P.O.C. NUMBER: 01	Location LSMO
Water Source Information:	
FLOW AVAILABLE	1"
Point of Connection Size: Flow Available	25.12 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	40 PSI
Pressure Available:	40 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	18.25 GPM
Flow Available at POC:	25.12 GPM
Residual Flow Available:	6.87 GPM
Design Pressure:	30 PSI
Friction Loss:	2.82 PSI
Fittings Loss:	0.28 PSI
Elevation Loss:	0 PSI
Loss through Valve:	5.93 PSI
Pressure Req. at Critical Station:	39.0 PSI
Loss for Fittings:	0.04 PSI
Loss for Main Line:	0.43 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	0 PSI
Critical Station Pressure at POC:	39.5 PSI
Pressure Available:	40 PSI
Residual Pressure Available:	0.49 PSI

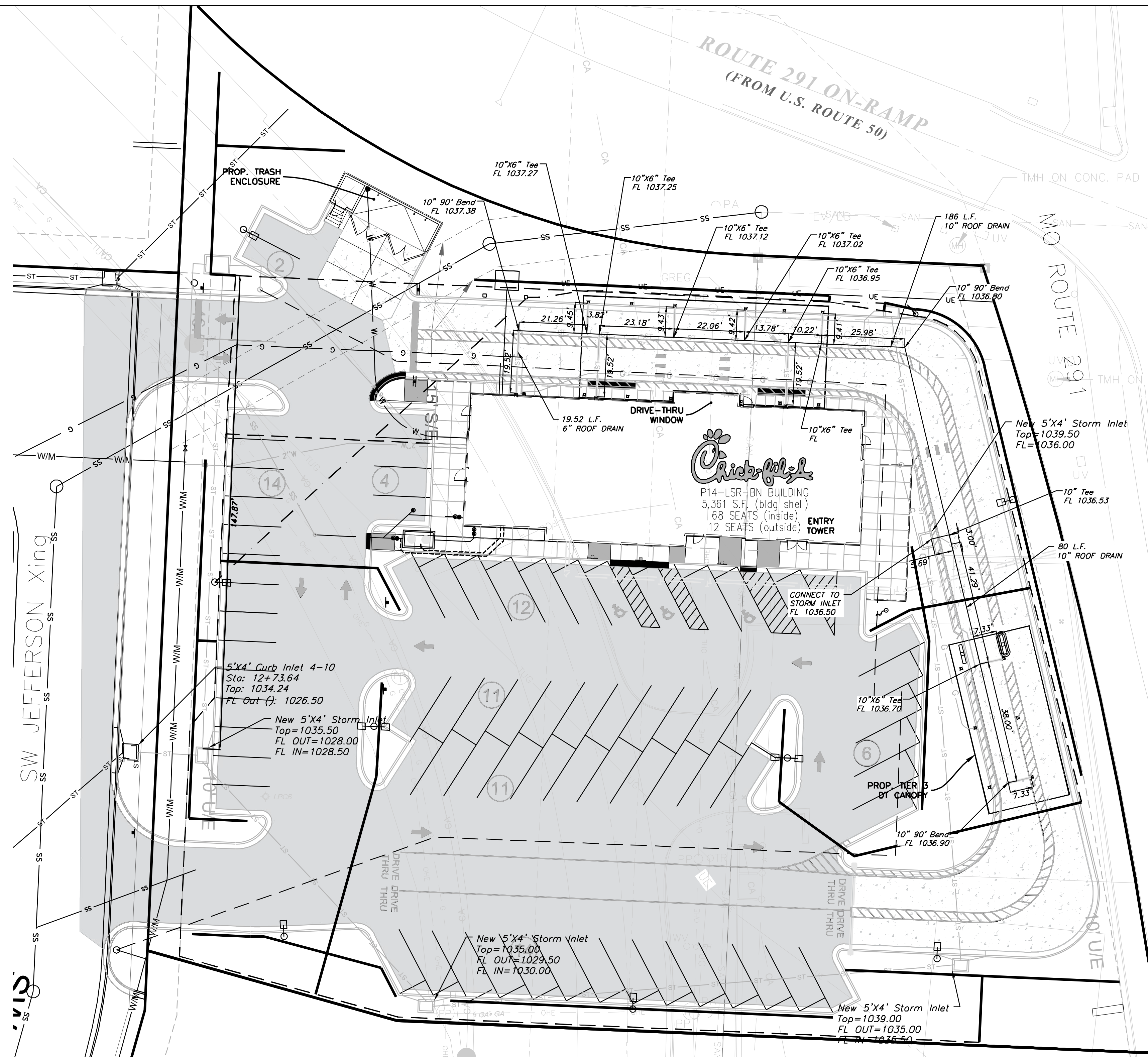
IRRIGATION SPECIFICATIONS

- IRRIGATION POINT OF CONNECTION SHALL BE CAPABLE OF DELIVERING A VARIABLE FLOW RATE OF 18 GPM AT A CONSTANT PRESSURE OF 40 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE. POINT OF CONNECTION SHALL BE ABLE TO MAINTAIN THE MAXIMUM FLOW RATE AND PRESSURE FOR THE DURATION OF AN IRRIGATION CYCLE. CONTRACTOR SHALL VERIFY THE SEPARA METERS PRIOR TO CONSTRUCTION, AND NOTIFY OWNER'S REPRESENTATIVE AND IRRIGATION CONSULTANT IF THEY CANNOT BE MET.
- IF THE POINT OF CONNECTION EXCEEDS THE ABOVE PRESSURE REQUIREMENTS, A PRESSURE REGULATOR SHALL BE INSTALLED AT THE OWNER'S EXPENSE. PRESSURE REGULATOR SHALL BE SET AT THE PRESSURE RECOMMENDED ABOVE.
- POWER FOR THE IRRIGATION CONTROLLER, PUMP AND OTHER ELECTRICAL COMPONENTS SHALL BE PROVIDED BY OTHER. CONTRACTOR SHALL VERIFY IF POWER AVAILABLE MEETS THE REQUIREMENTS OF THE COMPONENT'S MANUFACTURER.
- IF POWER AVAILABLE IS INADEQUATE, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
- IRRIGATION SYSTEM IS DISPLAYED SCHEMATIC IN NATURE. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY TO ACCOMMODATE FOR LANDSCAPING CHANGES, PLANTING BEDS OR OTHER OBSTRUCTIONS. THESE ADJUSTMENTS MAY BE MADE ONLY AFTER NOTIFYING THE OWNER'S REPRESENTATIVE.
- SOME IRRIGATION COMPONENTS AND PIPING ARE SHOWN IN HARDSCAPE AREAS AND OUTSIDE OF PROPERTY LINES TO IMPROVE ON THE READABILITY OF THE IRRIGATION PLAN. ALL COMPONENTS AND PIPING SHALL BE INSTALLED INSIDE OF THE PROPERTY LINES AND OUTSIDE OF HARDSCAPE AREAS.
- MAINLINE, LATERALS AND CONTROL WIRES SHALL BE INSTALLED INSIDE THE SAME TRENCH WHENEVER POSSIBLE.
- SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- CONTROLLER SHALL BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS.
- ALL CONTROLLER/DECODER WIRE SHALL BE THE 2-WIRE CABLE SPECIFIED BY THE CONTROLLER MANUFACTURER.
- ALL FIELD WIRE ABOVE GRADE OR WITHIN STRUCTURE TO BE INSTALLED IN CONDUIT PER LOCAL CODE.
- ALL UNDERGROUND SPLICES TO UTILIZE 3M DBY, OR KING WATERPROOF SPLICE KITS, DEPENDING ON NUMBER AND SIZE OF WIRES. ALL SPLICES SHALL BE MADE INSIDE A VALVE BOX.
- DEPTH OF IRRIGATION PIPING: 18" ON MAINLINE; 12" ON LATERALS.
- SLEEVING UNDER PAVED AREAS SHALL BE INSTALLED AT A DEPTH OF 24".

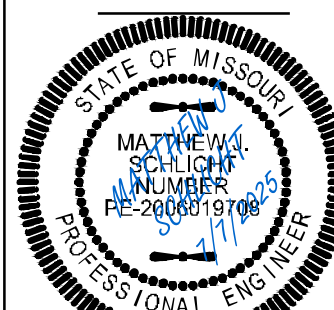


0 20'  
1" = 20'  
BAR IS ONE INCH ON  
OFFICIAL DRAWINGS  
0 1"  
IF NOT ONE INCH,  
ADJUST SCALE ACCORDINGLY





0 20'  
1" = 20'  
BAR IS ONE INCH ON  
OFFICIAL DRAWINGS  
0 1"  
IF NOT ONE INCH,  
ADJUST SCALE ACCORDINGLY



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

REVISIONS	
REV. 6/2/2025	
REV. 6/23/2025	
REV. 7/7/2025	

Roof Drain Plan  
Construction Plans for:  
Lot 8, Oldham Village  
Lee's Summit, Jackson County, Missouri

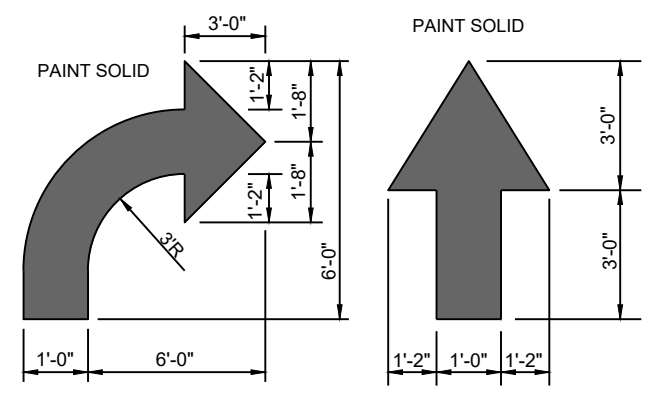
Project:  
FDP, Lot 8  
Issue Date:  
December 2, 2024

Lot 8, Oldham Village  
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

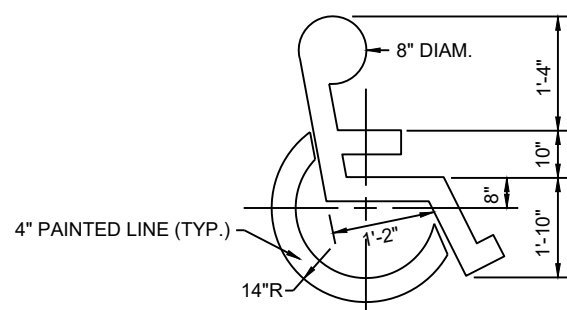
Professional Registration  
Missouri  
Engineering 200502186-D  
Surveying 2005008319-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

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





1A DIRECTIONAL ARROW  
C-400 NOT TO SCALE

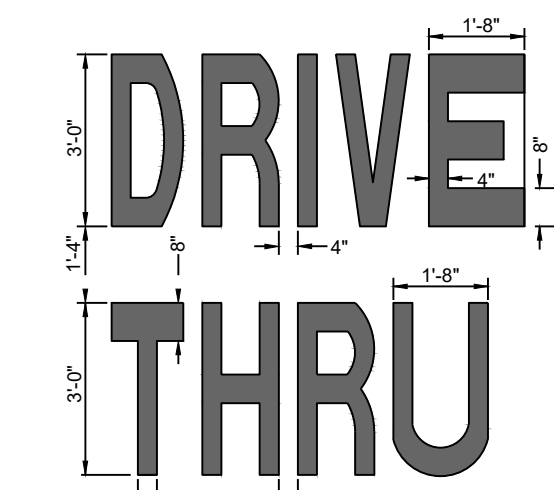


1B ACCESSIBILITY SYMBOL  
C-400 NOT TO SCALE

NOTES:

1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS (SEE DETAIL 5/C-400).
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE, UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

1 PAVEMENT MARKINGS - 1  
C-400 NOT TO SCALE

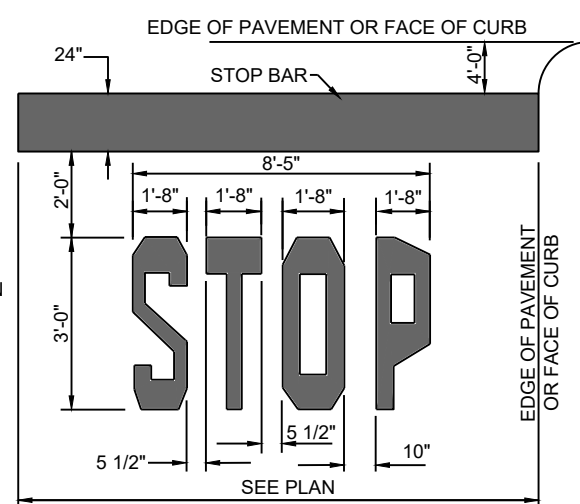


2A DRIVE-THRU  
C-400 NOT TO SCALE

NOTES:

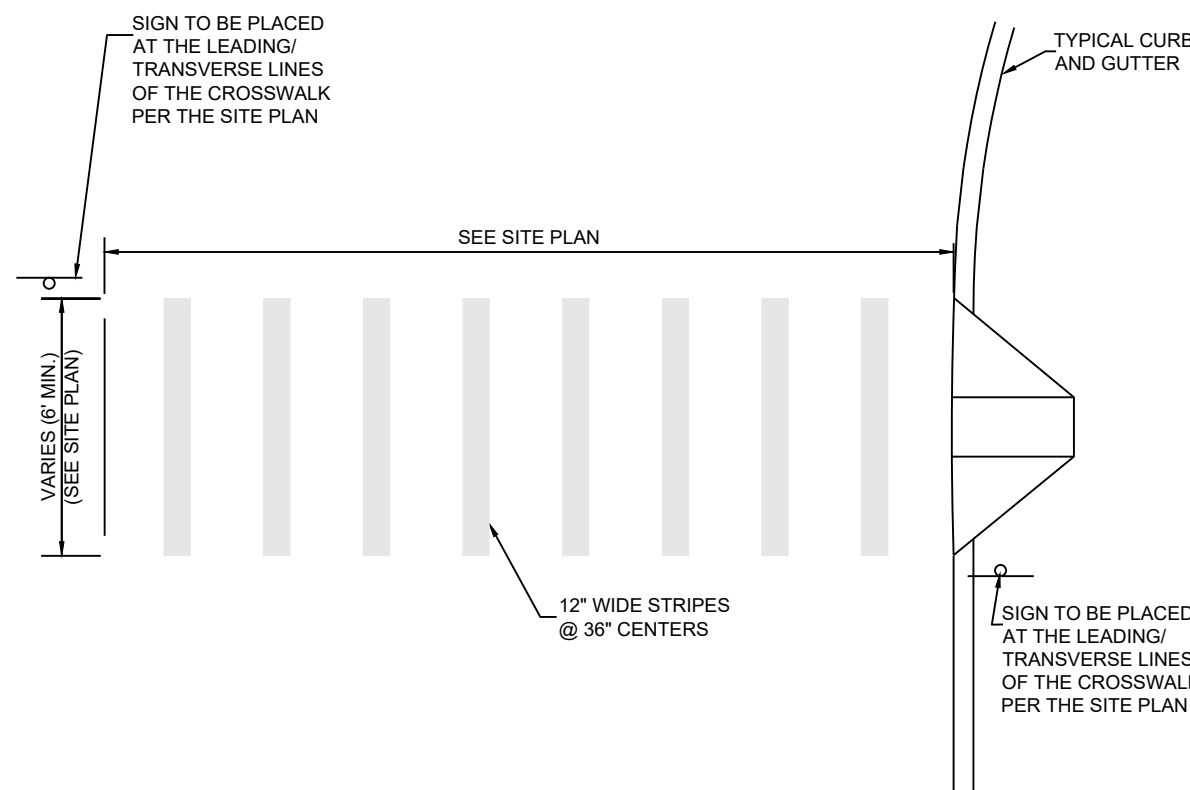
1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS.
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE, UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

NOTE:  
IF STOP SIGN IS PROPOSED, "STOP" LETTERING GRAPHIC IS NOT REQUIRED.



2B STOP BAR  
C-400 NOT TO SCALE

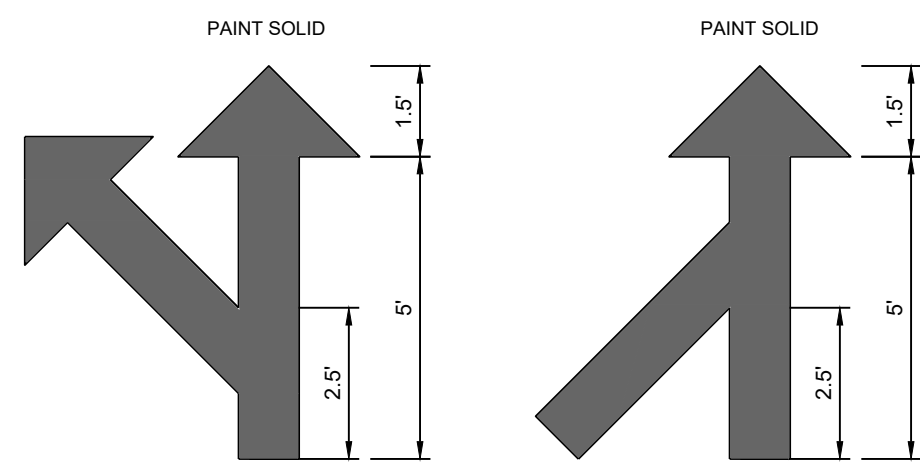
2 PAVEMENT MARKINGS - 2  
C-400 NOT TO SCALE



NOTES:

1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS (SEE DETAIL 5/C-400).
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT AND YELLOW REFLECTIVE PAINT ON CONCRETE.

3 CROSSWALK MARKINGS  
C-400 NOT TO SCALE



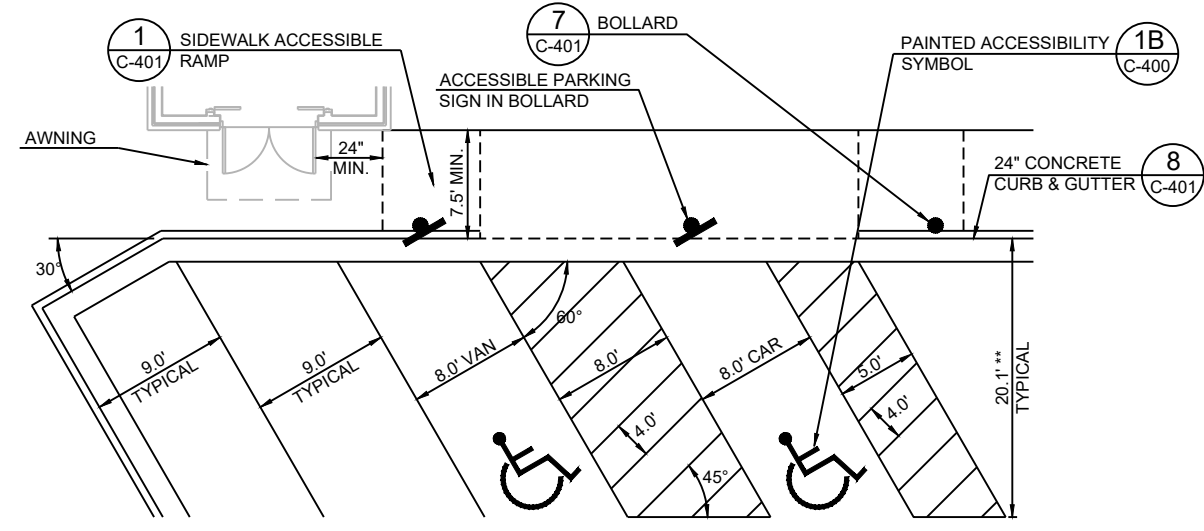
MULTI-LANE SPLIT

MULTI-LANE MERGE

NOTES:

1. GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS (SEE DETAIL 5/C-400).
2. CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE.

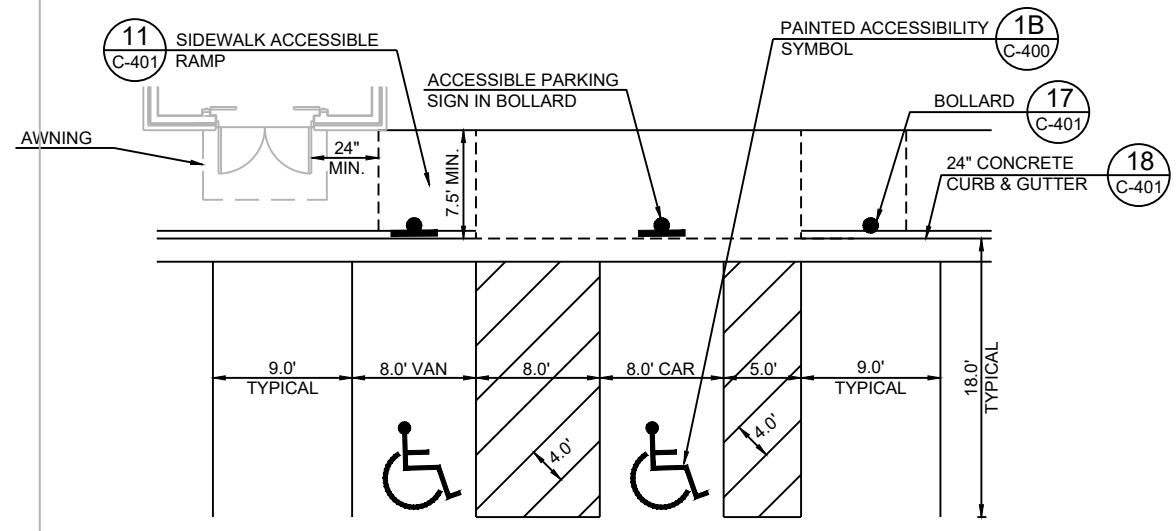
4 MULTI-LANE DIRECTIONAL GRAPHICS  
C-400 NOT TO SCALE



NOTES:

1. ACCESSIBLE PARKING AND ACCESSIBLE AISLES SHALL NOT EXCEED 1.5% IN SLOPE IN ANY DIRECTION. IF ONLY ONE ACCESS AISLE IS INSTALLED, IT IS TO BE A VAN SIZE.
2. PARKING STALL DIMENSIONING SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITY'S AND ADA STANDARDS. SEE SITE PLAN FOR COMPLETE STRIPING LAYOUT.
3. GENERAL CONTRACTOR SHALL REFER TO CHICK-FILA PARKING LOT STRIPING SPECIFICATIONS, THIS DETAIL.
4. CONTRACTOR SHALL USE 4" WIDE WHITE REFLECTIVE PAINT FOR STRIPING ON ASPHALT PARKING LOTS.
5. CONTRACTOR SHALL USE 4" WIDE YELLOW REFLECTIVE PAINT FOR STRIPING ON CONCRETE PARKING LOTS.
6. ACCESSIBLE PARKING AND ACCESSIBLE AISLE STRIPING COLOR SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.
7. NO WHEEL STOPS TO BE INSTALLED WHEN PARKING IS ADJACENT TO SIDEWALK.
8. ADA SIGNS IN BOLLARDS AND BOLLARDS SHALL BE INSTALLED WHEN PARKING IS ADJACENT TO FLUSH CURB OR A RAMP.
9. ALL DIMENSIONS ARE TO CENTER OF STRIPE UNLESS OTHERWISE NOTED.
10. STRIPING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

5 PARKING STALL LAYOUT AND STRIPING  
C-400 NOT TO SCALE



PARKING LOT STRIPING SPECIFICATIONS:

STANDARDS:

1. ALWAYS FOLLOW ALL APPLICABLE GOVERNING AUTHORITY'S STANDARDS.
2. SURFACES SHOULD BE CLEAN, DRY, AND FREE FROM LOOSE OR PEELING PAINT. REMOVE ALL OIL, DUST, GREASE, DIRT, AND OTHER FOREIGN MATERIAL TO ENSURE ADEQUATE ADHESION. DO NOT APPLY WHEN AIR OR SURFACE TEMPERATURES ARE BELOW 40°F.
3. APPLY SHERWIN-WILLIAMS SETFAST PREMIUM ALKYO ZONE MARKING PAINT A300 WHITE OR A303 YELLOW USING EITHER AIRLESS OR CONVENTIONAL LINE STRIPING EQUIPMENT. USE THE FOLLOWING SETTINGS AS A GUIDE. ACTUAL SETTINGS DEPEND ON ATMOSPHERIC CONDITIONS AT THE TIME OF APPLICATION:

AIRLESS

- PRESSURE
- NOSE
- TIP
- FILTER
- REDUCTION

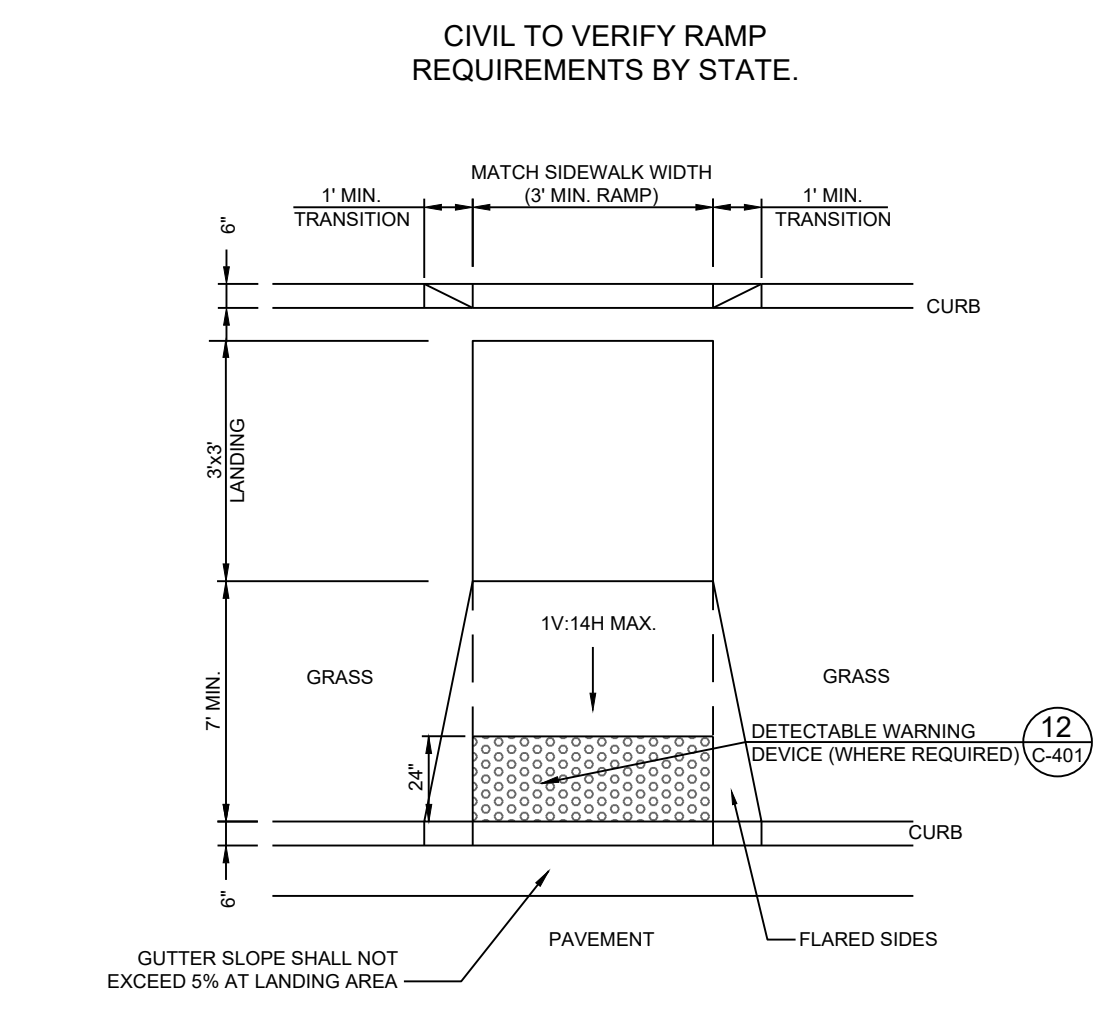
1800-2700 PSI  
2/2" ID  
0.015"-0.017"  
80 MESH  
ONLY IF NECESSARY, UP TO 1PT/GAL  
VM&P NAPTHA R1K3

CONVENTIONAL

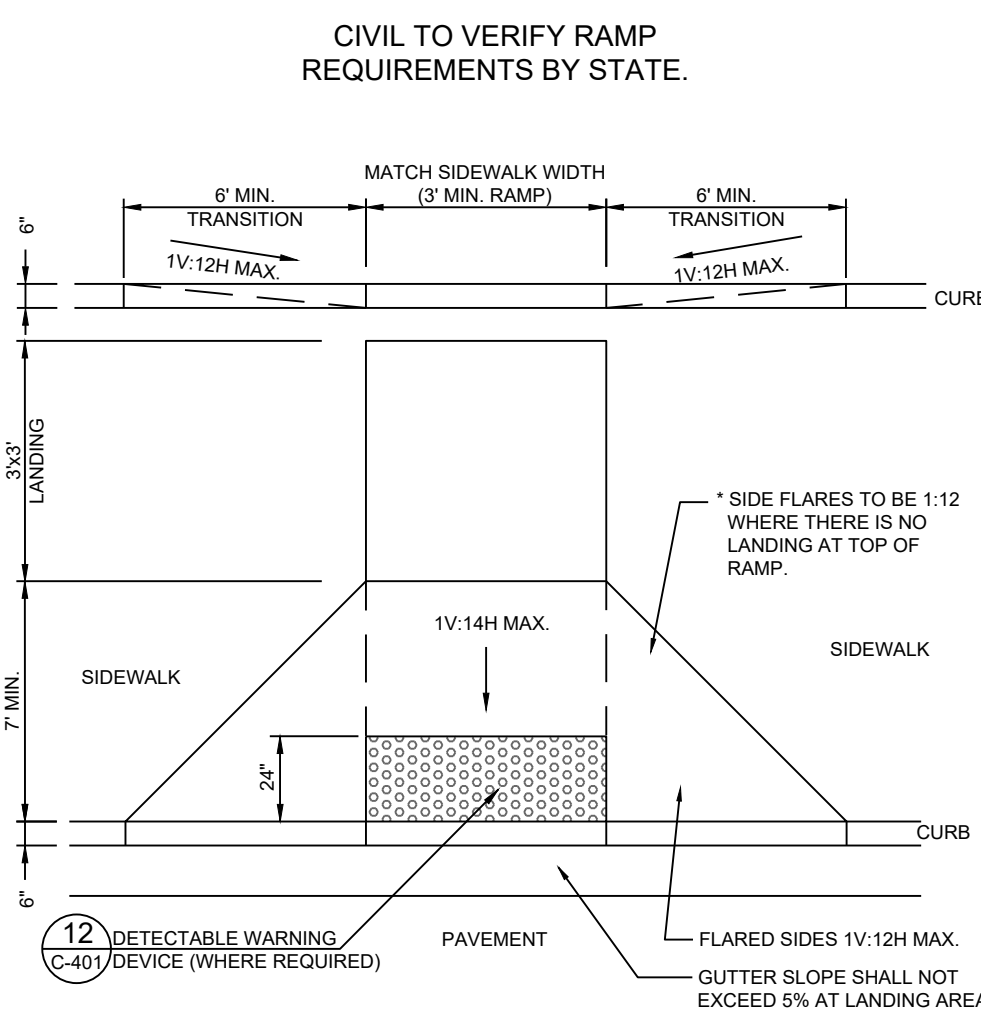
- GUN
- FLUID NOZZLE
- AIR NOZZLE
- ATOMIZATION PRESSURE
- FLUID PRESSURE
- REDUCTION

BLUNKS 21 (BLEEDER) OR EQUIVALENT  
#69  
INTERNAL MIX, #709  
45-60 PSI  
40-70 PSI  
ONLY IF NECESSARY, UP TO 1PT/GAL  
VM&P NAPTHA R1K3

- SHERWIN WILLIAMS, H&C SHARK GRIP SLIP RESISTANT ADDITIVE TO BE MEASURED AND ADDED TO ALL PAINT PER MANUFACTURER'S WRITTEN SPECIFICATIONS. MIX THOROUGHLY PER MANUFACTURER'S RECOMMENDATIONS SO THAT NO CLUMPING IS APPARENT AND UNTIL EVEN DISTRIBUTION IS ACHIEVED. MAINTAIN EVEN DISTRIBUTION OF ADDITIVE IN PAINT THROUGHOUT THE APPLICATION PROCESS.
- MIX PAINT THOROUGHLY BY ROVING, STIRRING, OR POWER AGITATION BEFORE USE. APPLY AT 10 MILS. WET TO ACHIEVE A SPREAD RATE OF 400-500 LINEAL FEET OF STANDARD 4" STRIPE PER GALLON. APPLIED AT THIS RATE AT 70 DEGREES F AND 50% RELATIVE HUMIDITY, PAINT WILL DRY WITH NO TRAFFIC PICKUP AFTER 20 MINUTES.
- GENERAL CONTRACTOR TO RE-STRIP THE LOT 45 DAYS AFTER OPENING.

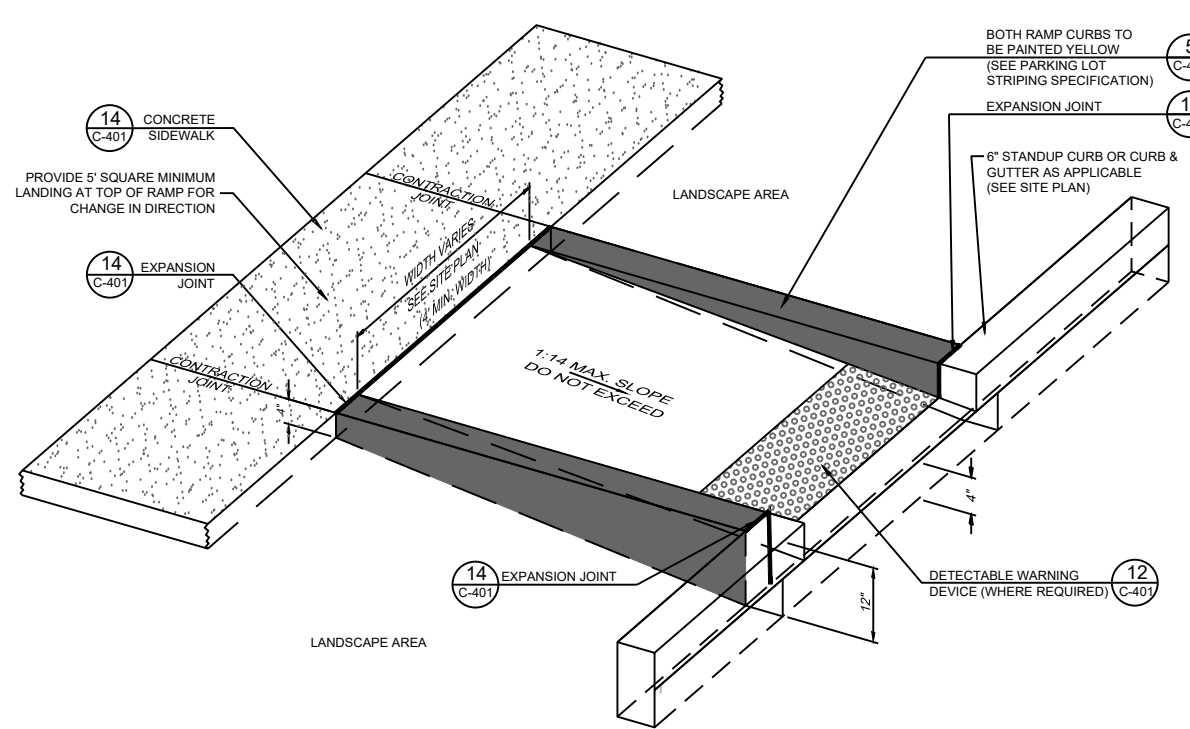


8 CURB RAMP w/ SHORT FLARED SIDES  
C-400 NOT TO SCALE

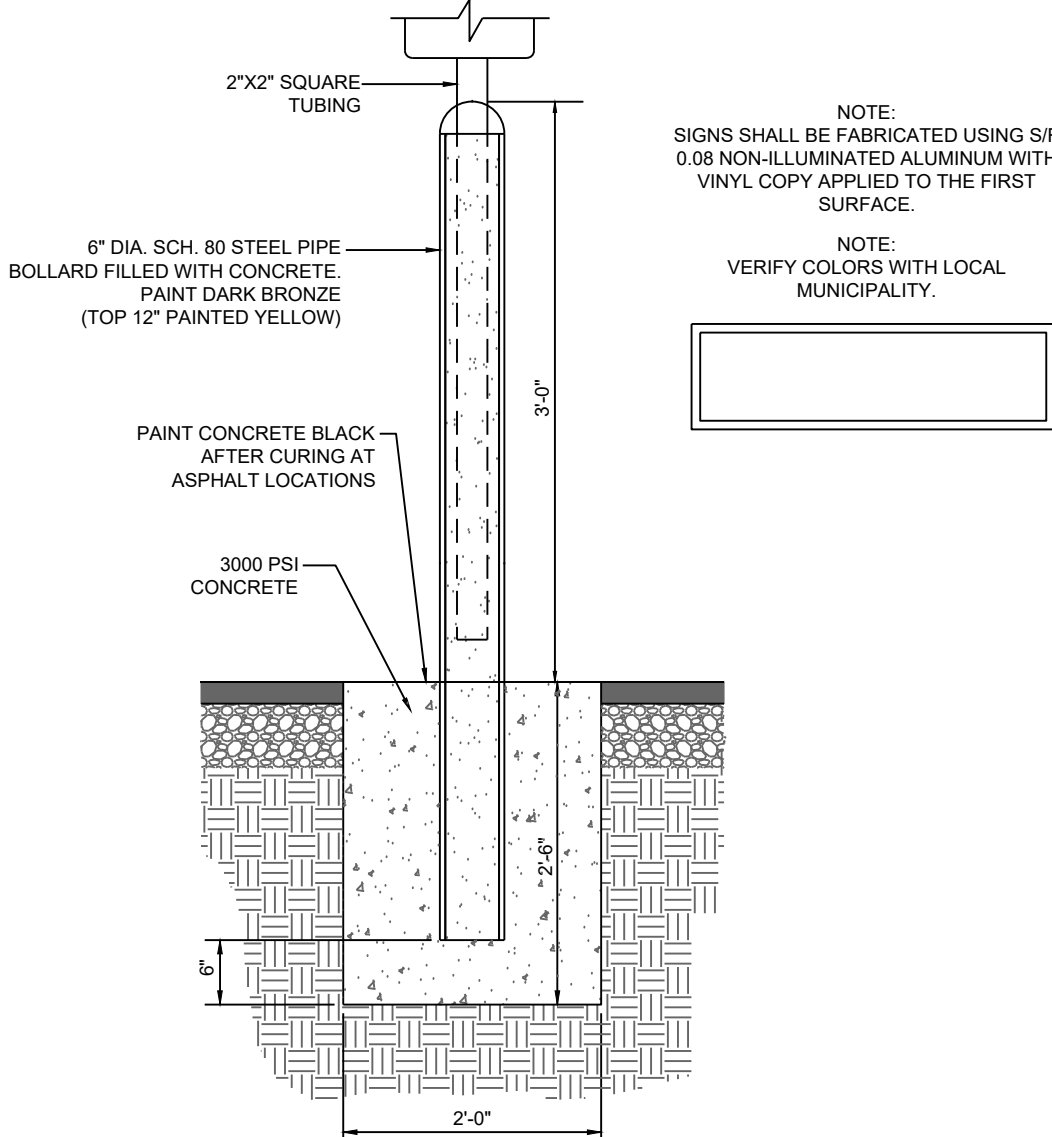


9 CURB RAMP w/ FLARED SIDES  
C-400 NOT TO SCALE

CIVIL TO VERIFY RAMP REQUIREMENTS BY STATE.

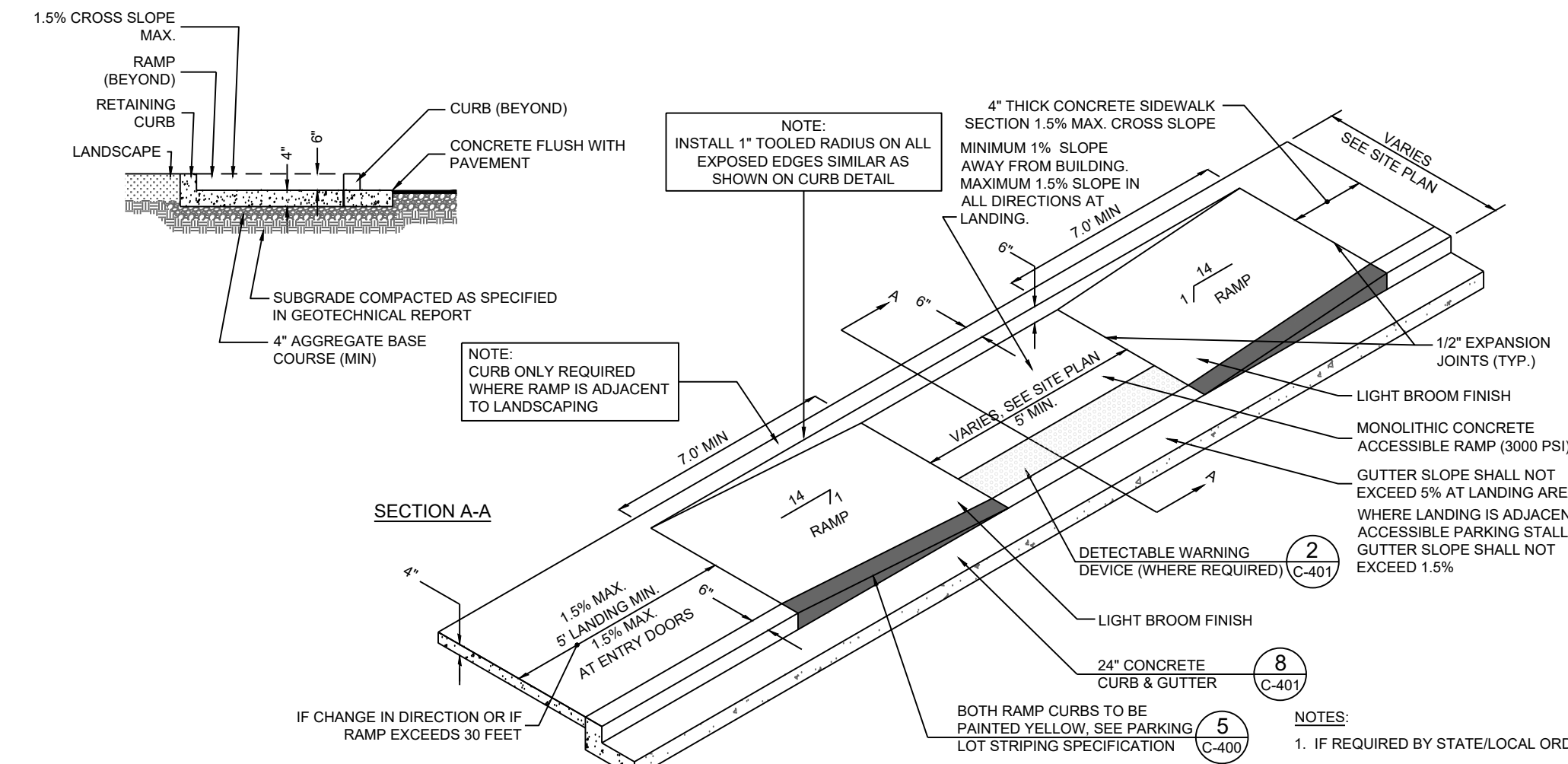


10 RETURNED CURB RAMP  
C-400 NOT TO SCALE

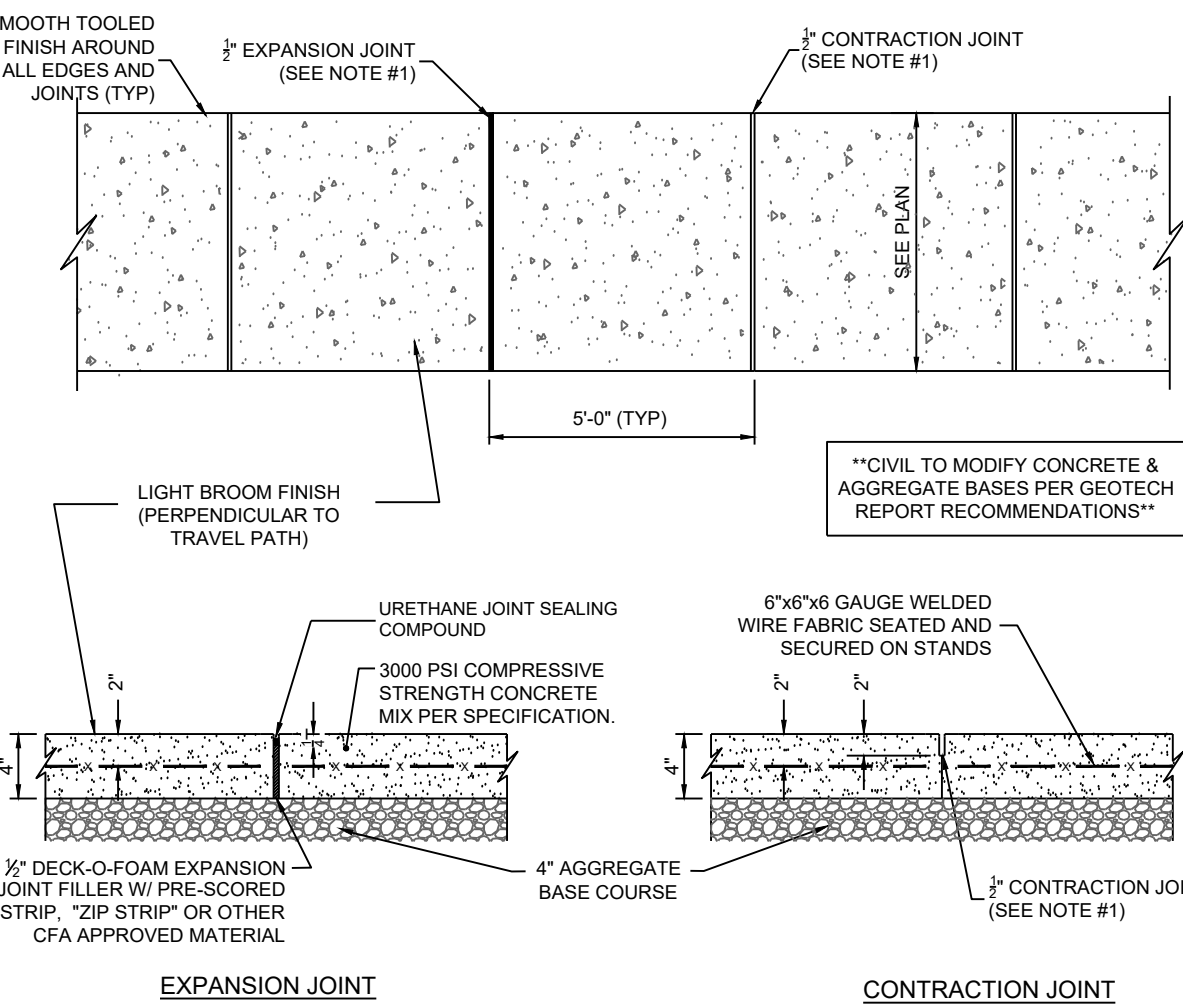


7 BOLLARD MOUNTED SIGN  
C-400 NOT TO SCALE

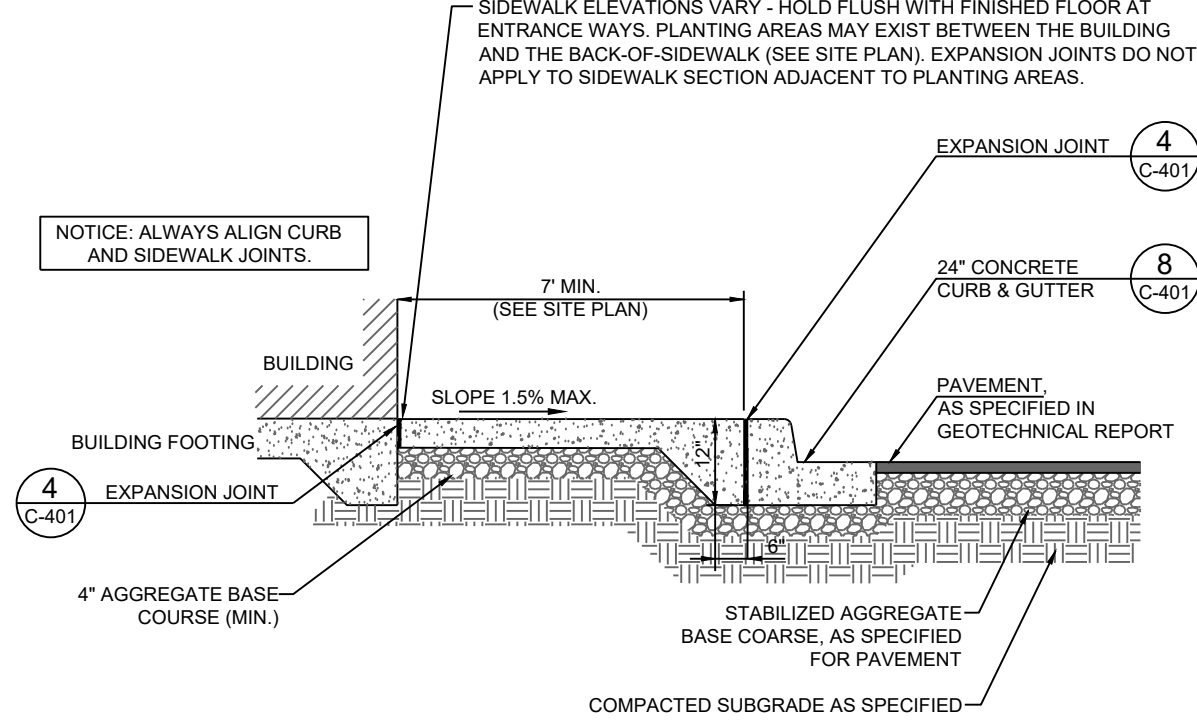




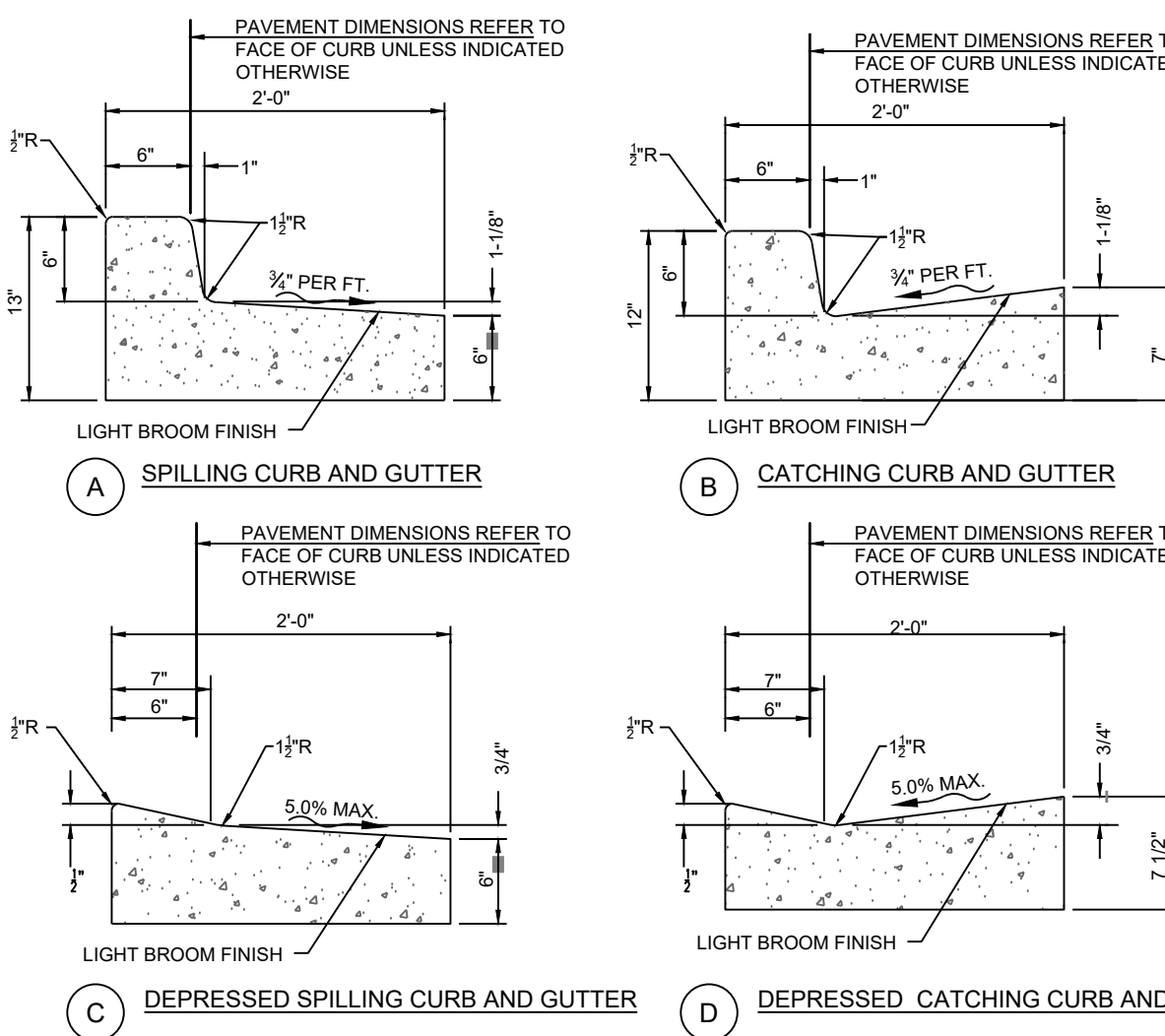
**1 SIDEWALK ACCESSIBLE RAMP**  
C-401 NOT TO SCALE



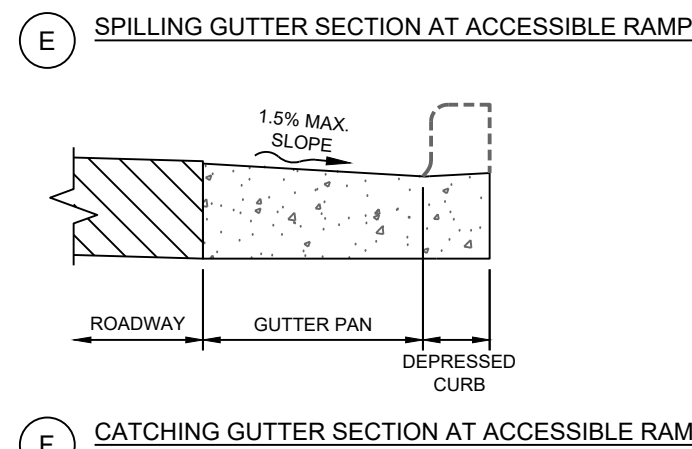
**4 CONCRETE SIDEWALK**  
C-401 NOT TO SCALE



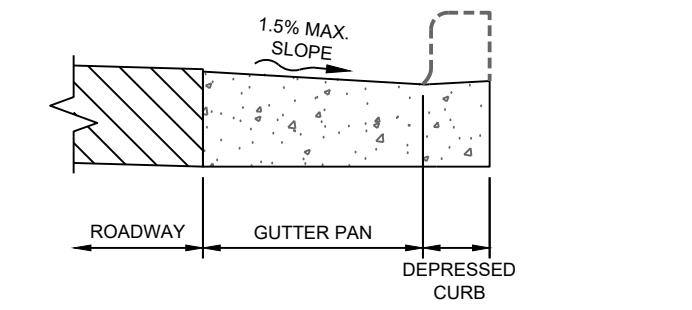
**5 CONCRETE SIDEWALK w/ CURB & GUTTER**  
C-401 NOT TO SCALE



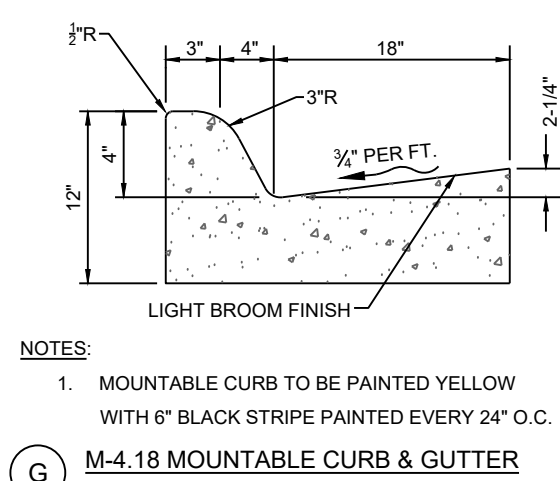
**8 CONCRETE CURB & GUTTER**  
C-401 NOT TO SCALE



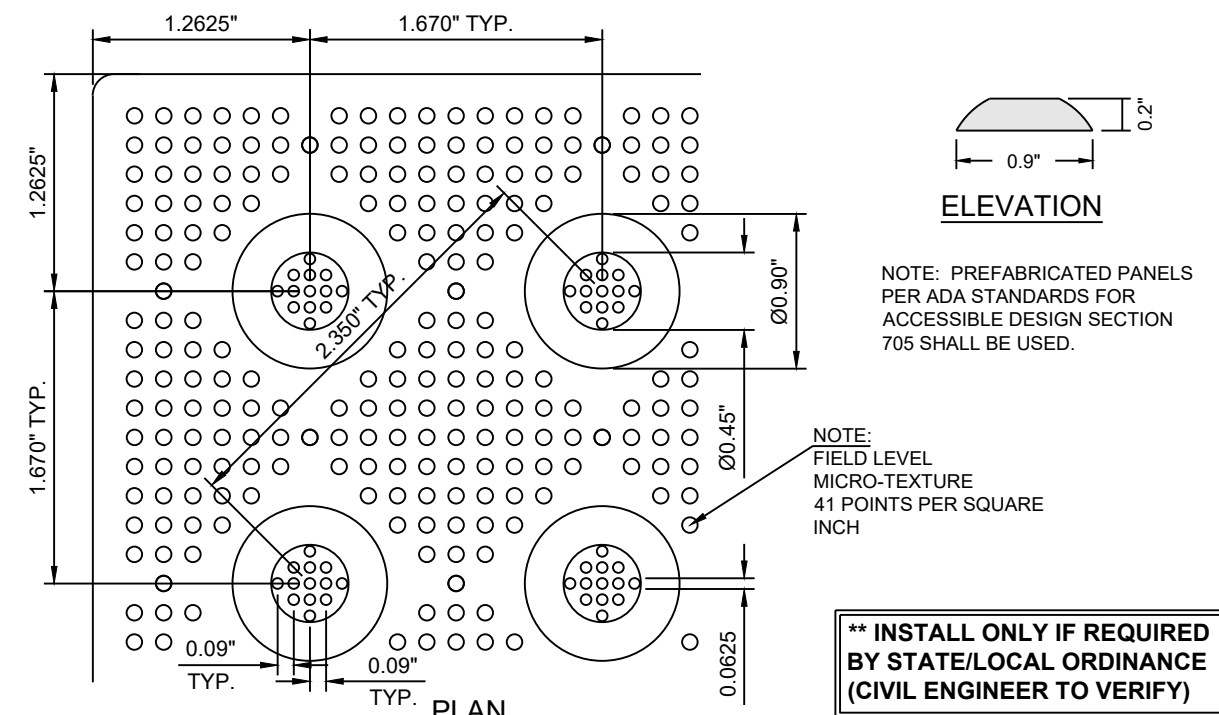
**E SPILLING GUTTER SECTION AT ACCESSIBLE RAMP**



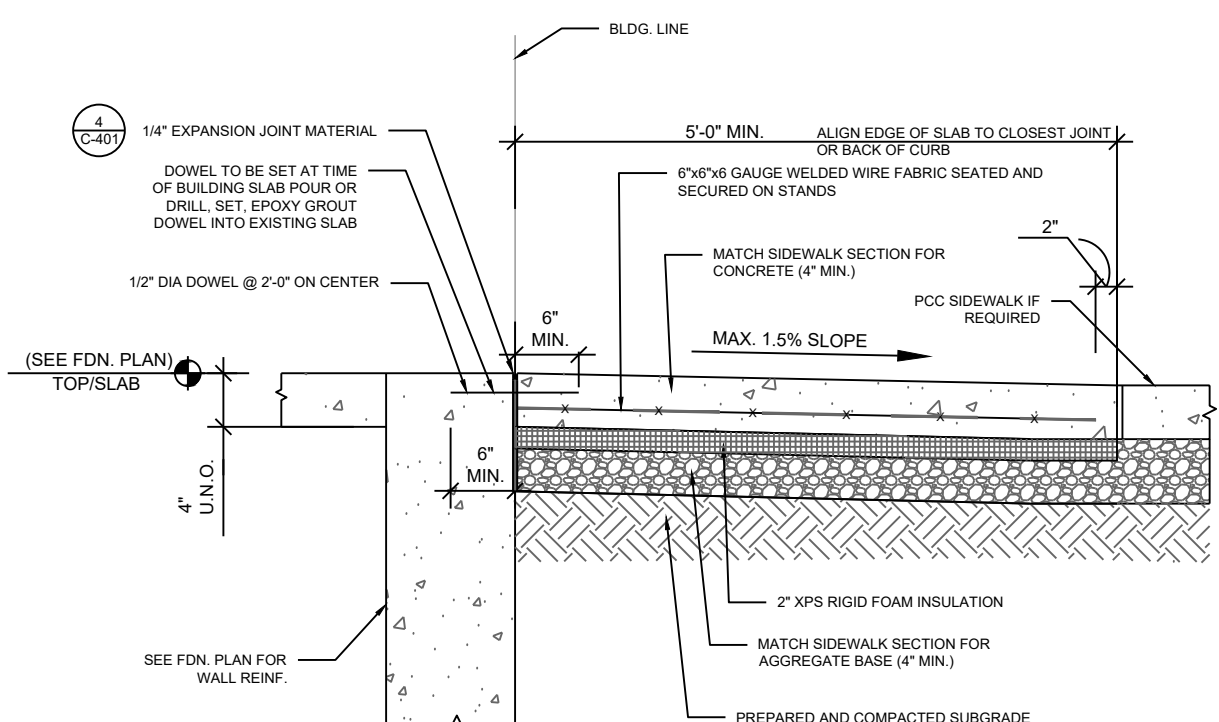
**F CATCHING GUTTER SECTION AT ACCESSIBLE RAMP**



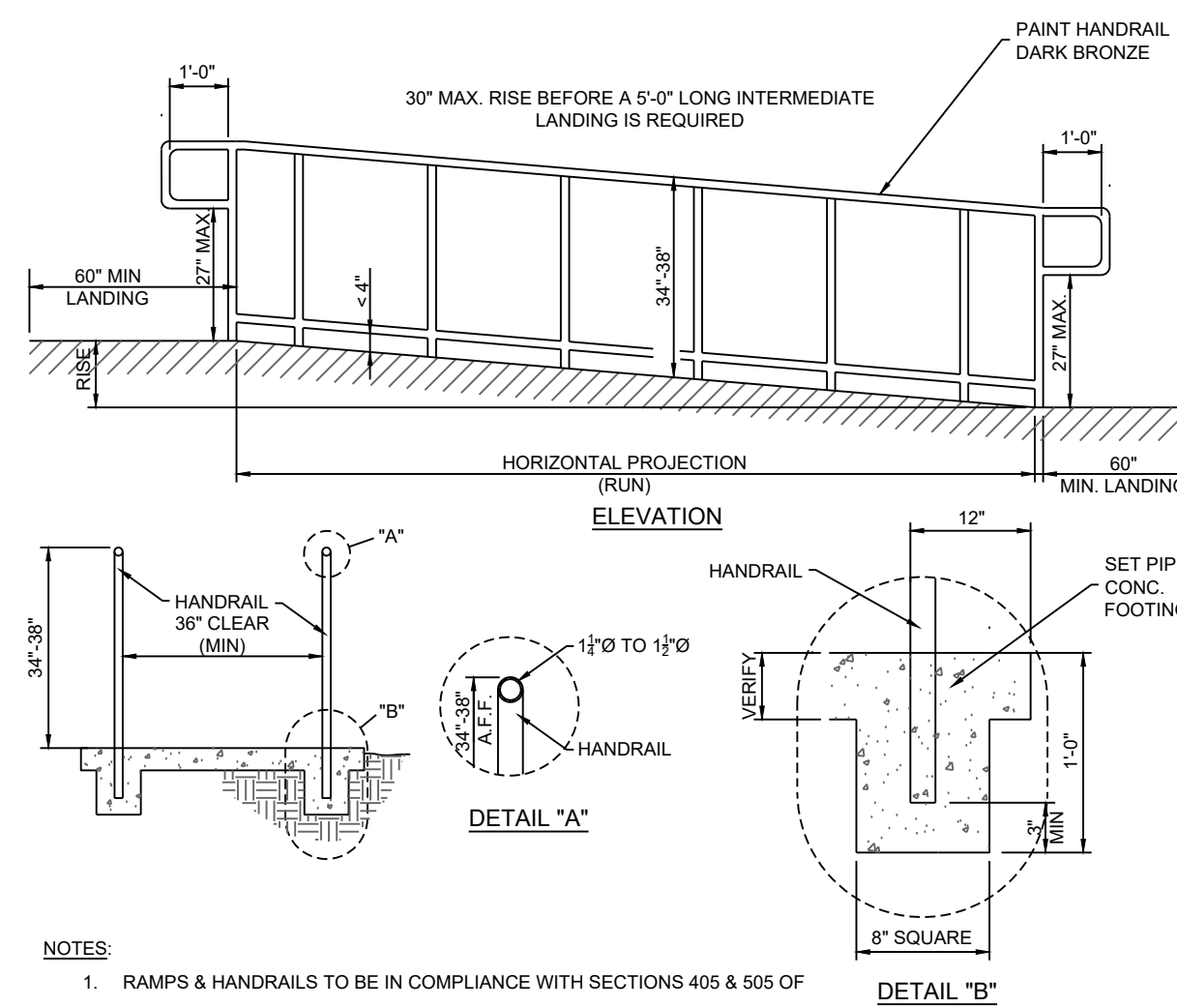
**G M-4.18 MOUNTABLE CURB & GUTTER**



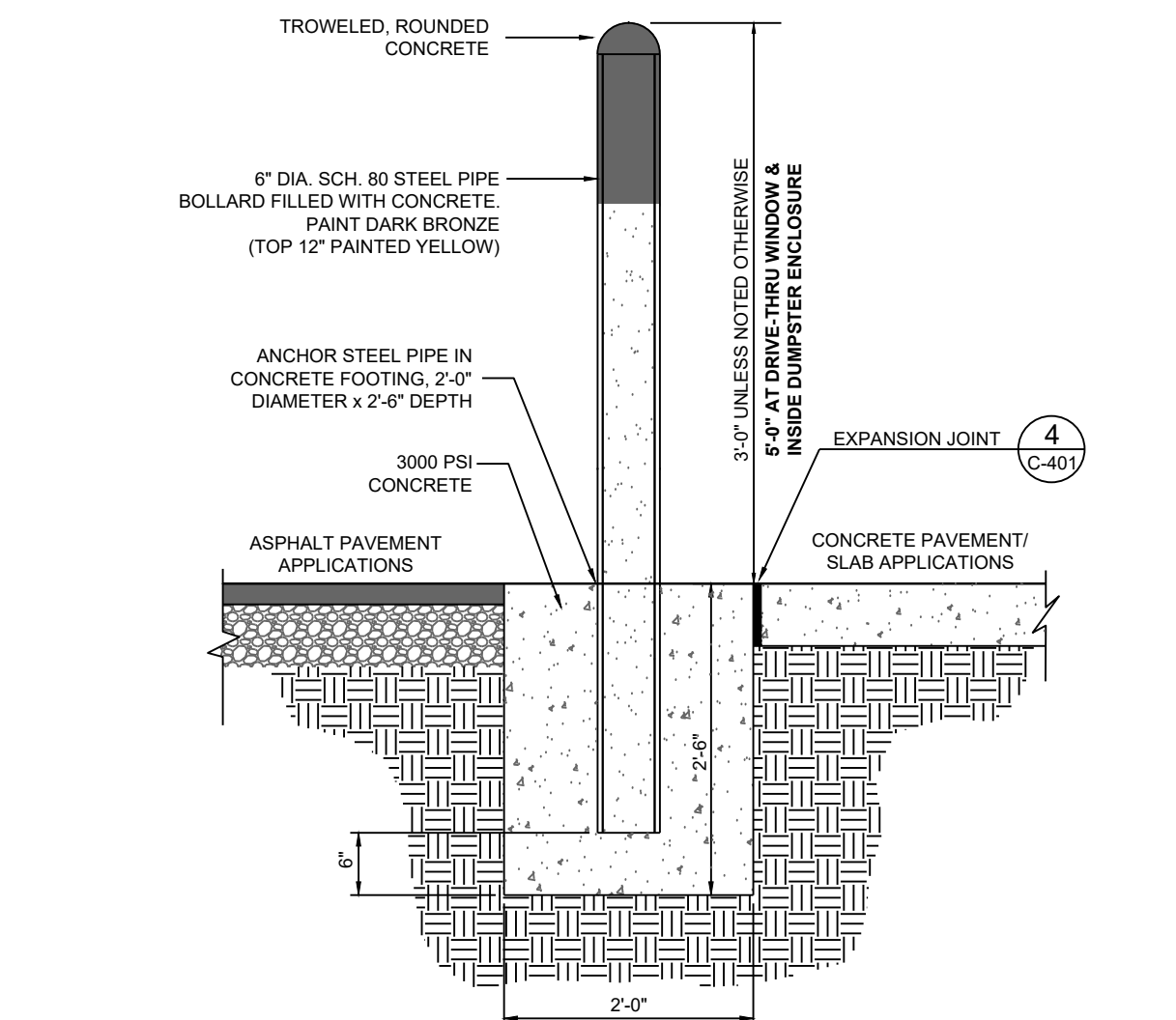
**2 DETECTABLE WARNING DEVICE**  
C-401 NOT TO SCALE



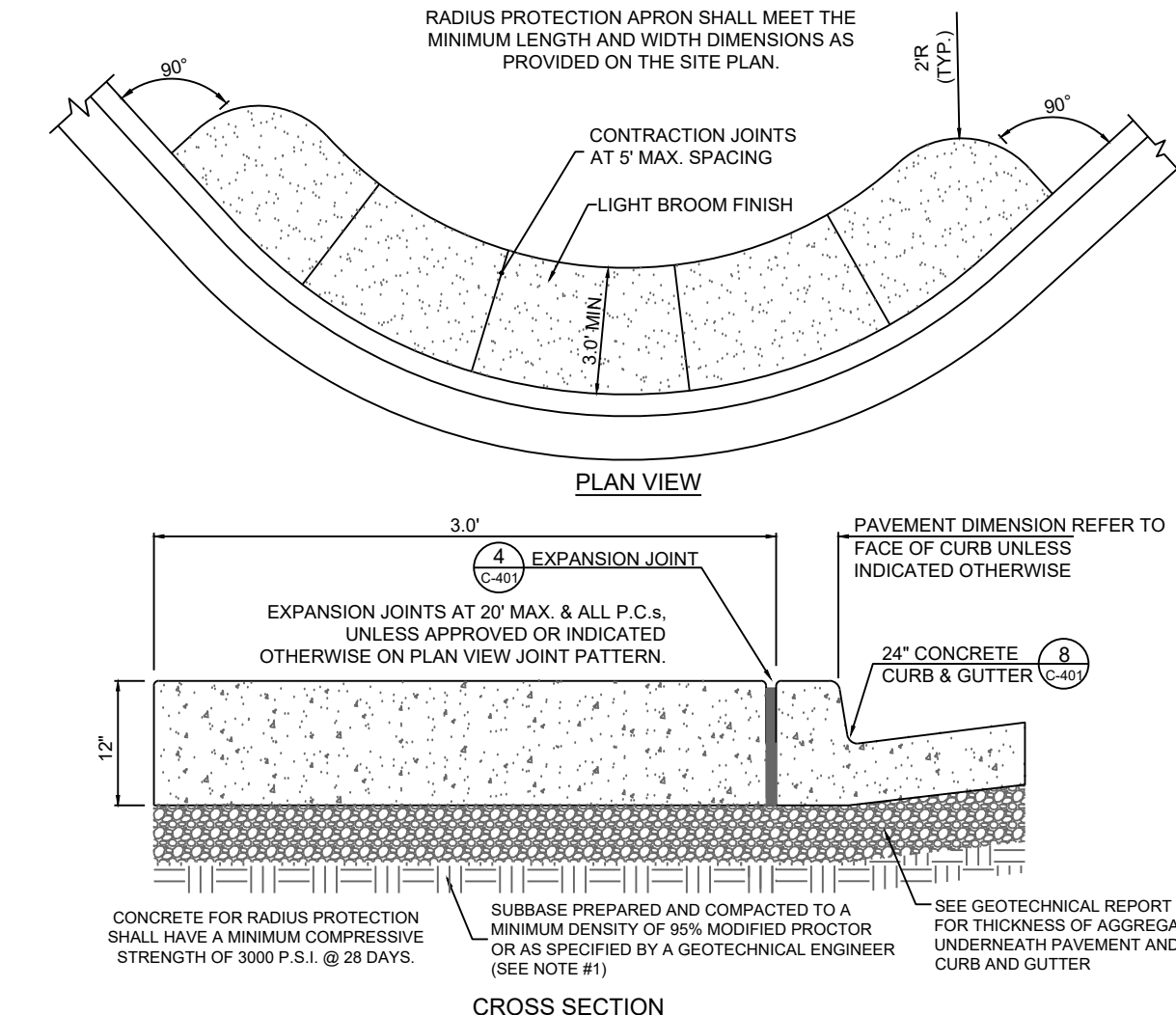
**6 ENTRY DOOR FROST SLAB DETAIL**  
C-401 NOT TO SCALE



**3 TYPICAL ADA RAMP & HANDRAIL**  
C-401 NOT TO SCALE

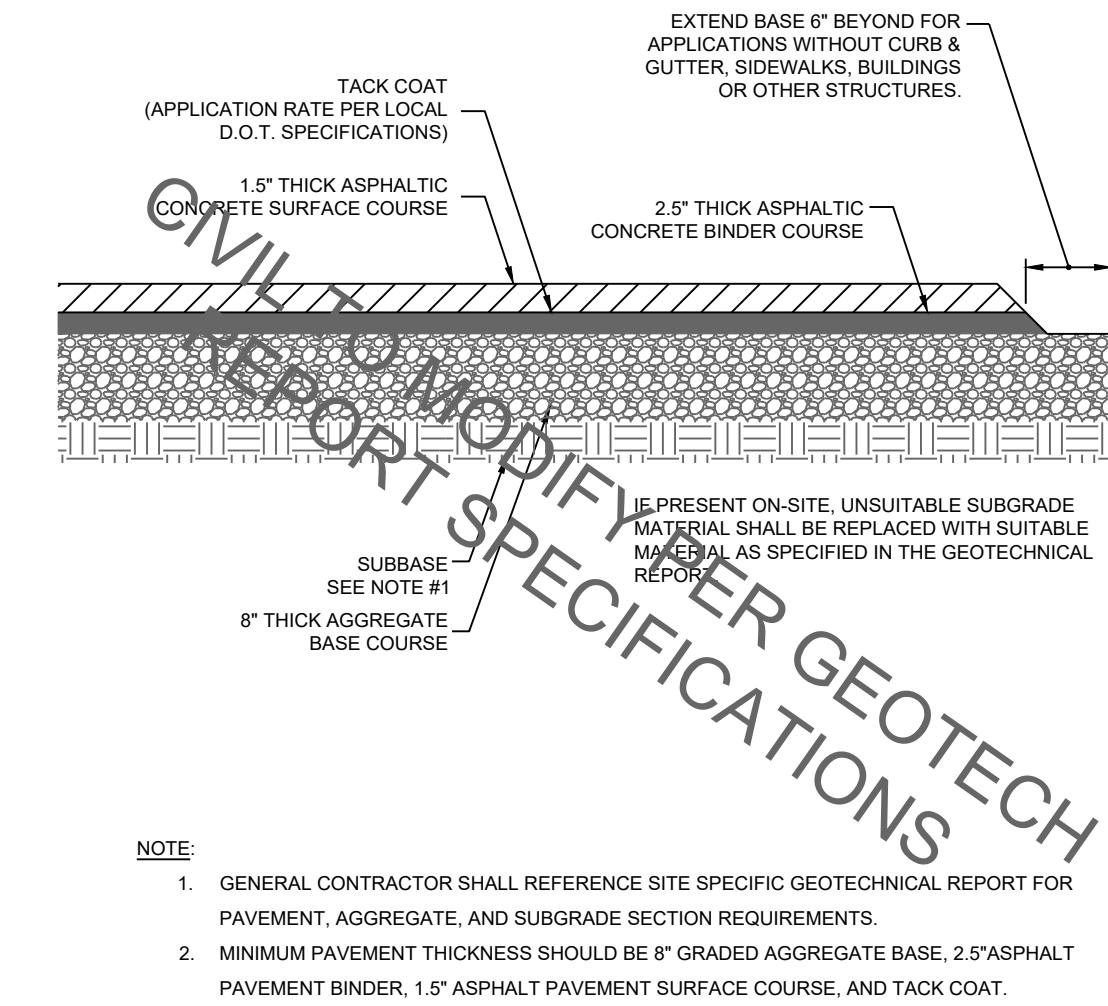


**7 CONCRETE BOLLARD**  
C-401 NOT TO SCALE

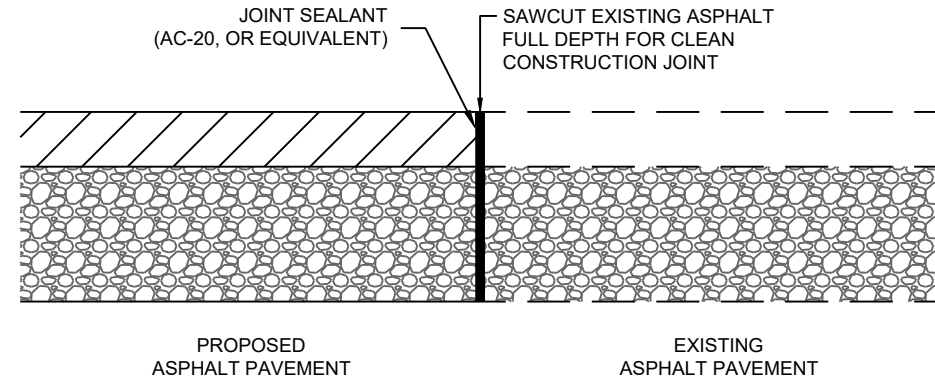


**9 LANDSCAPE & IRRIGATION PROTECTOR**  
C-401 NOT TO SCALE

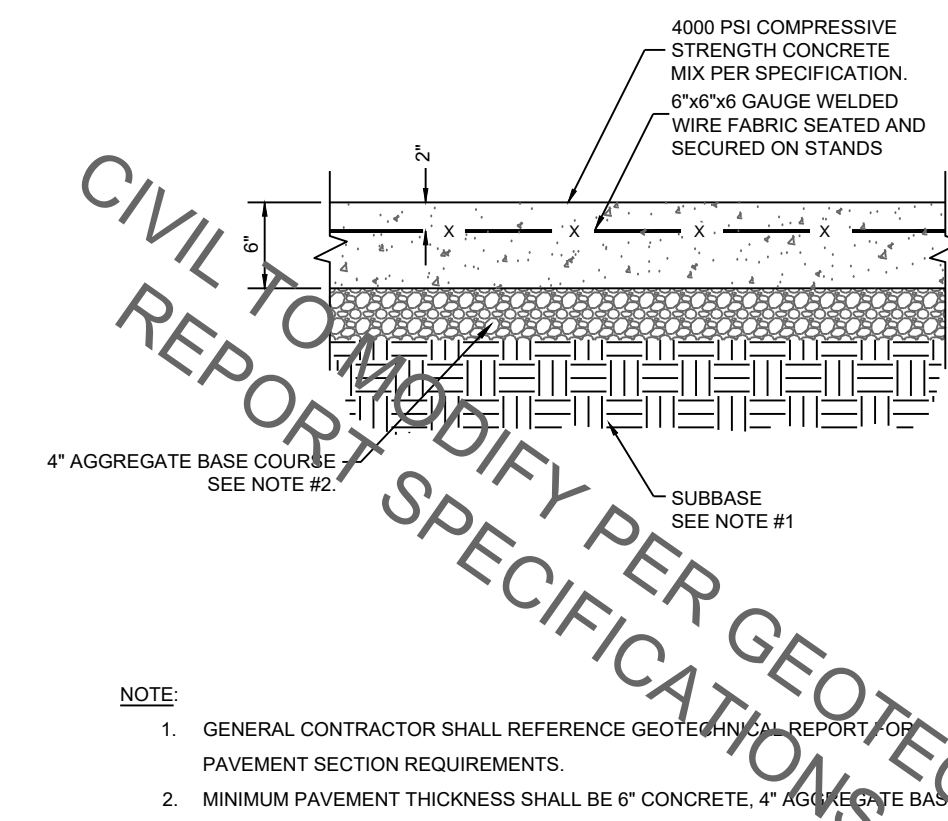




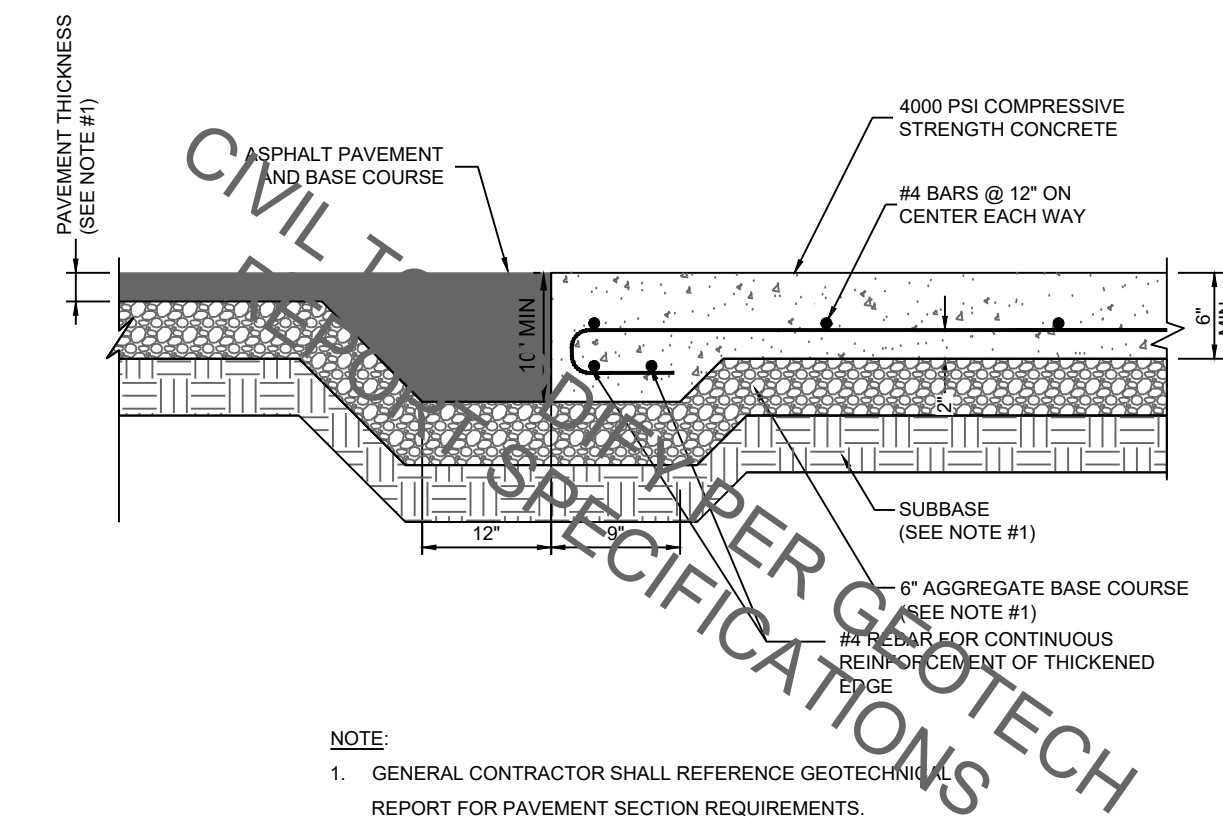
1 TYPICAL HMAC PAVEMENT SECTION  
C-402 NOT TO SCALE



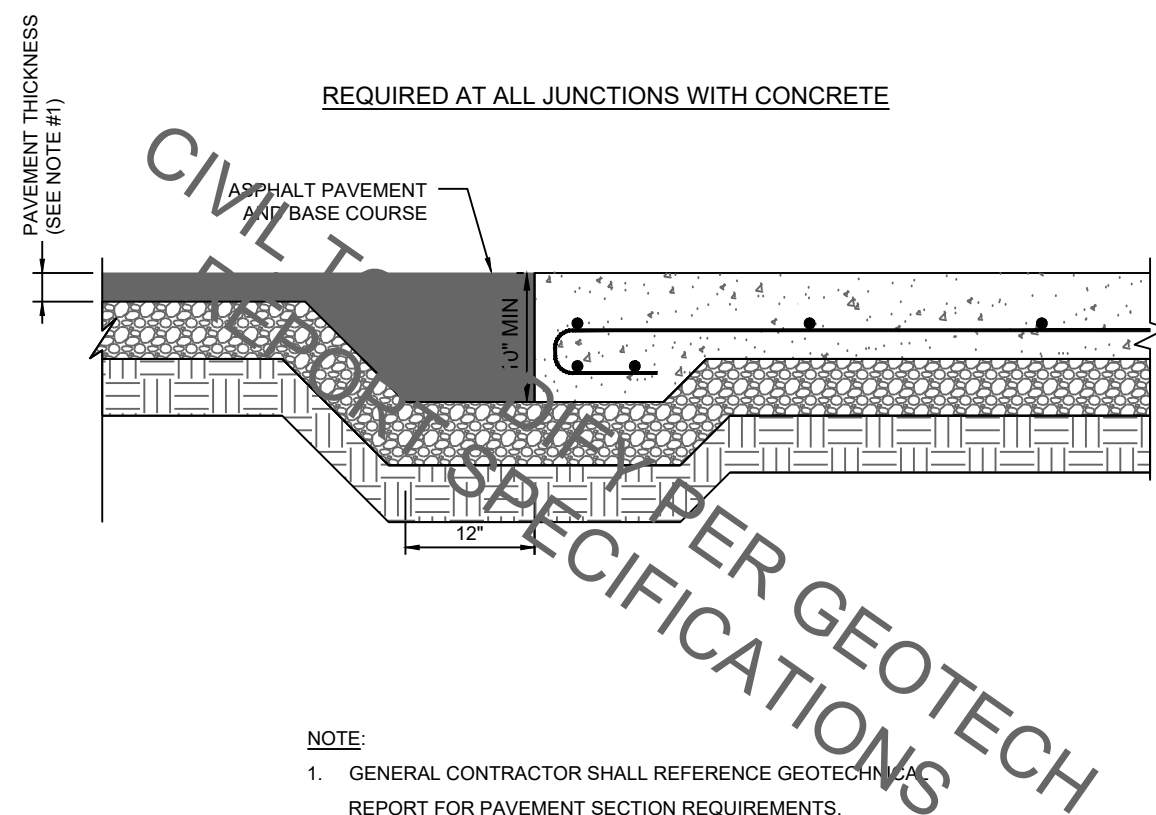
2 BUTT JOINT  
C-402 NOT TO SCALE



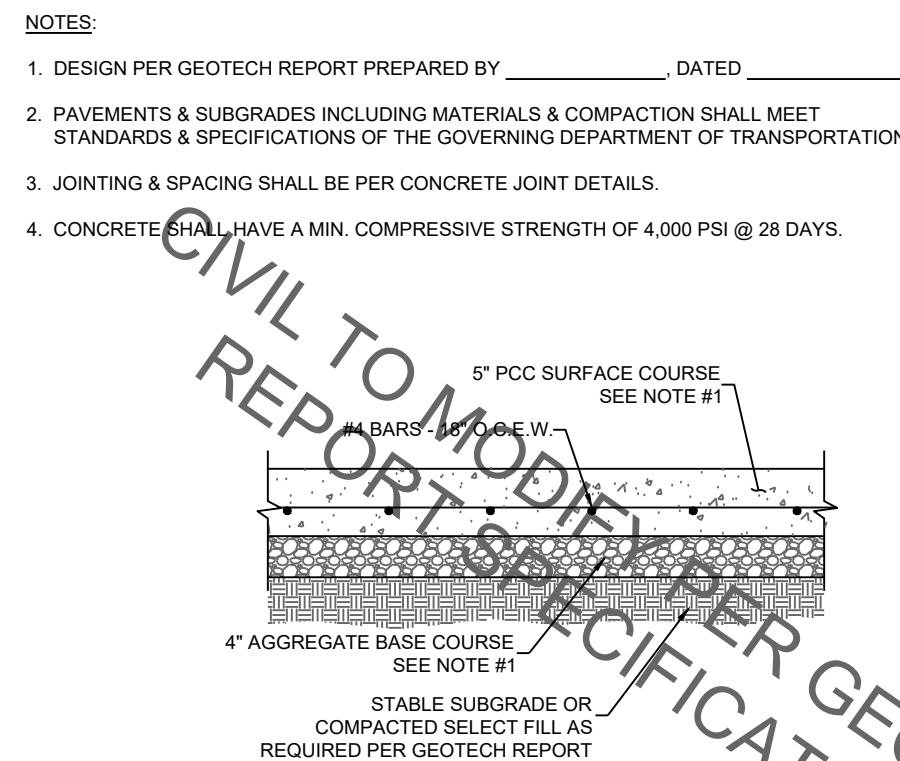
3 CONCRETE PAVEMENT DRIVE-THRU LANE  
C-402 NOT TO SCALE



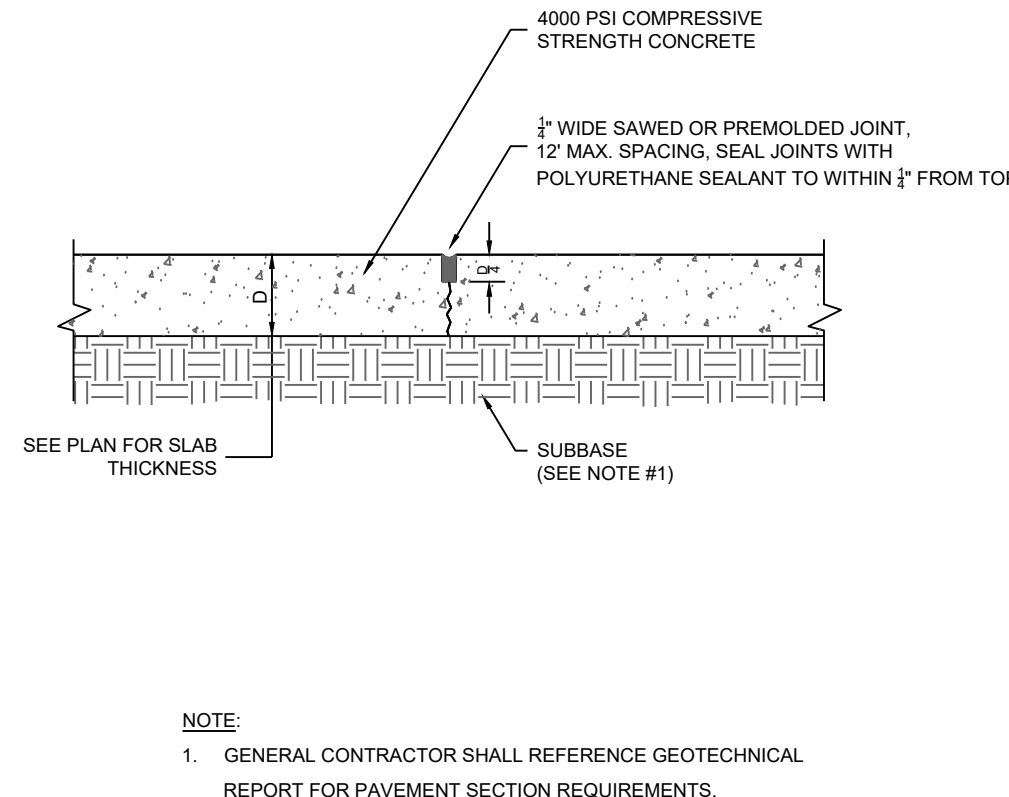
4 CONCRETE APRON AT TRASH ENCLOSURE  
C-402 NOT TO SCALE



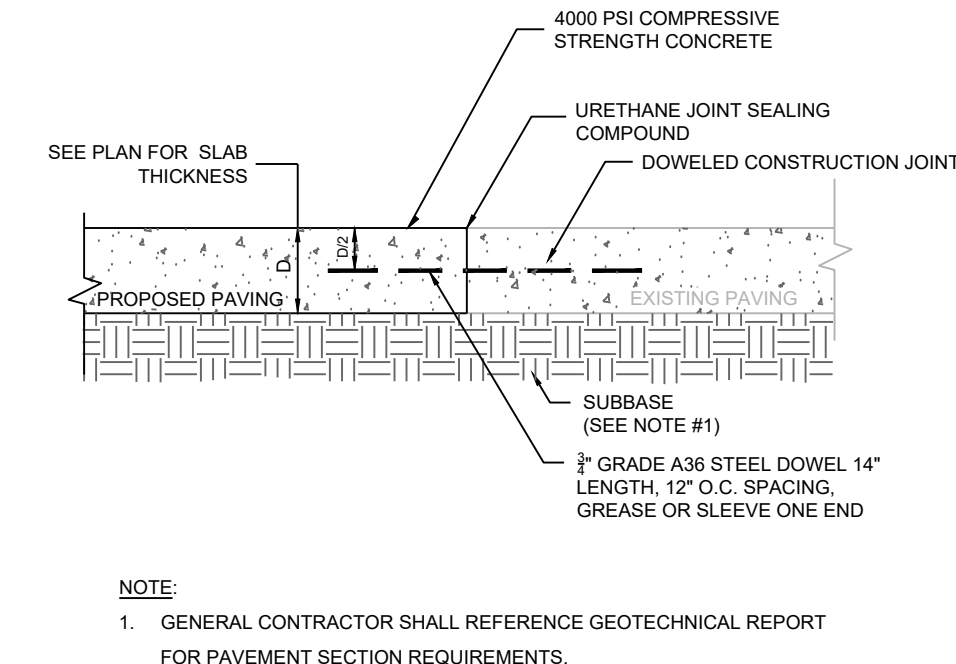
5 PAVEMENT EDGE DETAIL  
(START & END OF DRIVE-THRU LANES)  
C-402 NOT TO SCALE



6 CONCRETE PAVEMENT  
C-402 NOT TO SCALE

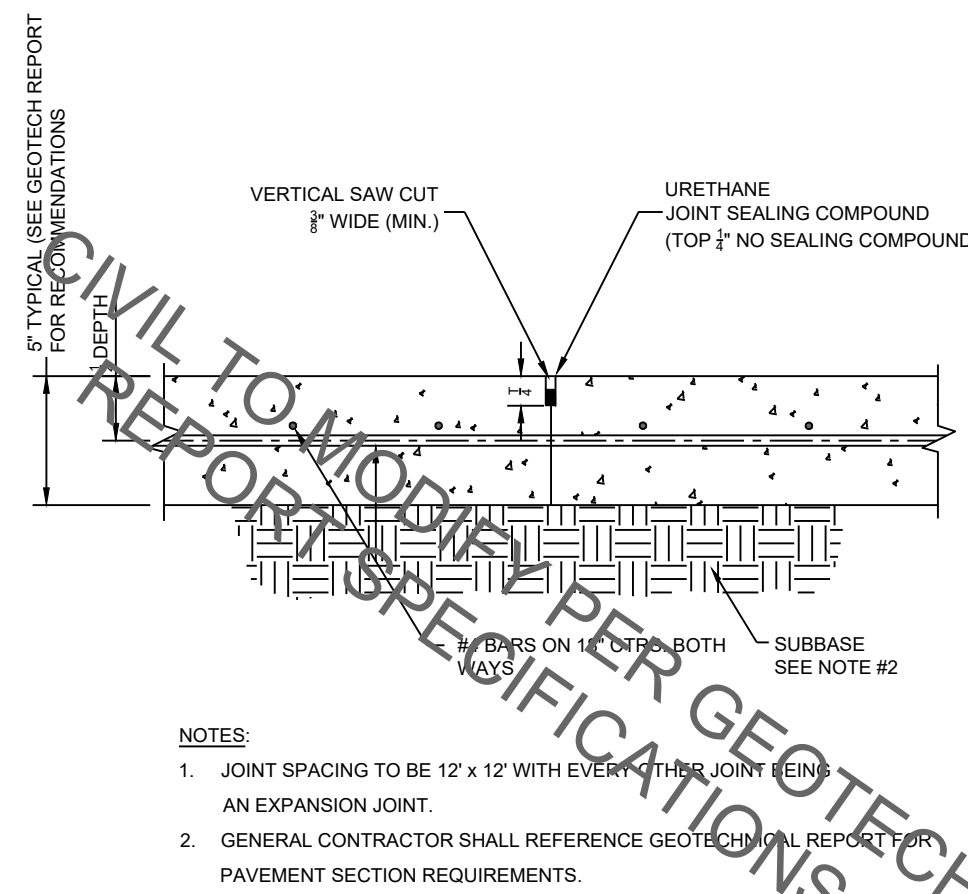


7 TRANSVERSE AND LONGITUDINAL CONTRACTION JOINT  
C-402 NOT TO SCALE

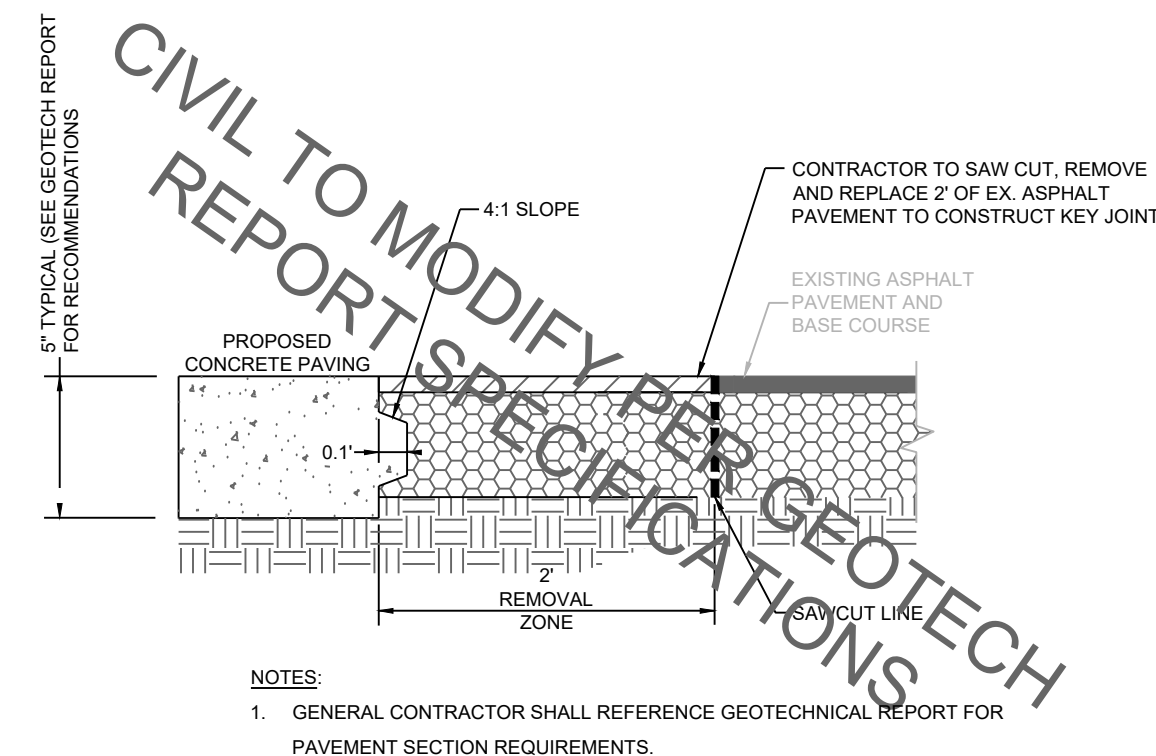


8 TRANSVERSE AND LONGITUDINAL DOWELED CONSTRUCTION JOINT  
C-402 NOT TO SCALE

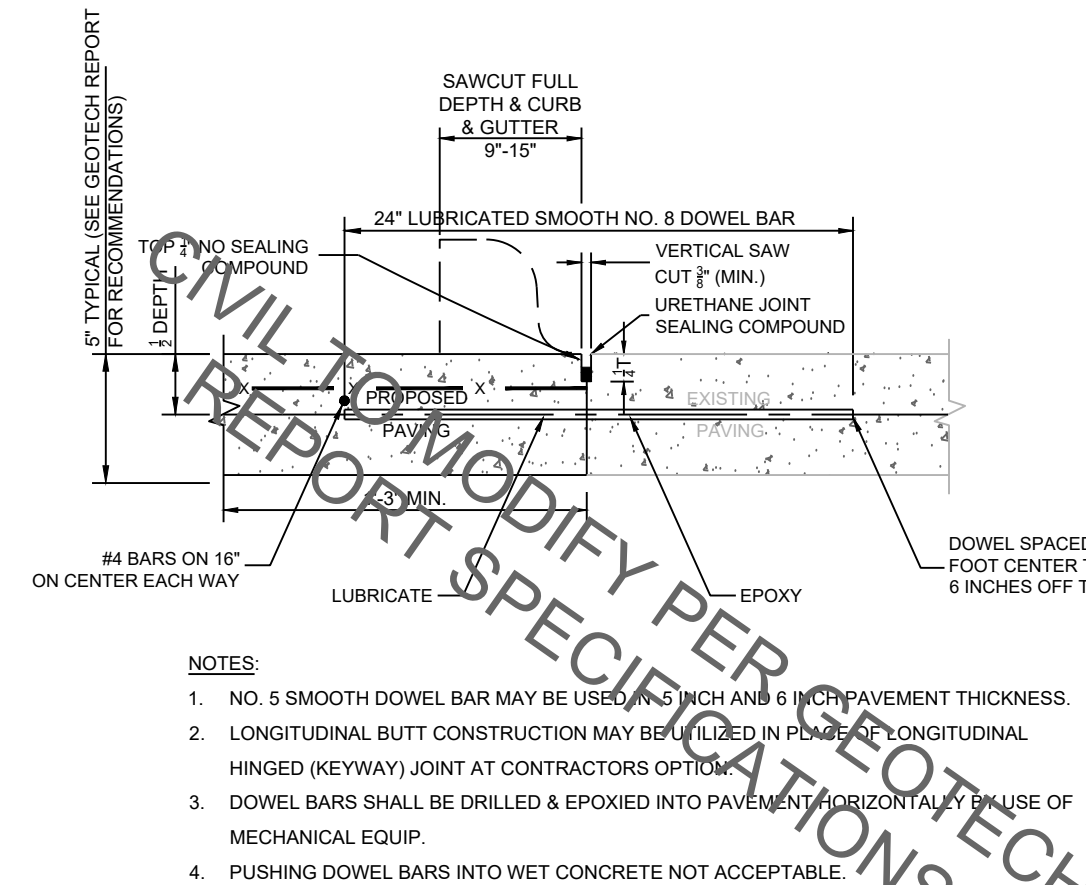
THESE DETAILS APPLY TO CONCRETE PAVED LOTS



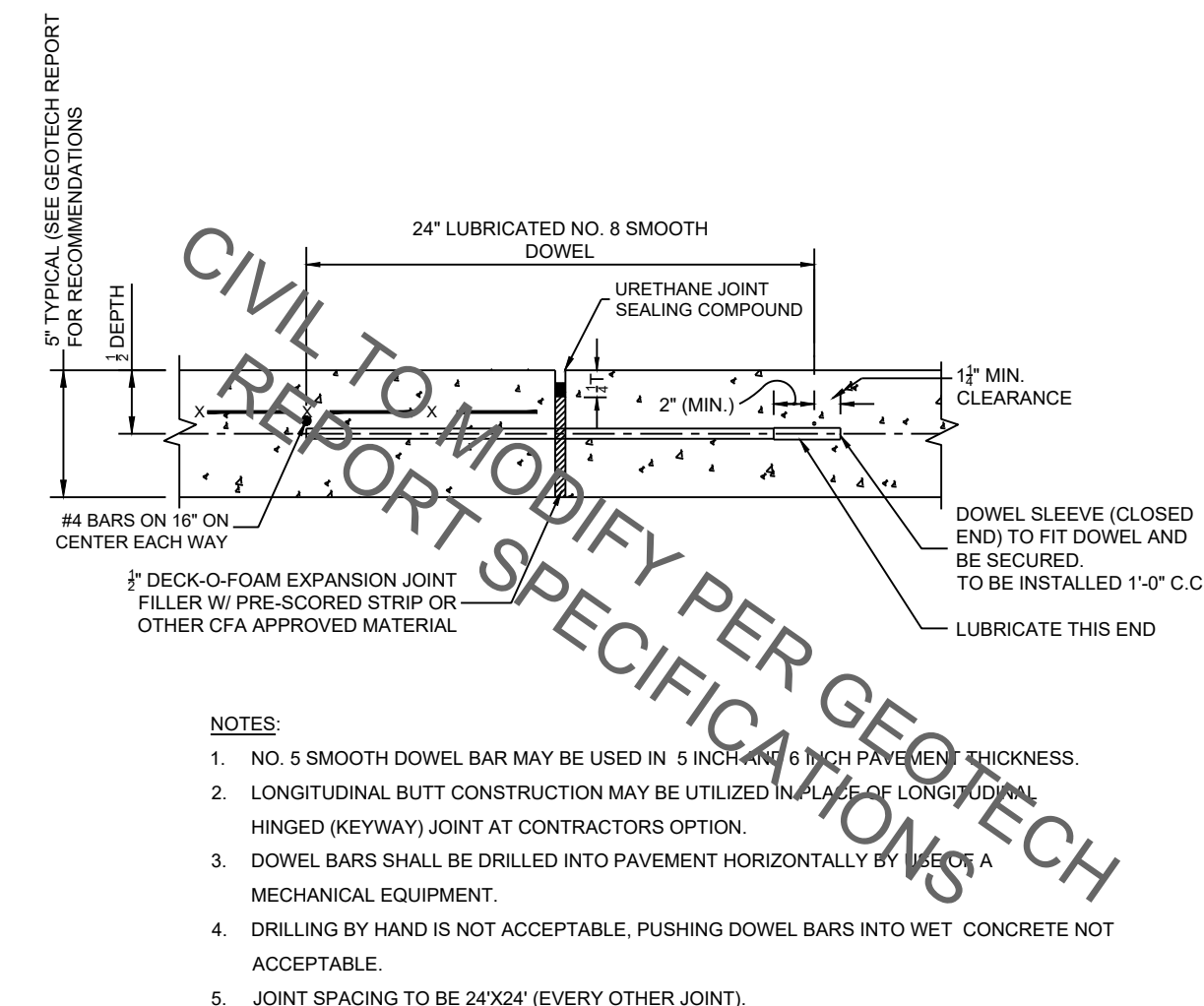
9 CONTRACTION JOINT  
C-402 NOT TO SCALE



10 KEYED CONSTRUCTION JOINT  
C-402 NOT TO SCALE



11 LONGITUDINAL BUTT JOINT  
C-402 NOT TO SCALE



12 EXPANSION JOINT  
C-402 NOT TO SCALE







SITE PLAN DESIGN NOTES & KEY PLAN

- 1A

DIRECTIONAL ARROW

1A

C-400
- 1B

PAINTED HANDICAP PARKING SYMBOL

1B

C-400
- 2A

DRIVE-THRU GRAPHICS

2A

C-400
- 2B

STOP BAR GRAPHIC

2B

C-400
- 3

CROSSWALK MARKINGS

3

C-400
- 4

MULTI-LANE DIRECTIONAL GRAPHICS

4

C-400
- 5

STANDARD OR HANDICAP PARKING STALL PER CODE

5

C-400
- 5A

4" SOLID WHITE STRIPING
- 5B

4" SOLID YELLOW STRIPING
- 5C

4" SKIP DASH YELLOW STRIPING
- 6

SOLID PLASTIC WHEEL STOP

6

C-400
- 7

BOLLARD MOUNTED SIGN

7

C-400
- 8

CURB RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)

8

C-400
- 9

CURB RAMP w/ FLARED SIDES (IN SIDEWALK)

9

C-400
- 10

RETURNED CURB HANDICAP RAMP

10

C-400
- 11

SIDEWALK ACCESSIBLE RAMP

1

C-400
- 12

DETECTABLE WARNING DEVICE

2

C-400
- 13

TYPICAL ADA RAMP & HANDRAIL

3

C-400
- 14

CONCRETE SIDEWALK

4

C-400
- 15

CONCRETE SIDEWALK w/ CURB & GUTTER

5

C-400
- 16

ENTRY DOOR FROST SLAB DETAIL

6

C-400
- 17

CONCRETE BOLLARD

7

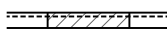
C-400
- 18

CONCRETE CURB & GUTTER


8

C-400
- 18A


SPILLING CURB & GUTTER


- 18B


CATCHING CURB & GUTTER


- 18C


DEPRESSED SPILLING CURB & GUTTER


- 18D


DEPRESSED CATCHING CURB & GUTTER


- 18E


SPILLING GUTTER SECTION AT ACCESSIBLE RAMP


- 18F

CATCHING GUTTER SECTION AT ACCESSIBLE RAMP


- 18G

MOUNTABLE CURB & GUTTER


- 19

LANDSCAPE & IRRIGATION PROTECTOR

9

C-400
- 20

TYPICAL HMAc PAVEMENT SECTION

1

C-400
- 21

BUTT JOINT

2

C-400
- 22

CONCRETE PAVEMENT DRIVE-THRU LANE

3

C-400
- 23

CONCRETE APRON AT TRASH ENCLOSURE

4

C-400
- 24

PAVEMENT EDGE DETAIL (START & END OF DRIVE-THRU LANES)

5

C-400
- 25

CONCRETE PAVEMENT SECTIONS

6

C-400
- 26

TRANSVERSE & LONGITUDINAL CONTRACTION JOINT

7

C-400
- 27

TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT

8

C-400
- 28

CONTRACTION JOINT

9

C-400
- 29

KEYED CONSTRUCTION JOINT

10

C-400
- 30

LONGITUDINAL BUTT JOINT

11

C-400
- 31

EXPANSION JOINT

12

C-400
- 32

DRIVE-THRU PLAN - FLUSH WITH FFE

1

C-400
- 33

DRIVE-THRU ISOMETRIC

2

C-400
- 34

DRIVE-THRU ORDER POINT ISLAND

3

C-400
- 35

MENU BOARD LOOP DETECTION SYSTEM

4

C-400
- 36

BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)

5

C-400
- 37

CANOPY DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM)

6

C-400
- 38

SCREENED REFUSE ENCLOSURE (REFER TO ARCH PLANS FOR ADDITIONAL DETAILS)

7

C-400
- 39

CLEAN-OUT (OUTSIDE OF BUILDING)

8

C-400
- 40

THICKENED PAVEMENT @ STRUCTURES

9

C-400
- 41

STORM STRUCTURE WEEP HOLE DETAILS

10

C-400
- 42

ALUMINUM HANDRAIL (REFER TO ARCH PLANS)
- 43

BUILDING DOWNSPOUT CONNECTION
- 44

DRIVE-THRU CLEARANCE BAR (REFER TO SIGNAGE PACKAGE)
- 45

GREASE TRAP
- 46

PROPOSED TRANSFORMER
- 47

BIKE RACK
- 48

LANDSCAPED AREA
- 49

TYPICAL LOCATION FOR OUTDOOR TABLES (REFER TO ARCH PLANS)
- 50

CONCRETE PAD FOR OPTIONAL CASH STATION
- 51


FREE-STANDING ORDER POINT CANOPY
- 52

FREE-STANDING OUTSIDE MEAL DELIVERY CANOPY


SIGN LEGEND

- \*\* CONTRACTOR TO REFER TO THE SIGNAGE PACKAGE FOR PLACEMENT AND SPECIFICATIONS OF ALL SIGNS \*\*
- A


HANDICAP PARKING SIGN (SEE SIGNAGE PACKAGE)  
R7-8; 12" x 18" (TYP.)


- B


HANDICAP PARKING FINE SIGN (SEE SIGNAGE PACKAGE)  
6" x 12" (TYP.)


- C


"VAN ACCESSIBLE" SIGN (SEE SIGNAGE PACKAGE)  
R7-8P; 6" x 12" (TYP.)


- D

"DO NOT ENTER" SIGN (SEE SIGNAGE PACKAGE)  
R5-1; 24" x 24" (TYP.)


- E

STOP SIGN (SEE SIGNAGE PACKAGE)  
R1-1; 30" x 30" (TYP.)


- F

CFA PEDESTRIAN CROSSING SIGN (SEE SIGNAGE PACKAGE)
- G

FLAG POLE (SEE SIGNAGE PACKAGE)
- H

CFA MONUMENT OR PYLON SIGN
- I

DIGITAL DRIVE-THRU MENU BOARDS

ENGINEERING

ENGINEERING & SURVEYING

SOLUTIONS

50 SE 30TH STREET

LEE'S SUMMIT, MO 64082

P: (816) 623-9888 F: (816) 623-9849

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Surveying LS-218

Oklahoma

Engineering 6254

Nebraska

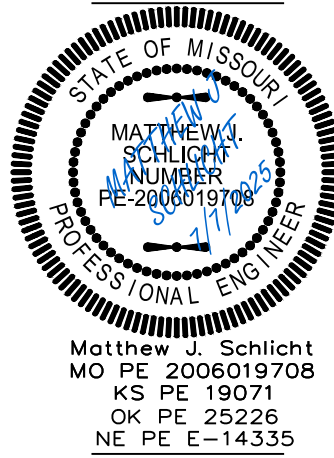
Engineering CA2821




Lot 8, Oldham Village  
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Project:  
FDP - Lot 8

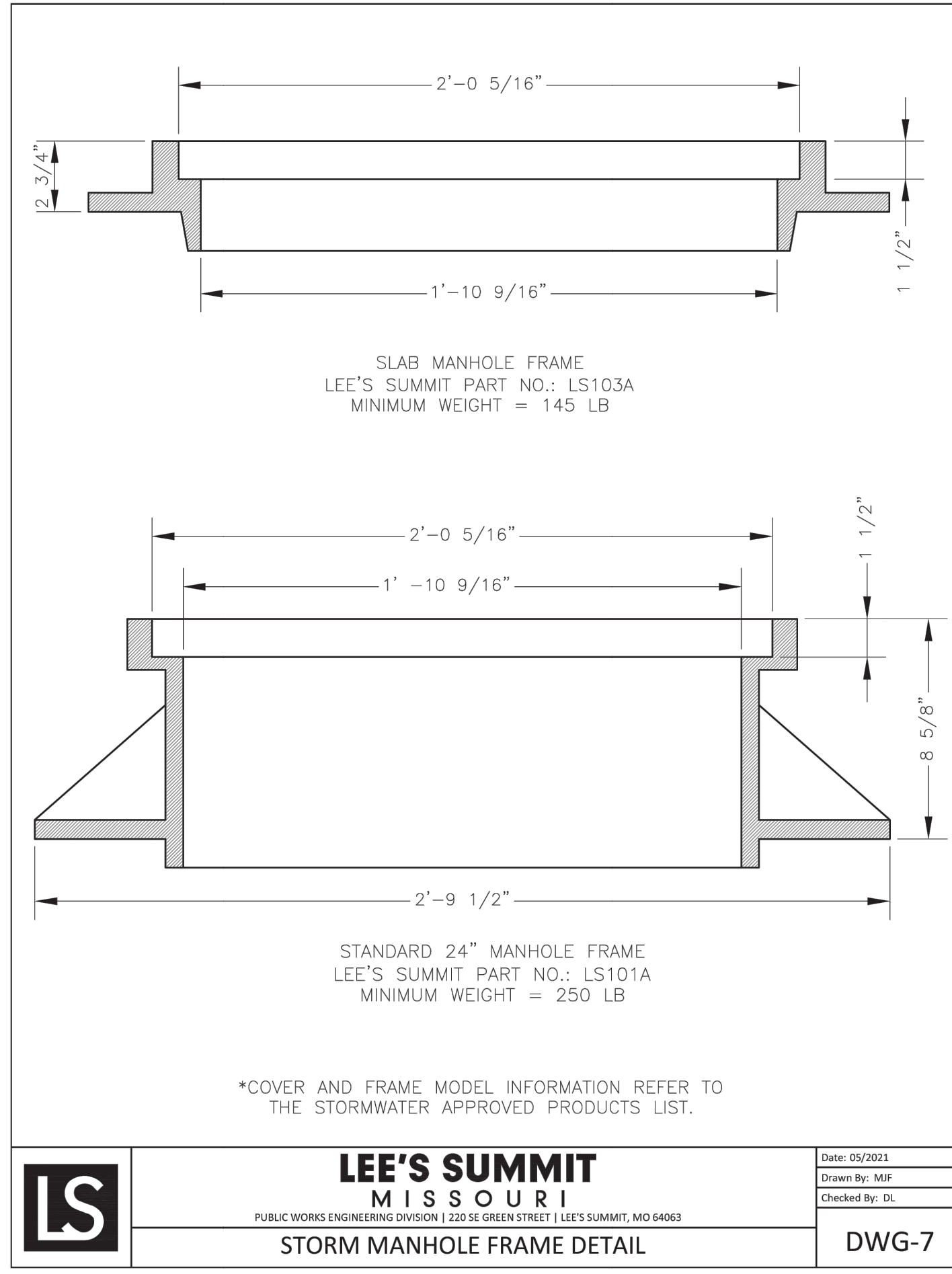
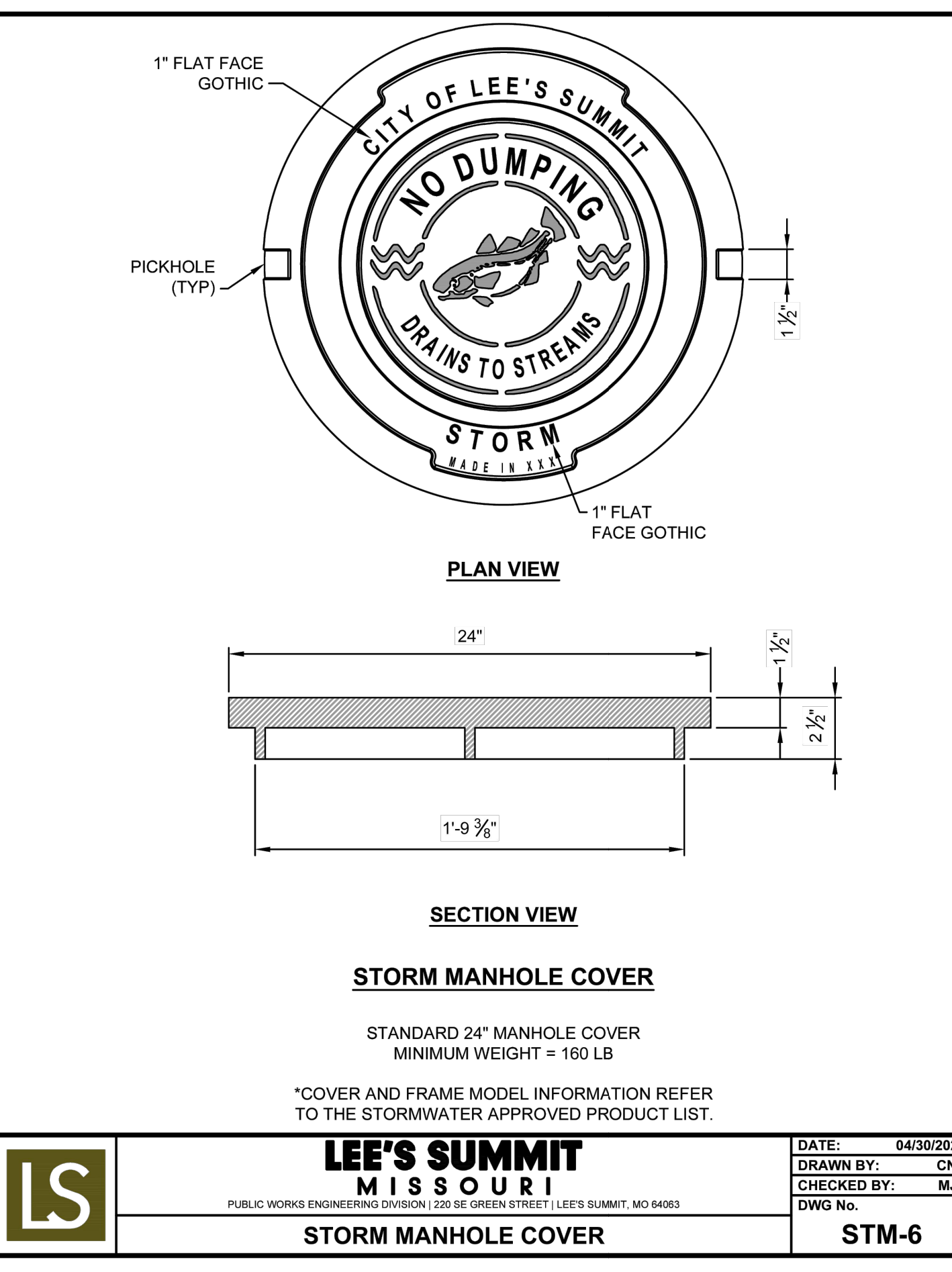
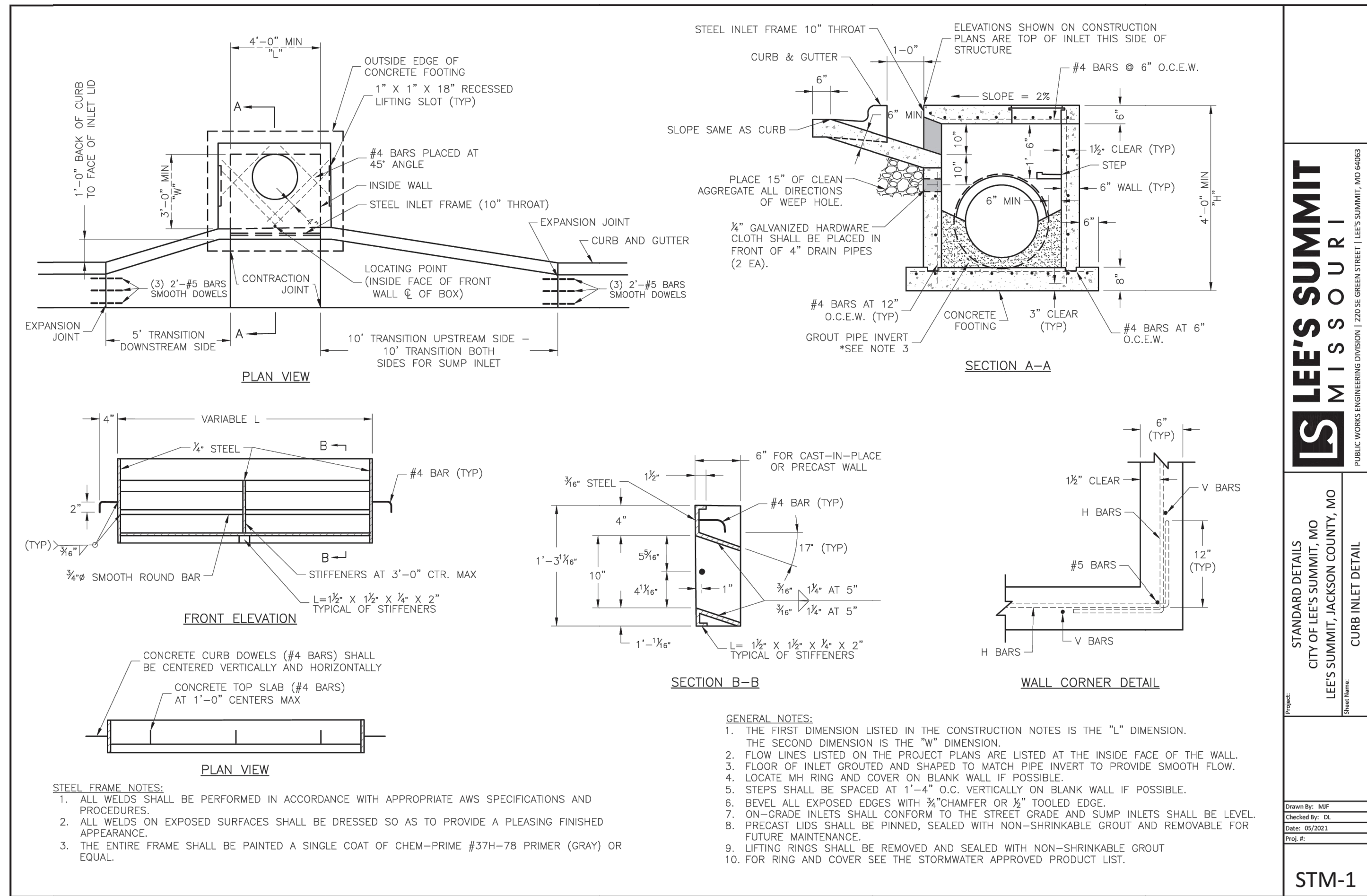
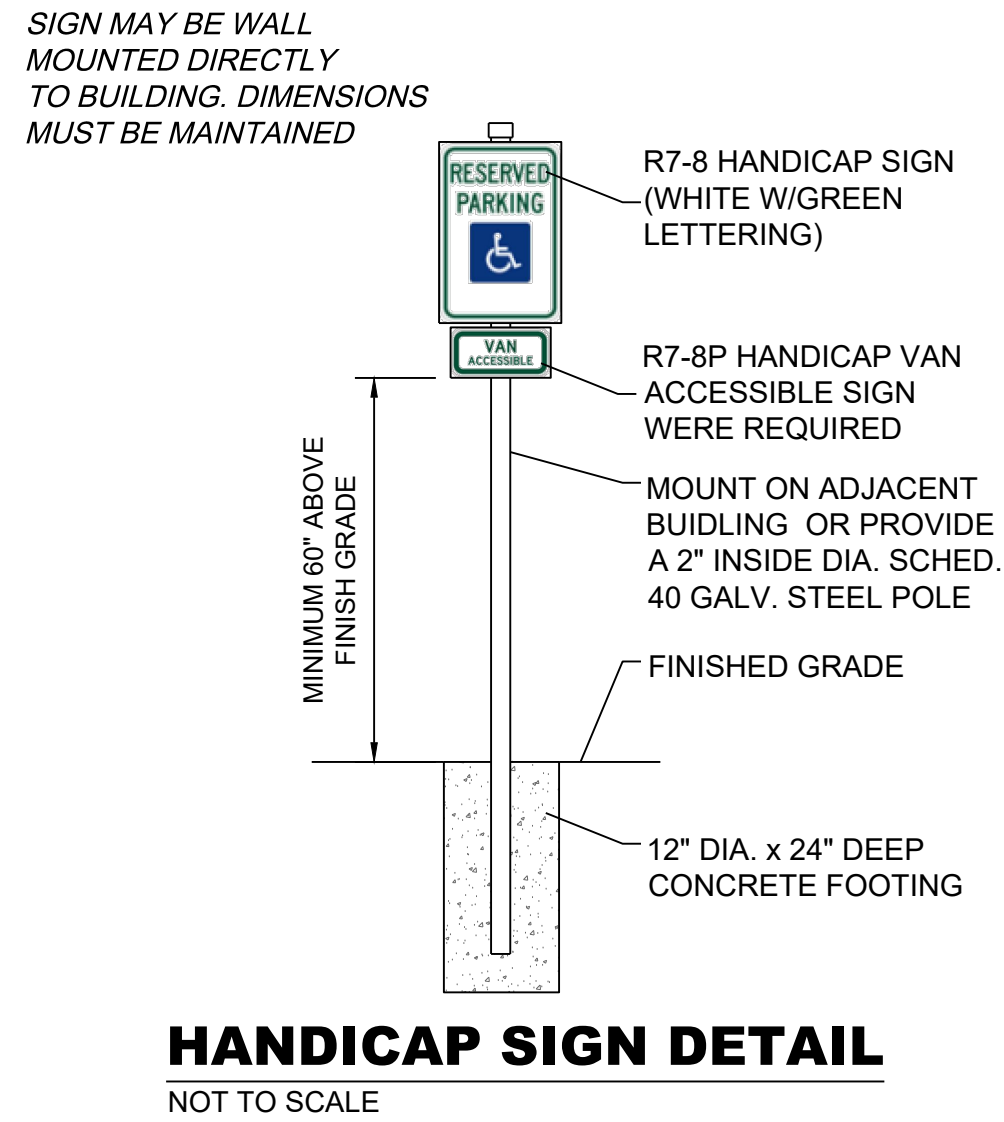
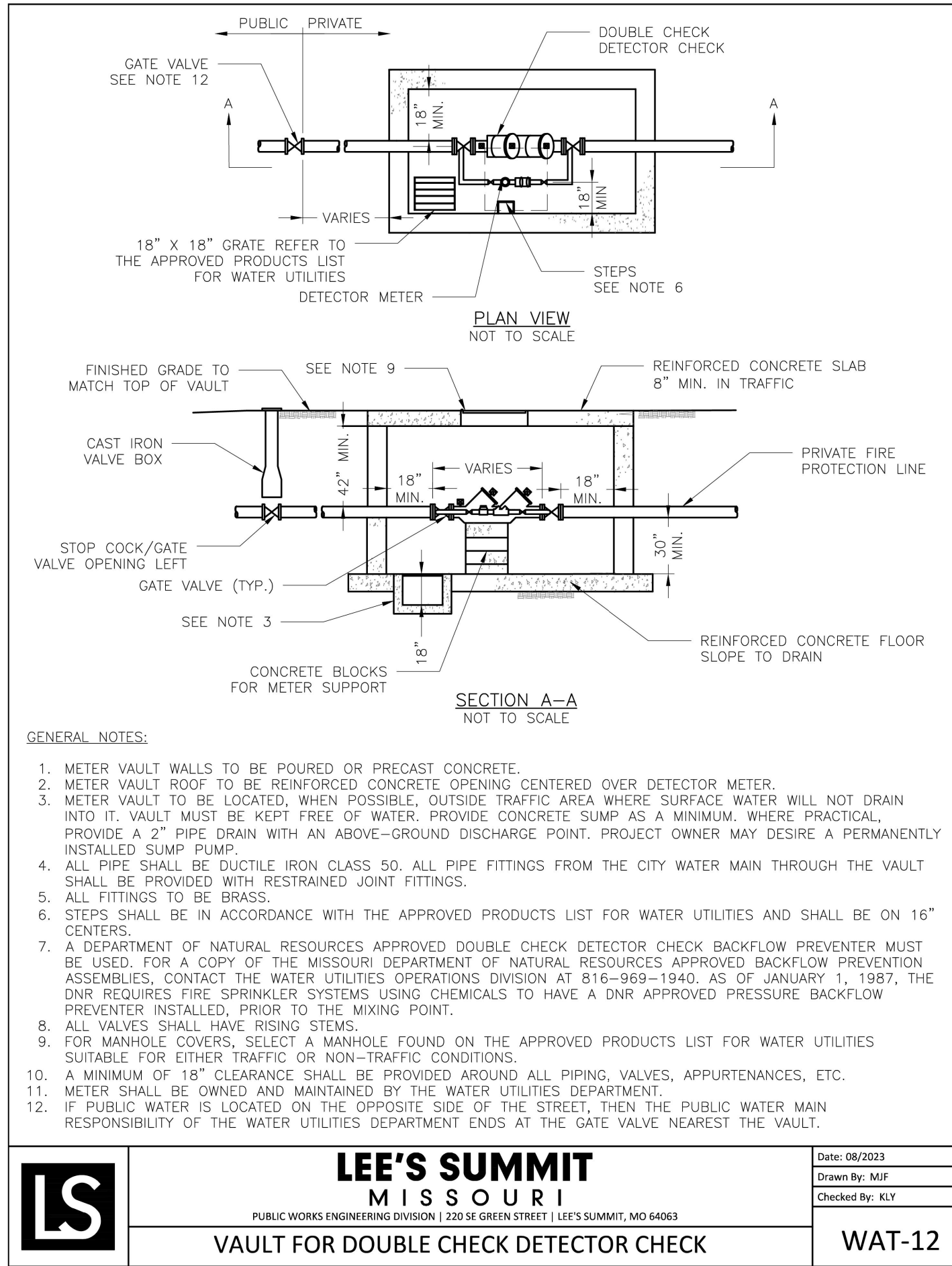
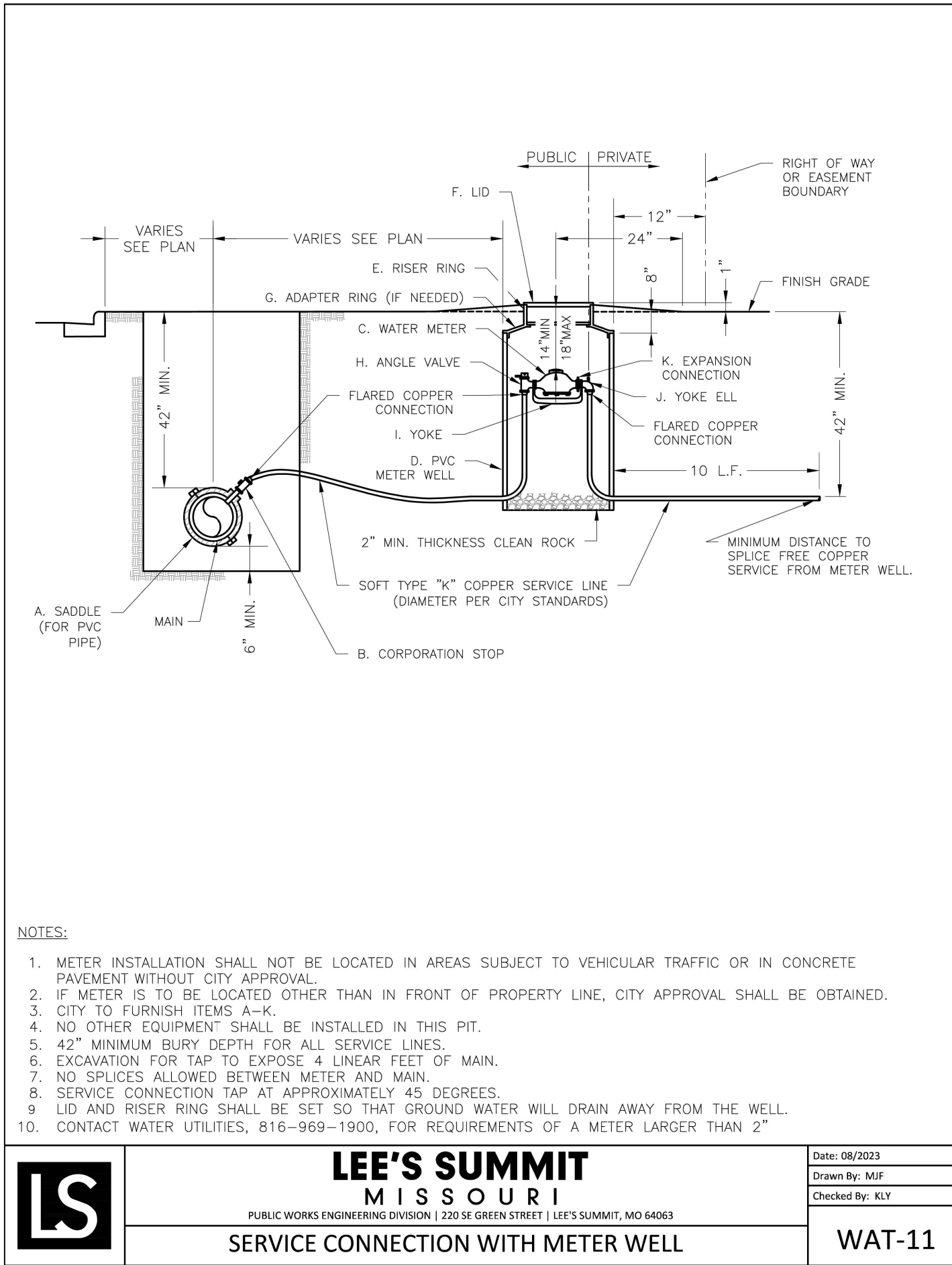
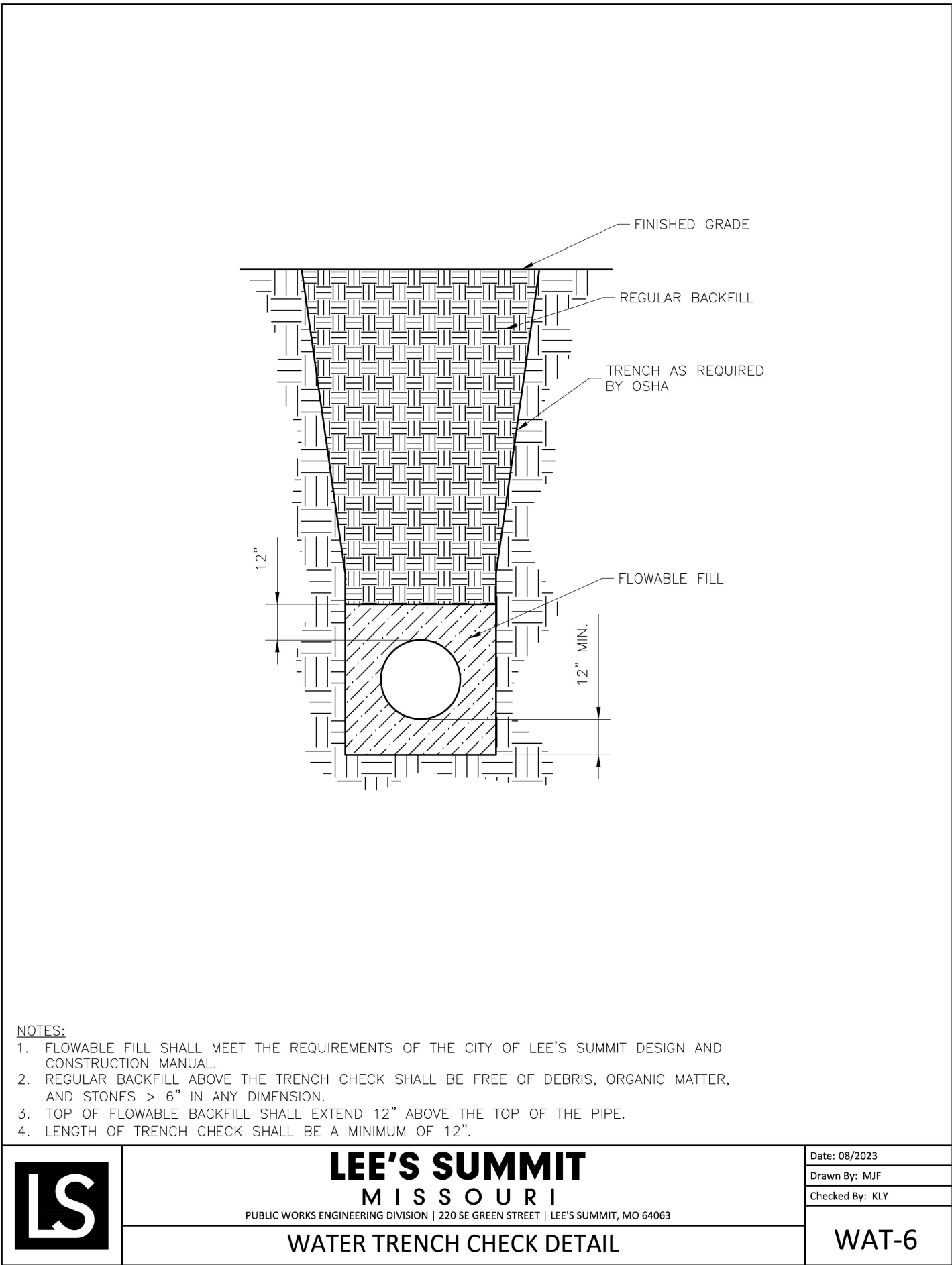
Issue Date:  
December 2, 2024

Standard Details  
Construction Plans for:  
Lot 8, Oldham Village  
Lee's Summit, Jackson County, Missouri

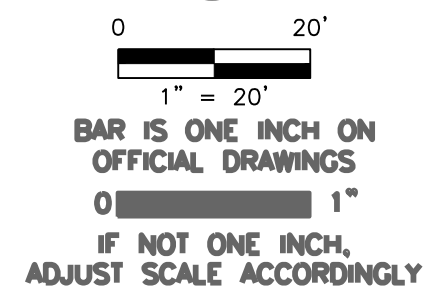


REVISIONS	
	REV. 6/2/2025
	REV. 6/23/2025
	REV. 7/7/2025











TYPICAL LANDSCAPE DESIGN GUIDELINES

1. THE DESIGN SHOULD STRIVE FOR AN UPSCALE APPEARANCE, YET MANAGEABLE MAINTENANCE.
2. KEEP VIEWS TO THE STORE AND SIGNAGE OPEN TO THE MAXIMUM EXTENT POSSIBLE. BETTER TO HAVE THE REQUIRED TREES CLUSTERED IN THE CENTER OF THE STORE AND HAVE "CONES OF VISION" FROM ANGLES. REFER TO THE SIGNAGE PACKAGE FOR SIGN STYLE AND HEIGHT.
3. SHADE THE PARKING LOT USING CANOPY/SHADE TREES IN ISLANDS. LANDSCAPE ISLANDS TO BE A MINIMUM OF 8' WIDTH.
4. DELIVERIES ARE MADE WITH TRACTOR-TRAILER TRUCKS AND TYPICALLY MADE AT REAR OF STORE POTENTIALLY CAUSING DAMAGE TO PLANT MATERIAL AND IRRIGATION. THE SITE PLAN WILL ADDRESS THE OBVIOUS AREAS WITH A CONCRETE APRON AT TOP OF CURB TO PROTECT THE LANDSCAPE.
5. DO NOT SOD SLOPES GREATER THAN 2:1. SLOPES STEEPER THAN 2:1 WILL REQUIRE INSTALLATION OF SPREADING GROUNDCOVERS AND EROSION FABRIC. IN AREAS WHERE AESTHETIC CONCERN IS MINIMAL, LOW MAINTENANCE GRASS SEED CAN BE USED.
6. USE TALL EVERGREEN SHRUBS TO SCREEN THE REAR AND SIDES OF THE DUMPSTER ENCLOSURE.
7. USE TALL EVERGREEN TREES OR SHRUBS TO SCREEN UNDESIRABLE VIEWS TO NEIGHBORING SITES. CARE SHOULD BE TAKEN TO NOT IMPEDE VIEWS TO SITE FROM MAIN ROAD OR ACCESS DRIVES.
8. USE LOW TO MEDIUM EVERGREEN SHRUBS TO SCREEN ELECTRICAL TRANSFORMER AS APPROPRIATE. USE LOW GROUNDCOVERS AT FRONT OF TRANSFORMER TO ALLOW ACCESS TO DOORS; SCREEN AS PER LOCAL CODES.
9. ANNUAL COLOR BEDS AND LOW ORNAMENTAL SHRUBS AS ACCENT, ARE TO BE USED AT STRATEGIC LOCATIONS AND KEPT TO A MINIMUM. USE SPECIFICALLY AROUND ENTRANCE DOORS, ENTRANCE DRIVES, MENU BOARDS AND MAIN ENTRANCE SIGNAGE.
10. DO NOT PLANT CANOPY/SHADE TREES UNDER OVERHEAD POWER LINES. TREES TO BE MINIMUM 15' FROM POWER LINES. USE UNDERSTORY TREES TO MEET REQUIREMENTS IN THESE AREAS.
11. SHOW POWER LINES AND ALL UTILITY EASEMENTS ON THE LANDSCAPE PLAN.
12. DO NOT PLANT ANY TREES WITHIN UTILITY EASEMENTS UNLESS FIRST APPROVED BY UTILITY.
13. MULCH TO BE 3" DEPTH. SPECIFY TYPE OF MULCH TO BE USED IN THE LANDSCAPE NOTES. ROCK MULCH TO BE USED AT BUILDING PLANTING AREAS IN MIDWEST REGION; COORDINATE WITH REGIONAL CHICK-FIL-A DEVELOPMENT MANAGER FOR OTHER REGIONS.

14. DO NOT PLACE TREES, SHRUBS OR SOD IN THE ROW OR ANYWHERE OUTSIDE OF THE PROPERTY LINE WITHOUT THE APPROVAL OF THE CHICK-FIL-A DEVELOPMENT MANAGER AND THE APPROPRIATE GOVERNING AGENCY. HOWEVER, SOD/SEED SHOULD BE PROVIDED TO LIMITS OF DISTURBANCE IF LOCATED OUTSIDE OF PROPERTY LINE.
15. USE TREES, SHRUBS AND GROUNDCOVERS THAT ARE NATIVE OR ADAPTIVE TO THE REGION.
16. ADAPTIVE PLANTS ARE PLANTS THAT ARE RELIABLY GROWN AND THRIVE IN A REGION WITH MINIMAL WINTER PROTECTION, PEST CONTROL, FERTILIZER OR IRRIGATION ONCE THEIR ROOT SYSTEMS ARE ESTABLISHED. THESE PLANTS ARE CONSIDERED LOW MAINTENANCE AND NOT INVASIVE.
17. USE TURF GRASS THAT IS ADAPTIVE AND DROUGHT TOLERANT IN THE REGION.
18. REFER TO SIGN PACKAGE FOR SIGNAGE TYPE AND HEIGHT. PROVIDE ACCENT PLANTING ACCORDINGLY.
19. IF REQUIRED PER LOCAL CODE TO SUPPLY BUILDING PERIMETER PLANTING, REFER TO THE D.I.P. OR SIGN PACKAGE FOR BUILDING ELEVATIONS AND PLANT ACCORDINGLY. DO NOT BLOCK WINDOWS, OR BUILDING SIGNAGE.
20. TO AVOID TREE/LIGHT POLE CONFLICTS, COORDINATE TREE LOCATIONS WITH LIGHTING DESIGNER.
21. DO NOT PLANT TREES AND SHRUBS ON TOP OF THE GREASE TRAP; GROUNDCOVER, OR SOD IS ACCEPTABLE.

SECURITY / SAFETY

1. A SECURITY CAMERA IS LOCATED AT THE REAR OF THE STORE, TYPICALLY ON A LIGHT POLE. AVOID PLACING TREES, LARGE EVERGREENS IN THE REAR LANDSCAPE ISLANDS; COORDINATE WITH LIGHTING DESIGNER FOR CAMERA LOCATIONS.
2. AVOID PLACING TREES, LARGE EVERGREENS, OR ANYTHING THAT CAN CREATE 'HIDING' PLACES IN THE REAR LANDSCAPE ISLANDS OR AROUND DUMPSTER DOORS THAT MIGHT COMPROMISE EMPLOYEE SAFETY/SECURITY.
3. SHRUBS AT INGRESS AND EGRESS TO SITE MUST BE LOW OR MAINTAINED BETWEEN 18"-30" HGT FOR VISIBILITY EXCEPT WHERE ORDINANCES PROHIBIT OR DICTATE OTHERWISE.
4. CANOPY TREES AT INGRESS AND EGRESS TO SITE MUST HAVE A MIN 6' CLEAR TRUNK TO ALLOW FOR SAFE SIGHT LINES.
5. DO NOT USE POISONOUS PLANTS OR PLANTS WITH THORNS IN AREAS OF PEDESTRIAN TRAFFIC.

LANDSCAPE WORKSHEET			
	ORDINANCE REQUIREMENT	REQUIRED FOR THIS SITE	PROPOSED LANDSCAPE
8.790.A.1 Street Frontage Trees (SW Jefferson Xing)	1 tree per 30 feet of street frontage	147 ft. of street frontage /30= 5 trees required	5 Trees Provided
8.790.A.3 Street Frontage Shrubs (SW Jefferson St.)	1 shrub per 20 feet of street frontage	147 ft. of street frontage /20= 8 shrubs required	Requirement met
8.790.B.1 Open Yard Shrubs	2 shrubs per 5000 sq. ft. of total lot area, excludes single family and duplex developments, excluding building.	73,085 sq. ft. of total lot area minus 4,924 sq. ft. of bldg. = 68,161 sq. ft. /5,000 x 2 = 28 shrubs	Requirement met
8.790.B.3 Open Yard Trees	1 tree per 5000 sq. ft. of total lot area excluding building.	73,085 sq. ft. of total lot area minus 4,924 sq. ft. of bldg. = 68,161 sq. ft. /5,000 = 14 trees	Requirement met
8.810. Parking Lot Landscape	5% of entire parking area (spaces, aisles & drives); 1 island at end of every parking bay, min. 9' wide	39,667 sq. ft. of parking area x .05 = 1,983 sq. ft. of landscape parking lot islands required	2,036 sq. ft.
8.820. Screening of Parking Lot, Road	12 shrubs per 40 linear feet (must be 2.5 feet tall; berms may be combined with shrubs)	127 linear feet/40 x 12 38 shrubs required.	Requirement met
*STREET SHRUBS ARE SATISFIED WITH PARKING LOT SCREENING REQUIREMENTS.			

**PLANT MATERIAL SYMBOL LEGEND**

LARGE CANOPY TREES AS REQUIRED FOR SHADE, ISLAND PLANTING AND DENSITY COUNT.

STREET TREES AS REQUIRED. CLUSTER TOGETHER WHEN POSSIBLE TO OPEN SITE LINES TO BUILDING / SIGNAGE.

TALL COLUMNAR EVERGREEN FOR SCREENING DUMPSTER OR UNDESIRABLE VIEWS.

FOUNDATION AND PARKING ISLAND BASE PLANT SHRUBS. LOW 15"-30" HGT.

LARGE BORDER SHRUBS OF LOOSE HABIT TO FILL EDGES. EVERGREEN OR DECIDUOUS. INTENT IS TO NOT SHEAR THIS SHRUB BUT TO LET GROW NATURAL FORM WITH MINIMAL PRUNING.

ACCENT UPRIGHT EVERGREEN SHRUBS USED AT CORNERS OF BUILDING TO ADD HGT AND INTEREST. USED SPARSELY.

MEDIUM HGT EVERGREEN HEDGE. TO BE SHEARED OR TIGHTLY TRIMMED TO PERFORM SCREENING OF PARKING, DUMPSTER, TRANSFORMER OR UTILITY.

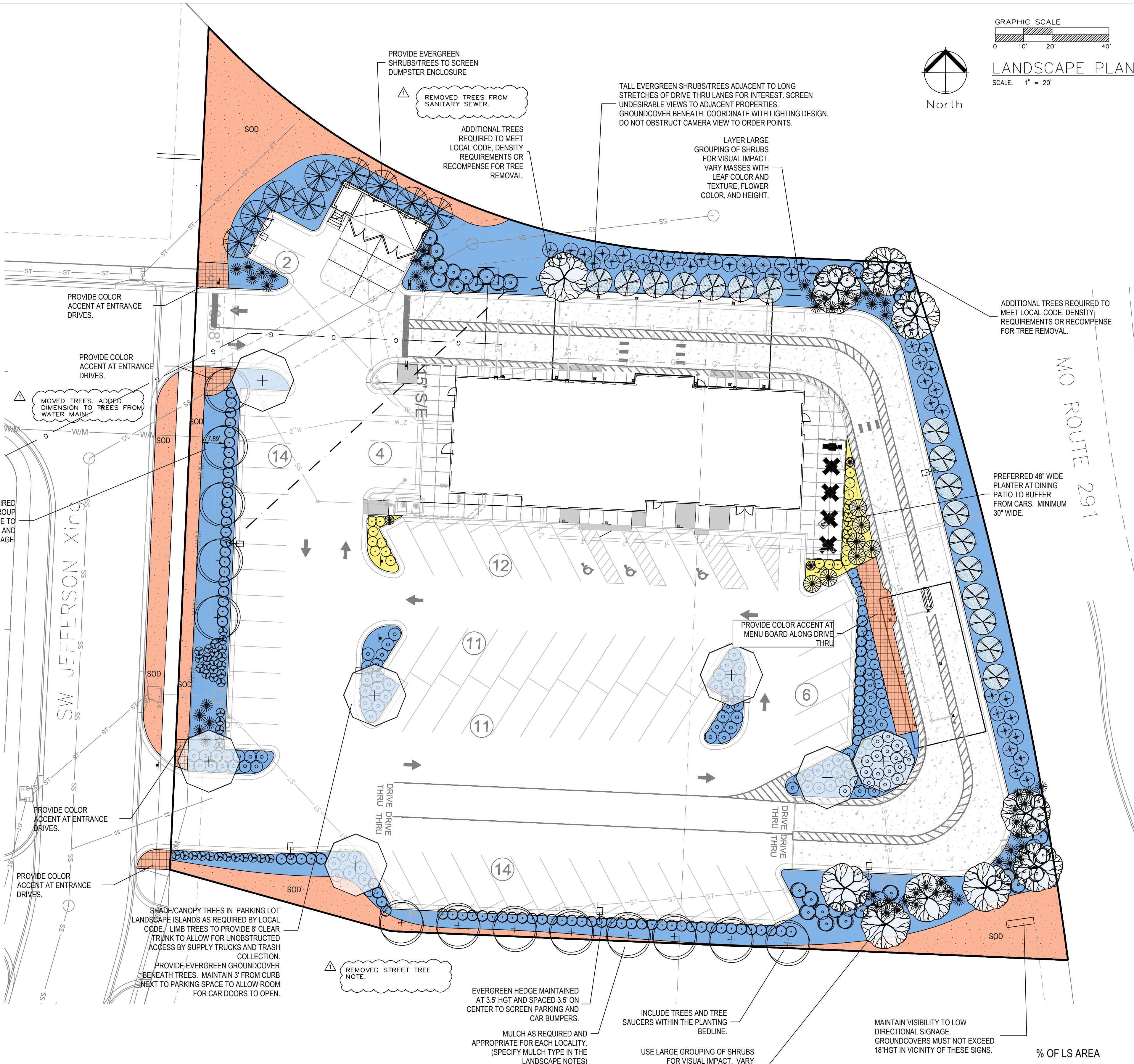
ACCENT ORNAMENTAL GRASSES OR LONG LEAFED PLANTS. USED IN LARGE BED AREAS.

ANNUAL COLOR BED USED IN ACCENT AREAS AT STRATEGIC LOCATIONS. PLANT AS REGION AND SEASON ALLOW.

LOW GROUNDCOVER BEDS USED NEXT TO WALKS OR BUILDING OR UNDER SMALL TREES OR IN PARKING ISLANDS.

GROUNDCOVER IN LARGE BEDS TO ADD TO LAYERING EFFECT OF LANDSCAPE. HGT TO BE 12"-18" HGT.

SODDED AREA. SELECTION AS REGION ALLOWS.



ISOLATED LAYOUT

% OF LS AREA

62% SHRUBS

5% MIXED

33% TURF

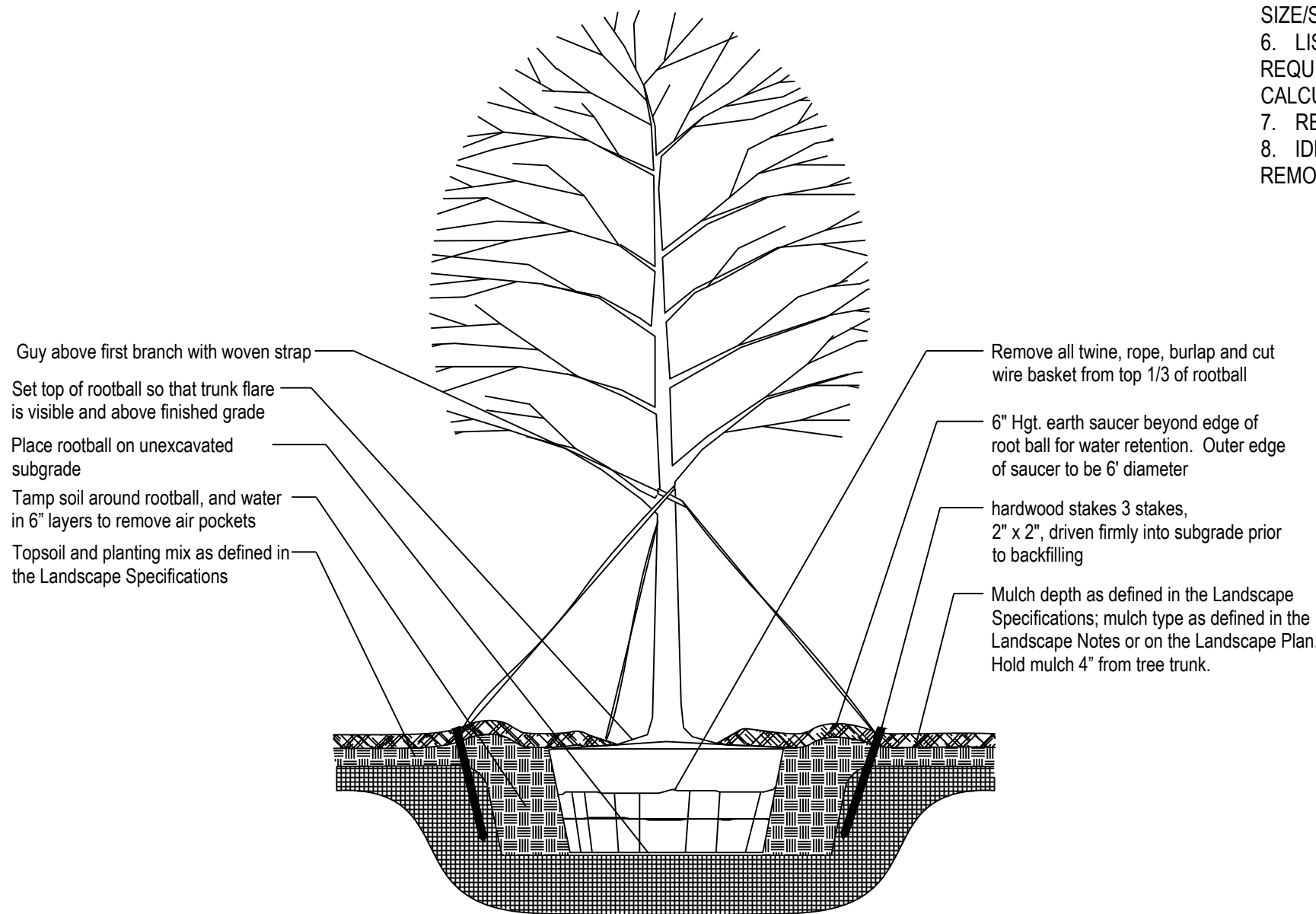
LANDSCAPE FOR LEE'S DESIGNS  
PROVIDE ACTUAL % OF VEGETATED AREAS AS SHOWN IN EXAMPLE HERE. ENSURE THAT THESE PERCENTAGES FALL WITHIN THE IDENTIFIED THRESHOLDS.



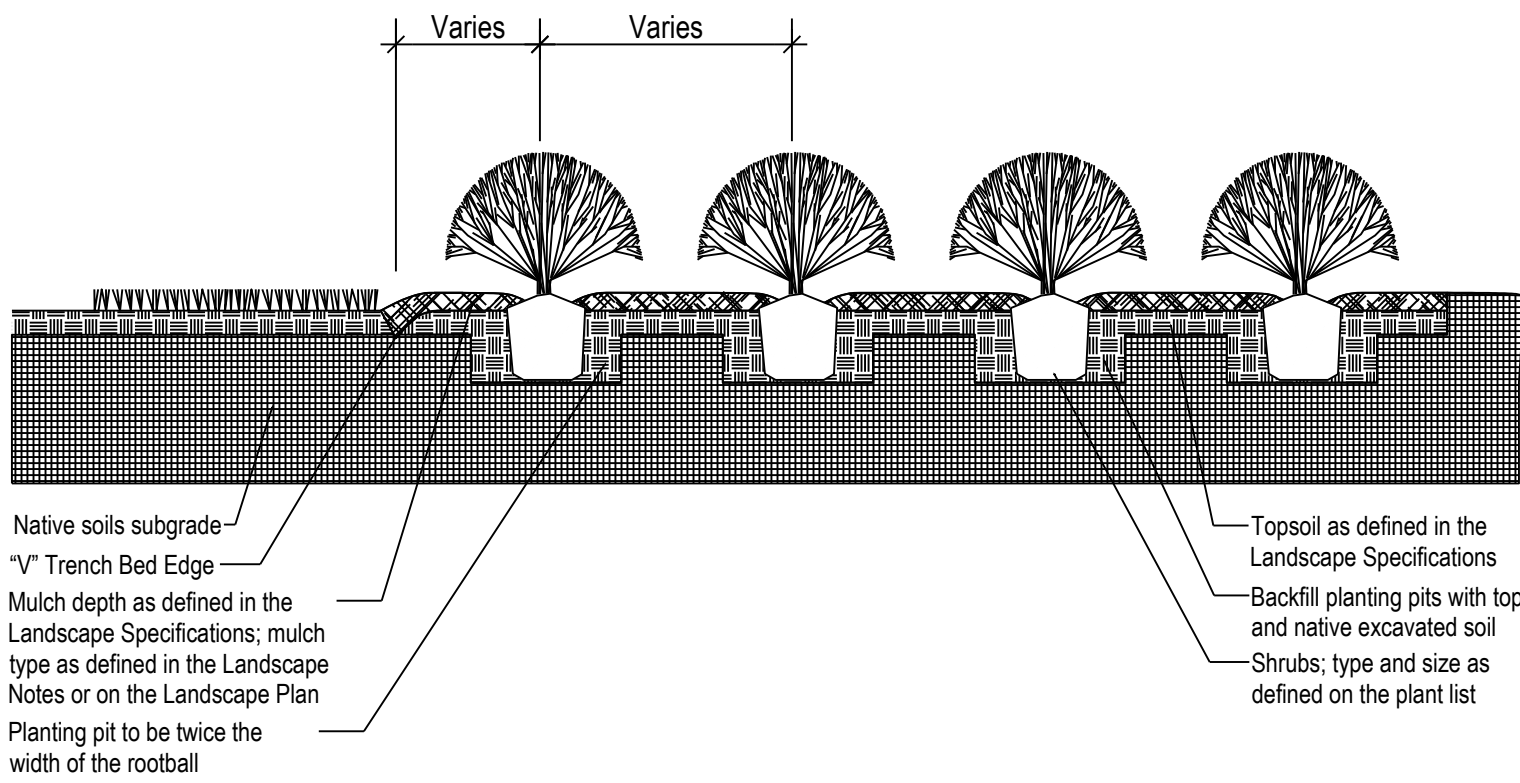
LANDSCAPE PLAN DESIGN CHECKLIST

1. LANDSCAPE PLAN TO BE DRAWN AT 1"=20'-0" ON A 24" X 36" SHEET ON A MOST CURRENT CHICK-FIL-A STANDARD TITLE BLOCK.
2. INCLUDE CHICK-FIL-A LOCATION ADDRESS IF AVAILABLE, STORE NUMBER, GRAPHIC SCALE, DATE, REVISED DATE, NORTHARROW AND NAME, ADDRESS AND PHONE NUMBER OF LANDSCAPE ARCHITECT. SIGN AND SEAL DRAWINGS AS APPROPRIATE.
3. LABEL ADJACENT ROADWAYS.
4. LABEL EACH GROUP OF PLANTS ON THE LANDSCAPE DESIGN WITH QUANTITY AND COMMON NAME. ( AVOID USE OF ABBREVIATIONS)
5. SHOW A COMPLETE PLANT LIST IDENTIFYING QUANTITY, BOTANICAL NAME, COMMON NAME, SIZE/SPECIFICATION (INCLUDING HGT AND SPREAD) AND SPACING.
6. LIST THE LANDSCAPE REQUIREMENTS FOR THE LOCAL MUNICIPALITY AND HOW THOSE REQUIREMENTS ARE SATISFIED. PROVIDE NECESSARY TABLES AND PERTINENT CALCULATIONS.
7. RESPOND TO DEVELOPER(S) REQUIREMENTS FOR LANDSCAPE AS APPROPRIATE.
8. IDENTIFY EXISTING TREES FROM THE TREE SURVEY AND SHOW WHETHER BEING SAVED OR REMOVED.

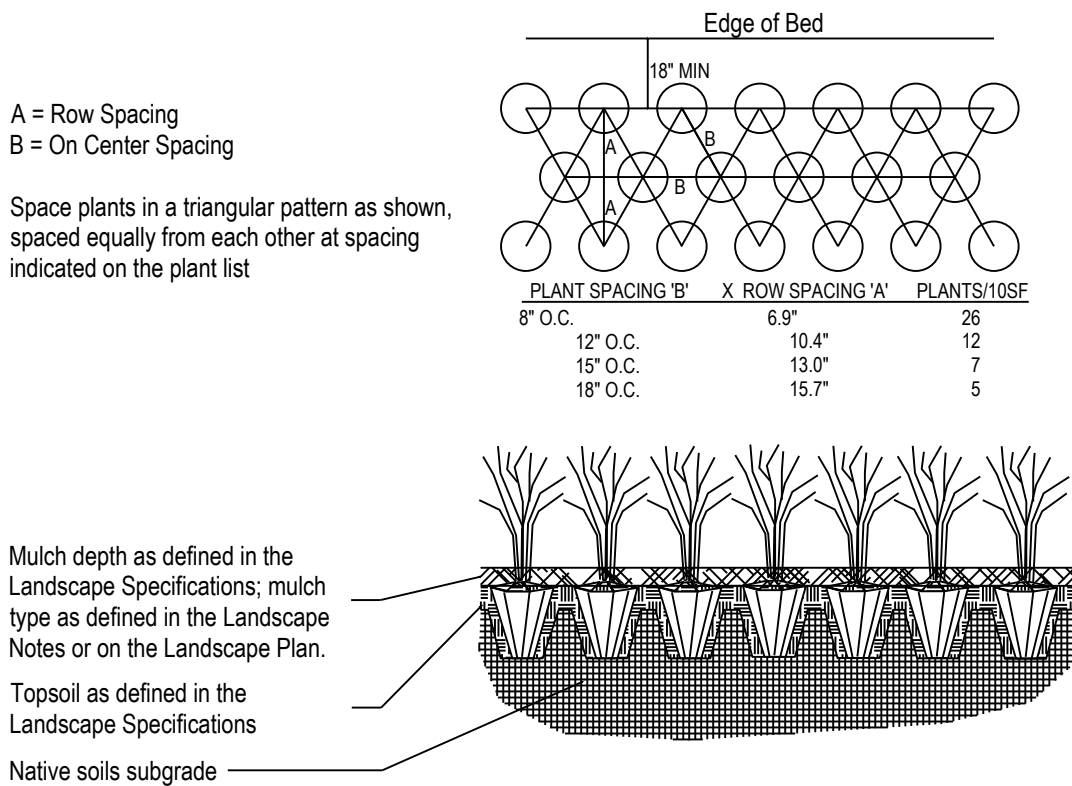
9. SHOW TREE PROTECTION FENCING LOCATION AS REQUIRED.
10. SHOW TREE PROTECTION FENCING DETAIL AS PER LOCAL CODES.
11. LIST ITEMS SPECIFIC TO THE SITE THAT WOULD BE NECESSARY TO KNOW
  - \* POOR SOILS
  - \* VEGETATION ON ADJACENT PROPERTIES THAT MAY IMPACT SIGNAGE OR PROPOSED LANDSCAPE
  - \* FENCE OR EARTH BERM REQUIREMENTS AND WHO IS RESPONSIBLE FOR PROVIDING.
12. SHOW CHICK-FIL-A MAIN SIGNAGE AND MENU BOARDS AND INDICATE SIZE/HGT; REFER TO SIGN PACKAGE FOR THIS INFORMATION.
13. SHOW UTILITIES AND UTILITY EASEMENTS.
14. COORDINATE TREE LOCATIONS WITH LIGHTING DESIGNER.
15. SPECIFY MULCH TYPE WITHIN THE LANDSCAPE NOTES (#17 WITHIN LANDSCAPE NOTES).
16. LANDSCAPE PACKAGE SHALL INCLUDE THE FOLLOWING SHEETS: L-1.0 LANDSCAPE PLAN, L-1.1 LANDSCAPE DETAILS, L-1.2 LANDSCAPE SPECIFICATIONS AND MAINTENANCE, L-2.0 IRRIGATION PLAN, L-2.1 IRRIGATION DETAILS, AND L-2.2 IRRIGATION SPECIFICATIONS



- NOTE**
1. Hole to be twice the width of the rootball.
  2. Do not heavily prune tree at planting. Prune only crossover limbs, broken or dead branches; Do not remove the terminal buds of branches that extend to the edge of the crown.
  3. Each tree must be planted such that the trunk flare is visible at the top of the rootball. Trees where the trunk flare is not visible shall be rejected. Do not cover the top of the rootball with soil. Mulch to be held back 4" away from trunk.
  4. Remove Guy Wires and Staking when warranty period has expired (after one year).

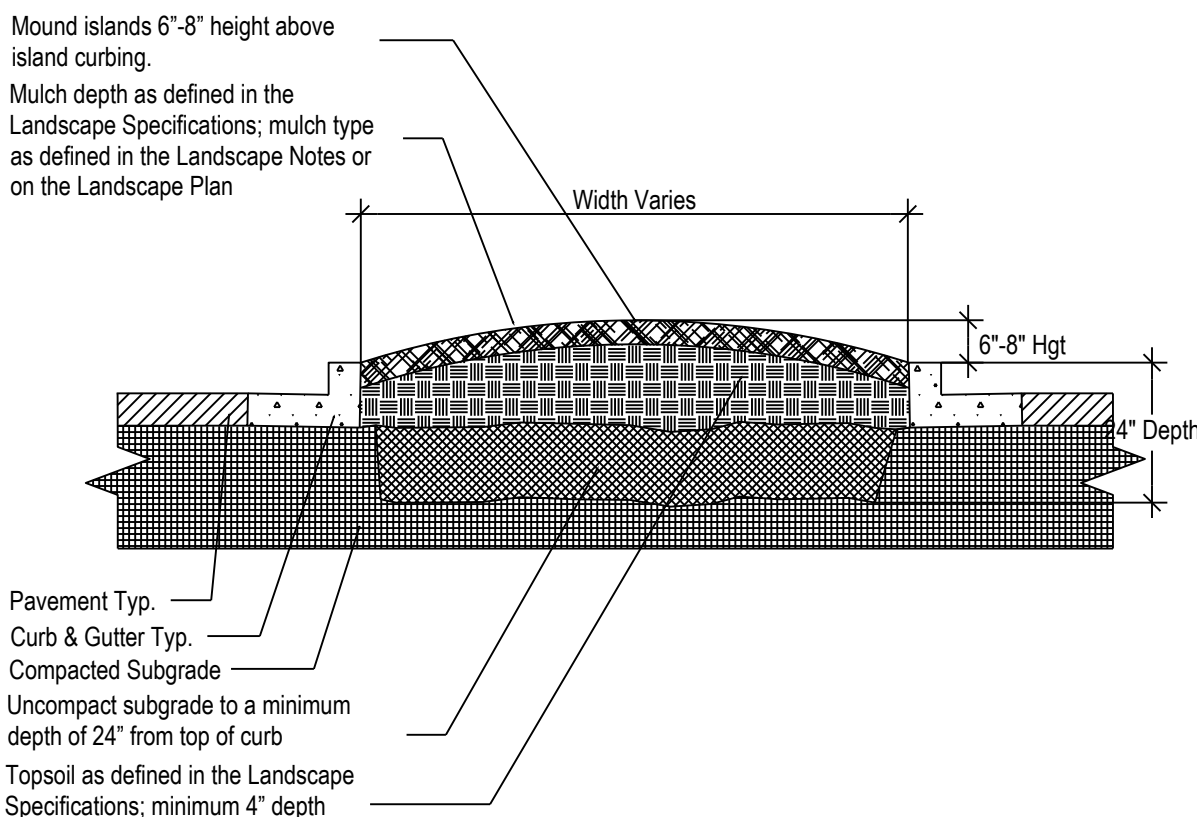


2 SHRUB BED PLANTING DETAIL  
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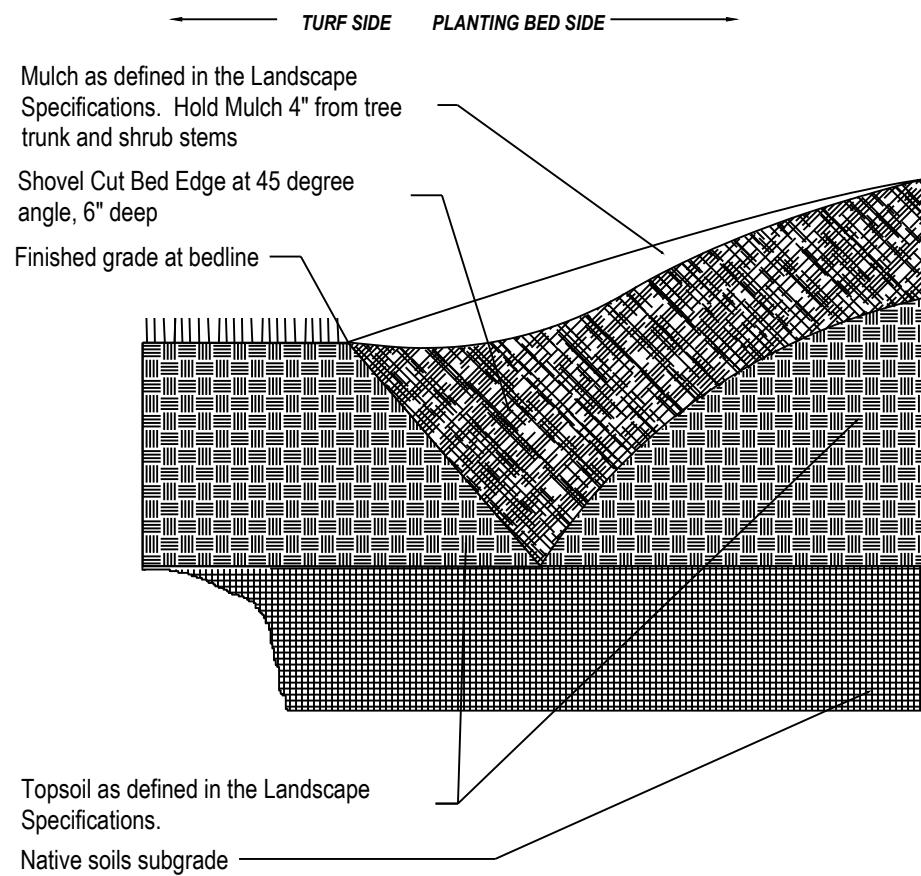
- NOTE**
1. Space groundcover plants in accordance with indicated spacing listed on the plant list, or as shown on the landscape plan.
  2. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants.
  3. Plant to within 24" of the trunks of trees and shrubs within planting bed and to within 18" of edge of bed.

3 GROUNDCOVER PLANTING DETAIL  
SCALE: NTS

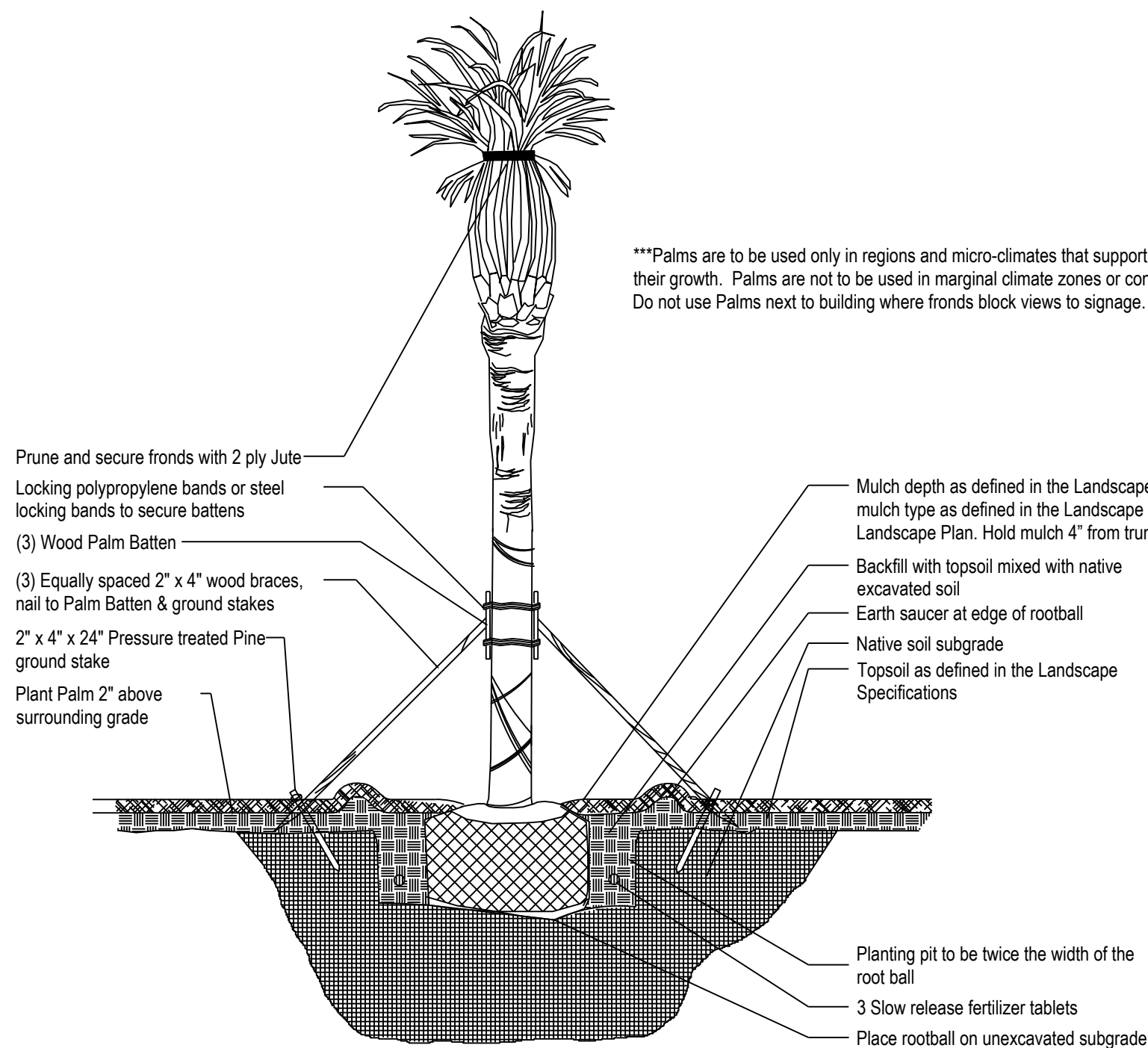


- NOTE**
1. Clean construction debris from within landscape island areas (ie. concrete, rocks, rubble, building materials, ect), prior to installing topsoil and plant material.
  2. Fracture/loosen existing subgrade to a minimum 24" depth. Remove and replace any subgrade unsuitable for planting. Once subgrade is clean of debris and loosened, add topsoil to a minimum bermed 6"-8" height above island curbing.
  3. Island plant material as per the Landscape Plan.
  4. Install plant material as per tree, shrub and ground cover planting details, and as defined in the Landscape Specifications.
  5. Install mulch or sod as specified on the Landscape Plan, and as defined in the Landscape Specifications.

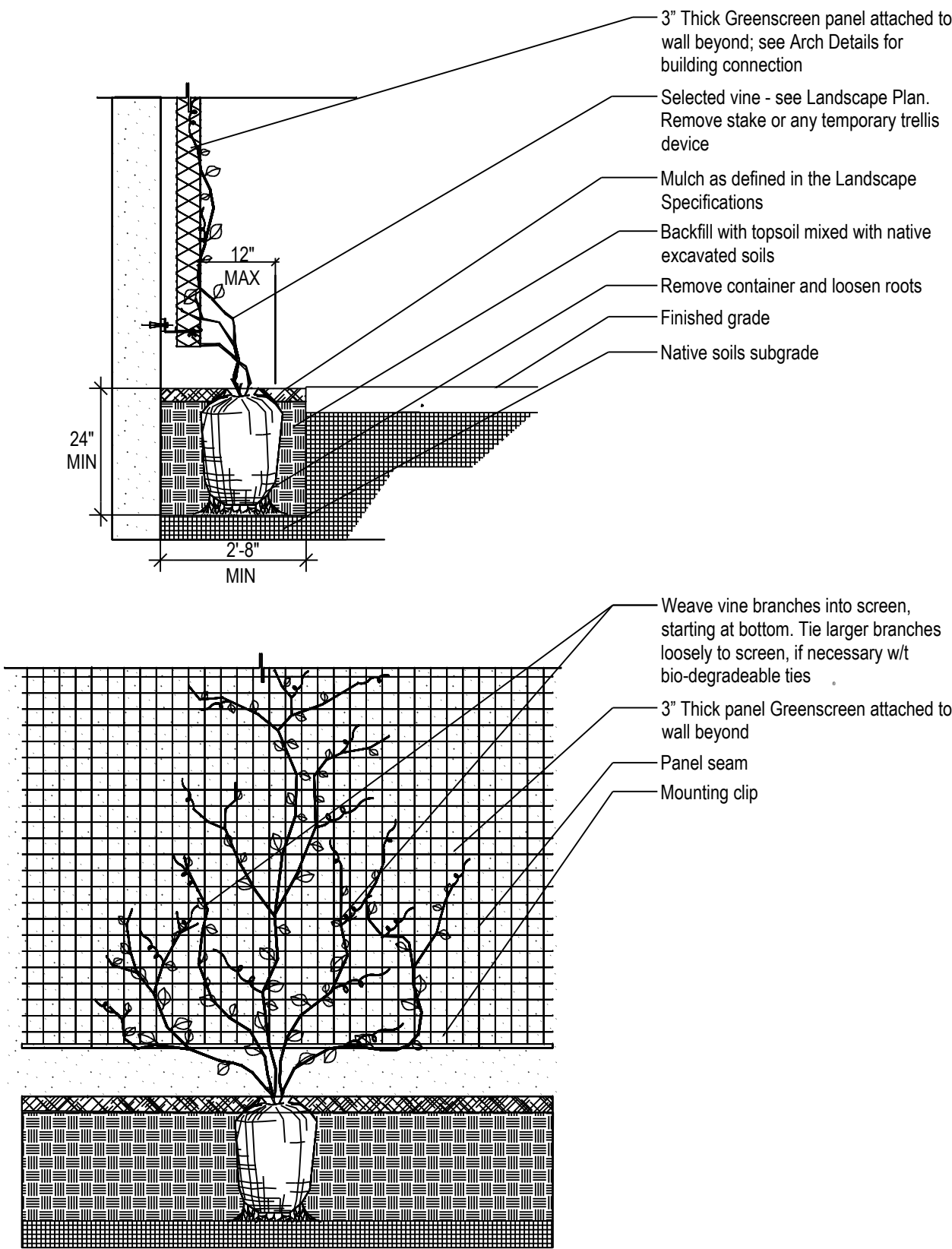
4 PARKING ISLAND BERMING DETAIL  
SCALE: NTS



5 "V" TRENCHED BED DETAIL  
SCALE: NTS



6 PALM STAKING DETAIL  
SCALE: NTS



- NOTE**
1. Plant vines per landscape plans and Landscape Specifications.
  2. Typical spacing varies from 1' to 4' OC, depending upon vine species and container size.
  3. Irrigation will be required in all climate zones. Install per Irrigation Plan and Irrigation Specifications. Greenscreen does not supply plant material.

7 GREENSCREEN TRELLIS PLANTING DETAIL  
SCALE: NTS

LANDSCAPE NOTES

1. Landscape Contractor to read and understand the Landscape Specifications (sheet L-1.2) prior to finalizing bids. The Landscape Specifications shall be adhered to throughout the construction process.
2. Contractor is responsible for locating and protecting all underground utilities prior to digging.
3. Contractor is responsible for protecting existing trees from damage during construction.
4. All tree protection devices to be installed prior to the start of land disturbance, and maintained until final landscaping.
5. All tree protection areas to be protected from sedimentation.
6. All tree protection fencing to be inspected daily, and repaired or replaced as needed.
7. No parking, storage or other construction activities are to occur within tree protection areas.
8. All planting areas shall be cleaned of construction debris (ie. concrete, rock, rubble, building materials, etc) prior to adding and spreading of the topsoil.
9. General Contractor is responsible for adding a min of 4" clean friable topsoil in all planting beds and all grassed areas. Graded areas to be held down the appropriate elevation to account for topsoil depth. See Landscape Specifications for required topsoil characteristics.
10. In all parking lot islands, the General Contractor is responsible to remove all debris, fracture/loosen subgrade to a min. 24" depth. Add topsoil to a 6"-8" berm height above island curbing; refer to landscape specifications and landscape island detail.
11. Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by the General Contractor and observe the site conditions under which the work is to be done. Notify the General Contractor of any unsatisfactory conditions, work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Contractor.
12. Any deviations from the approved set of plans are to be approved by the Landscape Architect.
13. Landscaping shall be installed in conformance with ANSI Z60.1 the "American Standard for Nursery Stock" and the accepted standards of the American Association of Nurserymen.
14. Existing grass in proposed planting areas shall be killed and removed. Hand rake to remove all rocks and debris larger than 1 inch in diameter, prior to adding topsoil and planting shrubs.
15. Sod to be tested to determine fertilizer and lime requirements prior to laying sod.
16. Annual and perennial beds: add min. 4 inch layer of organic material and till to a min. depth of 12 inches. Mulch annual and perennial beds with 2-3 inch layer of mini nuggets.
17. All shrubs beds (existing and new) to be mulched with a min. 3 inch layer of mulch (double shredded hardwood mulch) [mulch type per region to be specified here].
18. Planting holes to be dug a minimum of twice the width of the root ball, for both shrub and tree. Set plant material 2-3" above finish grade. Backfill planting pit with topsoil and native excavated soil.
19. Sod to be delivered fresh (Cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. Edge of sod at planting beds are to be "V" trenched; see Landscape Details.
20. Any existing grass disturbed during construction to be fully removed, regraded and replaced. All tire marks and indentations to be repaired.
21. Water thoroughly twice in first 24 hours and apply mulch immediately.
22. The Landscape Contractor shall guarantee all plants installed for one full year from date of acceptance by the owner. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The Landscape Contractor shall not be responsible for acts of God or vandalism. See Landscape Specifications for Warranty requirements/expectations.
23. Any plant that is determined dead, in an unhealthy, unsightly condition, lost its shape due to dead branches, or other symptoms of poor, non-vigorous growth, shall be replaced by the Landscape Contractor. See Landscape Specifications for warranty requirements/expectations.
24. Site to be 100% irrigated in all planting beds and grass area by an automatic underground Irrigation System. See Irrigation Plan L-2.0 for design. Irrigation as-built shall be provided to the Landscape Architect within 24 hours of irrigation install completion.
25. Stake all evergreen and deciduous trees as shown in the planting detail and as per the Landscape Specifications.
26. Remove stakes and guying from all trees after one year from planting.



LANDSCAPE SPECIFICATIONS

PART 1 - GENERAL

DESCRIPTION

Provide trees, shrubs, ground covers, sod, and annuals/perennials as shown and specified on the landscape plan. The work includes:

1. Soil preparation.
2. Trees, shrubs, ground covers, and annuals/perennials.
3. Planting mixes.
4. Top Soil, Mulch and Planting accessories.
5. Maintenance.
6. Decorative stone.

Related Work:

1. Irrigation System; see irrigation specifications (sheet L-2.2)

QUALITY ASSURANCE

Plant names indicated: comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock". A plant shall be dimensioned as it stands in its natural position.

All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of 2 years.

Nursery Stock furnished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional cost, and providing that the larger plants will not be cut back to size indicated. Provide plants indicated by two measurements so that only a maximum of 25% are of the minimum size indicated and 75% are of the maximum size indicated.

Before submitting a bid, the Contractor shall have investigated the sources of supply and be satisfied that they can supply the listed plants in the size, variety and quality as specified. Failure to take this precaution will not relieve the Contractor from their responsibility for furnishing and installing all plant materials in strict accordance with the Contract Documents without additional cost to the Owner. The Landscape Architect shall approve any substitutes of plant material, or changes in plant material size, prior to the Landscape Contractor submitting a bid.

DELIVER, STORAGE AND HANDLING

Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to the Landscape Architect. Water heeled-in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Cover plants transported on open vehicles with a protective covering to prevent wind burn.

PROJECT CONDITIONS

Protect existing utilities, paving, and other facilities from damage caused by landscape operations.

A complete list of plants, including a schedule of sizes, quantities, and other requirements are shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

The irrigation system will be installed prior to planting. Locate, protect and maintain the irrigation system during planting operations. Repair irrigation system components damaged during planting operations; at the Contractor's expense. Refer to the irrigation specifications, irrigation plan and irrigation details.

Do not begin landscape accessory work before completion of final grading or surfacing.

WARRANTY

Warrant plant material to remain alive, be healthy and in a vigorous condition for a period of 1 year after completion and final acceptance of entire project.

Replace, in accordance with the drawings and specifications, all plants that are dead or, are in an unhealthy, or unsightly condition, and have lost their natural shape due to dead branches, or other causes due to the Contractor's negligence. The cost of such replacement(s) is at the Contractor's expense. Warrant all replacement plants for 1 year after installation.

Warranty shall not include damage, loss of trees, plants, or ground covers caused by fires, floods, freezing rains, lightning storms, winds over 75 miles per hour, winter kill caused by extreme cold, severe winter conditions not typical of planting area, and/or acts of vandalism or negligence on a part of the Owner.

Remove and immediately replace all plants, found to be unsatisfactory during the initial planting installation.

Maintain and protect plant material, lawns, and irrigation until final acceptance is made.

ACCEPTANCE

Inspection of planted areas will be made by the Owner's representative.

1. Planted areas will be accepted provided all requirements, including maintenance, have been complied with and plant materials are alive and in a healthy, vigorous condition.

Upon acceptance, the Contractor shall commence the specified plant maintenance.

CODES, PERMITS AND FEES

Obtain any necessary permits for this Section of Work and pay any fees required for permits.

The entire installation shall fully comply with all local and state laws and ordinances, and with all established codes applicable thereto; also as depicted on the landscape and irrigation construction set.

PART 2 - PRODUCTS

MATERIALS

Plants: Provide typical of their species or variety, with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces. Plants held on storage will be rejected if they show signs of growth during the storage period.

1. Balled and plants wrapped with burlap, to have firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls, or signs of chiding roots are not acceptable.

2. Container-grown stock: Grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
  - a. No plants shall be loose in the container.
  - b. Container stock shall not be pot bound.
3. Plants planted in rows shall be matched in form.
4. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
  - a. If the use of larger plants is acceptable, increase the spread of roots or root ball in proportion to the size of the plant.

5. The height of the trees, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated in the plant list.
6. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
7. Evergreen trees shall be branched to the ground or as specified in plant list.
8. Shrubs and small plants shall meet the requirements for spread and height indicated in the plant list.
  - a. The measurements for height shall be taken from the ground level to the height of the top of the plant and not the longest branch.
  - b. Single stemmed or thin plants will not be accepted.
  - c. Side branches shall be generous, well-twigged, and the plant as a whole well-bush-d to the ground.

- d. Plants shall be in a most, vigorous condition, free from dead wood, bruises, or other or branch injuries.

ACCESSORIES

Topsoil: Shall be fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, roots, sticks, and other foreign materials, with acidity range of between pH 6.0 and 6.8.

Note: All planting areas shall be cleaned of construction debris (ie. Concrete, rubble, stones, building material, etc.) prior to adding and spreading of the top soil.

1. Sod Areas: Spread a minimum 4" layer of top soil and rake smooth.
2. Planting bed areas: Spread a minimum 4" layer of top soil and rake smooth.

LANDSCAPE MAINTENANCE SPECIFICATIONS

The Contractor shall provide as a separate bid, maintenance for a period of 1 year after final acceptance of the project landscaping. The Contractor must be able to provide continued maintenance if requested by the Owner or provide the name of a reputable landscape contractor who can provide maintenance.

STANDARDS

All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

APPROVALS

Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative (General Manager of the restaurant).

All seasonal color selections shall be approved by the General Manager prior to ordering and installation.

SOIL TESTING

The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Acceptable Soil Test Results

Turf		Landscape Trees and Shrubs	
pH Range	6.0-7.0	5.0-7.0	
Organic Matter	>2.5%	>1.5%	
Magnesium (Mg)	100-lbs./acre	100-lbs./acre	
Phosphorus (P2O5)	150-lbs./acre	150-lbs./acre	
Potassium (K2O)	120-lbs./acre	120-lbs./acre	
Soluble salts	Not to exceed 900ppm/1.9 mmhos/cm	Not to exceed 750ppm/0.75 mmhos/cm	
Conductivity	In soil, not to exceed 1400 ppm/2.5 mmhos/cm	In soil, not to exceed 2000 ppm/2.0 mmhos/cm	
For unsuitable soil conditions, the following optional tests are recommended with levels not to exceed:			
	Boron		
	Manganese		50
	Potassium (K2O)		
	Sodium		

WORKMANSHIP

During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the owner.

TURF

GENERAL CLEAN UP

Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

MOWING

Warm season grasses (i.e. Bermuda grass) shall be maintained at a height of 1" to 2" during the growing season.

Cool season grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Weed eaters should NOT be used around trees because of potential damage to the bark.

EDGING

Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

LIMING & FERTILIZING

A soil test shall be taken to determine whether an application of limestone in late fall is necessary. If limestone is required, the landscape contractor shall specify the rate, obtain approval from the owner and apply it at an additional cost. A unit price for liming of turf shall accompany the bid based on a rate of 50 pounds per 1000 square feet.

Fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES

Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. Read the label prior to applying any chemical.

INSECT & DISEASE CONTROL FOR TURF

The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problem exists. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

TREES, SHRUBS, & GROUND COVER

PRUNING

All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. Do not shear trees or shrubs. If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

Pruning Guidelines:

1. Prune those that flower before the end of June immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune those that flower in summer or autumn in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as cotoneasters, pyracanthas and viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
  - A. Yews, junipers, hemlocks, arbovitae, and false-cypress may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
  - B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
8. C. Pines may be lightly pruned in early June by reducing candles. Groundcover shall be edged and pruned as needed to contain it within its borders.

Perennials:

1. After initial installation, if a time-released fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.
2. The following year:
  - a. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
  - b. Cut all deciduous perennials flush to the ground by March 1, if this was not done previous fall, to allow new growth to develop freely.
  - c. Mulch the perennial bed once in early spring at 1"-2" depth. If soil is bared in late fall, re-mulch lightly after ground is frozen to protect perennials.
  - d. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and ligularias. Powdery mildew on phlox, monardas, and asters can be prevented with properly timed fungicides or use of disease-resistant varieties.
  - e. Weed perennial bed as specified in "WEEDING" above.
  - f. Prune branching species to increase density. Cut only the flowering stems after blooming. Do not remove the foliage.
3. The following fall cut back deteriorating plant parts unless instructed to retain for winter interest, e.g. Sedum Autumn Joy and ornamental grasses.
4. Long-term Care:
  - a. Divide plants that overcrowd the space provided. Divide according to the species. Some need frequent dividing, e.g. asters and yarrow every two years; other ever, e.g. peonies, hostas, and astilbe.
  - b. For detailed information regarding the care of specific perennials, refer to *All About Perennials* by Ortho, *Perennials: How to Select, Grow and Enjoy* by Pammar and Frederick McGouty, Hp Books Publisher; *Herbaceous Perennial Treatise on their Identification, Culture and Garden* Slipes Pub LLC.

Harper Plants: A *Airbutes* by Allan Armitage.

SUMMARY OF MAINTENANCE

LAWN MAINTENANCE

1. Soil analysis performed annually to determine pH. If pH does not fall within specified range, adjust according to soil test recommendations.
2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to turf vitality for cool season grasses.
3. Mow warm and cool season on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on paved and bed areas will be removed.
4. Aerate warm season turf areas to maintain high standards of turf appearance.
5. Apply pre-emergent to turf in two applications in early February and early April to extend barrier.
6. Apply post emergent as needed to control weeds.
7. Mechanically edge curbs and walks.
8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess runners to maintain clean defined beds.

TREE, GROUNDCOVER, AND SHRUB BED MAINTENANCE

1. Prune shrubs, trees and groundcover to encourage healthy growth and create a natural appearance.
2. Mulch to be applied in February/March with a half rate in late summer to top dress.
3. Apply pre-emergent herbicides in February and April.
4. Manual weed control to maintain clean bed appearance.
5. Apply fungicides and insecticides as needed to control insects and disease.
6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November)
7. Edge all mulched beds.
8. Remove all litter and debris.

GENERAL MAINTENANCE

1. Remove all man-made debris, blow edges.
2. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

SEASONAL COLOR MAINTENANCE

Perennialization of Bulbs:

1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet, or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:

1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner, and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
  - a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
  - b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water.

Remove: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.