

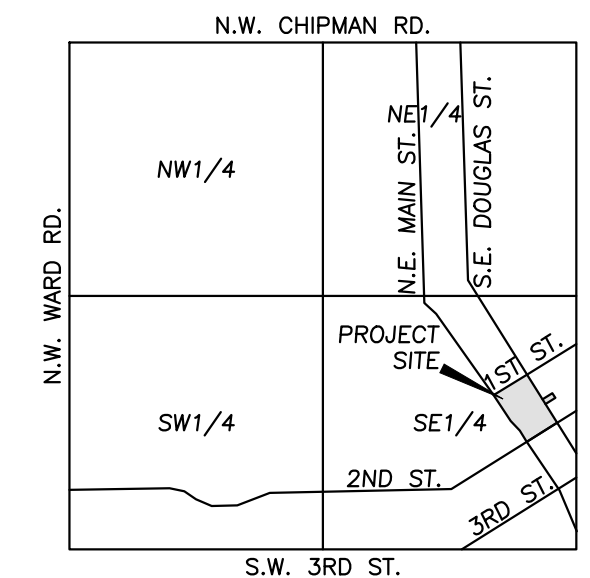
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Know what's below.
Call before you dig.

DEMOLITION NOTES:

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

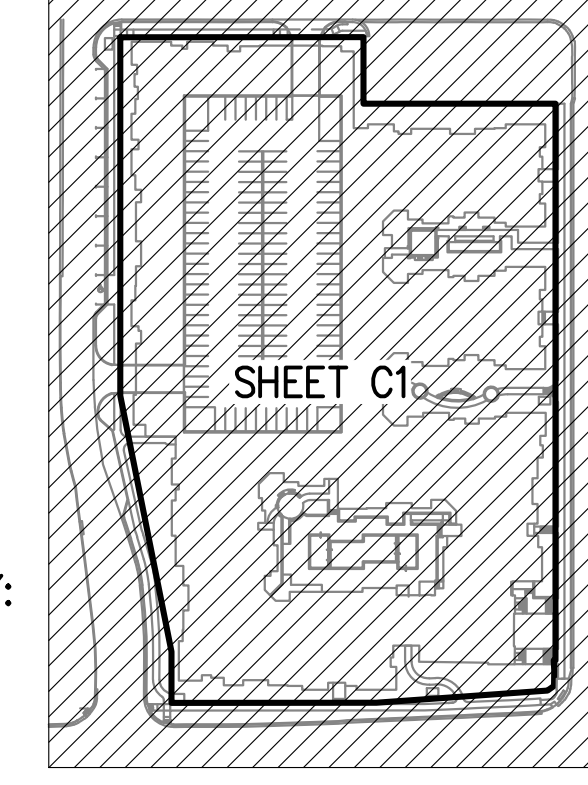


VICINITY MAP
SEC. 6-T47N-R31W
DEMOLITION KEY NOTES:

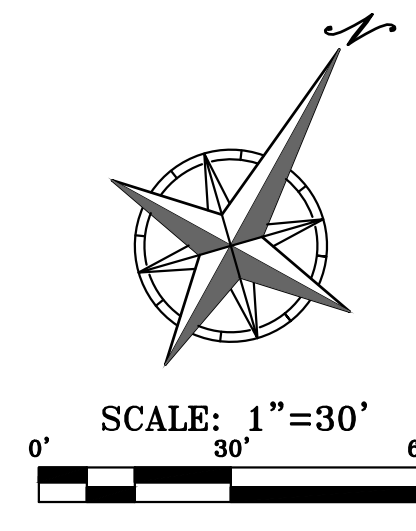
- ALL UTILITIES SERVING STRUCTURES IMMEDIATELY SURROUNDING THE DEMOLITION BOUNDARY SHALL REMAIN IN SERVICE THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DAMAGE TO SUCH UTILITIES. TYPICAL LOCATION.
- THE CONTRACTOR SHALL REMOVE ALL UNDERGROUND GAS LINES, WATER LINES, SANITARY AND STORM SEWER SERVICE LINES AND THEIR APPURTENANCES. APPURTENANCES INCLUDE, BUT NOT LIMITED TO, ALL PIPES, MANHOLES, JUNCTION BOXES, CATCH BASINS, YARD INLETS, FLUMES AND METER PITS. THE UTILITY SERVICES SHALL BE DISCONNECTED ALONG THE PROJECT BOUNDARY LINE TO THE EXISTING BUILDING TO BE DEMOLISHED.
- THE CONTRACTOR SHALL REMOVE ALL UNDERGROUND/OVERHEAD ELECTRICAL SERVICES, TELEPHONE AND CABLE SERVICE LINES AND THEIR APPURTENANCES WITHIN THE PROJECT BOUNDARY. THE UTILITY SERVICES SHALL BE DISCONNECTED ALONG THE PROJECT BOUNDARY. TYPICAL LOCATION.
- THE CONTRACTOR SHALL REMOVE EXISTING DRIVE ENTRANCE, EXISTING CONCRETE PARKING LOT, & EXISTING ASPHALT PARKING LOT. REMOVE EXISTING ASPHALT, CONCRETE, AND THE SUB-BASE GRAVEL TO THE NATURAL SOIL ELEVATION.
- THE CONTRACTOR SHALL REMOVE ALL PRE-EXISTING STRUCTURES, FOUNDATIONS, FOOTINGS, PIERS, WATER WELLS, SEPTIC TANKS, LATERAL LINES, BURIED DEBRIS, MISCELLANEOUS CONCRETE, ETC. WHICH MAY BE ENCOUNTERED DURING DEMOLITION ACTIVITIES. THE CONTRACTOR SHALL DISPOSE OF THESE MATERIALS IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES.
- SHADED AREAS INDICATE MAIN STRUCTURES AND OUTBUILDINGS TO BE DEMOLISHED. IN ADDITION TO SHADED DEMOLITION AREAS, ALL MISCELLANEOUS CONCRETE, STONE STRUCTURES, OUTBUILDINGS, PRIVATE SIDEWALKS, RETAINING WALLS, SIGNS, PATIOS, FOUNDATION WALLS AND FOOTINGS ASSOCIATED WITH THE STRUCTURES SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS, TYPICAL LOCATION.
- THE CONTRACTOR SHALL BE REQUIRED TO BACKFILL ALL EXCAVATIONS/DEPRESSIONS CREATED BY THE REMOVAL OF STRUCTURES, FOUNDATIONS, FOOTINGS, PAVING, SEPTIC TANKS, WELLS, PIPES, TREE ROOTS, DEBRIS AND UTILITY STRUCTURES, ETC. ALL EXCAVATIONS SHALL BE BACKFILLED TO EXISTING GROUND ELEVATIONS ON ALL SIDES OF THE EXCAVATION.
- REMOVE EXISTING LIGHT POLE AND FOUNDATION.
- CONTRACTOR TO COORDINATE WITH CABLE COMPANY TO REMOVE OVERHEAD CABLE ACROSS 2ND STREET.

OIL-GAS WELLS:
PER MISSOURI DNR RECORDS AN ABANDONED GAS WELL (API #095-00498) HAS BEEN IDENTIFIED IN THE AREA, BUT THE EXACT LOCATION IS UNKNOWN. IF THE ABANDONED GAS WELL IS FOUND DURING CONSTRUCTION THE CONTRACTOR SHALL HALT ALL WORK IMMEDIATELY AND THE DEVELOPER / CONTRACTOR MUST NOTIFY THE CITY OF LEE'S SUMMIT AND MISSOURI DNR. THE CITY AND MISSOURI DNR WILL HAVE TO PROVIDE PERMISSION FOR CONSTRUCTION TO RESUME AFTER EVALUATING THE WELL.

KEY PLAN



LEGEND	
PL	PROPERTY LINE
LOT LINE	LOT LINE
R/W	RIGHT-OF-WAY
REMOVE EXISTING CURB & GUTTER	
EXISTING BUILDING TO BE REMOVED	
EXISTING ASPHALT PAVEMENT TO BE REMOVED	
EXISTING CONCRETE PAVEMENT/SIDEWALK TO BE REMOVED	
EXISTING TREE TO REMAIN	
REMOVE TREE	
EXISTING LIGHT POLE	
EXISTING WATER LINE	
EXISTING GAS LINE	
EXISTING BURIED ELECTRIC	
EXISTING BURIED TELEPHONE	
EXISTING SANITARY SEWER	
EXISTING STORM SEWER	
EXISTING FIRE HYDRANT	



PREPARED & SUBMITTED BY:
PHELPS ENGINEERING, INC.
1270 N. WINCHESTER
OLATHE, KANSAS 66061

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEWED BY
LEE'S SUMMIT MISSOURI
04/10/2020

STATE OF MISSOURI
JAMES E. HARRIS
PE-2011010998
3/16/20
PROFESSIONAL ENGINEER

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

PLANNING
ENGINEERING
IMPLEMENTATION

DEMOLITION PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Project No.	171125	No.	1	Date	3-16-20
DATE	01-28-20	DRAWN	SNH	CHECKED	DAF
DATE	01-28-20	APPROVED	DEU	CERTIFICATE OF AUTHORIZATION	
DATE	01-28-20	APPROVED	DEU	LAND SURVEYING - LS-82	
DATE	01-28-20	APPROVED	DEU	ENGINEERING - E-36	
DATE	01-28-20	APPROVED	DEU	CERTIFICATE OF AUTHORIZATION	
DATE	01-28-20	APPROVED	DEU	LAND SURVEYING - LS-82	
DATE	01-28-20	APPROVED	DEU	ENGINEERING - E-36	
DATE	01-28-20	APPROVED	DEU	CERTIFICATE OF AUTHORIZATION	
DATE	01-28-20	APPROVED	DEU	LAND SURVEYING - LS-82	
DATE	01-28-20	APPROVED	DEU	ENGINEERING - E-36	

SHEET
C1

FINAL PLAT OF DOWNTOWN LEE'S SUMMIT APARTMENTS

RESURVEY AND REPLAT OF TRACT A, REPLAT OF LOTS 1 THRU 9 AND 11 THRU 23, INCLUSIVE, BLOCK 4 THE TOWN OF STROTHER, AND THE WEST 130 FEET OF LOTS 11 AND 12, BLOCK 4, CITY OF LEE'S SUMMIT, FORMERLY THE TOWN OF STROTHER, A SUBDIVISION OF LAND IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

LEGAL DESCRIPTION

Resurvey and replat of Tract A, REPLAT OF LOTS 1 THRU 9 AND 11 THRU 23, INCLUSIVE, BLOCK 4 TOWN OF STROTHER and the West 130 feet of Lots 11 and 12, Block 4, CITY OF LEE'S SUMMIT, FORMERLY THE TOWN OF STROTHER, a platted subdivision of land and vacated right-of-way of Main Street, as now established lying adjacent to said Tract A, all in the City of Lee's Summit, Jackson County, Missouri, being more particularly described as follows:

Beginning at the Northwest corner of said Lot 11, said point also being on the Southerly right-of-way line of SE 1ST Street, as now established; thence N 61°05'33" E, thence along the Northerly line of said Lot 11 and said Tract A and the Southerly right-of-way line of said SE 1st Street, a distance of 190.00 feet to an angle point on the Northerly line of said Tract A; thence S 28°54'14" E, along the Northerly line of said Tract A, a distance of 52.00 feet; thence N 61°05'33" E, along the Northerly line of said Tract A, a distance of 150.00 feet to the Northeast corner of said Tract A, said point also being on the Westerly right-of-way line of SE Douglas Street, as now established; thence S 28°54'14" E, along the Easterly line of said Tract A and the Westerly right-of-way line of said SE Douglas Street, a distance of 434.97 feet; thence along the Westerly right-of-way line of SE Douglas Street, for the following four (4) courses; thence S 64°59'11" W, a distance of 1.33 feet; thence S 31°25'32" E, a distance of 7.54 feet; thence S 28°15'14" E, a distance of 12.45 feet; thence S 25°44'49" W, a distance of 6.19 feet to a point on the Southerly line of said Tract A, said point also being on the Northerly right-of-way line of SE 2nd Street, as now established; thence along the Southerly right-of-way line of said Tract A and the Northerly right-of-way line of said SE 2nd Street, for the following two (2) courses; thence S 57°00'25" W, a distance of 134.16 feet; thence S 61°05'33" W, a distance of 160.00 feet to a point on the Easterly right-of-way line of SE Main Street, as now established; thence along the Easterly right-of-way line of said SE Main Street, for the following five (5) courses; thence N 73°54'20" W, a distance of 14.14 feet; thence N 28°54'14" W, a distance of 50.60 feet; thence N 32°44'09" W, a distance of 36.61 feet; thence N 42°41'34" W, a distance of 115.60 feet; thence N 28°54'14" W, along the Westerly line of said Tract A and its Southeasterly extension, a distance of 310.59 feet to the point of beginning, containing 3.7603 acres, more or less, of replatted land.

DEDICATION

The undersigned proprietors of the above described tract of land have caused the same to be subdivided in the manner shown on the accompanying plat, which subdivision shall hereafter be known as: "DOWNTOWN LEE'S SUMMIT APARTMENTS".

EASEMENTS

An easement or license is hereby granted to the City of Lee's Summit, Missouri, to locate, construct and maintain or to authorize the location, construction and maintenance of poles, wires, anchors, conduits, and/or structures for water, gas, sanitary sewer, surface drainage channel, electricity, telephone, cable television, or any other necessary public utility or services, any of them, upon, over or under those areas outlined or designated upon this plat as "Utility Easement" (U/E) and "Sanitary Sewer Easement" (SS/E) or within any street or thoroughfares dedicated to public use on this plat. Grantor, on behalf of himself, his heirs, his assigns and successors in interest, hereby waives, to the fullest extent allowed by law, including, without limitation, Section 527.188. RSMo. (2006), any right to request restoration of rights previously transferred and vacation of the easement herein granted.

DRAINAGE NOTE

Individual lot owner(s) shall not change or obstruct the drainage flow lines on the lots, unless specific application is made and approved by the City Engineer.

EXECUTION

IN TESTIMONY WHEREOF, undersigned proprietors has caused this instrument to be executed on this _____ day of _____ 20____.

DTLS Apartments, LLC

By: _____
James Thomas, Jr., Managing Member

ACKNOWLEDGEMENT

STATE OF MISSOURI }
COUNTY OF JACKSON } SS

BE IT REMEMBERED that on this _____ day of _____, 20____, before me, the undersigned, a Notary Public in and for said County and State, came James Thomas, Jr., Managing Member of DTLS Apartments, LLC, who is personally known to me to be such person who executed, as such officer, the within instrument on behalf of said company, and such person duly acknowledged the execution of the same to be the act and deed of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

Notary Public: _____ My Appointment Expires: _____

Print Name: _____

APPROVALS

This is to certify that the plat of "DOWNTOWN LEE'S SUMMIT APARTMENTS" was submitted and duly approved by the City of Lee's Summit, pursuant to Chapter 33, the Unified Development Ordinance, of the City of Lee's Summit Code of Ordinances.

By: _____ Mayor: Bill Baird _____ Date _____

By: _____ Director of Planning and Codes Administration, _____ Date _____
Ryan A. Elam, P.E.

By: _____ City Engineer, George M. Binger III, P.E. _____ Date _____

By: _____ City Clerk, Trisha Fowler Arcuri _____ Date _____

By: _____ Planning Commission Secretary, _____ Date _____

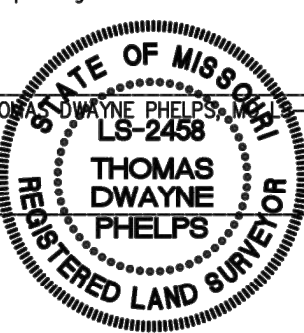
Approved by Jackson County Assessor:
By: _____ Date _____

Approved by GIS Department:
By: _____ Date _____

I hereby certify that the within plat of "DOWNTOWN LEE'S SUMMIT APARTMENTS" is based on an actual survey made by me or under my direct supervision and that said survey meets or exceeds the current MINIMUM STANDARD FOR PROPERTY BOUNDARY SURVEYS as adopted by the Missouri Board for Architects, Professional Engineers, and Land Surveyors and the Missouri Department of Natural Resources. I further certify that the Section and Sectional Subdivision corner monuments and survey boundary corner monuments were either found or set as indicated on this plat; that I have complied with all State and City of Lee's Summit statutes, ordinances and regulations governing the practice of surveying and plotting of subdivisions to the best of my knowledge and belief.

BY: _____ THOMAS DWAYNE PHELPS, 2458

DATE: _____



CERTIFICATE OF AUTHORIZATION
KANSAS
LAND SURVEYING - LS-82
ENGINEERING - E-391
MISSOURI
LAND SURVEYING - 2007001128
ENGINEERING - 2007005068

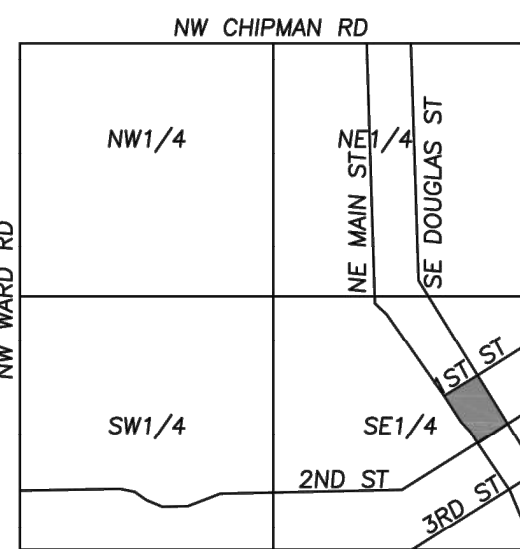
PHELPS ENGINEERING, INC.
1270 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax (913) 393-1166



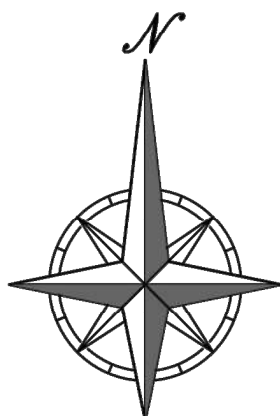
PLANNING
ENGINEERING
IMPLEMENTATION

MISSOURI STATE PLANE COORDINATE TABLE: (METERS)		
POINT NO.	NORTHING	EASTING
JA-25	303646.0331	860950.4763
②	305035.8918	860568.0322
③	304919.8404	860632.1062
④	304919.6690	860631.7389
⑤	304917.7081	860632.9371
⑥	304914.3658	860634.7332
⑦	304912.6653	860633.9131
⑧	304890.4011	860599.6202
⑨	304866.8296	860556.9336
⑩	304868.0244	860552.7925
⑪	304881.5256	860545.3383
⑫	304890.9116	860539.3043
⑬	304916.8072	860515.4146
⑭	304999.6716	860469.6516
⑮	305027.6669	860520.3528
⑯	305013.7931	860528.0128

NOTE:
THE BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE MISSOURI STATE PLANE COORDINATES SYSTEM, WEST ZONE, (IN METERS) WERE OBTAINED BY GPS OBSERVATION USING KC METRO CONTROL MONUMENT, JA-25 HAVING A COMBINED ADJUSTMENT FACTOR OF 0.99999843 DATE OF ADJUSTMENT 2003.



VICINITY MAP
SEC. 6-T47N-R31W



SCALE: 1"=30'

BEARING BASIS: RECORDED PLAT OF
"REPLAT OF LOTS 1 THRU 9 AND 11 THRU 23,
INCLUSIVE, BLOCK 4 TOWN OF STROTHER"

LEGEND

- DEVOTES SET 1/2"x24" REBAR W/PHELPS MOLS-2458 PLASTIC CAP
- DEVOTES FOUND SURVEY MONUMENT (ORIGIN UNKNOWN UNLESS DESCRIBED)
- ▲ DEVOTES FOUND "+" CUT
- DEVOTES SET MAG. NAIL & SHINER (ORIGIN UNKNOWN UNLESS DESCRIBED)
- (M) DEVOTES MEASURED
- (P) DEVOTES PLATTED
- (D) DEVOTES DEED
- (CR) DEVOTES CALCULATED FROM RECORD VALUE
- DEVOTES PROPOSED 8" CONCRETE SIDEWALK

FLOOD NOTE:

THE SUBJECT PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 29095C04176, AND DATED JANUARY 20, 2017.

TITLE NOTES:

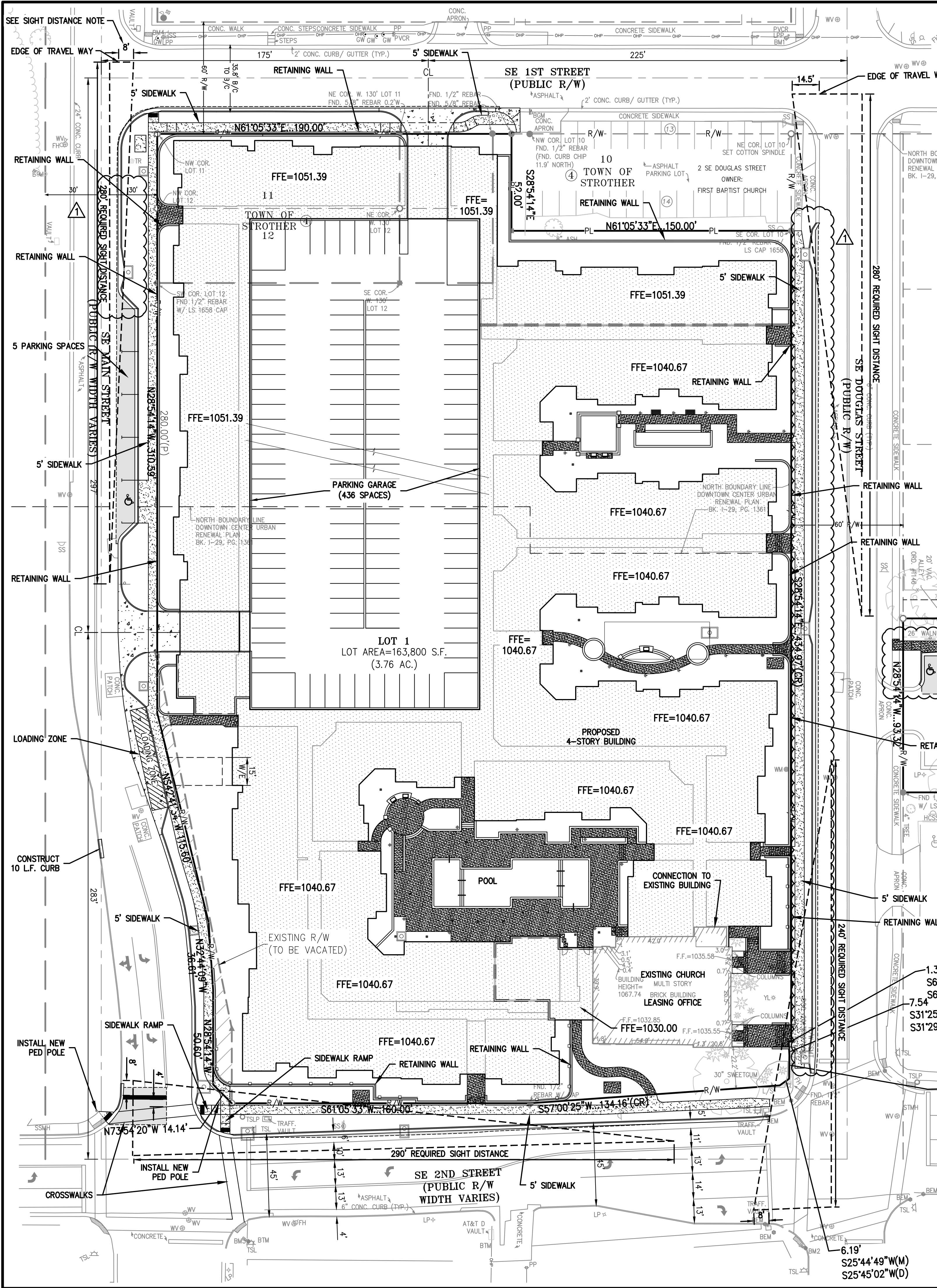
TITLE INFORMATION SHOWN HEREON WAS TAKEN FROM FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE NO. NCS-882582-KCTY FIRST AMENDMENT WITH AN EFFECTIVE DATE OF NOVEMBER 25, 2019 AT 8:00 A.M.

OWNER/DEVELOPER:
DTLS APARTMENTS, LLC
ATTN: JAMES THOMAS, JR.
8335 KEYSTONE CROSSING, SUITE 220
INDIANAPOLIS, IN 46240
(913) 216-0124

SURVEYOR:
PHELPS ENGINEERING, INC.
1270 N. WINCHESTER
OLATHE, KS 66061
ATT: THOMAS DWAYNE PHELPS
913-393-1155

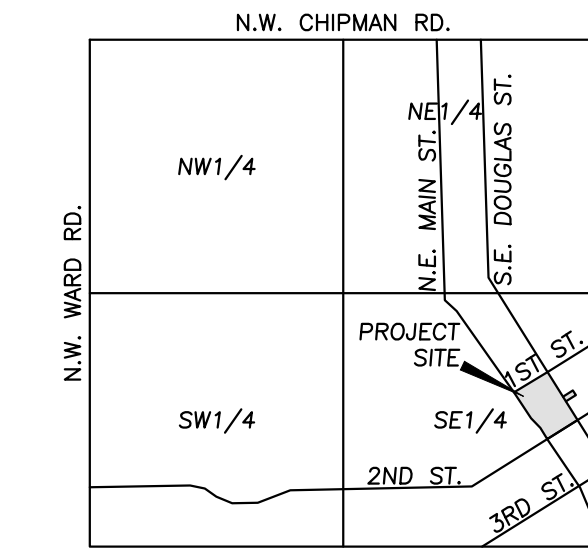
THE PLAT WAS PREPARED FEBRUARY 4, 2020.

\\PHILIPS-SERVER\Projects\171125\Eng\Permit Plans\Site\Site.dwg Layout:1 Mar 17, 2020 - 11:05am Small Hatch



Know what's below.
Call before you dig.

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



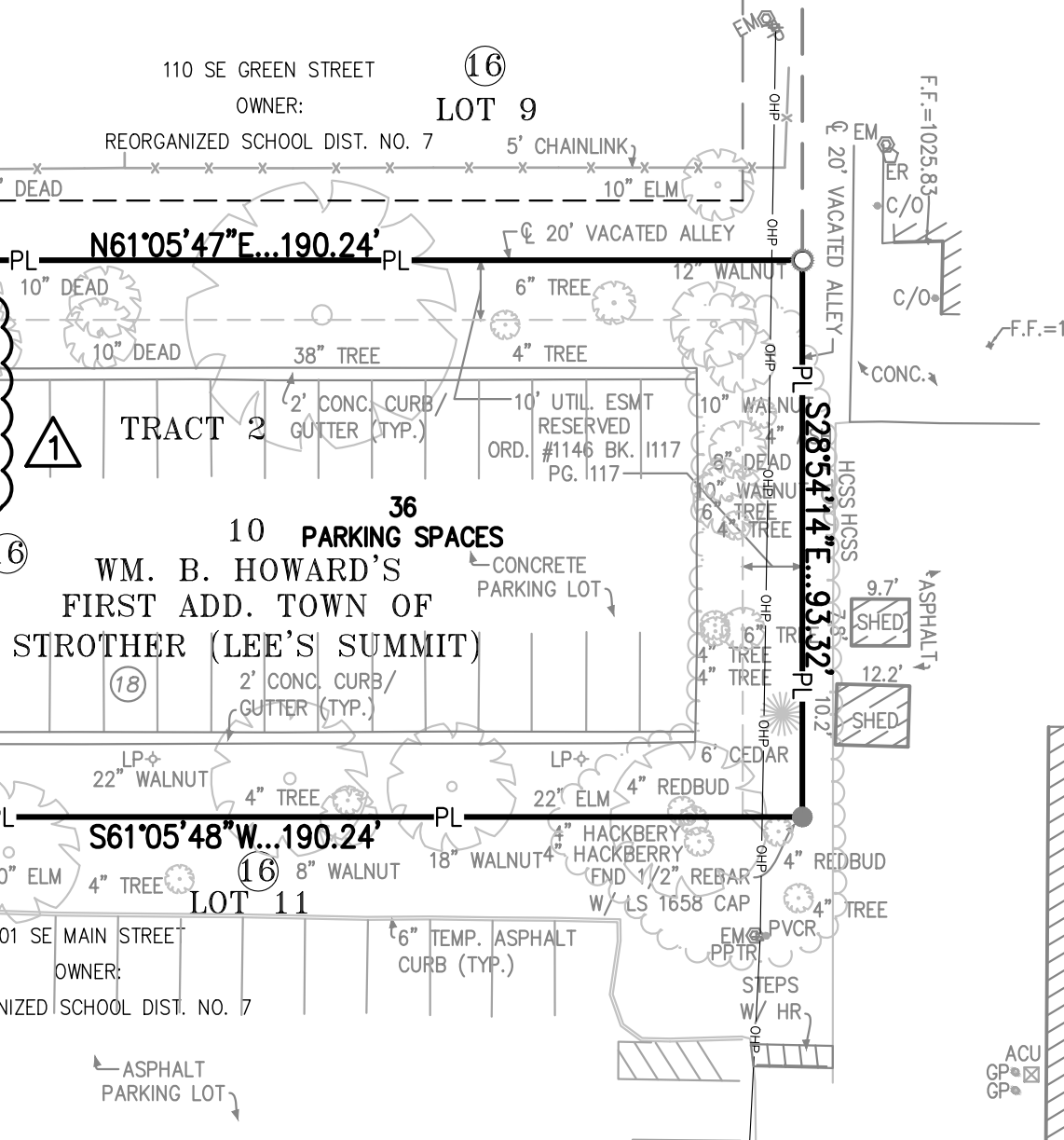
VICINITY MAP
SEC. 6-T47N-R31W

OIL-GAS WELLS:

PER MISSOURI DNR RECORDS AN ABANDONED GAS WELL (API #095-00498) HAS BEEN IDENTIFIED IN THE AREA, BUT THE EXACT LOCATION IS UNKNOWN. IF THE ABANDONED GAS WELL IS FOUND DURING CONSTRUCTION THE CONTRACTOR SHALL HALT ALL WORK IMMEDIATELY AND THE DEVELOPER / CONTRACTOR MUST NOTIFY THE CITY OF LEE'S SUMMIT AND MISSOURI DNR. THE CITY AND MISSOURI DNR WILL HAVE TO PROVIDE PERMISSION FOR CONSTRUCTION TO RESUME AFTER EVALUATING THE WELL.

LEGAL DESCRIPTION:

LOT 1, DOWNTOWN LEE'S SUMMIT APARTMENTS, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI TOGETHER WITH:
LOT 10, BLOCK 16, WM. B. HOWARD'S FIRST ADDITION TO THE TOWN OF STROTHER, NOW THE CITY OF LEE'S SUMMIT, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, TOGETHER WITH THE SOUTHEASTERLY HALF OF THE VACATED ALLEY LYING NORTHWESTERLY AND ADJOINING AND ALSO TOGETHER WITH THE SOUTHWESTERLY HALF OF THE VACATED ALLEY LYING NORTHEASTERLY AND ADJOINING.



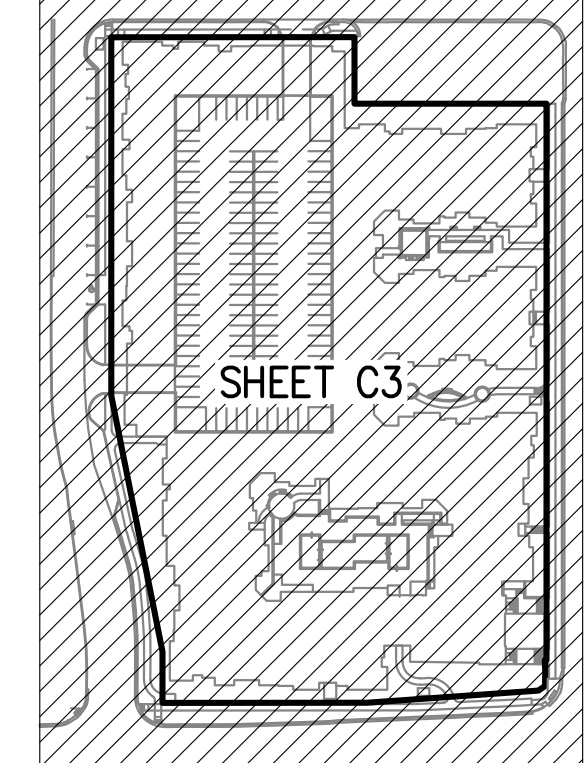
FLOOD NOTE:

THE SUBJECT PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 290950C0417G, AND DATED JANUARY 20, 2017.

LEGEND

- PL PROPERTY LINE
- LOT LINE
- R/W- RIGHT-OF-WAY
- 2" CURB & GUTTER
- 6" CURB
- ASPHALT PAVEMENT
- PROPOSED BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK (PUBLIC)
- CONCRETE SIDEWALK (PRIVATE)
- RETAINING WALL
- HANDRAIL
- LIGHT POLE

KEY PLAN



SITE PLAN NOTES:

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

SITE DIMENSION NOTES:

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

PAVEMENT MARKING AND SIGNAGE NOTES:

- ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE PER CITY OF LEE'S SUMMIT SPECIFICATIONS.

SIGHT DISTANCE NOTE:

- ACCORDING TO SECTION 9-5.3 OF THE 2011 EDITION OF AASHTO'S A POLICY ON THE GEOMETRIC DESIGN OF HIGHWAYS AND STREETS THE TYPICAL DECISION POINT OF A VEHICLE STOPPED ON A MINOR STREET WHICH INTERSECTS A MAJOR STREET IS 14.5' (SEE INTERSECTION OF 1ST & DOUGLAS).
- 14.5' IS DERIVED FROM FIELD OBSERVATIONS WHICH SHOW A DRIVER WILL INITIALLY STOP HIS/HER VEHICLE 8.5' FROM THE EDGE OF TRAVEL. OBSERVATIONS HAVE ALSO SHOWN HIS/HER EYE TYPICALLY SITS 8' BEHIND THE FRONT BUMPER. IF THE MAJOR ROAD IS A LOW VOLUME ROAD FIELD OBSERVATIONS HAVE SHOWN THE DRIVER WILL CREEP FORWARD SO THAT HIS/HER FRONT BUMPER IS FLUSH WITH THE EDGE OF TRAVEL. THUS MAKING THE DECISION POINT 8' FROM THE EDGE OF TRAVEL. DUE TO LOW VOLUME OF TRAFFIC AND LOW SPEEDS AN 8' SIGHT TRIANGLE HAS BEEN USED AT THE INTERSECTION OF 1ST AND MAIN TO INSURE THAT AT ALL TIMES THE PROPER SIGHT DISTANCE IS ACHIEVED WITHOUT THE DRIVER ENTERING THE ROADWAY.
- WHEN STOP BARS ARE USED IT IS ASSUMED THE DRIVER WILL PULL UP TO THE BAR AND THE DECISION POINT WILL BE 8' FROM THE STOP BAR (SEE INTERSECTIONS OF 2ND & MAIN, 2ND & DOUGLAS)

SITE DATA

Site Area - Lot 1	163,800 S.F./3.76 Ac.
Site Area - Tract 2	17,752 S.F./0.408 Ac.
Zoning - Existing	Planned Central Business
Zoning - Proposed	Planned Central Business
Existing Land Use:	Church
Proposed Land Use:	Apartments
Impervious (Existing)	114,837 S.F. (70.1%)
Impervious (Proposed)	125,360 S.F. (76.5%)

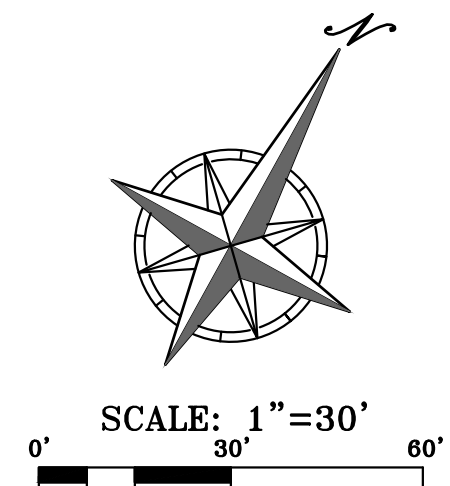
BUILDING DATA

Existing Church/Leasing Office	12,207 S.F.
Proposed Multi-Family	319,206 S.F.
(4 Story)	
Total Building S.F.	331,233 S.F.
Studio Units	18
One Bedroom Units	160
Two Bedroom Units	95
Total Units	273
Lot 1 - Floor Area Ratio (FAR)	2.04
Lot 1 - Total Units / Acre	73.1

PARKING SUMMARY

City Parking Required:	
1 Space per Studio Unit	18 Spaces
1.5 Spaces per One Bedroom Unit	240 Spaces
1.5 Spaces per Two Bedroom Unit	143 Spaces
Total Parking without Visitors	401 Spaces
0.5 Spaces per Unit for Visitors	137 Spaces
Total Parking Required	538 Spaces
Parking Provided:	
Garage Parking *	436 Spaces
Street Parking	5 Spaces
Tract 2 Off-Site	35 Spaces
Total Parking Provided	476 Spaces
* 53 Compact Spaces (8'x18')	
374 Standard Spaces (8.5'x18')	
7 Handicap Spaces - Car	
2 Handicap Spaces - Van	

NOTE: ALL LIGHTING SHALL COMPLY WITH CITY OF LEE'S SUMMIT U.D.O. REQUIREMENTS.



CONSTRUCTION AS NOTED ON PLANS REVIEW

STATE OF MISSOURI
JACKSON COUNTY
LEE'S SUMMIT, MISSOURI
3/16/20

PHILIPS ENGINEERING, INC.
1200 N. Winchester
Olathe, Kansas 66061
(913) 993-1155
Fax (913) 993-1165
www.philipsengineering.com

PLANNING
ENGINEERING
IMPLEMENTATION

SITE PLAN

DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	No.	1.	Date	3-16-20
CHECKED BY	SSNH	DATE	01-28-20	DRAWN BY	SSNH
APPROVED BY	SSNH	DATE	01-28-20	DESIGNED BY	SSNH
CERTIFICATE OF AUTHORIZATION		DATE	01-28-20	DESIGNED BY	SSNH
LAND SURVEYING - LS-82		DATE	01-28-20	DESIGNED BY	SSNH
ENGINEERING - E-361		DATE	01-28-20	DESIGNED BY	SSNH
CERTIFICATE OF AUTHORIZATION		DATE	01-28-20	DESIGNED BY	SSNH
LAND SURVEYING - LS-82		DATE	01-28-20	DESIGNED BY	SSNH
ENGINEERING - E-361		DATE	01-28-20	DESIGNED BY	SSNH

SHEET C3

PROJECT NO.	DATE	BY	APP.
171125	3-16-20	SNH	DEU
Revisions:	Revised Per City Comments		
1.			

SITE PLAN NOTES:

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

SITE DIMENSION NOTES:

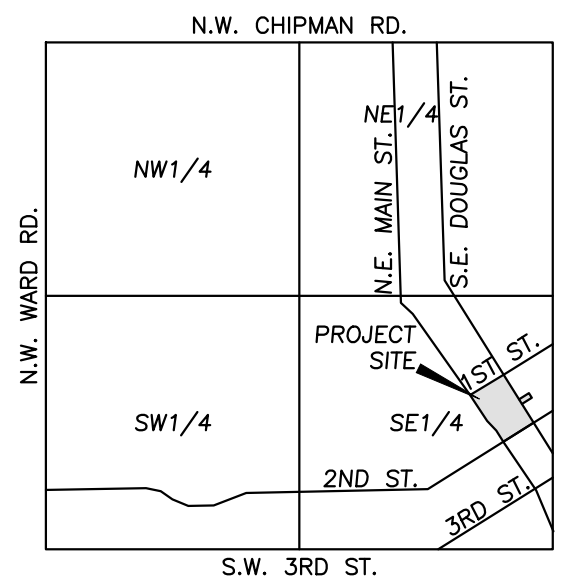
- BUILDING TIES SHOWN ARE TO THE OUTSIDE FACE OF PROPOSED WALLS. THE SUBCONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR SPECIFIC DIMENSIONS AND LAYOUT INFORMATION FOR THE BUILDINGS.
- ALL DIMENSIONS SHOWN FOR THE PARKING LOT AND CURBS ARE MEASURED FORM BACK OF CURB TO BACK OF CURB.

PAVEMENT MARKING AND SIGNAGE NOTES:

- ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE PER CITY OF LEE'S SUMMIT SPECIFICATIONS.

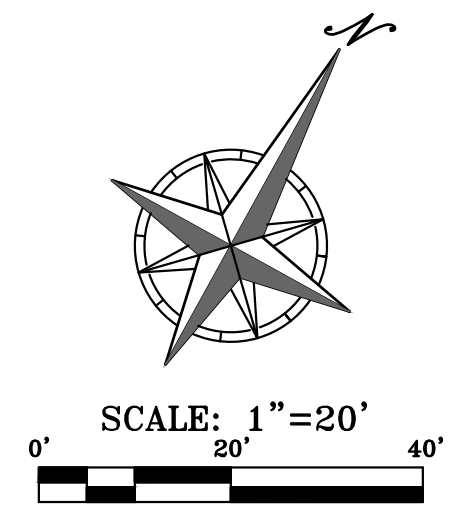
LEGAL DESCRIPTION:

LOT 1, DOWNTOWN LEE'S SUMMIT APARTMENTS, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
TOGETHER WITH:
LOT 10, BLOCK 16, WM. B. HOWARD'S FIRST ADDITION TO THE TOWN OF STROTHER, NOW THE CITY OF LEE'S SUMMIT, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, TOGETHER WITH THE SOUTHEASTERLY HALF OF THE VACATED ALLEY LYING NORTHWESTERLY AND ADJOINING AND ALSO TOGETHER WITH THE SOUTHWESTERLY HALF OF THE VACATED ALLEY LYING NORTHEASTERLY AND ADJOINING.



VICINITY MAP
SEC. 6-T47N-R31W

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

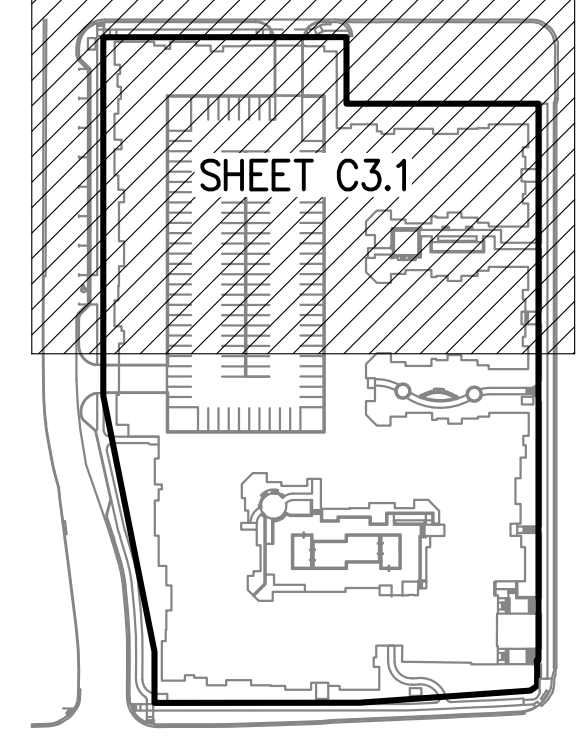


FLOOD NOTE:
THE SUBJECT PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 290950C0417G, AND DATED JANUARY 20, 2017.

LEGEND

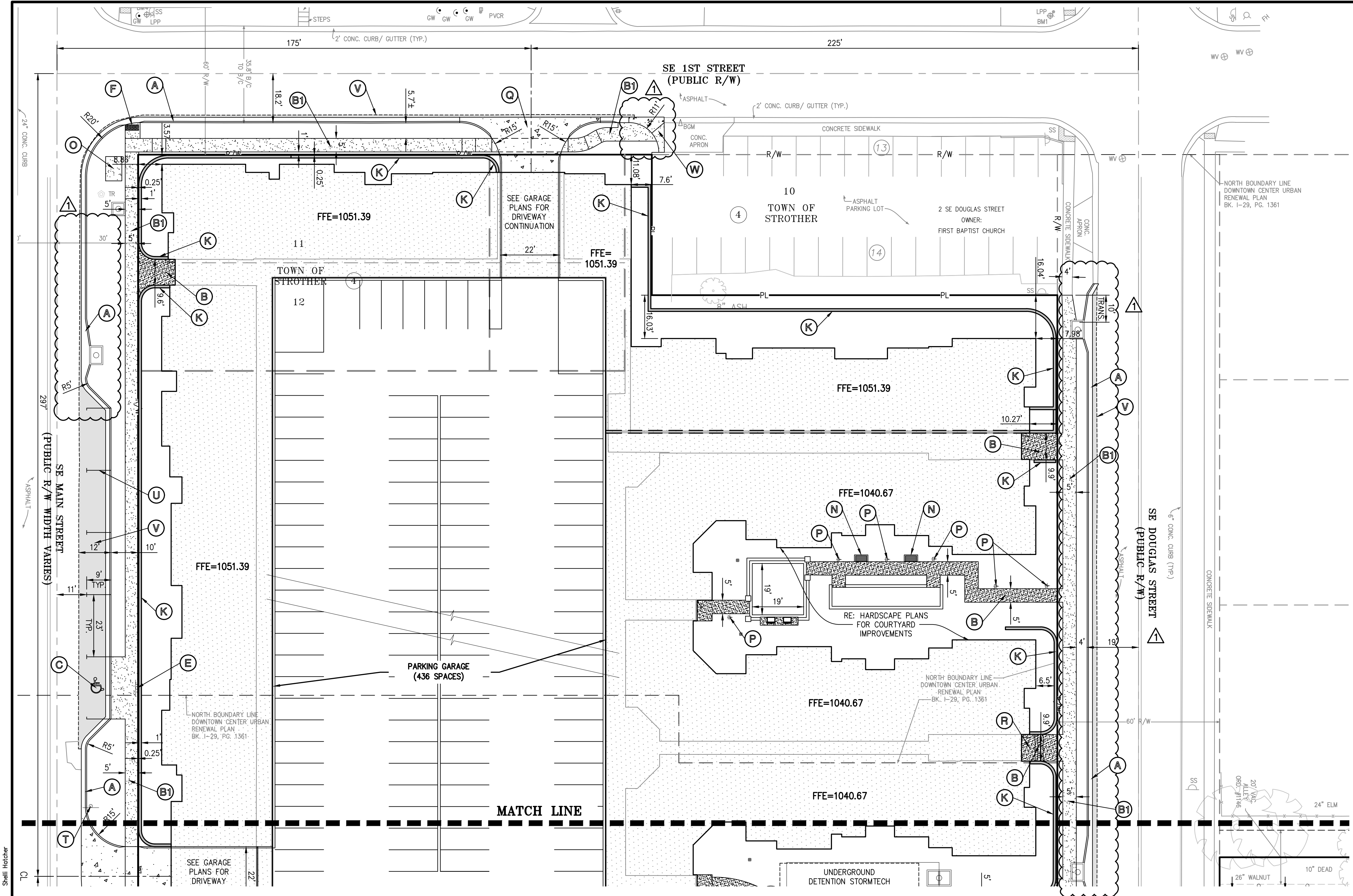
- PL PROPERTY LINE
- LOT LINE
- R/W RIGHT-OF-WAY
- 2' CURB & GUTTER
- 6" CURB
- ASPHALT PAVEMENT
- PROPOSED BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK (PUBLIC)
- CONCRETE SIDEWALK (PRIVATE)
- RETAINING WALL
- HANDRAIL
- LIGHT POLE

KEY PLAN



SITE KEY NOTES:

- (A) CONSTRUCT CG-1 CURB & GUTTER (TYPICAL).
- (B) CONSTRUCT CONCRETE SIDEWALK (PRIVATE) (RE: HARDSCAPE PLAN FOR ANY SPECIALTY CONCRETE IN COURTYARD & POOL DECK).
- (B1) CONSTRUCT CONCRETE SIDEWALK (PUBLIC) PER CITY DETAIL GEN-4.
- (C) CONSTRUCT ACCESSIBLE PARKING SPACE. INSTALL MARKINGS PER ACCESSIBLE PARKING SPACE DETAIL (3 TOTAL).
- (D) INSTALL 24" WHITE STOP BAR PER CITY DETAIL PM-1.
- (E) INSTALL VAN ACCESSIBLE PARKING SIGN (2 TOTAL).
- (E1) INSTALL ACCESSIBLE PARKING SIGN (1 TOTAL).
- (F) CONSTRUCT TYPE A SIDEWALK RAMP WITH LAYDOWN CURB & GUTTER.
- (G) (DELETED)
- (H) (DELETED)
- (I) INSTALL PED POLE (RE: SIGNAL MODIFICATION PLANS).
- (J) INSTALL CROSSWALK PAVEMENT MARKING 6" WHITE STRIPES PER CITY DETAIL PM-1.
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- (L) CONSTRUCT UNDERGROUND STORMTECH CHAMBERS (RE: SHEETS C16 FOR DETAILS).
- (M) INSTALL HANDRAIL AT TOP OF RETAINING WALL.
- (N) INSTALL PUBLIC SEATING (RE: HARDSCAPE PLANS).
- (O) CONSTRUCT CONCRETE TRANSFORMER PAD (RE: SHEET C5 FOR UTILITY PLAN).
- (P) INSTALL LIGHT POLE (RE: HARDSCAPE & ELECTRICAL PLANS).
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- (R) CONSTRUCT CONCRETE STAIRS WITH HANDRAIL.
- (S) CONSTRUCT LOADING ZONE STRIPING & SIGNAGE.
- (T) RESET EXISTING STREET SIGN (SPEED LIMIT).
- (U) 4" WHITE PARKING STRIPE (TYPICAL).
- (V) CONSTRUCT FULL DEPTH ASPHALT STREET WIDENING (RE: SHEET C11 FOR DETAIL).
- (W) CONSTRUCT CONCRETE DRIVE REPLACEMENT.





PHELPS ENGINEERING, INC.
1370 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax (913) 393-1165
www.phelpsen지니어링.com



ENLARGED SITE PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	DATE	BY	APP.
171125	3-16-20	SNH	DEU
Revisions:			
No.	Date	Revised Per	Comments
1.			

SHEET
C3.2

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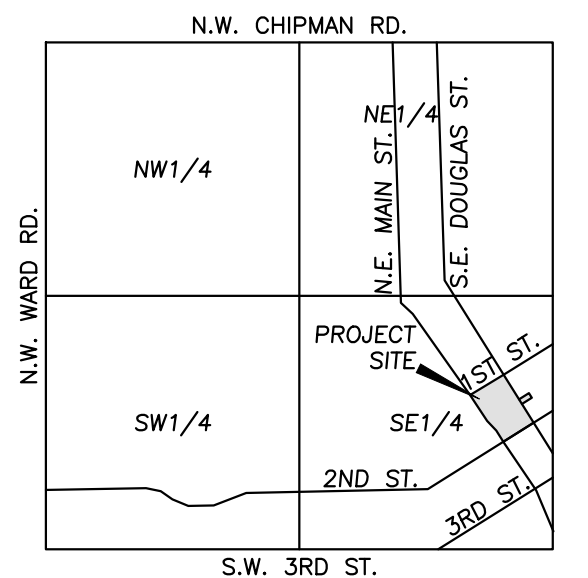
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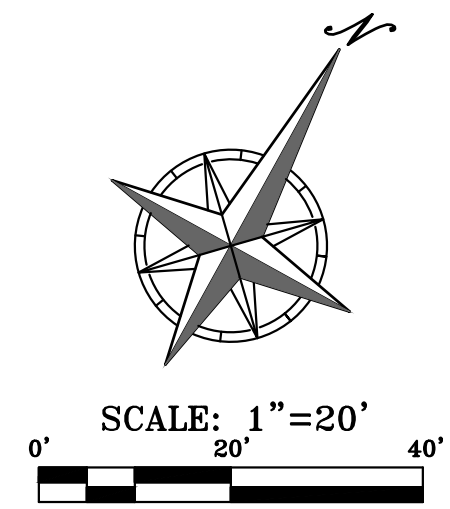
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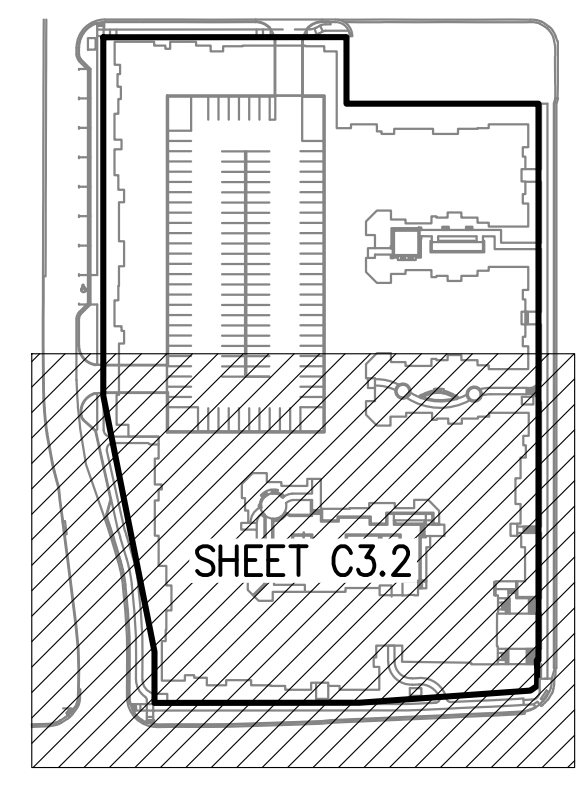
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LEGEND

- PL PROPERTY LINE
- R/W- RIGHT-OF-WAY
- 2' CURB & GUTTER
- 6" CURB
- ASPHALT PAVEMENT
- PROPOSED BUILDING
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK (PUBLIC)
- CONCRETE SIDEWALK (PRIVATE)
- RETAINING WALL
- HANDRAIL
- LIGHT POLE

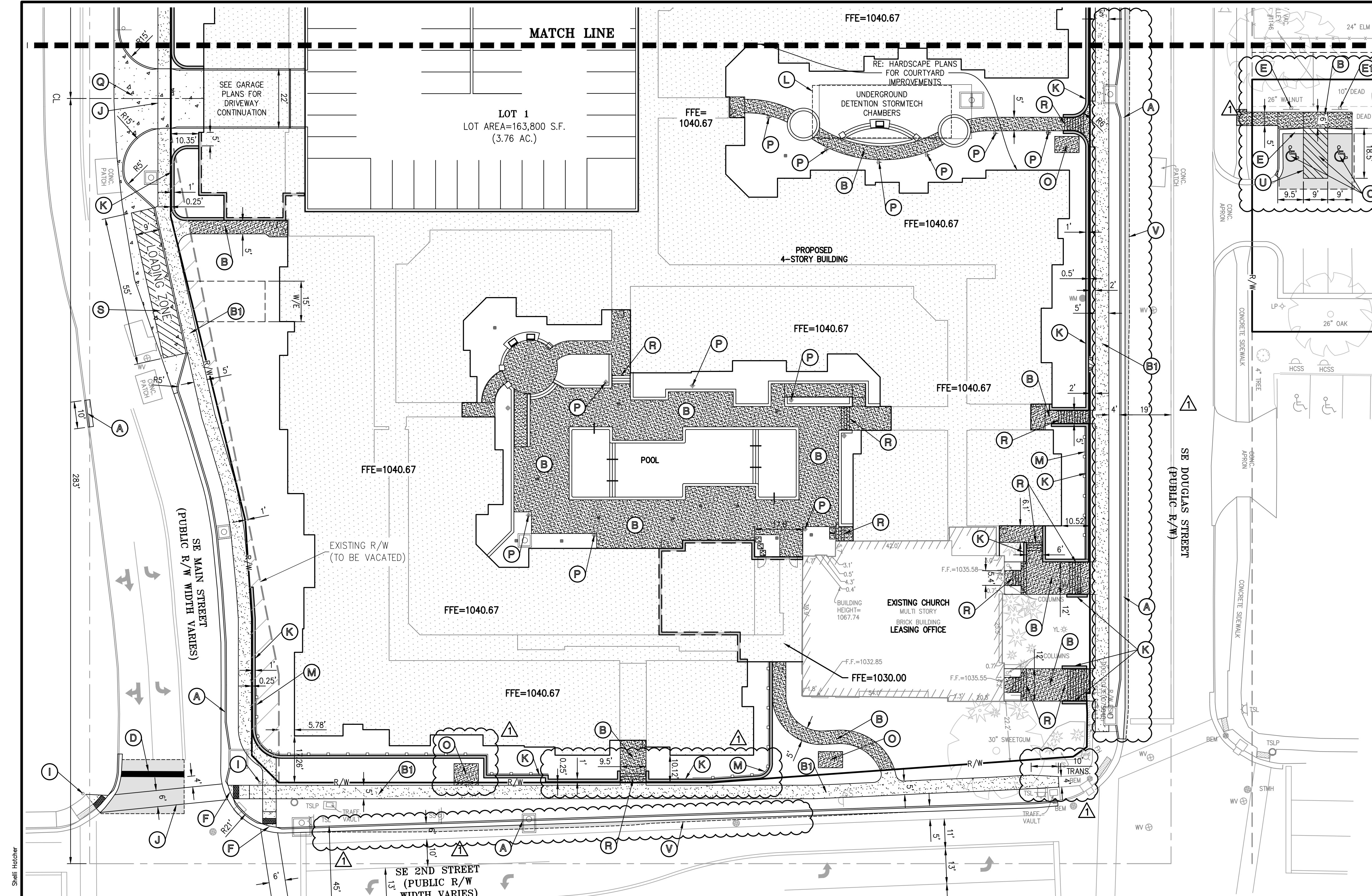
KEY PLAN

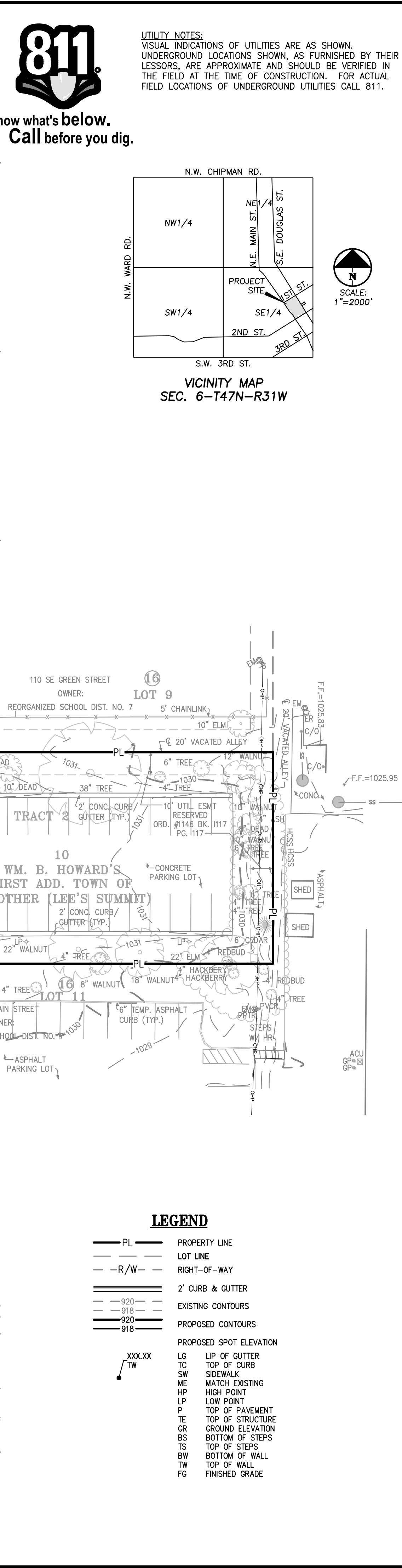


SITE KEY NOTES:

- A** CONSTRUCT CG-1 CURB & GUTTER (TYPICAL).
- B** CONSTRUCT CONCRETE SIDEWALK (PRIVATE) (RE: HARDSCAPE PLAN FOR ANY SPECIALTY CONCRETE IN COURTYARD & POOL DECK).
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- E** INSTALL VAN ACCESSIBLE PARKING SIGN (2 TOTAL).
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- F** CONSTRUCT TYPE A SIDEWALK RAMP WITH LAYDOWN CURB & GUTTER.
- G** (DELETED)
- H** (DELETED)
- I** INSTALL PED POLE (RE: SIGNAL MODIFICATION PLANS).
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- K** CONSTRUCT RETAINING WALL (W/ HANDRAIL AT ANY LOCATION WALL EXCEEDS 30" IN HEIGHT).
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- O** CONSTRUCT CONCRETE TRANSFORMER PAD (RE: SHEET C5 FOR UTILITY PLAN).
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- S** CONSTRUCT LOADING ZONE STRIPING & SIGNAGE.
- T** RESET EXISTING STREET SIGN (SPEED LIMIT).
- U** 4" WHITE PARKING STRIPE (TYPICAL).
- V** CONSTRUCT FULL DEPTH ASPHALT STREET WIDENING (RE: SHEET C11 FOR DETAIL).
- W** CONSTRUCT CONCRETE DRIVE REPLACEMENT.

MATCH LINE



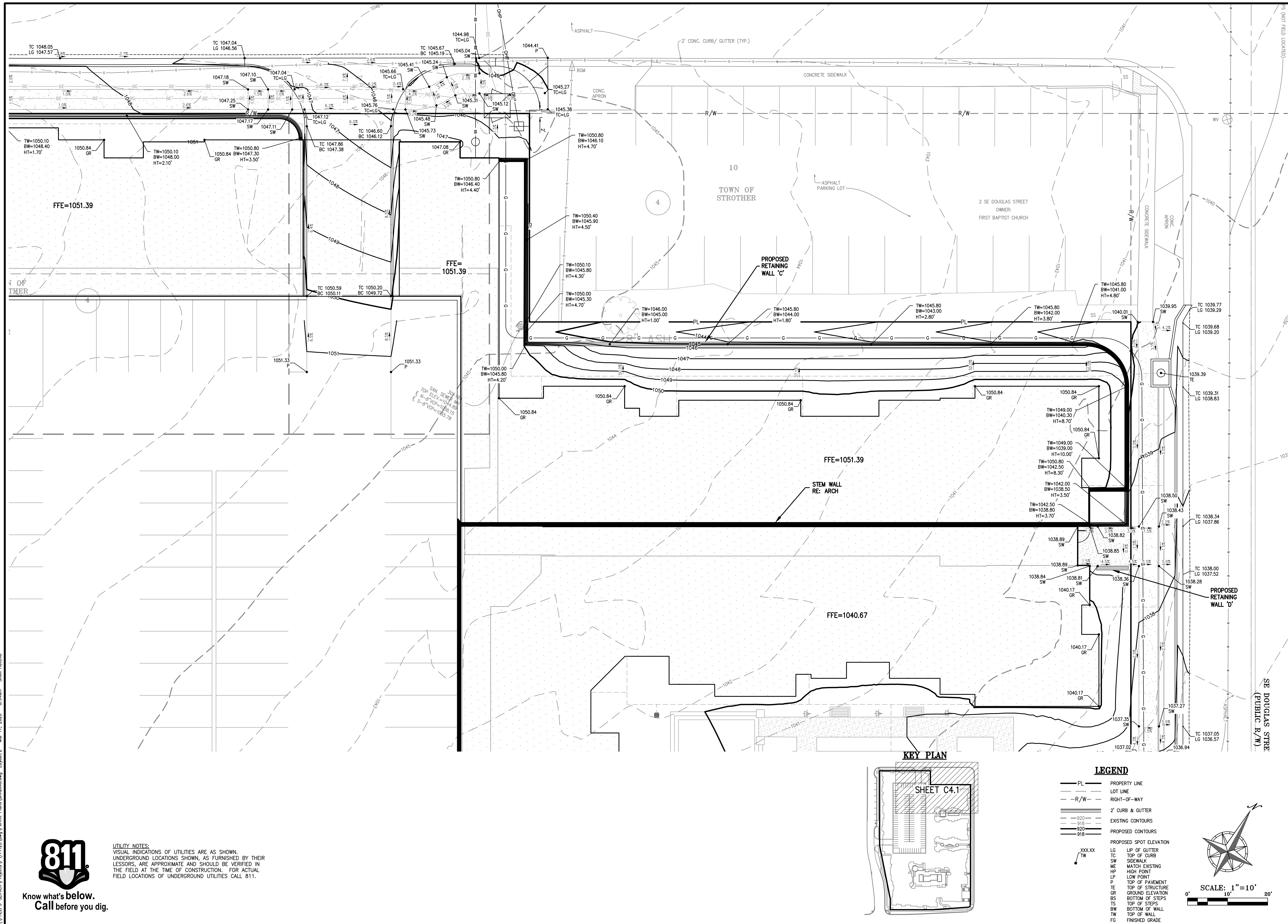


WATERSHED NOTE:
THIS PROPERTY IS PART OF THE LITTLE BLUE RIVER WATERSHED.

BENCHMARK:

KEY PLAN

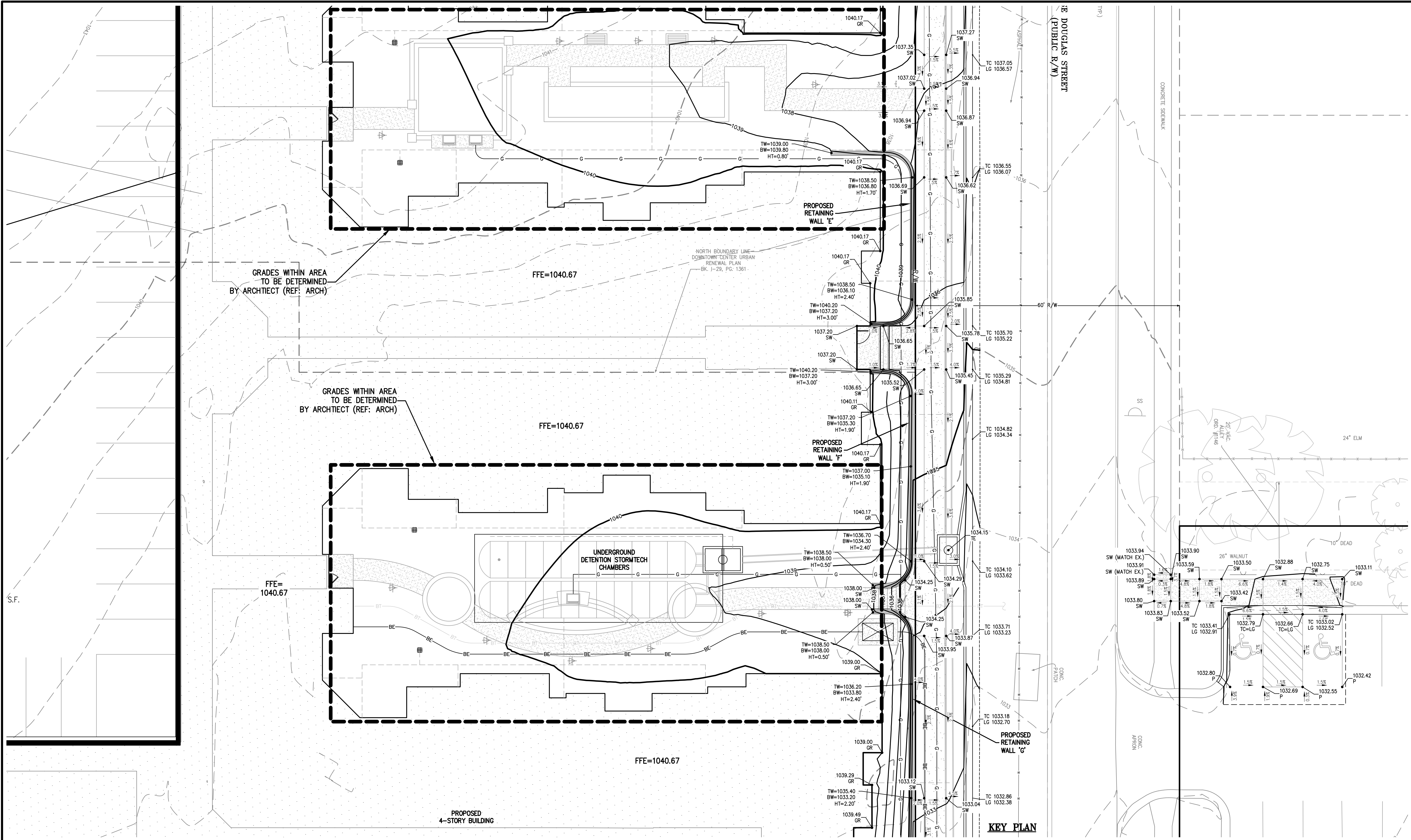
The key plan shows a rectangular site area with a hatched border. Inside, a smaller rectangular area is labeled "SHEET C4". To the right of the site area is a north arrow pointing towards the top right. Below the north arrow is a scale bar with markings for 0', 30', and 60'. The text "SCALE: 1"=30'" is printed above the scale bar.



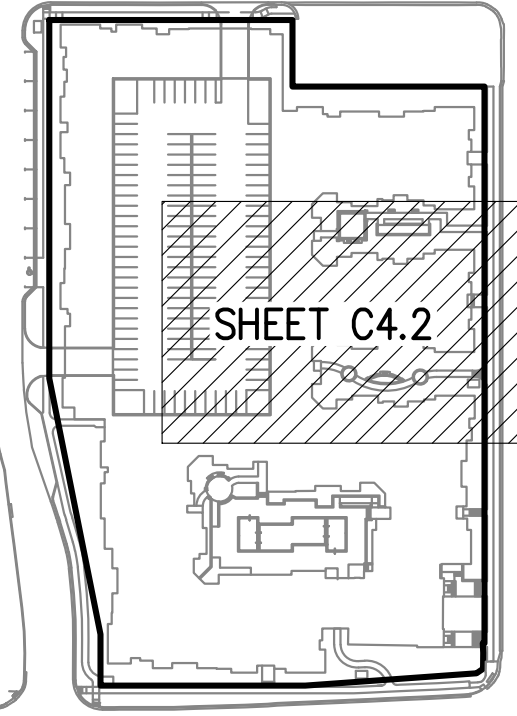
Know what's **below**.
Call before you dig.

PROJECT NO.	Date	By	App.
171125	3-16-20	SNH	DEU
Revisions:			
No.	Revised Per	City	Comments
1	1	3-16-20	SNH DEU

DATE: 01-28-2018	BRANK: SNH
CHECKED: DAF	APPROVED: DEU
CERTIFICATE OF AUTHORIZATION	
LAND SURVEYING - LS-82	
ENGINEERING - E-381	
REGISTERED PROFESSIONAL ENGINEER	
LAND SURVEYING: 007001128	
ENGINEERING: 007001128	

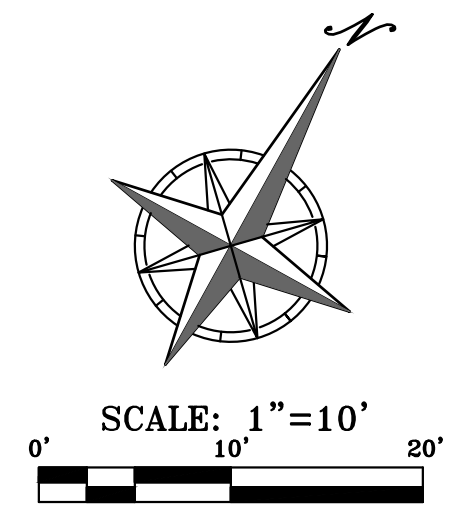


KEY PLAN



LEGEND

- PL PROPERTY LINE
- LOT LINE
- R/W RIGHT-OF-WAY
- 2' CURB & GUTTER
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- LG UP OF GUTTER
- TC TOP OF CURB
- SW SIDEWALK
- ME MATCH EXISTING
- HP HIGH POINT
- LP LOW POINT
- P TOP OF PAVEMENT
- TE TOP OF STRUCTURE
- GR GROUND ELEVATION
- BS BOTTOM OF STEPS
- TS TOP OF STEPS
- BW BOTTOM OF WALL
- TW TOP OF WALL
- FG FINISHED GRADE



Know what's below.
Call before you dig.

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LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN
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PROPOSED
4-STORY BUILDING

FFE=1040.67

FFE=1040.67

POOL

FE=1040.67

GRADES WITHIN AREA
TO BE DETERMINED
BY ARCHITECT (REF: ARCH)

STEM WALL
RE: ARCH

EXISTING CHURCH
MULTI-STORY
BRICK BUILDING
LEASING OFFICE

FFE=1030.00

FFE=1040.67

PROPOSED
RETAINING WALL 'H'

PROPOSED
RETAINING WALL 'I'

PROPOSED
RETAINING WALL 'J'

PROPOSED
RETAINING WALL 'K'

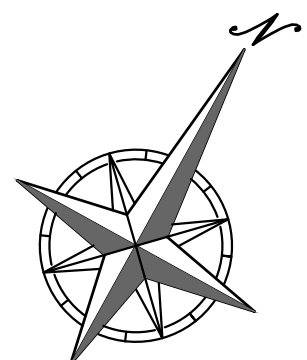
PROPOSED
RETAINING WALL 'L'

KEY PLAN

SHEET C4.3

LEGEND

- PL PROPERTY LINE
- LOT LINE
- R/W RIGHT-OF-WAY
- 2' CURB & GUTTER
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- LG LIP OF GUTTER
- TC TOP OF CURB
- SW SIDEWALK
- ME MATCH EXISTING
- HP HIGH POINT
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- BS GROUND ELEVATION
- TS BOTTOM OF STEPS
- BT TOP OF STEPS
- FW BOTTOM OF WALL
- TW TOP OF WALL
- FG FINISHED GRADE

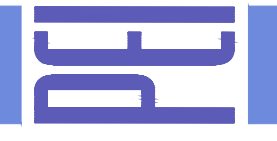


SCALE: 1"=10'
0' 10' 20'



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

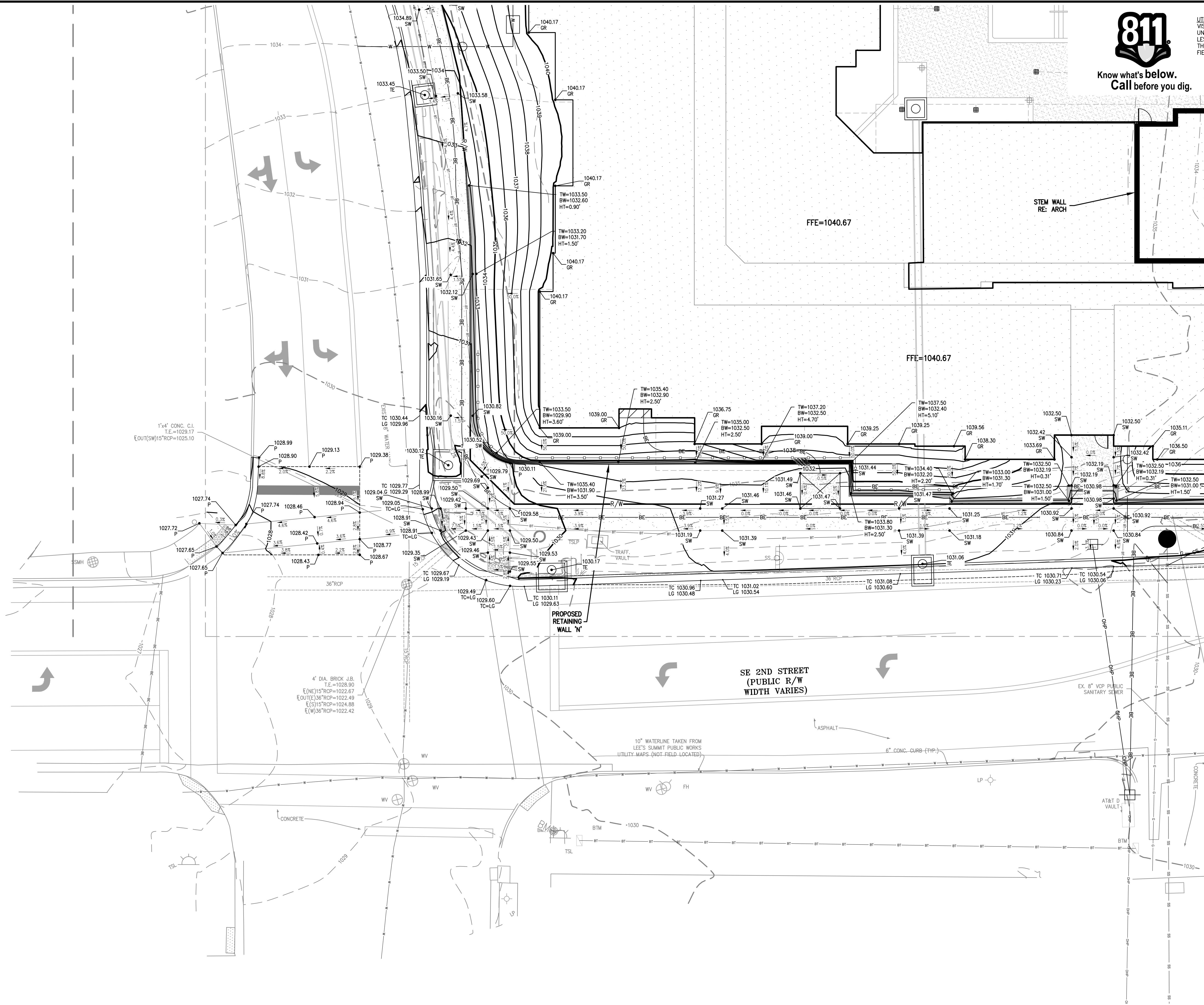
PLANNING
ENGINEERING
IMPLEMENTATION



ENLARGED GRADING PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	DATE	3-16-20	BY	App.	Revisions:	REVISIONS PER CITY COMMENTS
DATE	01-28-20	DRAWN	SNH	CHECKED	DAF	APPROVED	DEU
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							
CERTIFICATE OF AUTHORIZATION							

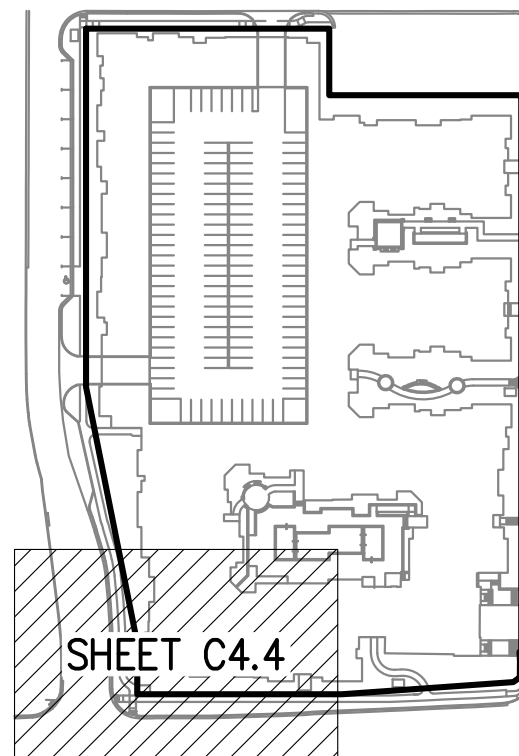
SHEET
C4.3



Know what's below.
Call before you dig.

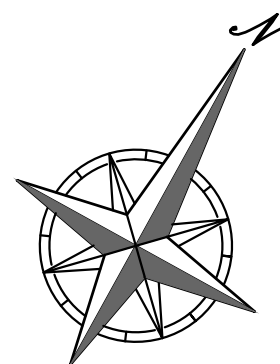
UTILITY NOTES:
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LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN
THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL
FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.

KEY PLAN



LEGEND

- PL PROPERTY LINE
- LOT LINE
- R/W- RIGHT-OF-WAY
- 2' CURB & GUTTER
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- LG LIP OF GUTTER
- TC TOP OF CURB
- SW SIDEWALK
- ME MATCH EXISTING
- HP HIGH POINT
- LP LOW POINT
- P TOP OF PAVEMENT
- TE TOP OF STRUCTURE
- GR GROUND ELEVATION
- BS BOTTOM OF STEPS
- TS TOP OF STEPS
- BW BOTTOM OF WALL
- TW TOP OF WALL
- FG FINISHED GRADE



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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DATE: 3/16/20
BY: [Signature]

PHILIPS ENGINEERING, INC.
1270 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax: (913) 393-1165
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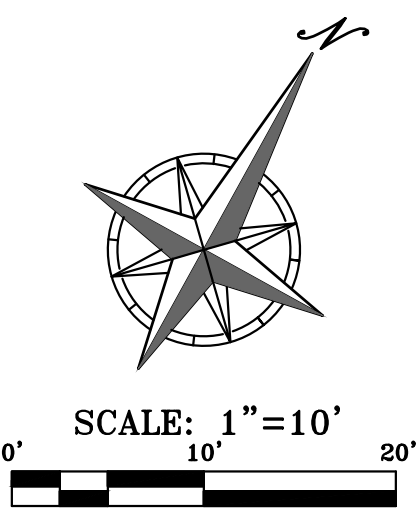
PLANNING ENGINEERING IMPLEMENTATION

PEI

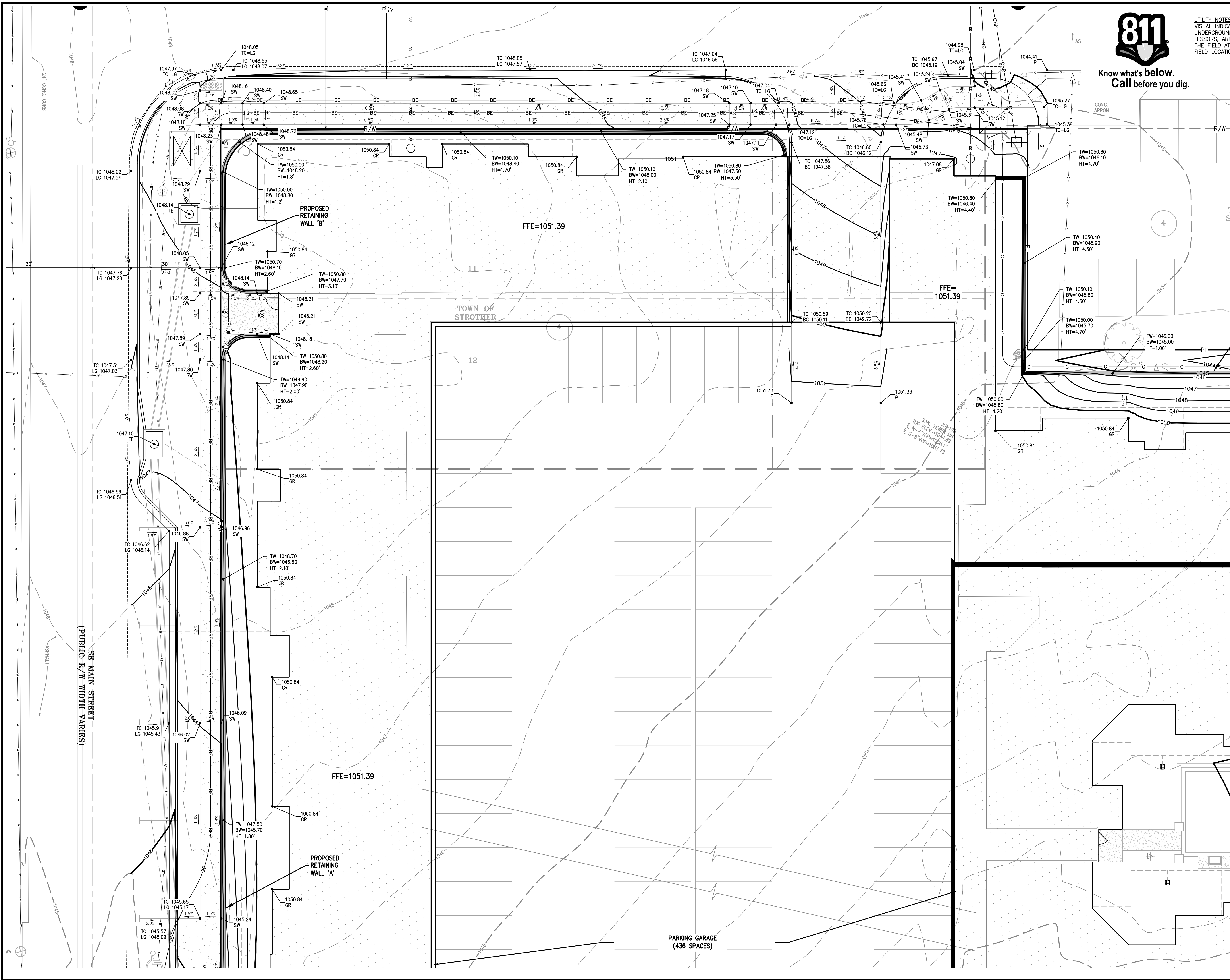
ENLARGED GRADING PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	DATE	3-16-20	BY	App.
CHECKED	DAF	APPROVED	DEU	SMH	DEU
CORPORATE OF AUTHORIZATION					
LAND SURVEYING - LS-82					
ENGINEERING - E-361					
CERTIFICATE OF AUTHORIZATION					
LAND SURVEYING-200701028					
ENGINEERING-200701028					

SHEET C4.4

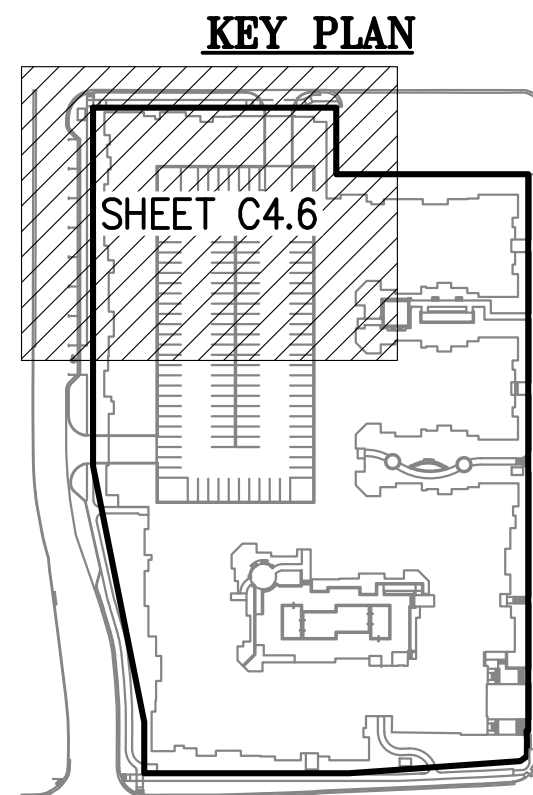


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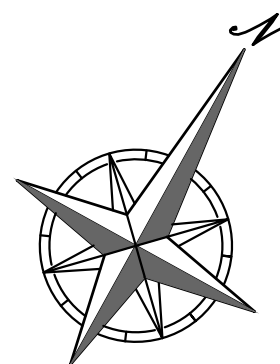
Know what's below.
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SCALE: 1" = 10'
0' 10' 20'



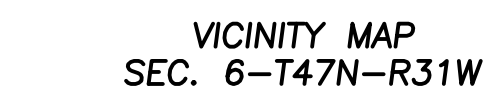
PHELPS ENGINEERING, INC.
1370 N. Winchester
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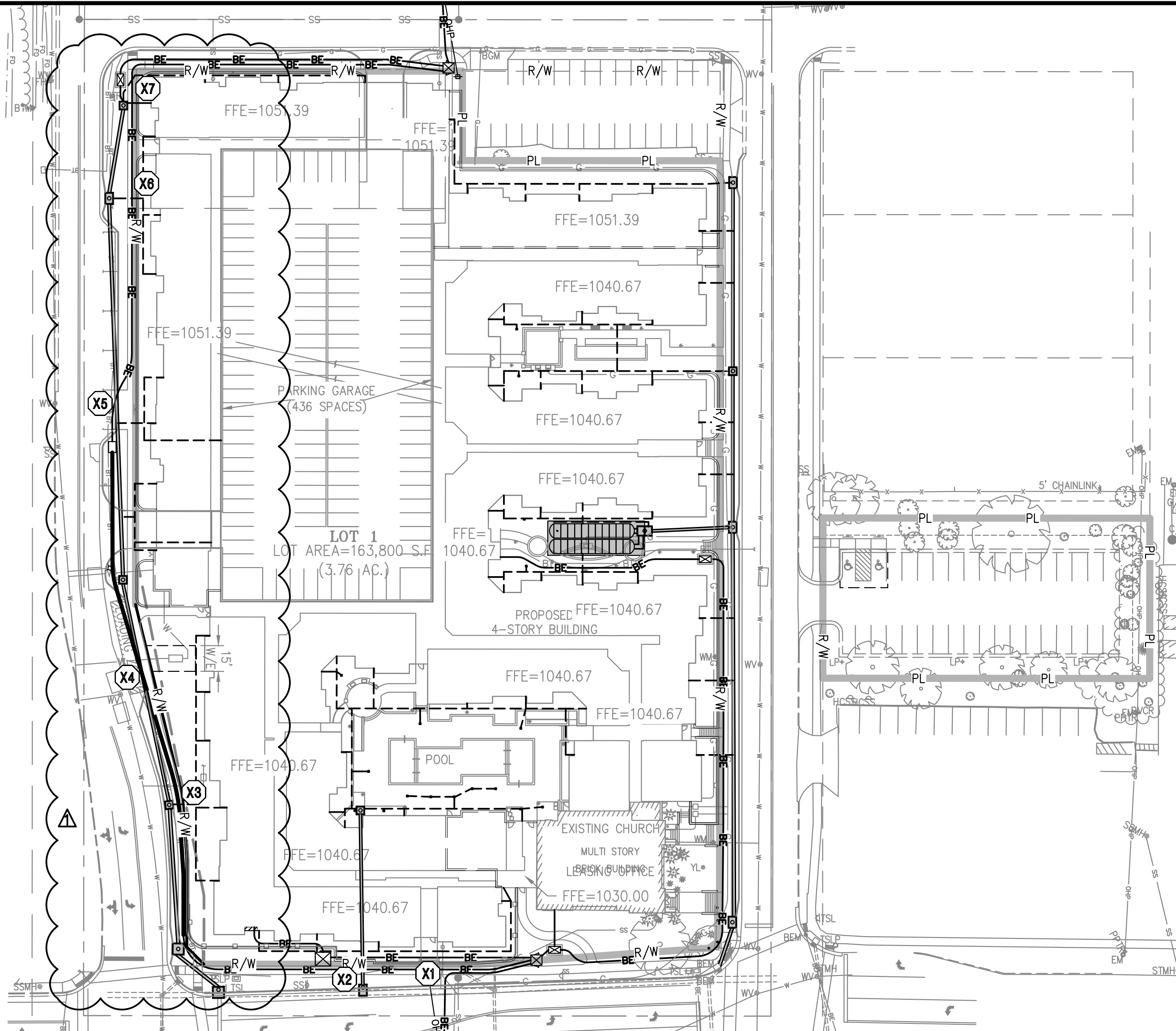
ENLARGED GRADING PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	No.	1.	Date	3-16-20	Revisions:	By	App.
DATE OF DRAWING	01-28-20	DRAWN BY	SNH	DATE OF APPROVAL	01-28-20	REVIEWED BY	SNH	DEU
CHECKED BY	DAF	APPROVED BY	DAF	CERTIFICATE OF AUTHORIZATION				
LAND SURVEYING - LS-82		LAND SURVEYING - E-361		CERTIFICATE OF AUTHORIZATION				
LAND SURVEYING - LS-82		LAND SURVEYING - E-361		CERTIFICATE OF AUTHORIZATION				

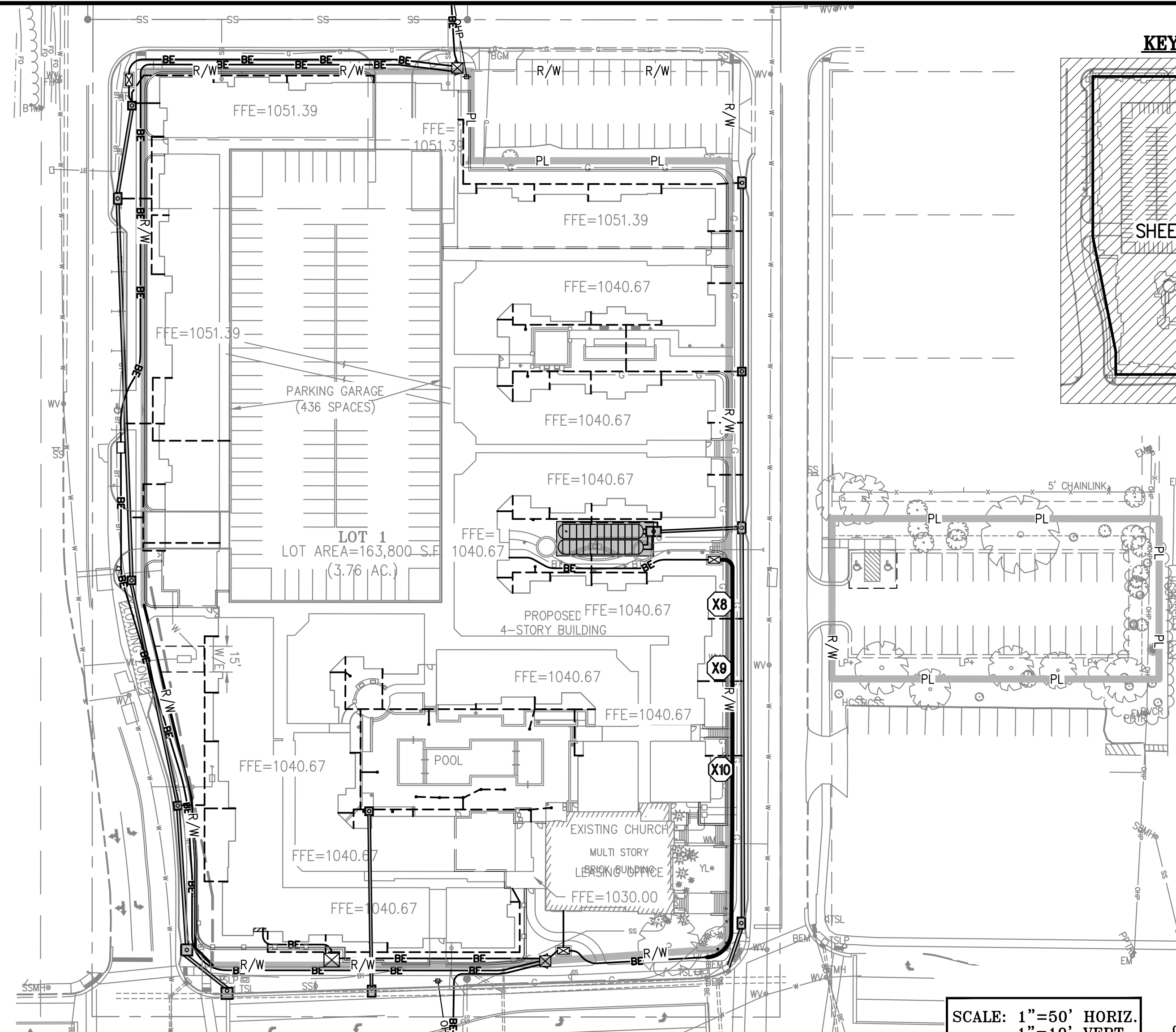
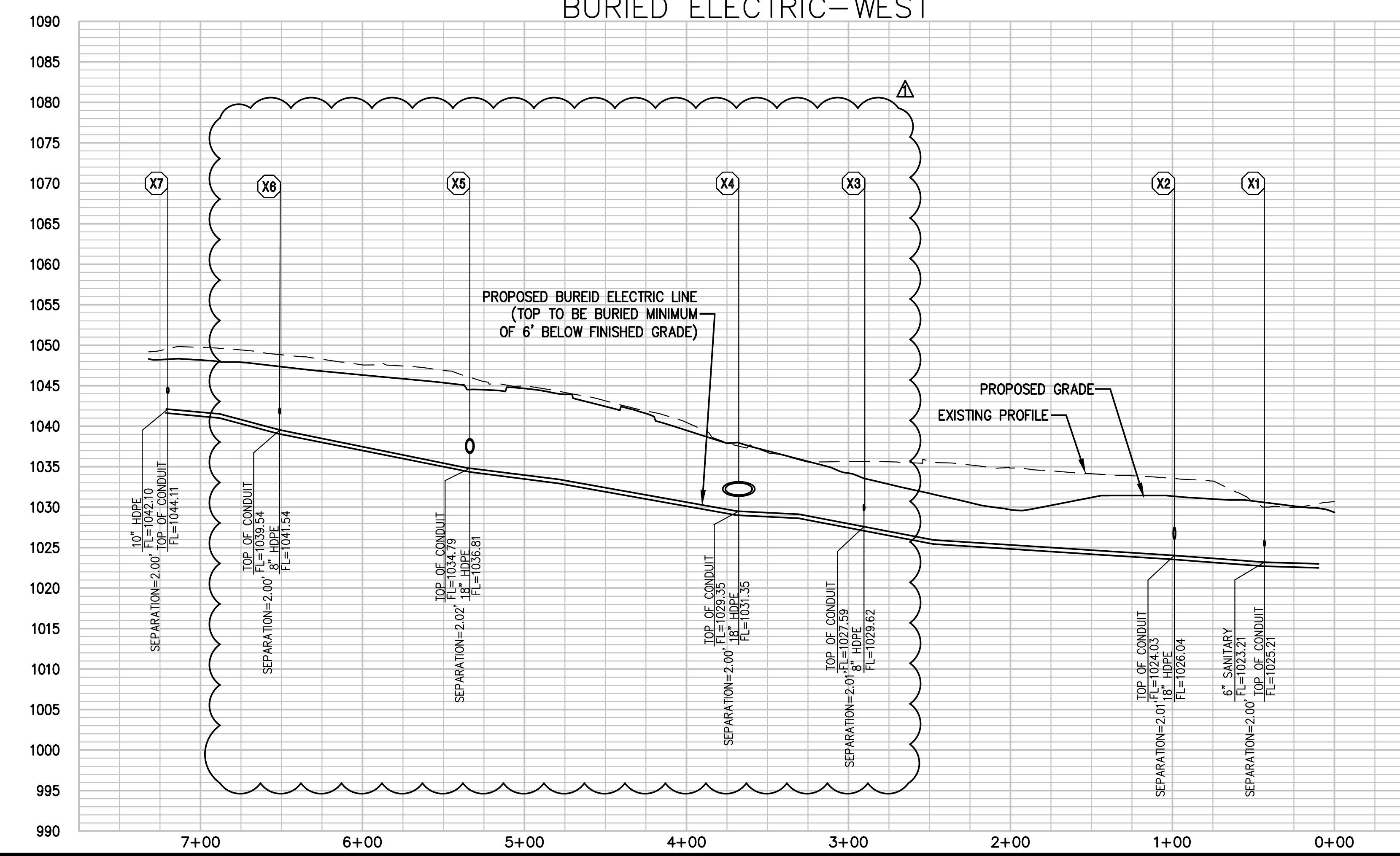
SHEET
C4.6



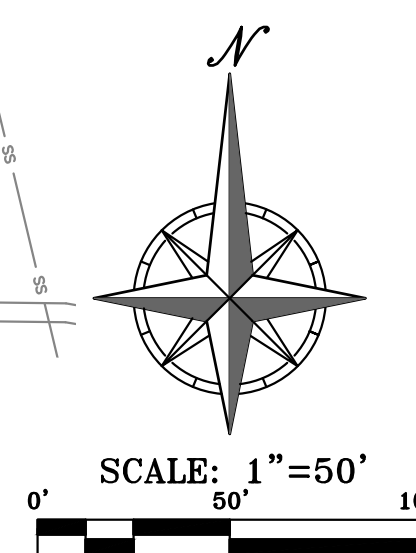
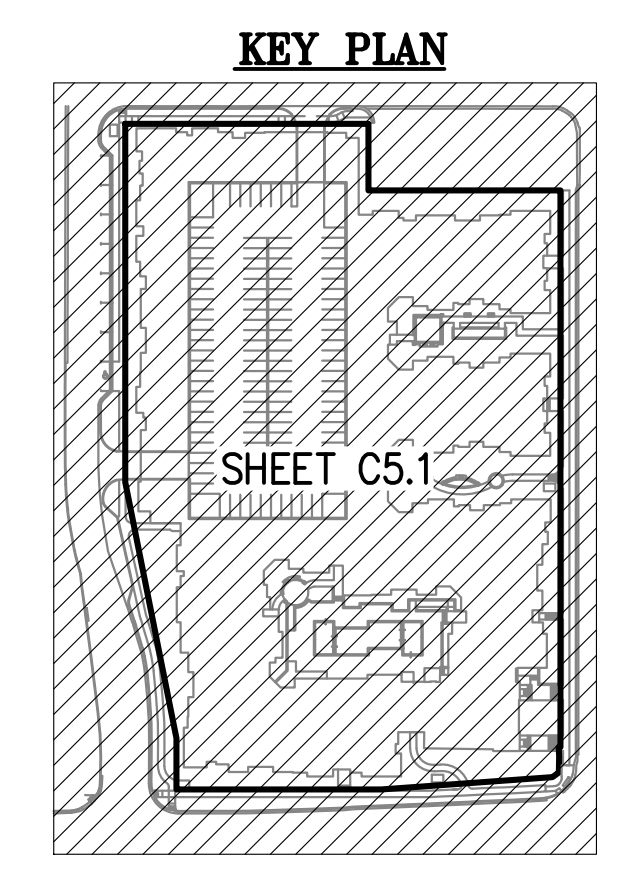
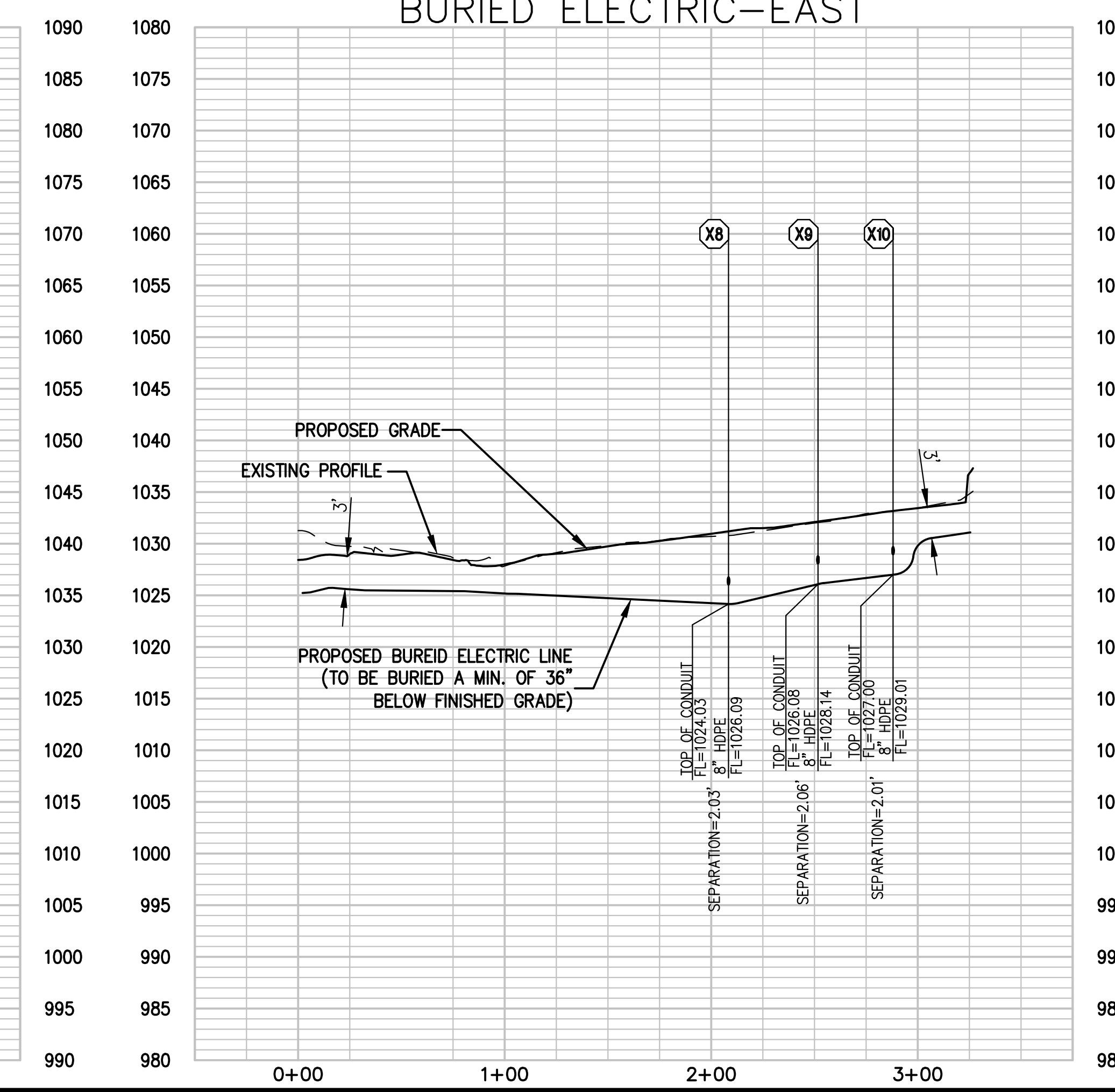
PROJECT NO.	171125	No.	Date	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH	1.	3-16-20	REVISED PER CITY COMMENTS	SNH	DEU
CHECKED: DAF	APPROVED: DEU					
CERTIFICATE OF AUTHORIZATION						
LAND SURVEYING - LS-82						
ENGINEERING - E-361						
CERTIFICATE OF AUTHORIZATION						
LAND SURVEYING-200701028						
ENGINEERING-200705028						

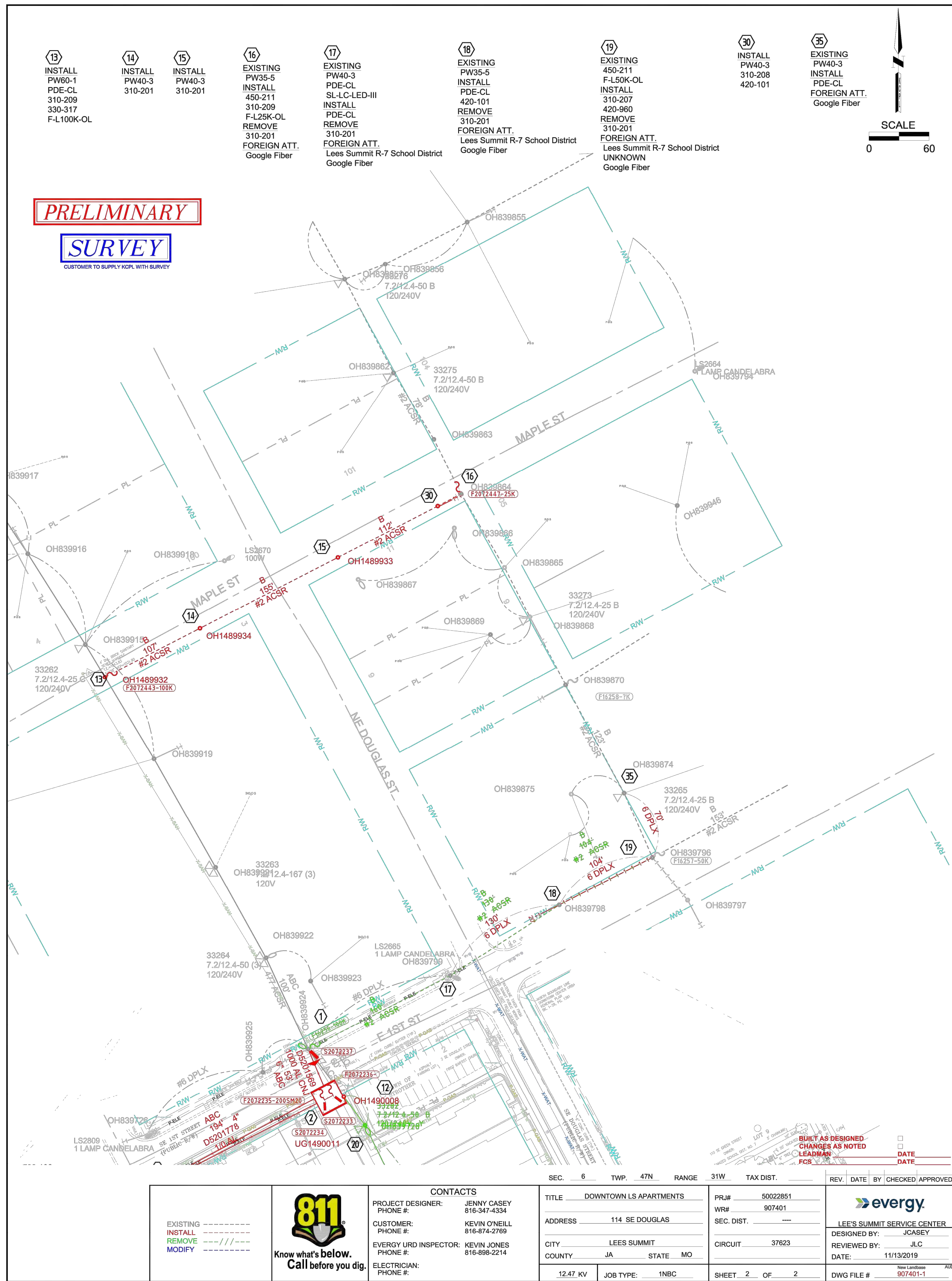


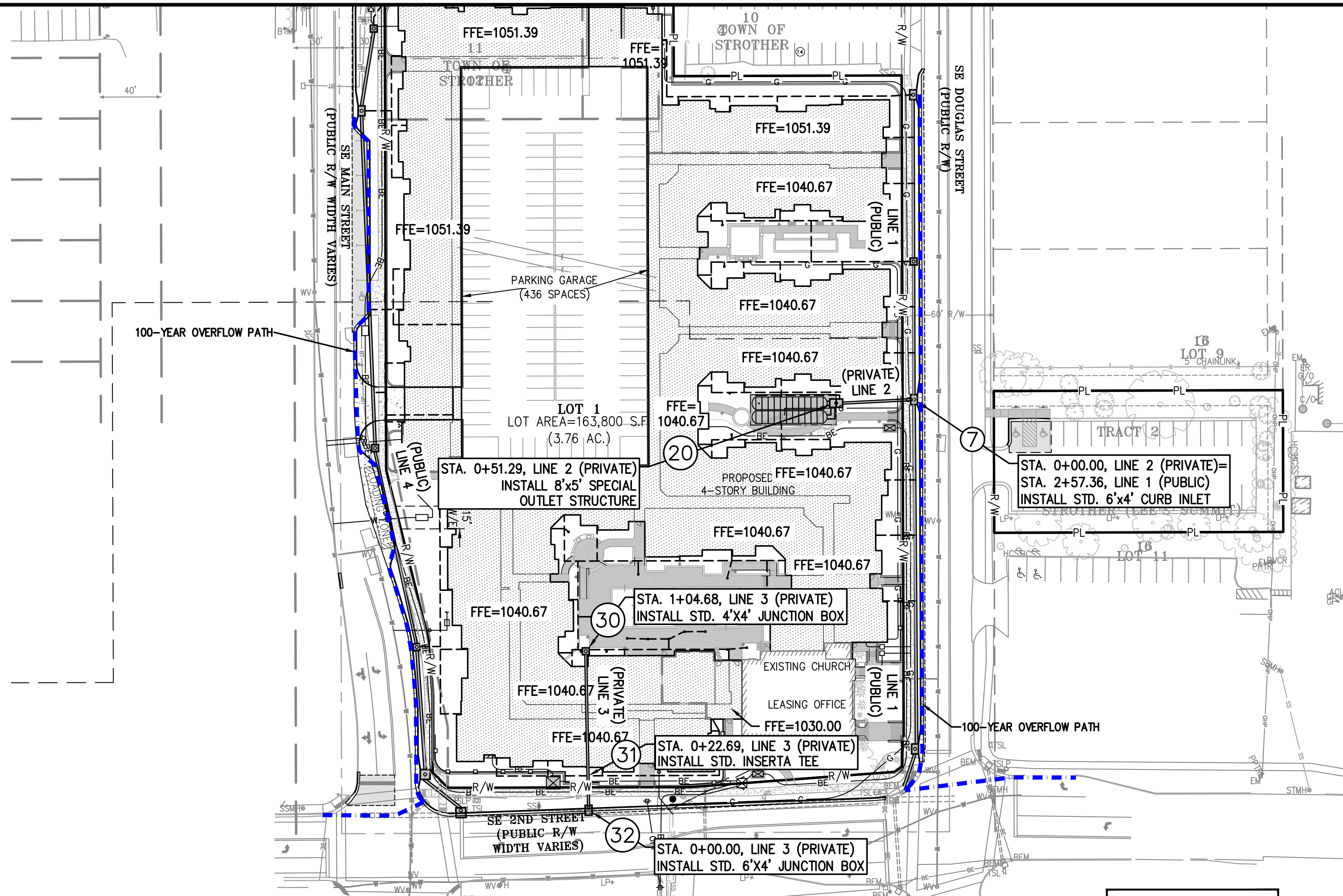
BURIED ELECTRIC—WEST



BURIED ELECTRIC—EAST







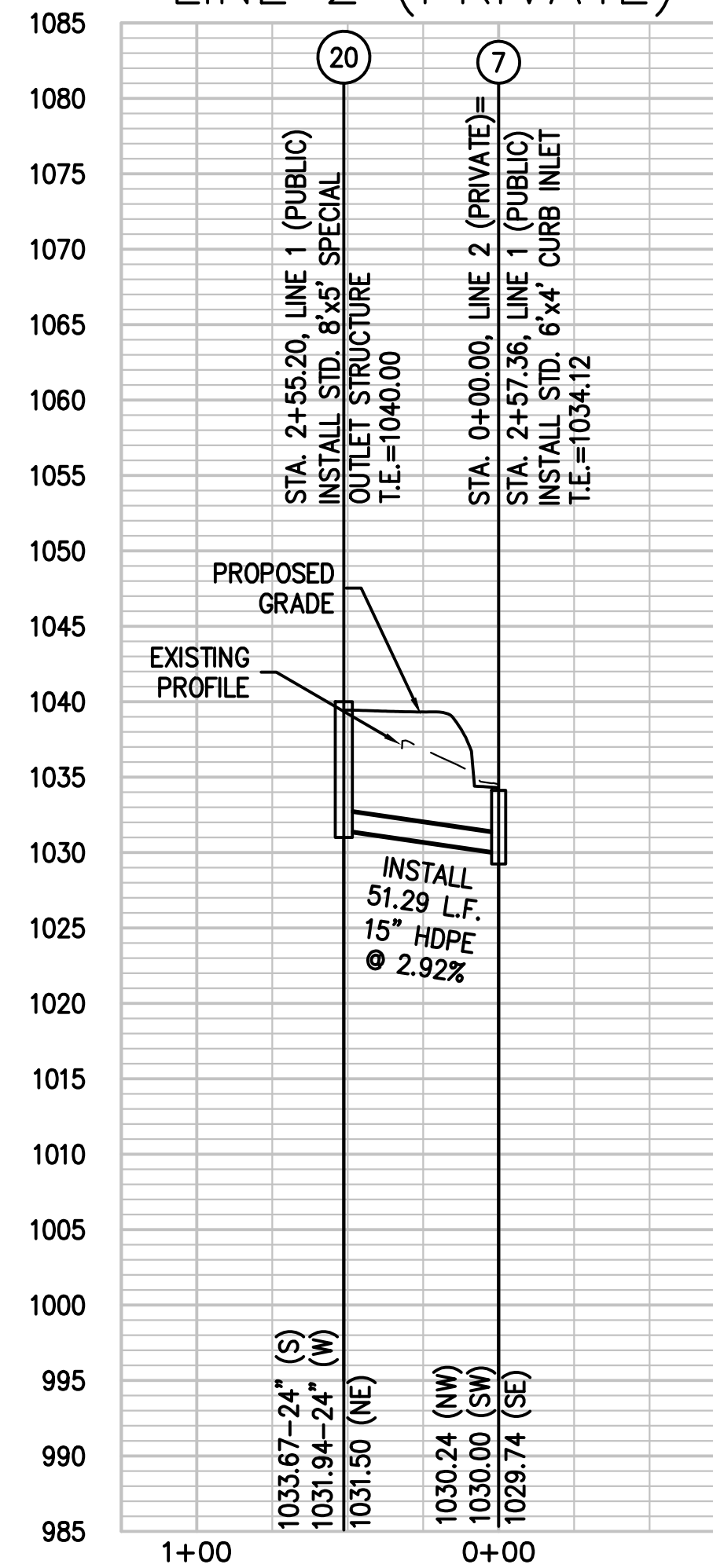
CONTRACTOR TO REFER TO SEPARATE SET OF STORM SEWER PLANS FOR PUBLIC STORM SEWER INSTALLATION.

LEGEND

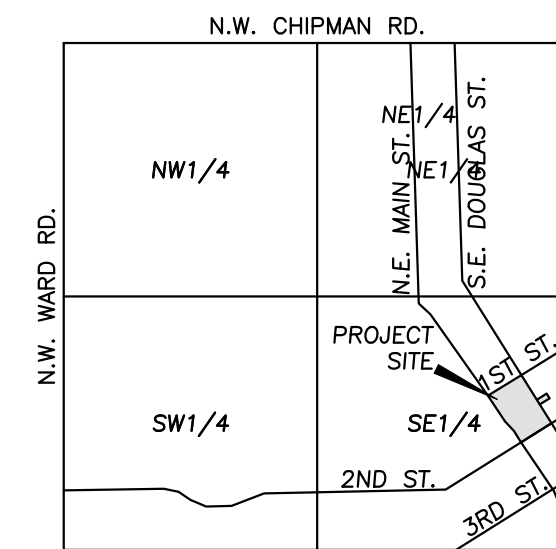
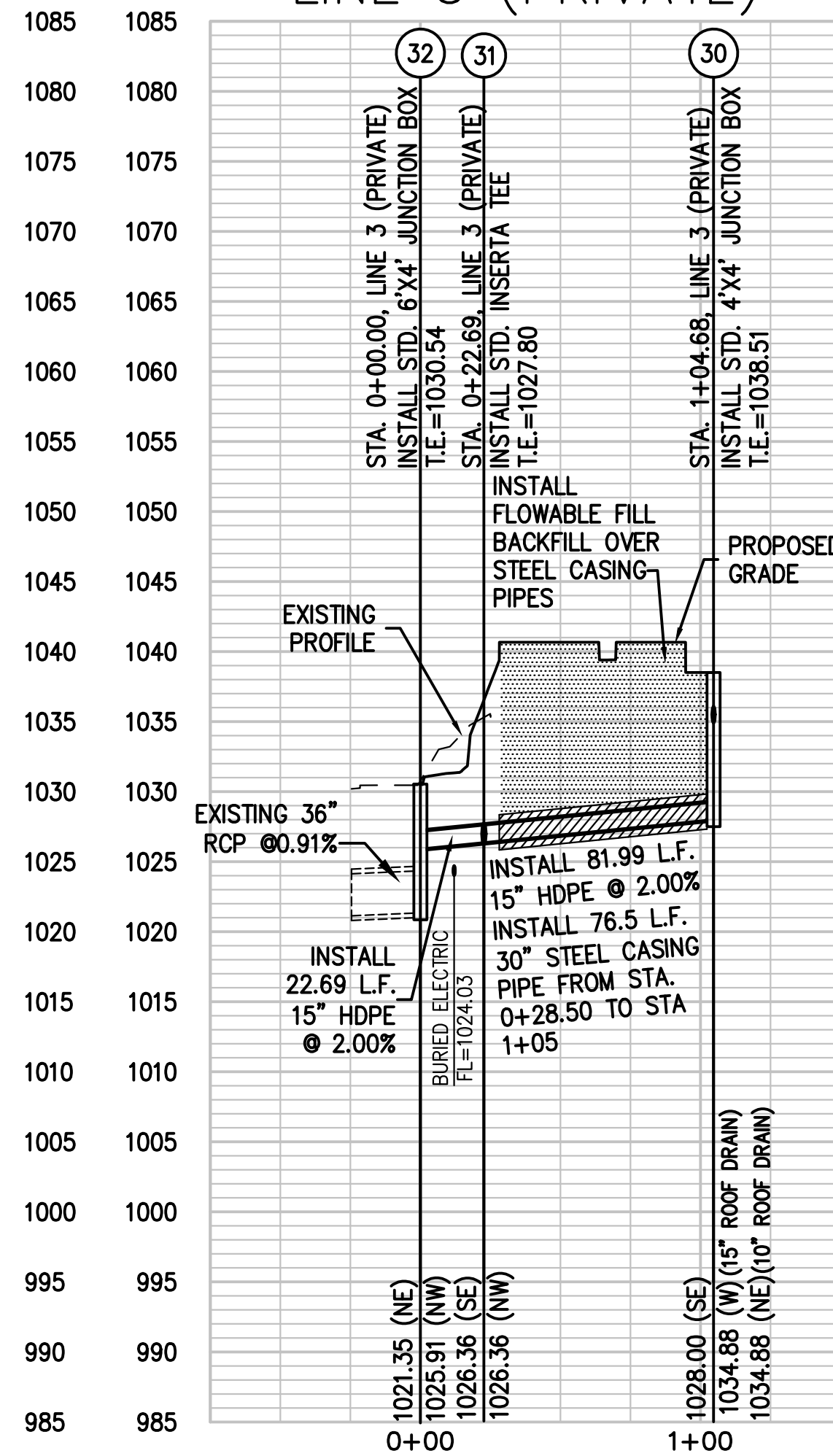
--- 100-YEAR OVERFLOW PATH

SCALE: 1"=50' HORIZ.
1"=10' VERT.

LINE 2 (PRIVATE)

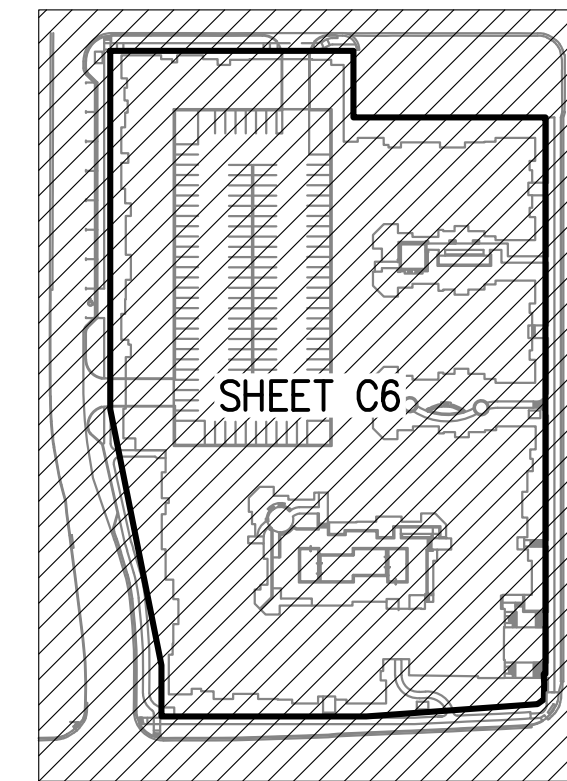


LINE 3 (PRIVATE)



VICINITY MAP
SEC. 6-T47N-R31W

KEY PLAN



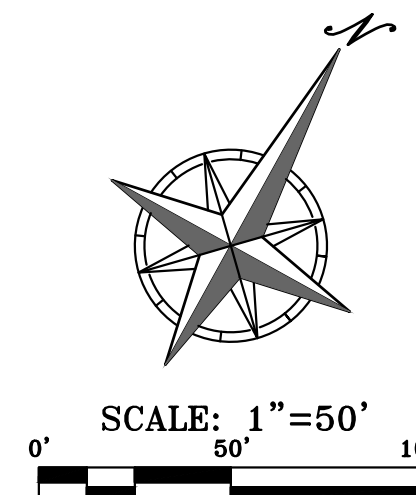
FLOOD NOTE:

THE SUBJECT PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 29095C0417G, AND DATED JANUARY 20, 2017.



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RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DATE: 04/06/2020 BY: KYLE DELERS
PROJECT NO. 171125

STATE OF MISSOURI
JACKSON COUNTY
PROFESSIONAL ENGINEER
477/20

PHILIPS ENGINEERING, INC.
1270 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
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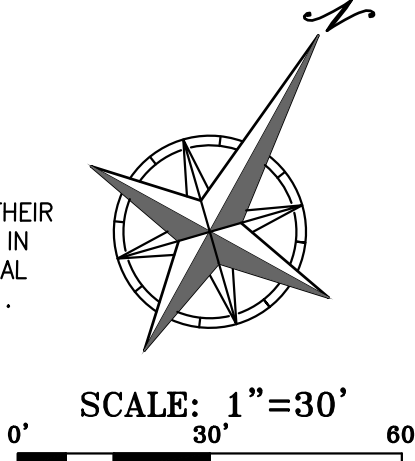
PLANNING
ENGINEERING
IMPLEMENTATION

STORM SEWER PLAN & PROFILE
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	By	App.	Revisions:	Date
DATE: 01-28-20	DRAWN: SNH			REVISED PER CITY COMMENTS	3-16-20
CHECKED: DAF	APPROVED: DEU				
CORPORATE OF AUTHORIZATION					
LAND SURVEYING - LS-82					
ENGINEERING - E-361					
CERTIFICATE OF AUTHORIZATION					
LAND SURVEYING-200701028					
ENGINEERING-200700028					

SHEET
C6

SHEET
C7



Know what's below.
Call before you dig.

PLANNING ENGINEERING IMPLEMENTATION

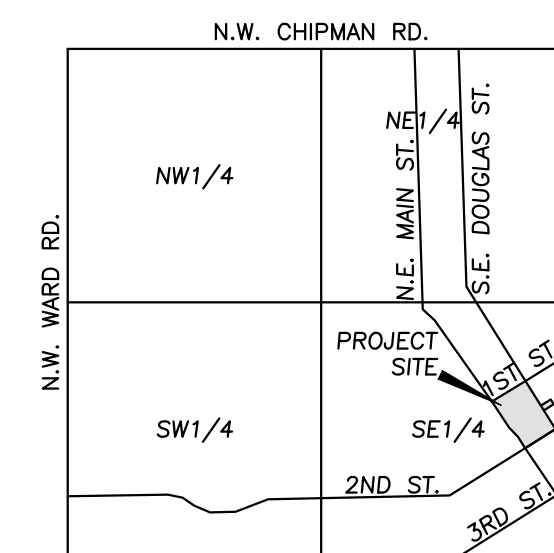


DOWNTOWN LEE'S SUMMIT APARTMENTS

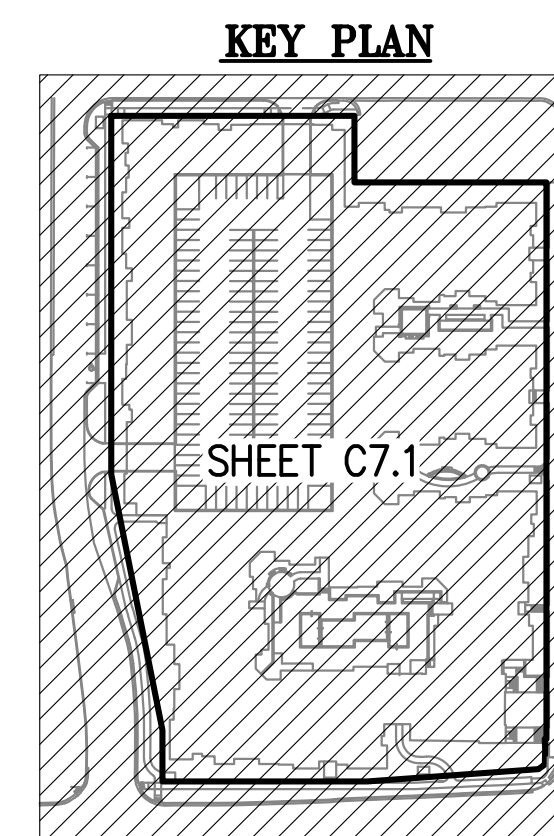
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

[illegible]

C7.1



VICINITY MAP
SEC. 6-T47N-R31W



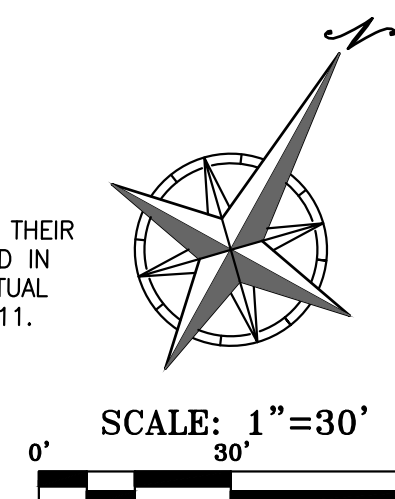
KEY PLAN

SHEET C7.1

- 

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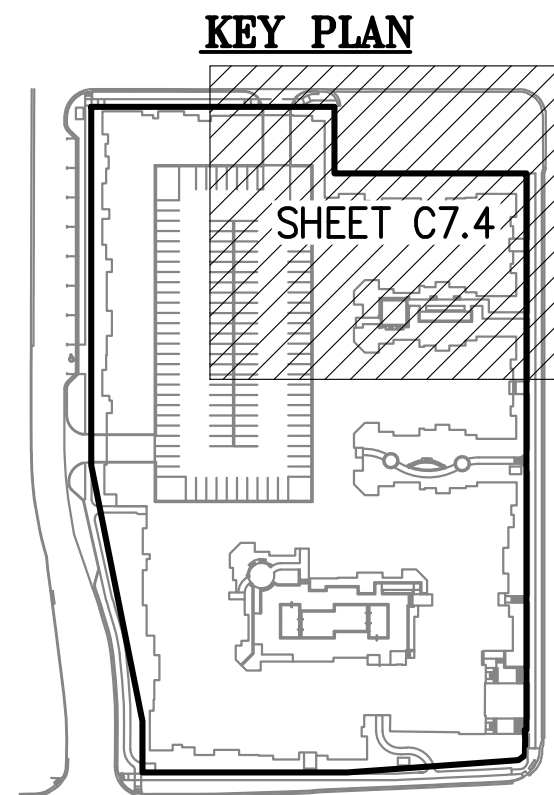
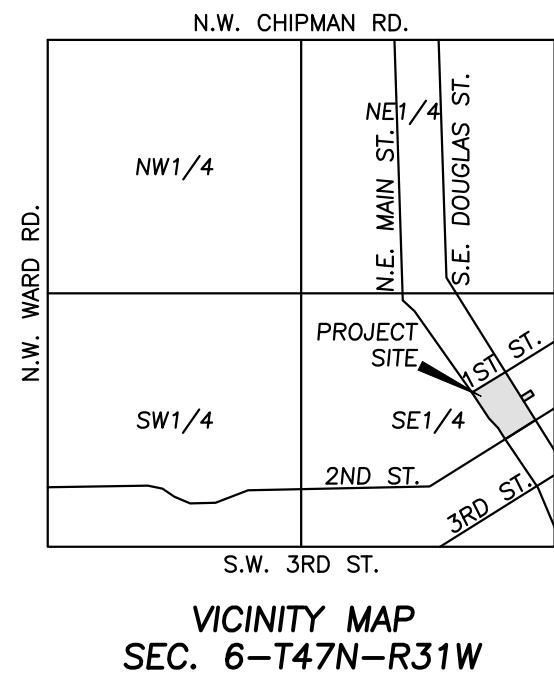
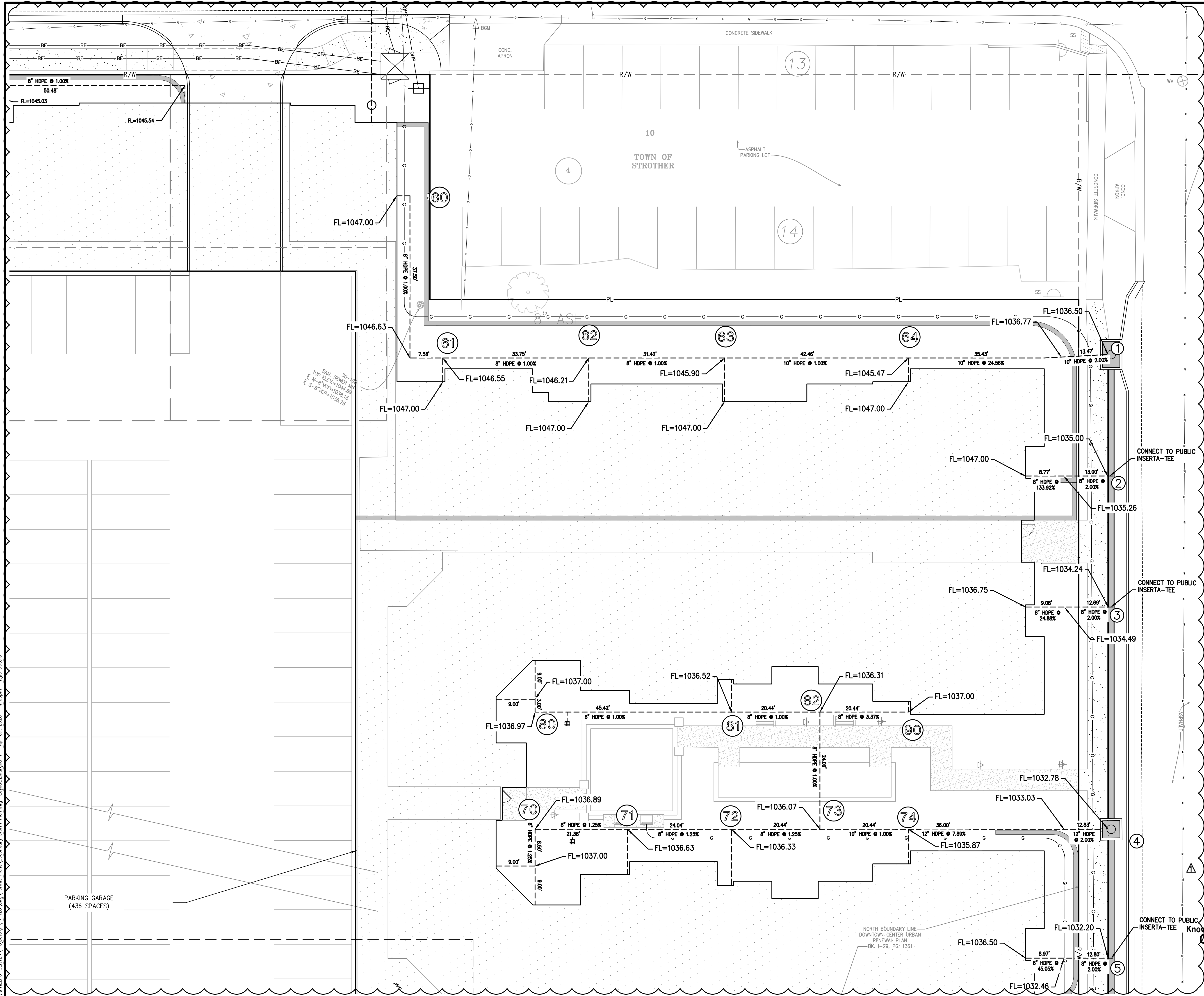


DESIGN CRITERIA: K10 = 1.0; K100 = 1.25; n = 0.013 (RCP); STORM FREQUENCY = 10 YEAR; A1 = AREA INLET; J.B = JUNCTION BOX; CI = CURB INLET; C.C = CURB OUT; G.I = GRATE INLET; HEIGHT OF STRUCTURE = RIM ELEV MINUS FLOWLINE OUT																									
I. RUNOFF											III. PIPE DESIGN													REMARKS	
N U M B E R	S T R U C T U R E	I N C R E M E N T A L			C U M U L A T I V E		SYSTEM TIME OF CONCENTRATION "Tc" AT STRUCTURE (MIN)	RAINFALL INTENSITY "I10, I100" (IN/HR)	A N T E C E D E N T P R E C I P I T A T I O N F A C T O R "K10 / K100"	RUNOFF "Q10 / Q100" (CFS)	S T R U C T U R E				P I P E										10-YEAR CHECK
		RUNOFF COEFFICIENT "C"	AREA "A" (ACRES)	C x A	AREA "A" (ACRES)	C x A					Upstream Structure Number	Downstream Structure Number	Upstream Structure Rim Elevation	Height of Structure (FT)	Diameter "D" (IN)	Length "L" (FT)	Upstream Invert Elevation	Downstream Invert Elevation	Slope "S" (FT/FT)	Travel Time in Pipe "TT" (min)	Velocity Full Vp (FPS)	Runoff Q10 (CFS)	Runoff Q100 (CFS)	Full Flow Qc (CFS)	
1	1	0.90	0.619	0.560	0.768	0.695	5.00	7.35	1.00	5.1	1	2	1039.39	4.09	15	28.09	1035.30	1034.58	0.0256	0.06	8.5	5.1	9.0	10.3	OK
	2	0.90	0.016	0.014	0.784	0.709	5.06	10.32	1.25	9.0	2	3	-	-	15	30.29	1034.58	1033.82	0.0251	0.06	8.4	5.2	9.1	10.2	OK
	3	0.90	0.010	0.009	0.794	0.718	5.12	10.30	1.25	9.1	3	4	-	-	15	51.39	1033.82	1032.53	0.0251	0.10	8.4	5.3	9.2	10.2	OK
	4	0.90	0.000	0.000	1.066	0.963	5.22	10.27	1.25	9.2	4	5	-	-	15	29.79	1032.53	1031.78	0.0252	0.06	8.4	7.0	12.3	10.2	OK
	5	0.90	0.015	0.014	1.081	0.977	5.28	10.23	1.25	12.3	5	6	-	-	15	30.29	1031.78	1031.02	0.0251	0.06	8.4	7.1	12.5	10.2	OK
	6	0.90	0.015	0.014	1.096	0.991	5.34	10.21	1.25	12.5	6	7	-	-	15	30.83	1031.02	1030.24	0.0253	0.06	8.4	7.2	12.6	10.3	OK
	7	0.90	0.190	0.171	1.577	1.425	5.40	10.18	1.25	12.6	7	8	1034.12	4.38	18	52.85	1029.74	1028.47	0.0240	0.09	9.3	10.3	18.1	16.3	OK
	8	0.90	0.021	0.019	1.598	1.444	5.49	10.16	1.25	18.1	8	9	-	-	18	36.35	1028.47	1027.59	0.0242	0.07	9.3	10.4	18.3	16.3	OK
	9	0.9	0.046	0.041	1.644	1.485	5.56	10.12	1.25	18.3	9	10	-	-	18	43.31	1027.59	1026.54	0.0242	0.08	9.3	10.7	18.7	16.4	OK
	10	0.9	0.053	0.048	1.697	1.533	5.63	10.10	1.25	18.7	10	11	-	-	18	97.93	1026.54	1024.17	0.0242	0.18	9.3	11.0	19.3	16.3	OK
	11	0.90	0.251	0.226	1.948	1.759	5.81	10.07	1.25	19.3	11	12	1028.54	4.87	18	27.68	1023.67	1023.25	0.0152	0.06	7.4	12.5	22.0	12.9	OK
	12	0.9	0.000	0.000	1.948	1.759	5.87	10.00	1.25	22.0	12	20					-	-							
2	20	0.90	0.000	0.000	0.291	0.263	5.00	7.35	1.00	1.9	20	7	1040.00	8.50	15	53.26	1031.50	1030.00	0.0282	0.10	8.9	1.9	3.4	10.8	OK
	7	0.90	0.000	0.000	0.291	0.263	5.10	10.32	1.25	3.4	7	30	-	-			-	-							
3	30	0.90	0.020	0.018	0.559	0.504	5.00	10.28	1.25	3.4	30	31	1038.51	10.51	15	81.99	1028.00	1026.36	0.0200	0.18	7.5	3.7	6.5	9.1	OK
	31	0.90	0.000	0.000	0.707	0.638	5.18	7.30	1.00	4.7	31	32	-	-	15	22.69	1026.25	1025.80	0.0200	0.05	7.5	4.7	8.2	9.1	OK
	32	0.90	0.000	0.000	0.707	0.638	5.23	7.28	1.00	4.6	32	40	-	-			-	-							
4	40	0.90	0.017	0.015	0.142	0.128	5.00	7.35	1.00	0.9	40	41	1048.14	4.44	18	54.73	1043.70	1040.88	0.0515	0.07	13.6	0.9	1.7	23.8	OK
	41	0.90	0.213	0.192	0.355	0.320	5.07	10.32	1.25	1.7	41	42	-	-	18	130.90	1040.38	1036.33	0.0309	0.21	10.5	2.3	4.1	18.5	OK
	42	0.90	0.808	0.727	1.163	1.047	5.27	10.29	1.25	4.1	42	43	1047.10	10.77	18	54.65	1036.33	1034.64	0.0309	0.09	10.5	7.6	13.4	18.5	OK
	43	0.90	0.081	0.073	1.244	1.120	5.36	10.21	1.25	13.4	43	44	-	-	18	36.66	1034.64	1033.51	0.0308	0.06	10.5	8.1	14.2	18.4	OK
	44	0.90	0.000	0.000	1.244	1.120	5.42	10.17	1.25	14.2	44	45	-	-	18	133.77	1033.01	1029.51	0.0262	0.23	9.7	8.1	14.2	17.0	OK
	45	0.90	0.148	0.133	1.392	1.253	5.65	10.15	1.25	14.2	45	46	-	-	18	84.08	1029.01	1025.68	0.0396	0.12	11.9	9.0	15.8	20.9	OK
	46	0.90	0.480	0.432	1.872	1.685	5.77	10.06	1.25	15.8	46	47	1041.75	16.57	18	34.43	1025.18	1023.62	0.0453	0.05	12.7	12.0	21.1	22.4	OK
	47							10.01	1.25	21.1															
5	60	0.90	0.013	0.012	0.013	0.012	5.00	7.35	1.00	0.1	60	61	-	-	8	45.08	-	-	0.0100	0.21	3.5	0.1	0.2	1.2	OK
	61	0.90	0.044	0.040	0.057	0.052	5.21	10.32	1.25	0.2	61	62	-	-	8	33.75	-	-	0.0100	0.16	3.5	0.4	0.7	1.2	OK
	62	0.90	0.028	0.025	0.085	0.077	5.38	10.23	1.25	0.7	62	63	-	-	8	31.42	-	-	0.0100	0.15	3.5	0.6	1.0	1.2	OK
	63	0.90	0.025	0.023	0.110	0.100	5.52	10.17	1.25	1.0	63	20	-	-	10	42.46	-	-	0.0100	0.17	4.1	0.7	1.3	2.2	OK
	64	0.90	0.039	0.035	0.149	0.135	5.70	10.11	1.25	1.3	64	20	-	-	10	48.90	-	-	0.0200	0.14	5.7	1.0	1.7	3.1	OK
	1	0.90	0.000	0.000	0.149	0.135	5.84	7.14	1.00	1.0															
	4	0.90	0.000	0.000	0.242	0.218	5.24	10.04	1.25	1.7															
6	70	0.90	0.048	0.043	0.048	0.043	5.00	7.35	1.00	0.3	70	71	-	-	8	21.38	-	-	0.0125	0.09	3.9	0.3	0.6	1.4	OK
	71	0.90	0.048	0.043	0.096	0.086	5.09	10.32	1.25	0.6	71	72	-	-	8	18.23	-	-	0.0125	0.08	3.9	0.6	1.1	1.4	OK
	72	0.90	0.023	0.021	0.119	0.107	5.17	10.28	1.25	1.1	72	73	-	-	10	20.44	-	-	0.0125	0.08	4.5	0.8	1.4	2.4	OK
	73	0.90	0.000	0.000	0.242	0.218	5.24	7.30	1.00	0.8	73	74	-	-	12	20.44	-	-	0.0100	0.07	4.6	1.6	2.8	3.6	OK
	74	0.90	0.030	0.027	0.272	0.245	5.32	10.25	1.25	2.8															
	4	0.90	0.000	0.000	0.272	0.245	5.39	7.28	1.00	1.6	74	4	-	-	12	48.83	-	-	0.0697	0.07	12.1	1.8	3.1	9.4	OK
	4	0.90	0.000	0.000	0.272	0.245	5.39	10.19	1.25	3.1	4	80	-	-											
							7.24	1.00	1.8																
							10.16	1.25	3.1																

\\PHILIPS-SERVER\Projects\171125\dwg\Permit Plans\Secondary Storm Plan.dwg Layout:Chart-2 Apr 07, 2020 - 4:08pm Kyle Delera

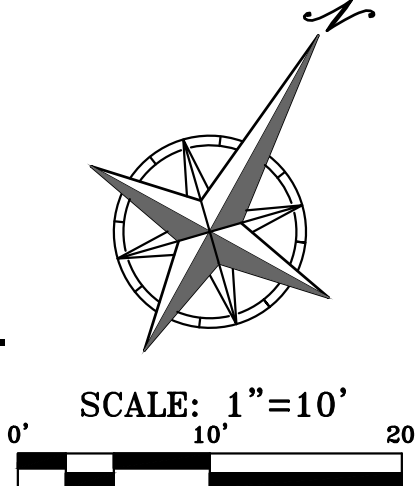
7	80	0.90	0.073	0.066	0.073	0.066	5.00	7.35	1.00	0.5	80	81	-	-	8	45.42	-	-	0.0100	0.22	3.5	0.5	0.9	1.2
								10.32	1.25	0.9			-	-										
	81	0.90	0.021	0.019	0.094	0.085	5.22	7.29	1.00	0.6	81	82	-	-	8	20.44	-	-	0.0100	0.10	3.5	0.6	1.1	1.2
								10.23	1.25	1.1			-	-										
	82	0.90	0.000	0.000	0.123	0.111	5.31	7.26	1.00	0.8	82	73	-	-	10	24.09	-	-	0.0100	0.10	4.1	0.8	1.4	2.2
8								10.19	1.25	1.4			-	-										
	73	0.90	0.000	0.000	0.123	0.111	5.41	7.23	1.00	0.8	73	90	-	-										
								10.15	1.25	1.4			-	-										
	90	0.90	0.029	0.026	0.029	0.026	5.00	7.35	1.00	0.2	90	82	-	-	8	20.44	-	-	0.0337	0.05	6.4	0.2	0.3	2.2
								10.32	1.25	0.3			-	-										
9	82	0.90	0.000	0.000	0.029	0.026	5.05	7.34	1.00	0.2	82	100	-	-										
								10.30	1.25	0.3			-	-										
	100	0.90	0.013	0.012	0.013	0.012	5.00	7.35	1.00	0.1	100	101	-	-	8	26.88	-	-	0.0100	0.13	3.5	0.1	0.2	1.2
								10.32	1.25	0.2			-	-										
	101	0.90	0.041	0.037	0.054	0.049	5.13	7.31	1.00	0.4	101	102	-	-	8	23.17	-	-	0.0100	0.11	3.5	0.4	0.6	1.2
								10.27	1.25	0.6			-	-										
	102	0.90	0.041	0.037	0.095	0.086	5.24	7.28	1.00	0.6	102	103	-	-	8	34.17	-	-	0.0100	0.16	3.5	0.6	1.1	1.2
								10.22	1.25	1.1			-	-										
	103	0.90	0.061	0.055	0.156	0.141	5.40	7.23	1.00	1.0	103	104	-	-	10	27.39	-	-	0.0100	0.11	4.1	1.0	1.8	2.2
								10.16	1.25	1.8			-	-										
	104	0.90	0.015	0.014	0.171	0.155	5.51	7.20	1.00	1.1	104	105	-	-	10	27.02	-	-	0.0100	0.11	4.1	1.1	2.0	2.2
								10.11	1.25	2.0			-	-										
	105	0.90	0.028	0.025	0.199	0.180	5.62	7.17	1.00	1.3	105	106	-	-	12	12.72	-	-	0.0100	0.05	4.6	1.3	2.3	3.6
								10.07	1.25	2.3			-	-										
	106	0.90	0.063	0.057	0.262	0.237	5.67	7.15	1.00	1.7	106	107	-	-	12	25.37	-	-	0.0100	0.09	4.6	1.7	3.0	3.6
								10.05	1.25	3.0			-	-										
10	107	0.90	0.037	0.033	0.299	0.270	5.76	7.12	1.00	1.9	107	108	-	-	12	11.29	-	-	0.0100	0.04	4.6	1.9	3.4	3.6
								10.01	1.25	3.4			-	-										
	108	0.90	0.015	0.014	0.314	0.284	5.80	7.11	1.00	2.0	108	109	-	-	15	21.68	-	-	0.0100	0.07	5.3	2.0	3.5	6.5
								10.00	1.25	3.5			-	-										
	109	0.90	0.066	0.059	0.380	0.343	5.87	7.09	1.00	2.4	109	30	-	-	15	3.00	-	-	0.0100	0.01	5.3	2.4	4.3	6.5
								9.97	1.25	4.3			-	-										
	30	0.90	0.000	0.000	0.380	0.343	5.88	7.09	1.00	2.4	30	110	-	-										
								9.97	1.25	4.3			-	-										
	110	0.90	0.047	0.042	0.047	0.042	5.00	7.35	1.00	0.3	110	111	-	-	8	39.48	-	-	0.0100	0.19	3.5	0.3	0.5	1.2
								10.32	1.25	0.5			-	-										
11	111	0.90	0.076	0.068	0.123	0.110	5.19	7.30	1.00	0.8	111	112	-	-	10	29.14	-	-	0.0100	0.12	4.1	0.8	1.4	2.2
								10.24	1.25	1.4			-	-										
	112	0.90	0.021	0.019	0.144	0.129	5.31	7.26	1.00	0.9	112	113	-	-	10	11.88	-	-	0.0100	0.05	4.1	0.9	1.6	2.2
								10.20	1.25	1.6			-	-										
	113	0.90	0.015	0.014	0.159	0.143	5.36	7.24	1.00	1.0	113	30	-	-	10	11.15	-	-	0.0100	0.05	4.1	1.0	1.8	2.2
12								10.18	1.25	1.8			-	-										
	30	0.90	0.000	0.000	0.159	0.143	5.40	7.23	1.00	1.0	30	120	-	-										
								10.16	1.25	1.8			-	-										
	120	0.90	0.055	0.050	0.055	0.050	5.00	7.35	1.00	0.4	120	121	-	-	8	50.48	-	-	0.1000	0.08	11.1	0.4	0.6	3.8
								10.32	1.25	0.6			-	-										
13	121	0.90	0.039	0.035	0.094	0.085	5.08	7.33	1.00	0.6	121	122	-	-	8	42.63	-	-	0.1000	0.06	11.1	0.6	1.1	3.8
								10.29	1.25	1.1			-	-										
	122	0.90	0.031	0.028	0.125	0.113	5.14	7.31	1.00	0.8	122	123	-	-	10	40.77	-	-	0.0100	0.17	4.1	0.8	1.4	2.2
								10.26	1.25	1.4			-	-										
	123	0.90	0.000	0.000	0.125	0.113	5.31	7.26	1.00	0.8	123	40	-	-	10	17.60	-	-	0.0100	0.07	4.1	0.8	1.4	2.2
14								10.20	1.25	1.4			-	-										
	40	0.90	0.000	0.000	0.125	0.113	5.38	7.24	1.00	0.8			-	-										
								10.17	1.25	1.4			-	-										
	130	0.90	0.033	0.030	0.033	0.030	5.00	7.35	1.00	0.2	130	131	-	-	8	8.87	-	-	0.1000	0.01	11.1	0.2	0.4	3.8
								10.32	1.25	0.4			-	-										
15	131	0.90	0.033	0.030	0.066	0.060	5.01	7.35	1.00	0.4	131	132	-	-	8	106.25	-	-	0.0100	0.51	3.5	0.4	0.8	1.2
								10.32	1.25	0.8			-	-										
	132	0.90	0.031	0.028	0.097	0.088	5.52	7.20	1.00	0.6	132	31	-	-	8	8.65	-	-	0.0100	0.04	3.5	0.6	1.1	1.2
								10.11	1.25	1.1			-	-										
	31	0.90	0.000	0.000	0.097	0.088	5.56	7.18	1.00	0.6	31		-	-										
16								10.09	1.25	1.1			-	-										
	140	0.90	0.023	0.021	0.023	0.021	5.00	7.35	1.00	0.2	140	141	-	-	8	33.71	-	-	0.0100	0.16	3.5	0.2	0.3	1.2
								10.32	1.25	0.3			-	-										
	141	0.90	0.028	0.025	0.051	0.046	5.16	7.30	1.00	0.3	141	31	-	-	8	25.61	-	-	0.0100	0.12	3.5	0.3	0.6	1.2

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LEGEND	
PL	PROPERTY LINE
LL	LOT LINE
R/W	RIGHT-OF-WAY
CATV	EXISTING CABLE TELEVISION LINE
FO	EXISTING FIBER OPTIC LINE
G	EXISTING GAS LINE
BE	EXISTING BURIED ELECTRIC LINE
OHP	EXISTING OVERHEAD POWER LINE
OHT	EXISTING OVERHEAD TELEPHONE LINE
SS	EXISTING SANITARY SEWER LINE
24"HDPE	EXISTING STORM SEWER LINE (& SIZE)
BT	EXISTING BURIED TELEPHONE LINE
W	EXISTING WATER LINE (& SIZE)
CATV	PROPOSED CABLE TELEVISION LINE
FO	PROPOSED FIBER OPTIC LINE
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UTILITY NOTES:
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SECONDARY DRAINAGE MAP & CALCS.

DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	No.	1.	Date	3-16-20	By	App.	Revisions:	Revised Per	Comments
DATE	01-28-20	DRAWN	SNH							
CHECKED	DAF	APPROVED	DEU							
CERTIFICATE OF AUTHORIZATION										
LAND SURVEYING	LS-82									
ENGINEERING	E-361									
CERTIFICATE OF AUTHORIZATION										
LAND SURVEYING	200701028									
ENGINEERING	200705028									

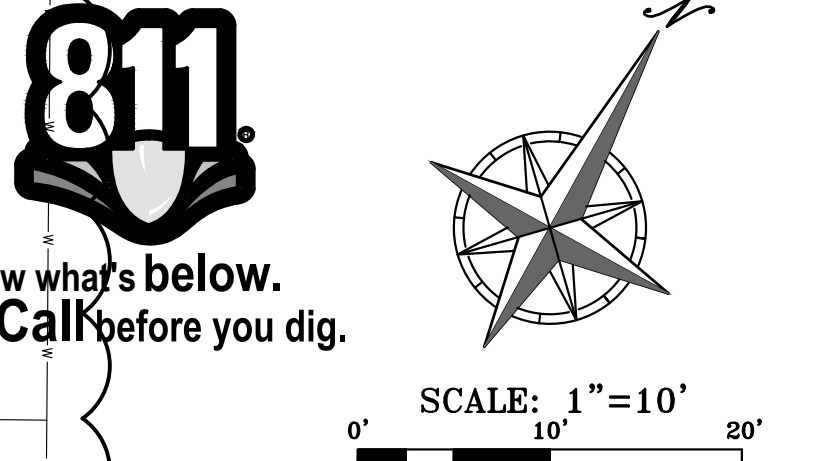
SHEET
C7.4

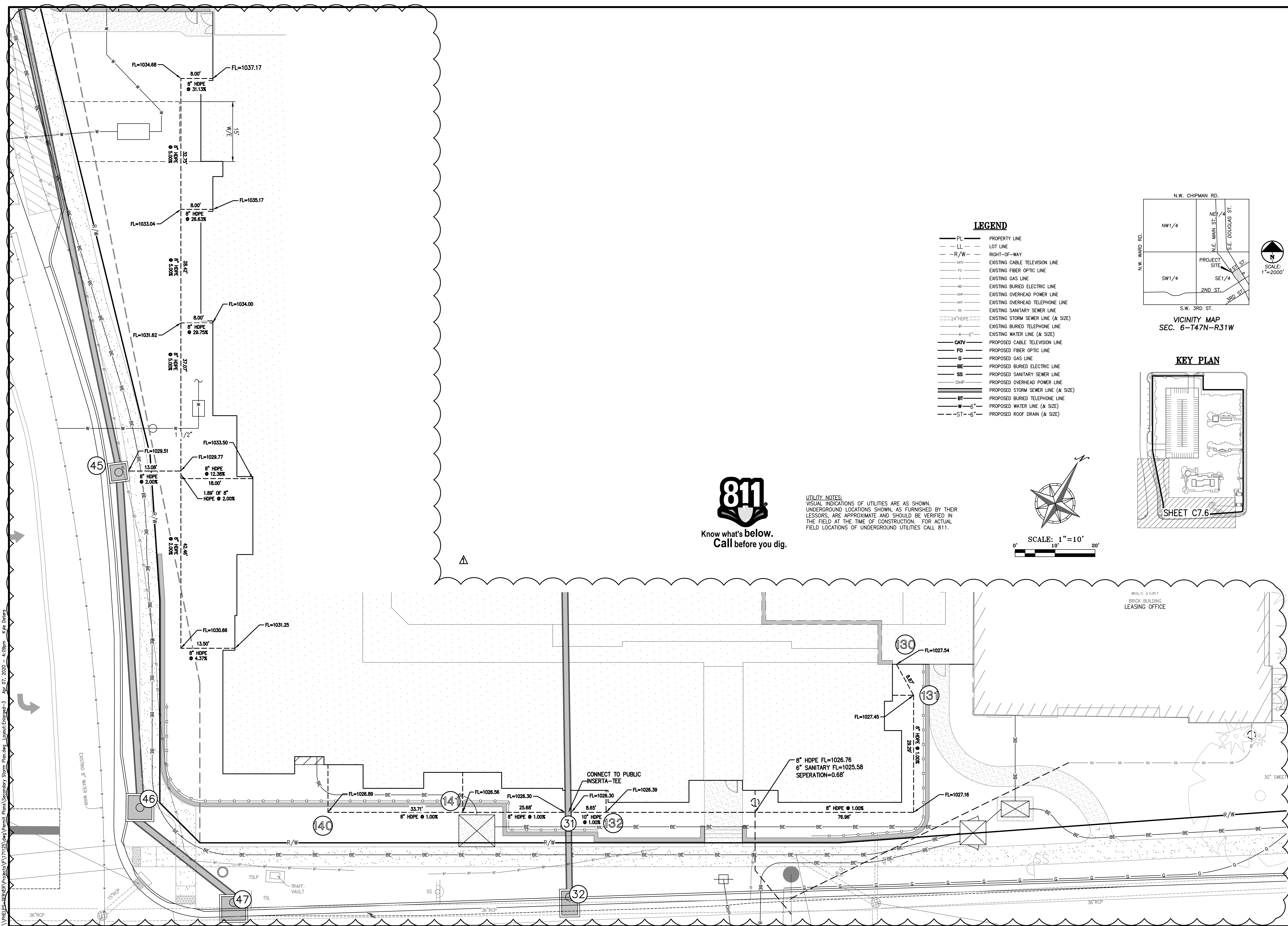
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DATE: 4/7/20
PROJECT: LEE'S SUMMIT, MISSOURI

PHILIPS ENGINEERING, INC.
1270 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax: (913) 393-1165
www.philipsengineering.com

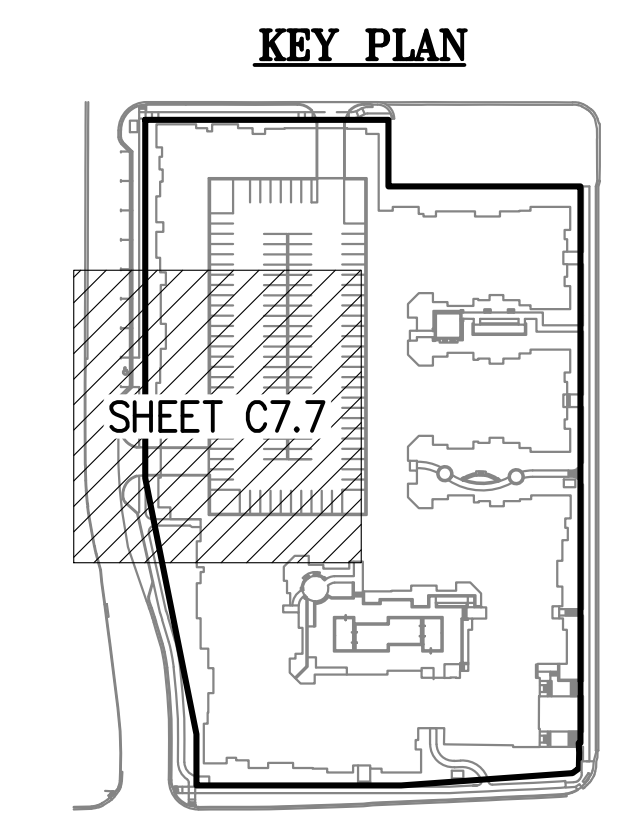
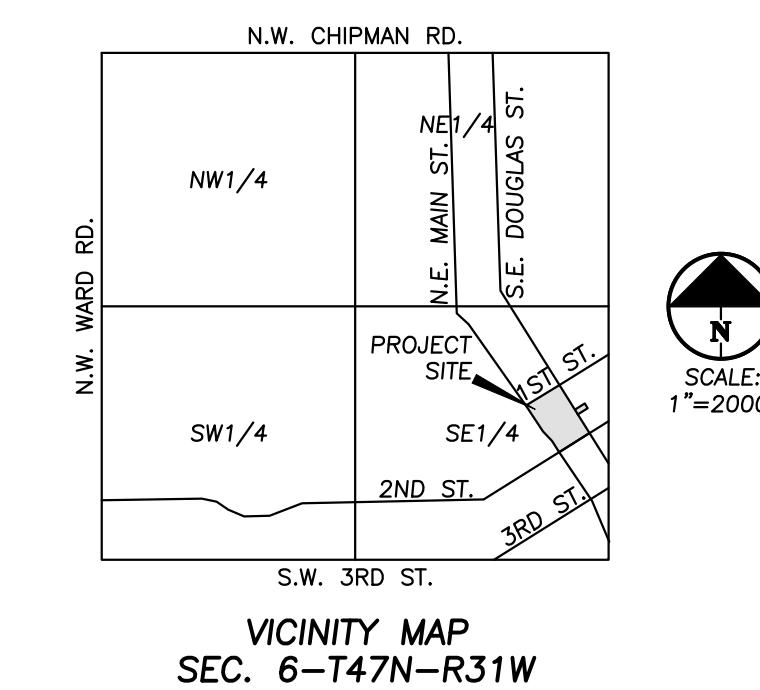
PLANNING
ENGINEERING
IMPLEMENTATION

PE
Professional Engineer



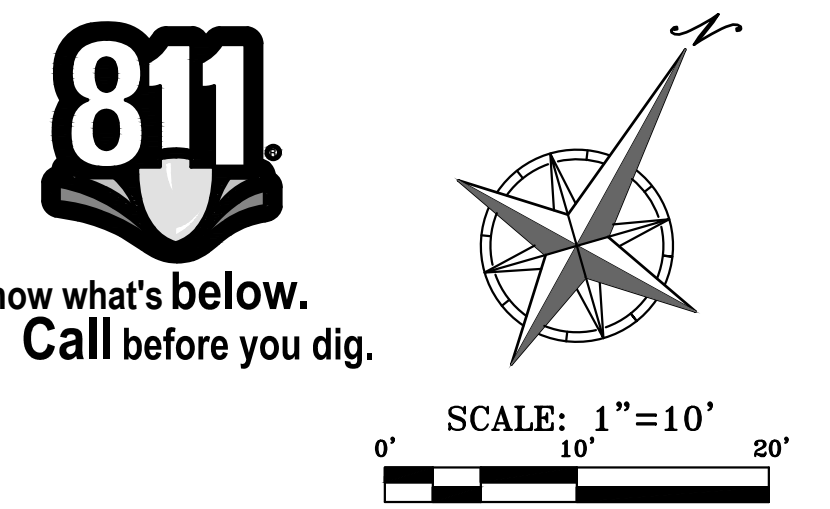


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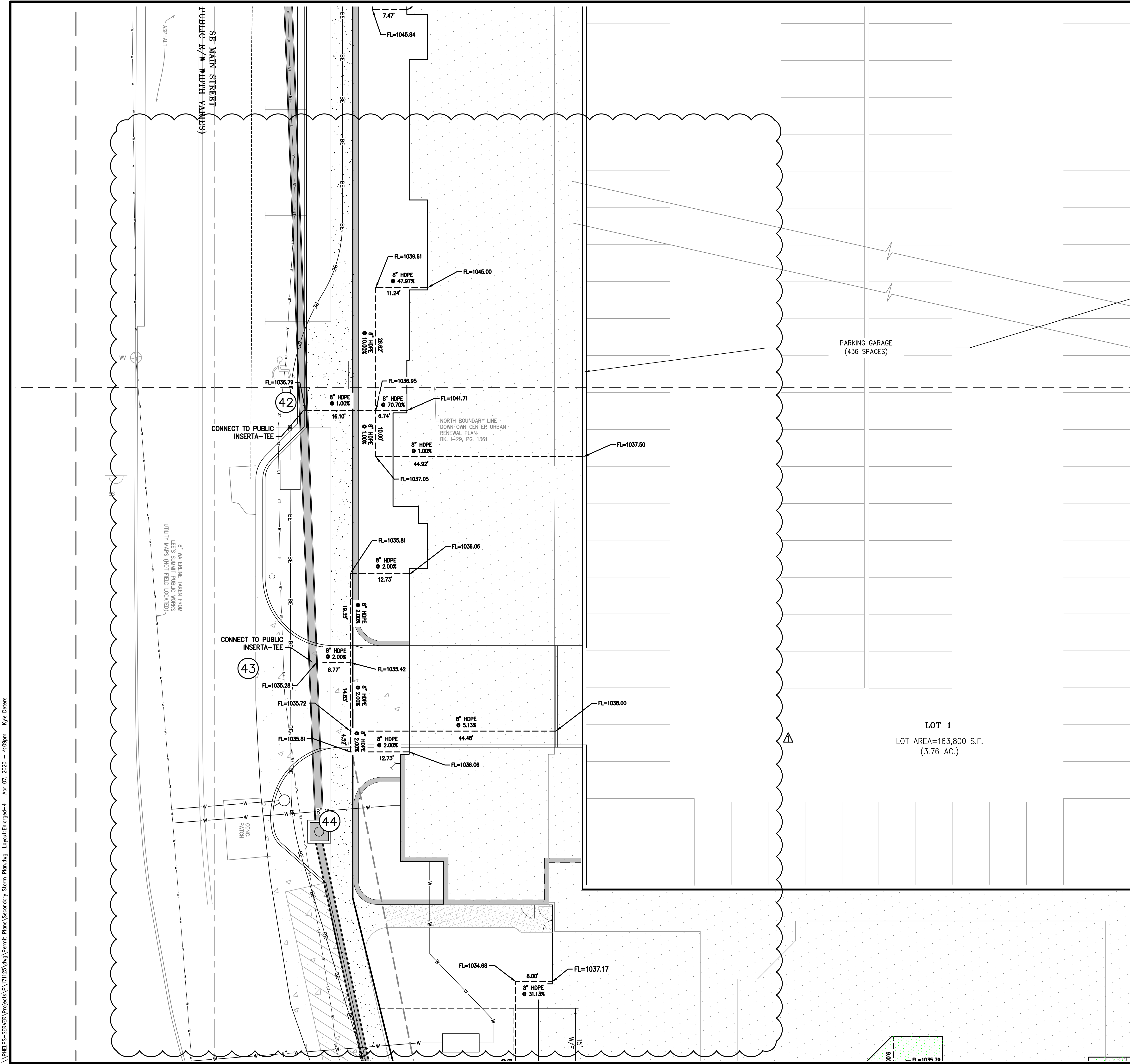


- LEGEND**
- PL — PROPERTY LINE
 - LL — LOT LINE
 - R/W — RIGHT-OF-WAY
 - CATV — EXISTING CABLE TELEVISION LINE
 - FO — EXISTING FIBER OPTIC LINE
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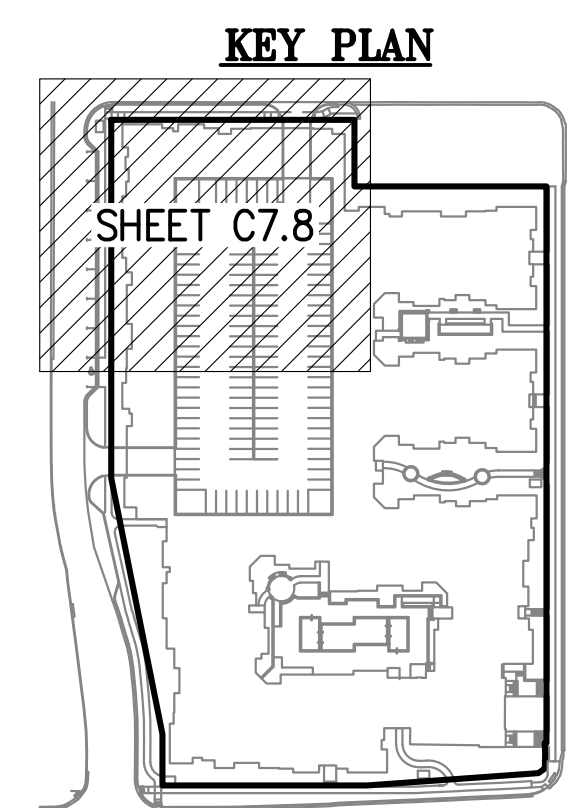
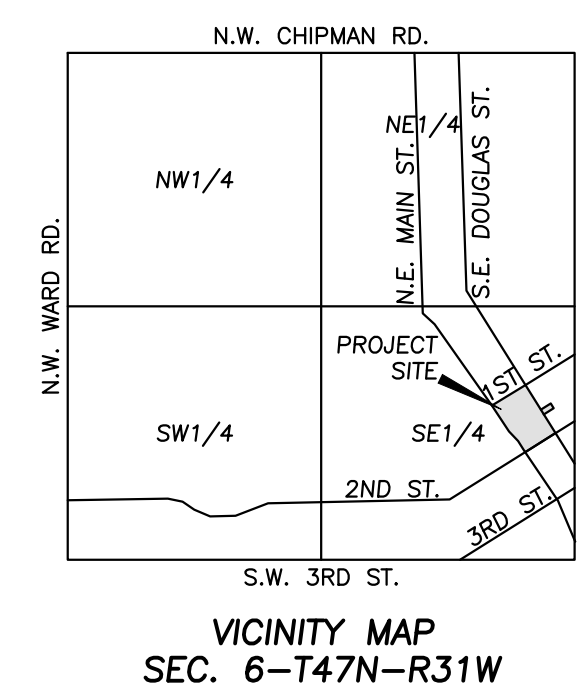
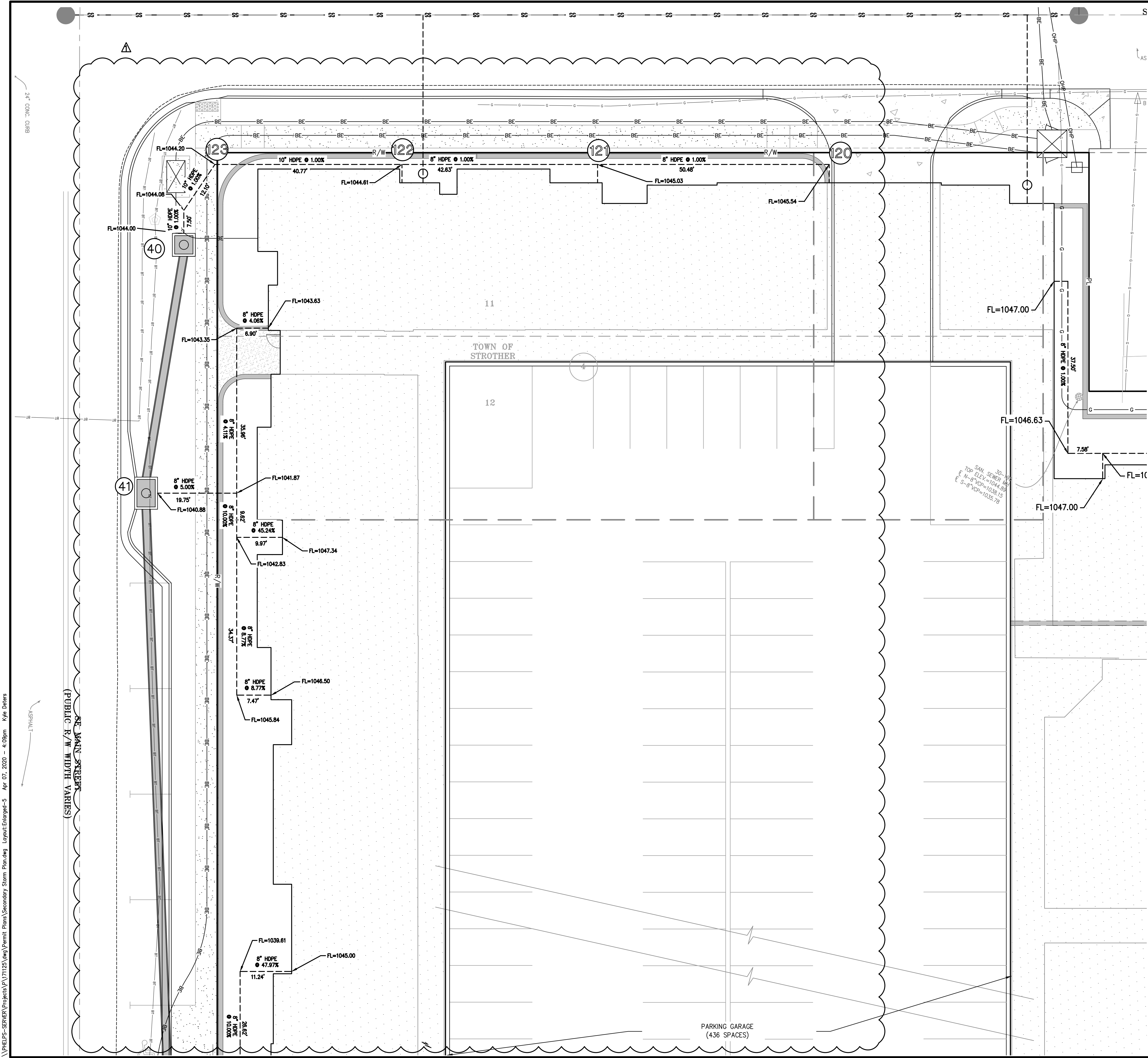


PROJECT NO.	171125	No.	1.	Date	3-16-20	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH	CHECKED: DAF	APPROVED: DEU			REVISED PER CITY COMMENTS	SNH	DEU
CERTIFICATE OF AUTHORIZATION								
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ENGINEERING - E-361								
CERTIFICATE OF AUTHORIZATION								
LAND SURVEYING - 200701028								
ENGINEERING - 200700029								



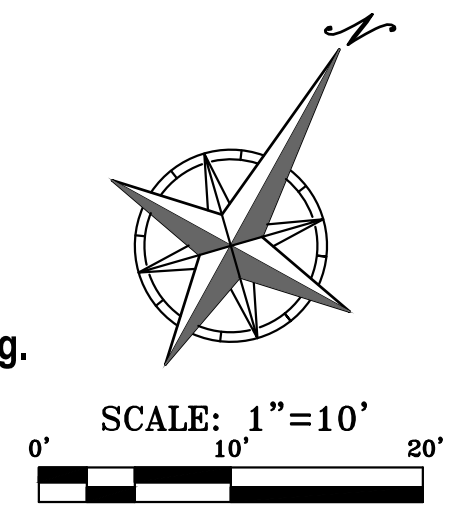
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DOWNTOWN LEE'S SUMMIT APARTMENTS
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PROJECT NO.	171125	No.	1.	Date	3-16-20	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH	CHECKED: DAF	APPROVED: DEU			REVISED PER CITY COMMENTS	SNH	DEU
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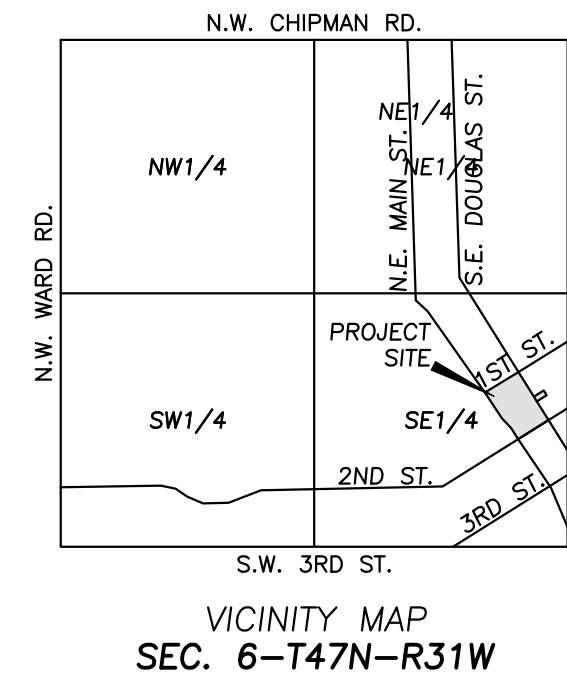
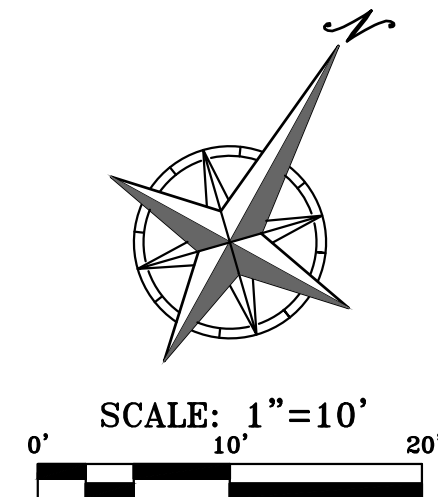
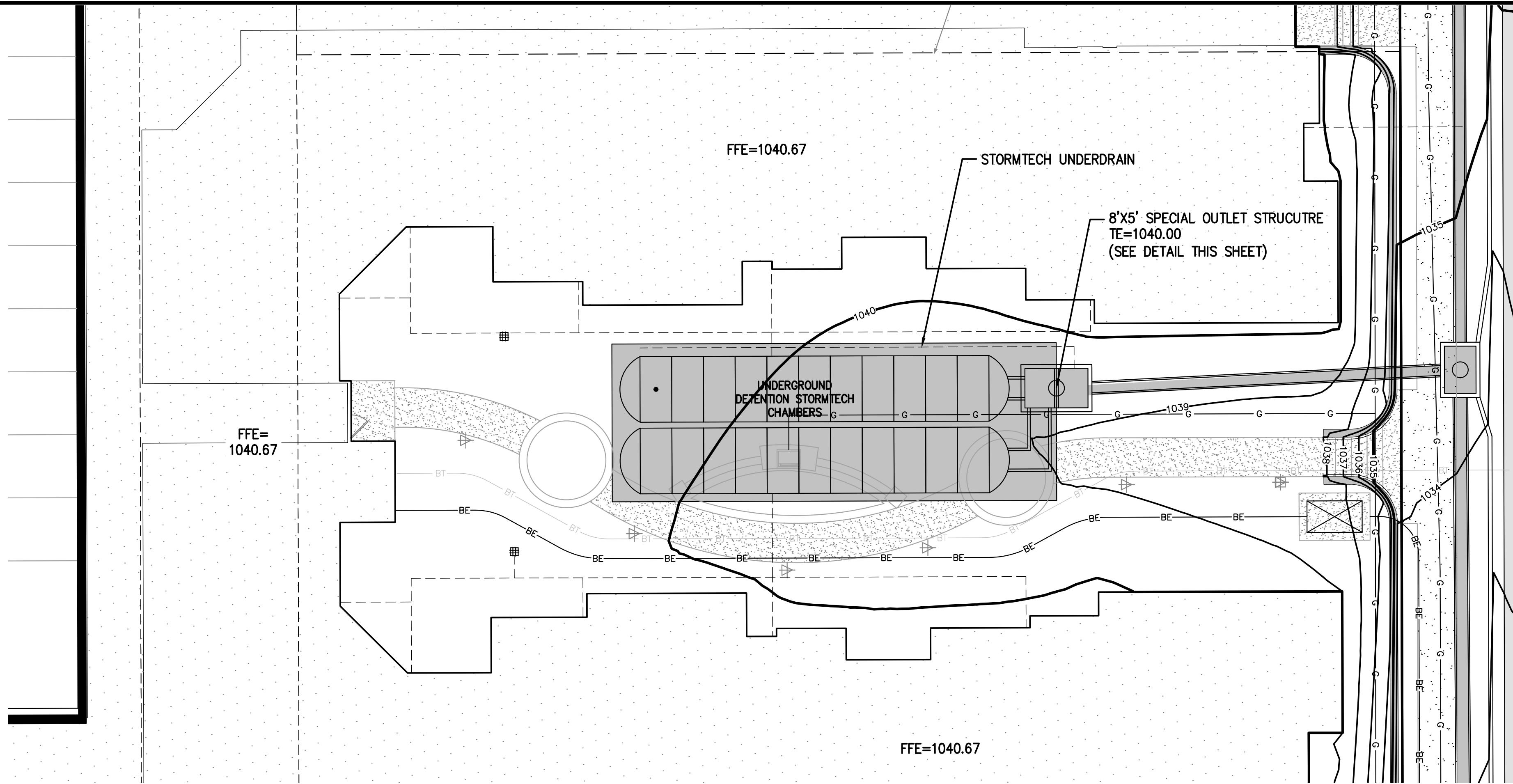
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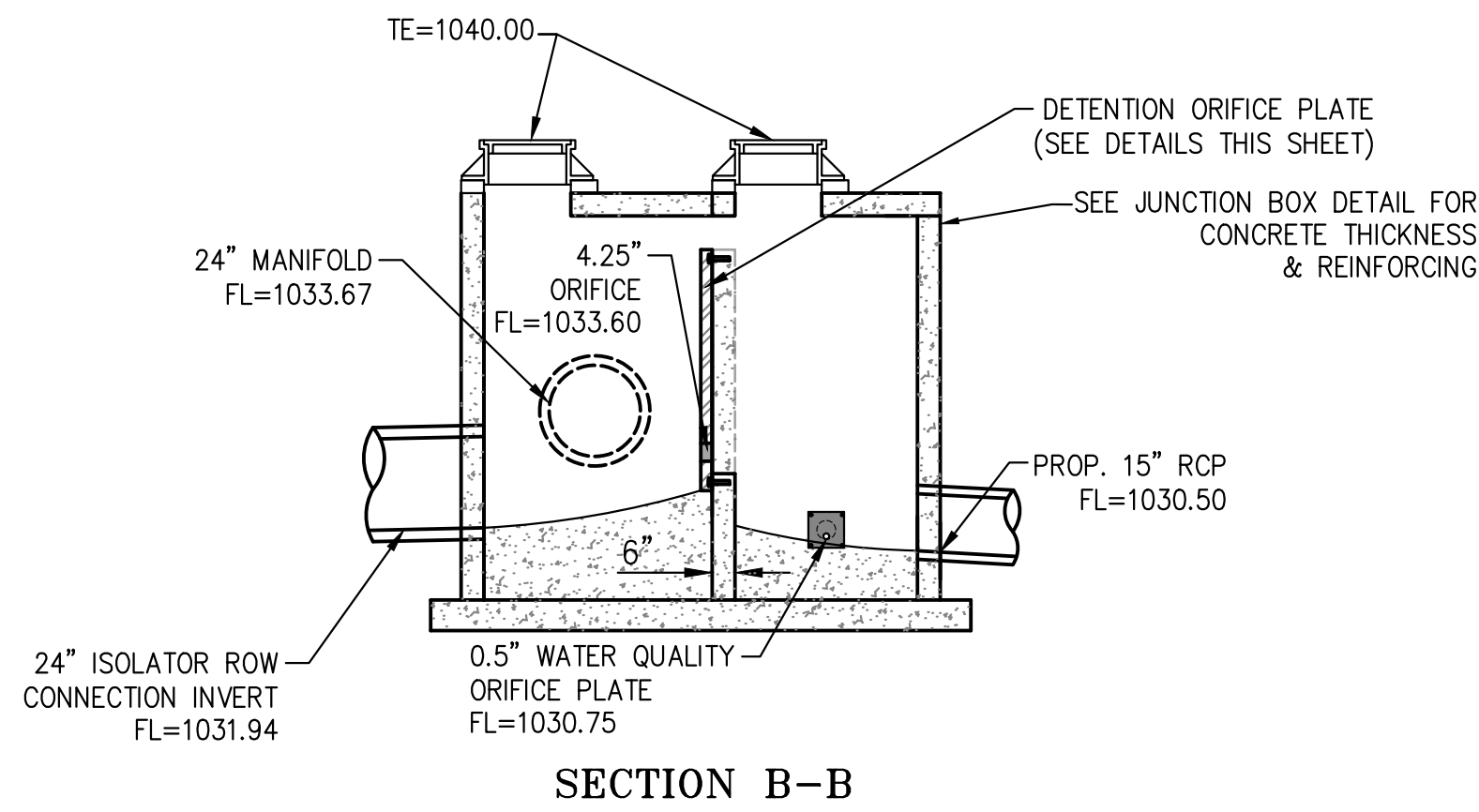
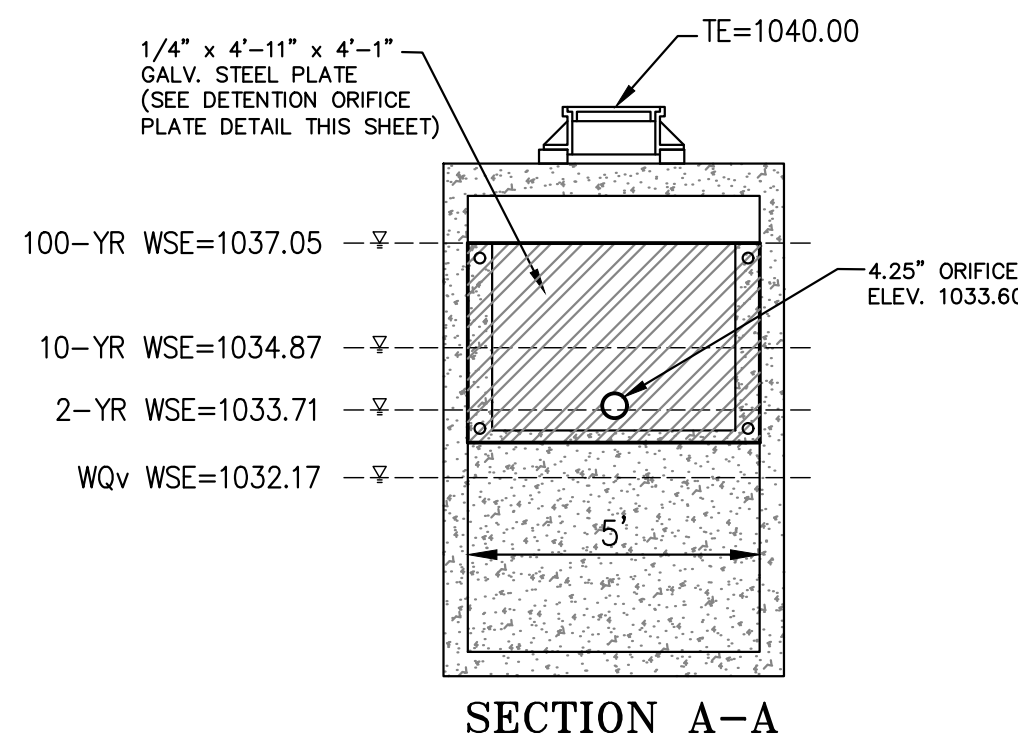
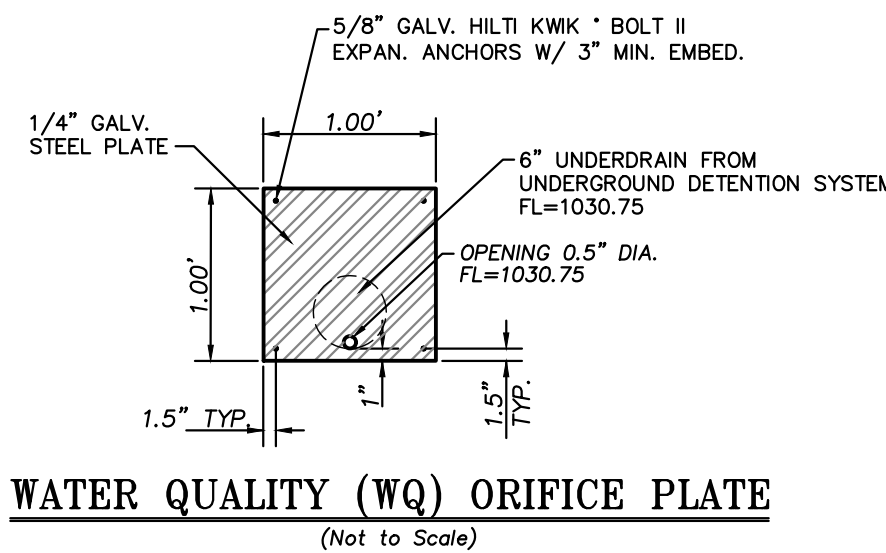
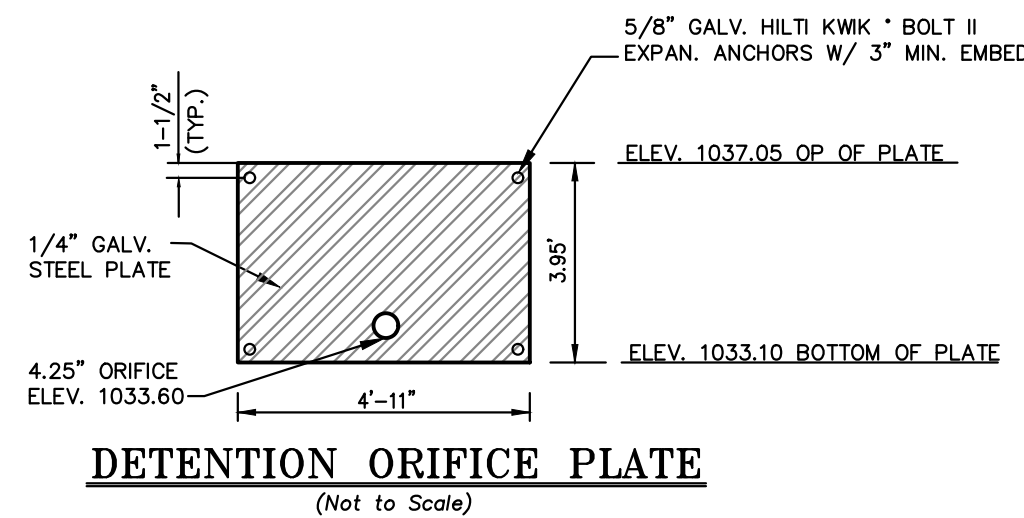
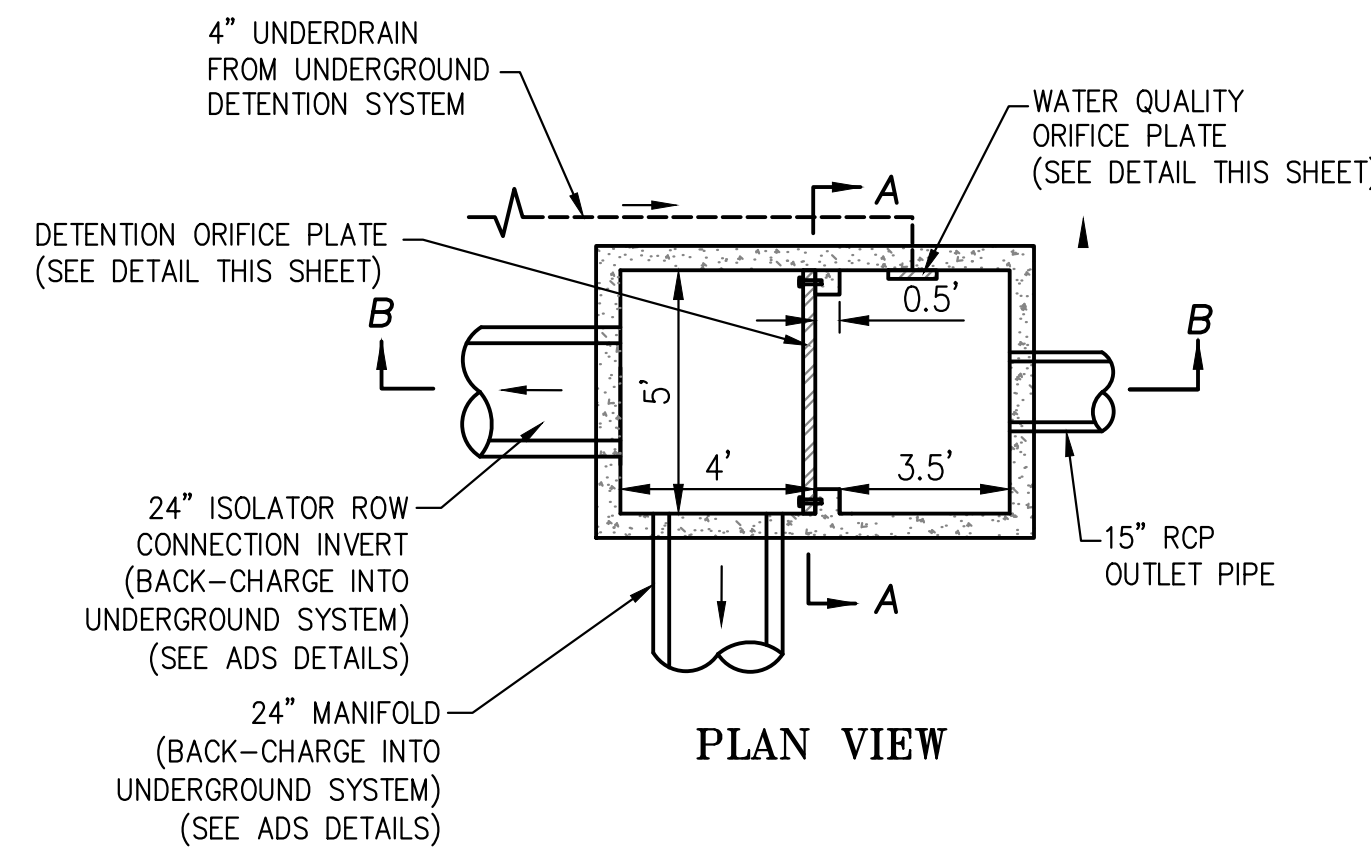
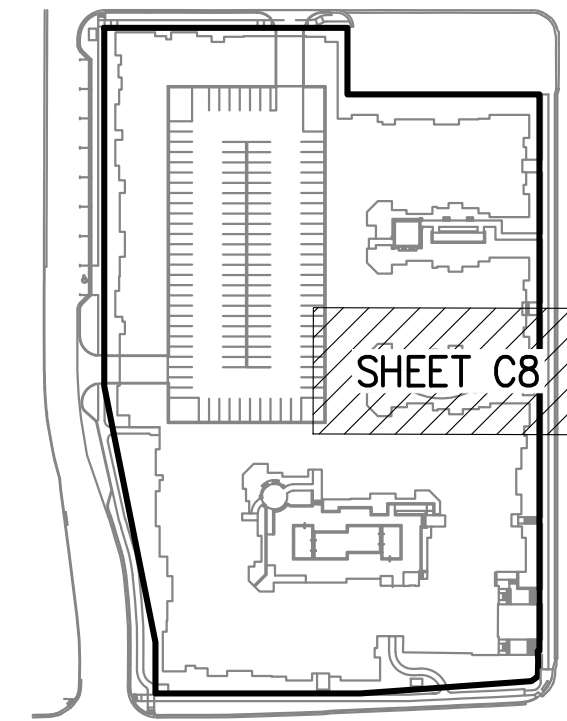


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\\PHILIPS-SERVER\Projects\171125\dwg\Permit Plans\Storm Detention Planning Layout1.dwg Mar 17, 2020 - 8:57am Shell Hatcher



KEY PLAN



8'X5' SPECIAL OUTLET STRUCTURE DETAILS
(NOT TO SCALE)

FLOOD NOTE:

THE SUBJECT PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF LEE'S SUMMIT, COMMUNITY NO. 290174, JACKSON COUNTY, MISSOURI, MAP NO. 29095C0417G, AND DATED JANUARY 20, 2017.

UTILITY NOTES:

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



Know what's below.
Call before you dig.



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

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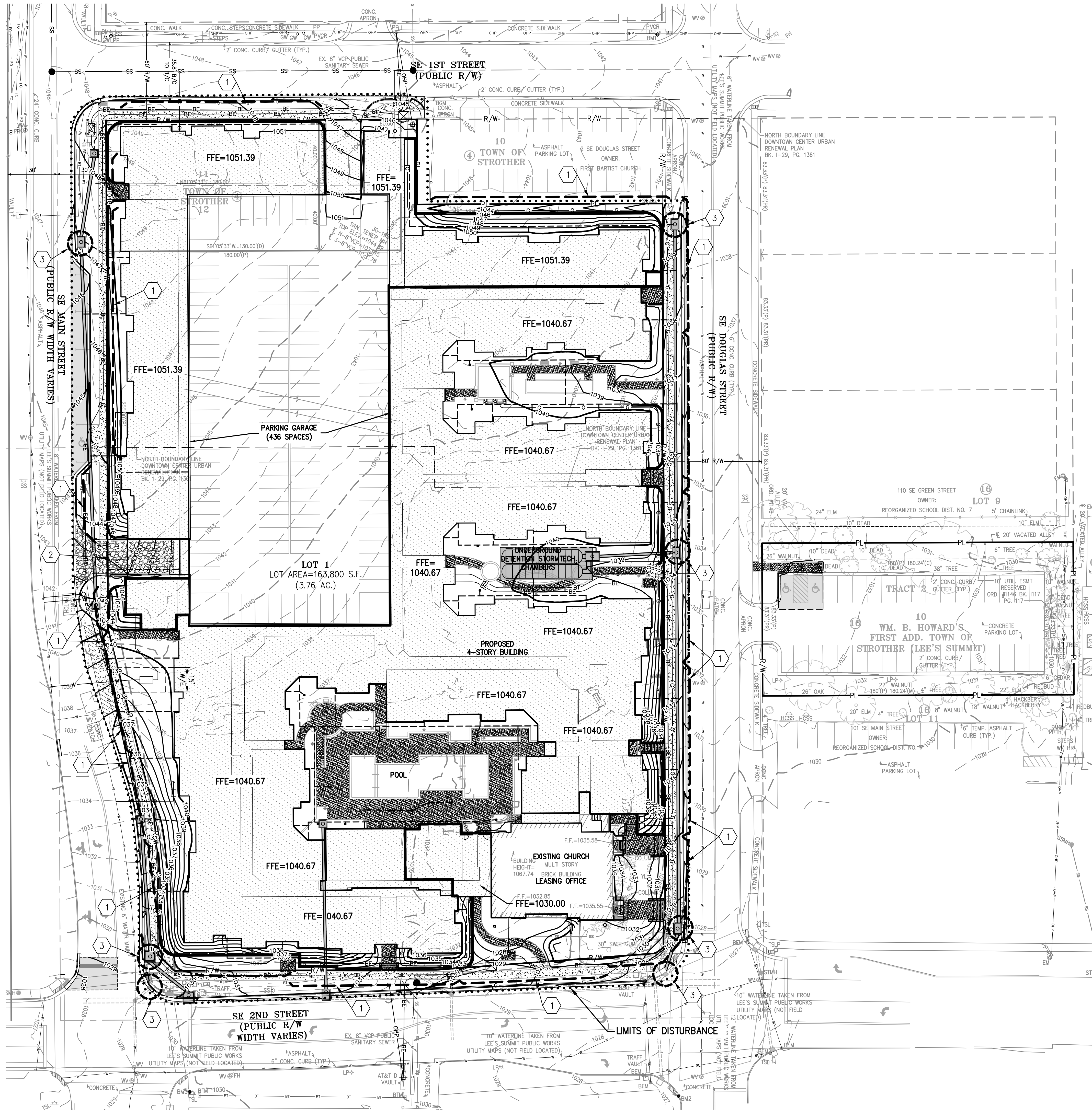
STORMWATER DETENTION PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	No.	Date	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH	1.	3-16-20	REVISED PER CITY COMMENTS	SNH	DEU
CORPORATE OF AUTHORIZATION						
LAND SURVEYING - LS-82						
ENGINEERING - E-361						
CERTIFICATE OF AUTHORIZATION						
LAND SURVEYING-200701028						
ENGINEERING-200705028						

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SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE												
NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE												
CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ROUGH GRADE / SEDIMENT CONTROL												
TEMPORARY CONTROL MEASURES												
STRIP & STOCKPILE TOPSOIL												
STORM FACILITIES												
TEMPORARY CONSTRUCTION ROADS												
FOUNDATION / BUILDING CONSTRUCTION												
SITE CONSTRUCTION												
PERMANENT CONTROL STRUCTURES												
FINISH GRADING												
LANDSCAPING/SEED/FINAL STABILIZATION												

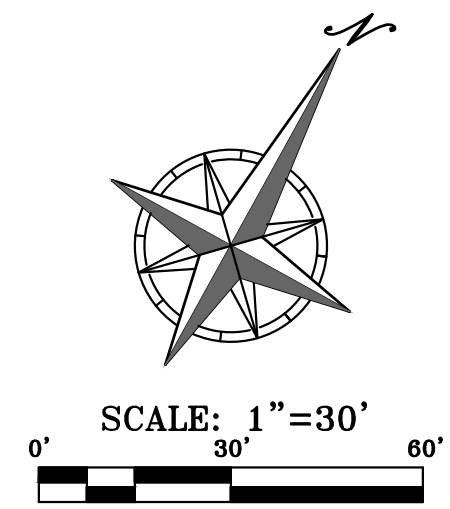
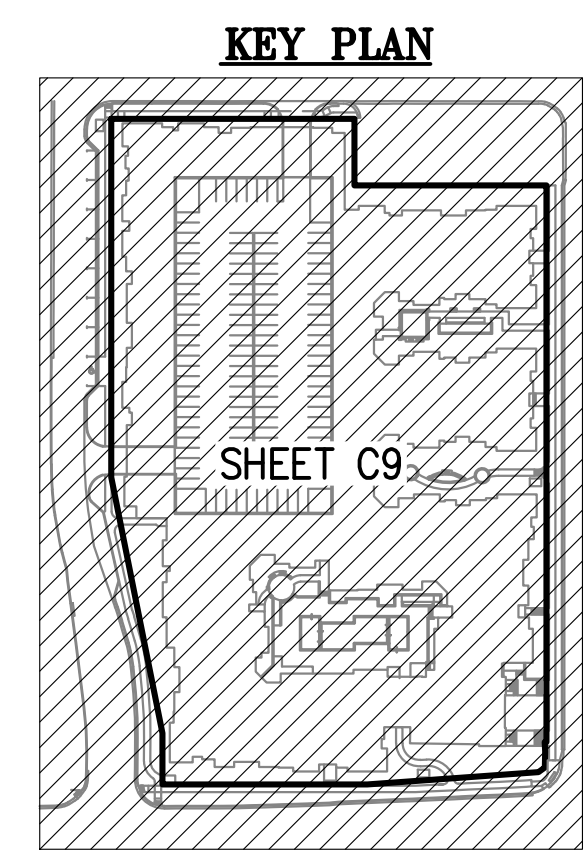
STAGING CHART				
Project Stage	BMP Plan Ref No.	BMP Description	Remove after Stage:	Notes:
PHASE 1	①	Sediment Fence	NA	Place downstream project site perimeter.
	②	Constr Entrance & Staging Area	NA	Include concrete washout pit.
	③	Inlet Protection	NA	See sheet C10 for details.

- LEGEND**
- CONSTRUCTION ENTRANCE
 - CONCRETE WASHOUT PIT
 - LIMITS OF DISTURBED AREAS
 - SILT FENCE
 - INLET PROTECTION
 - ROCK CHECK DAM
 - FLOW DIRECTION ARROW



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

DISTURBED AREA = 4.35 ACRES



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DATE: 3/16/20
PROJECT NO. 171125
DRAWN: SNH
CHECKED: DAF
DATE: 01-28-20
DATE OF AUTHORIZATION: 01-28-20
LAND SURVEYING - LS-82
ENGINEERING - E-361
DATE OF AUTHORIZATION: 01-28-20
LAND SURVEYING - LS-82
ENGINEERING - E-361

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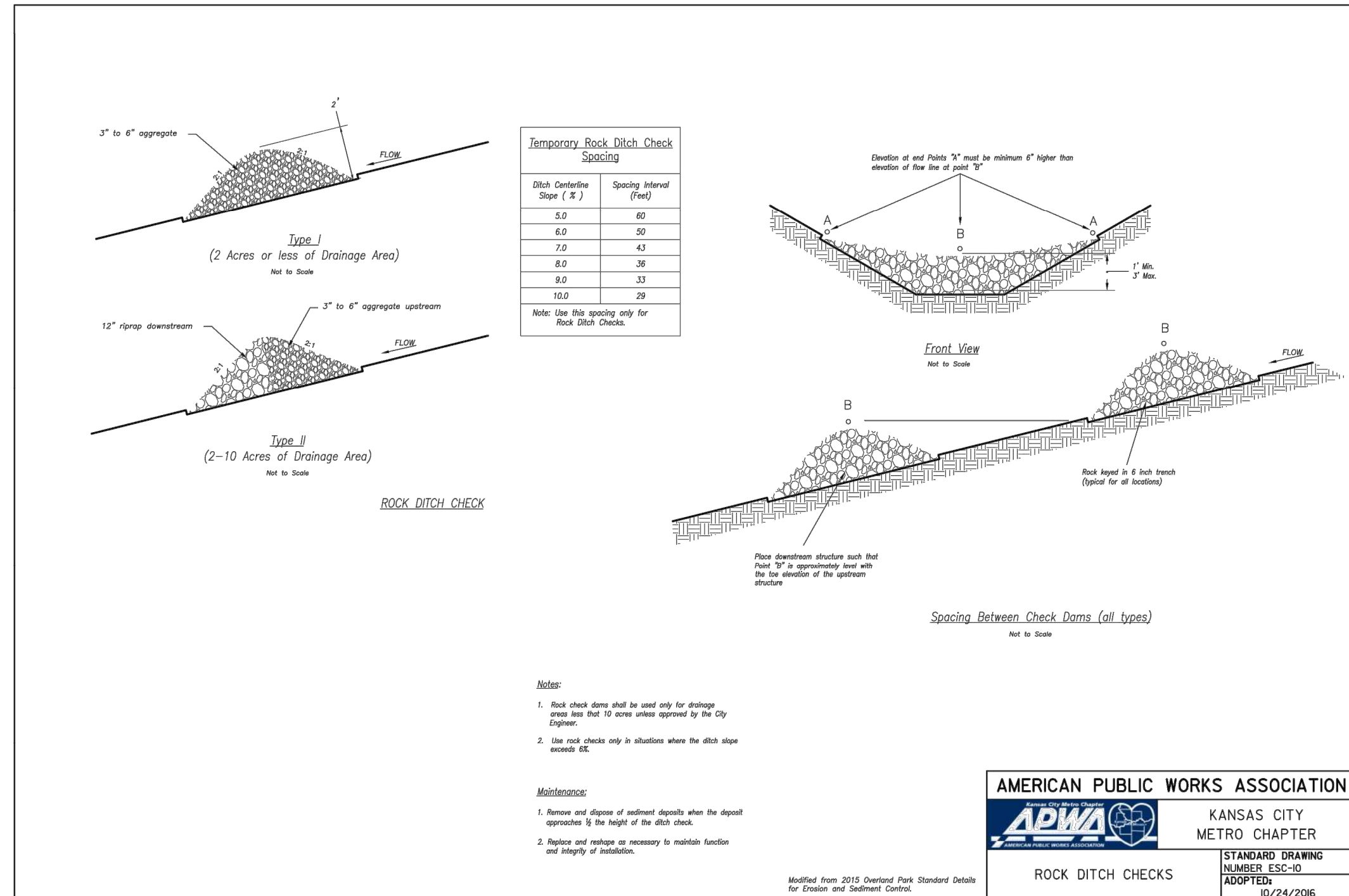
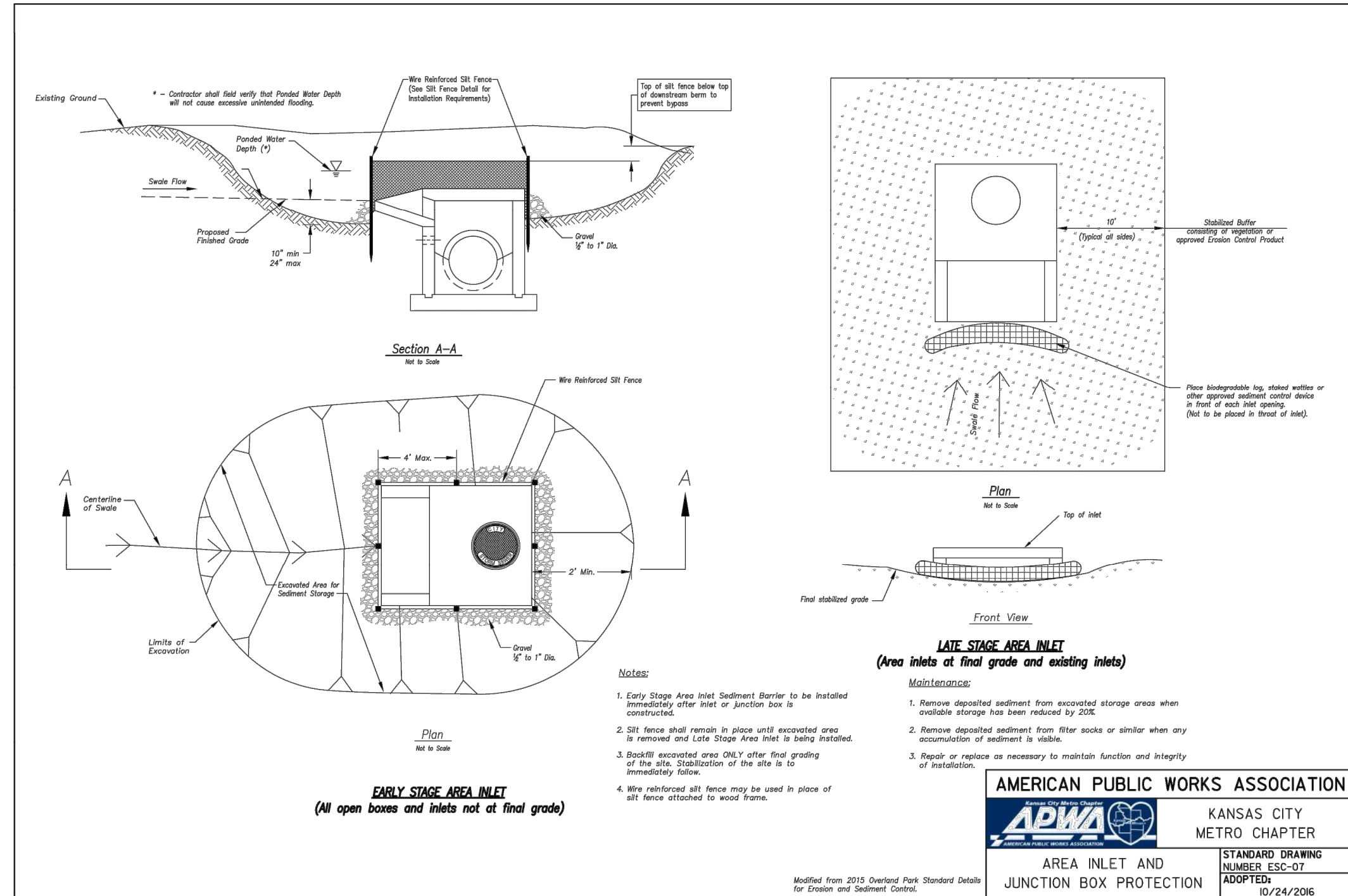
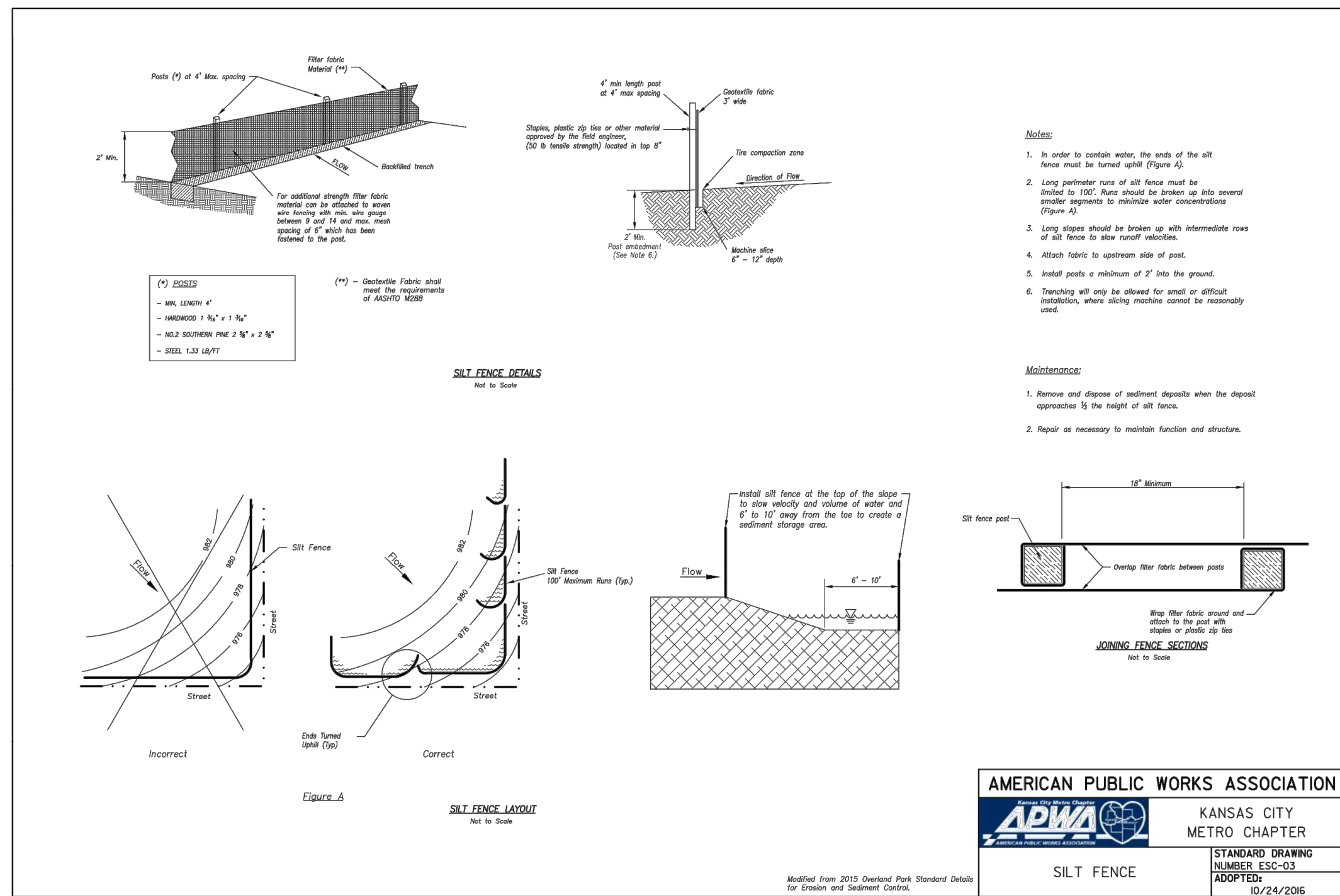
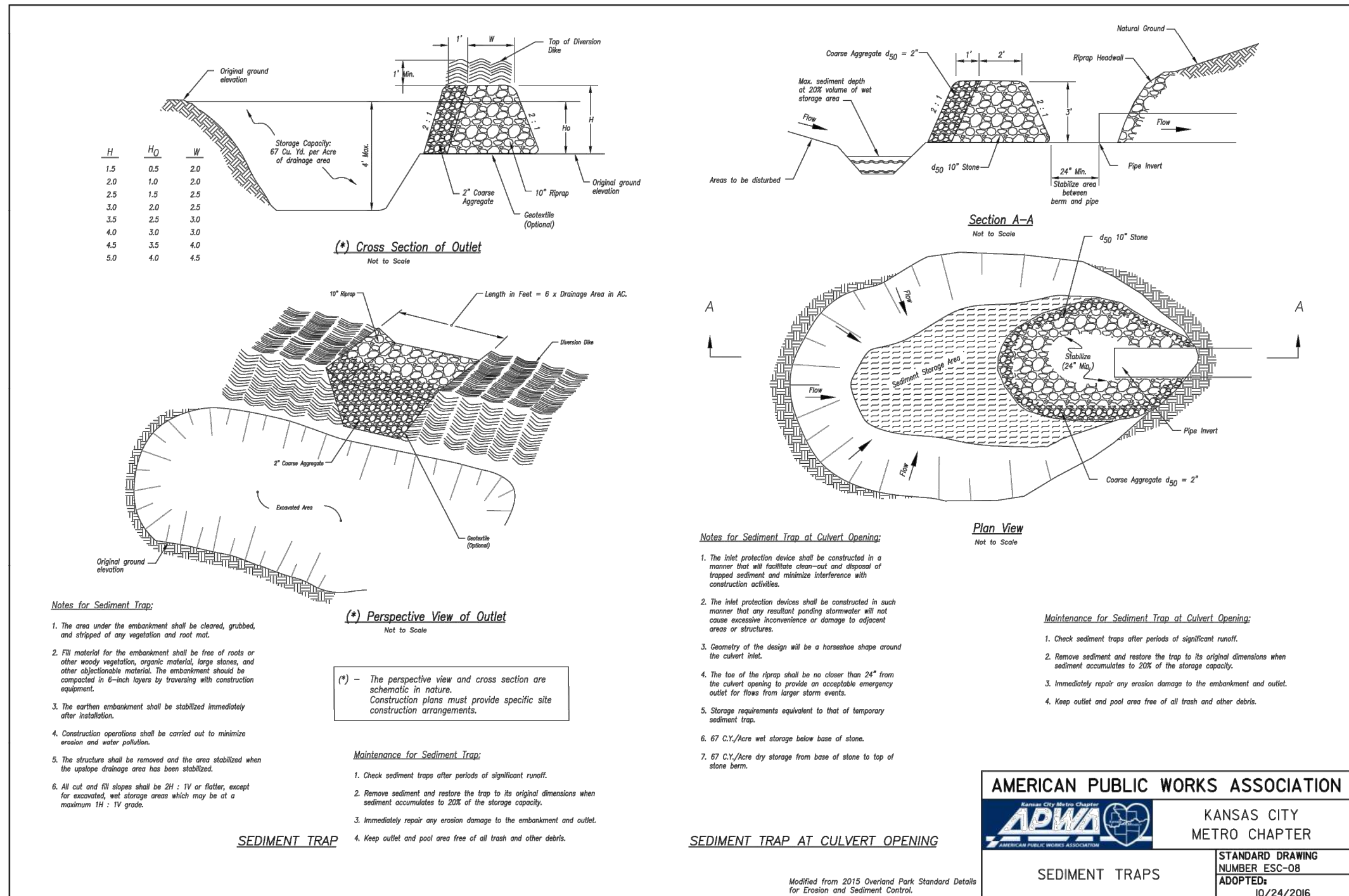
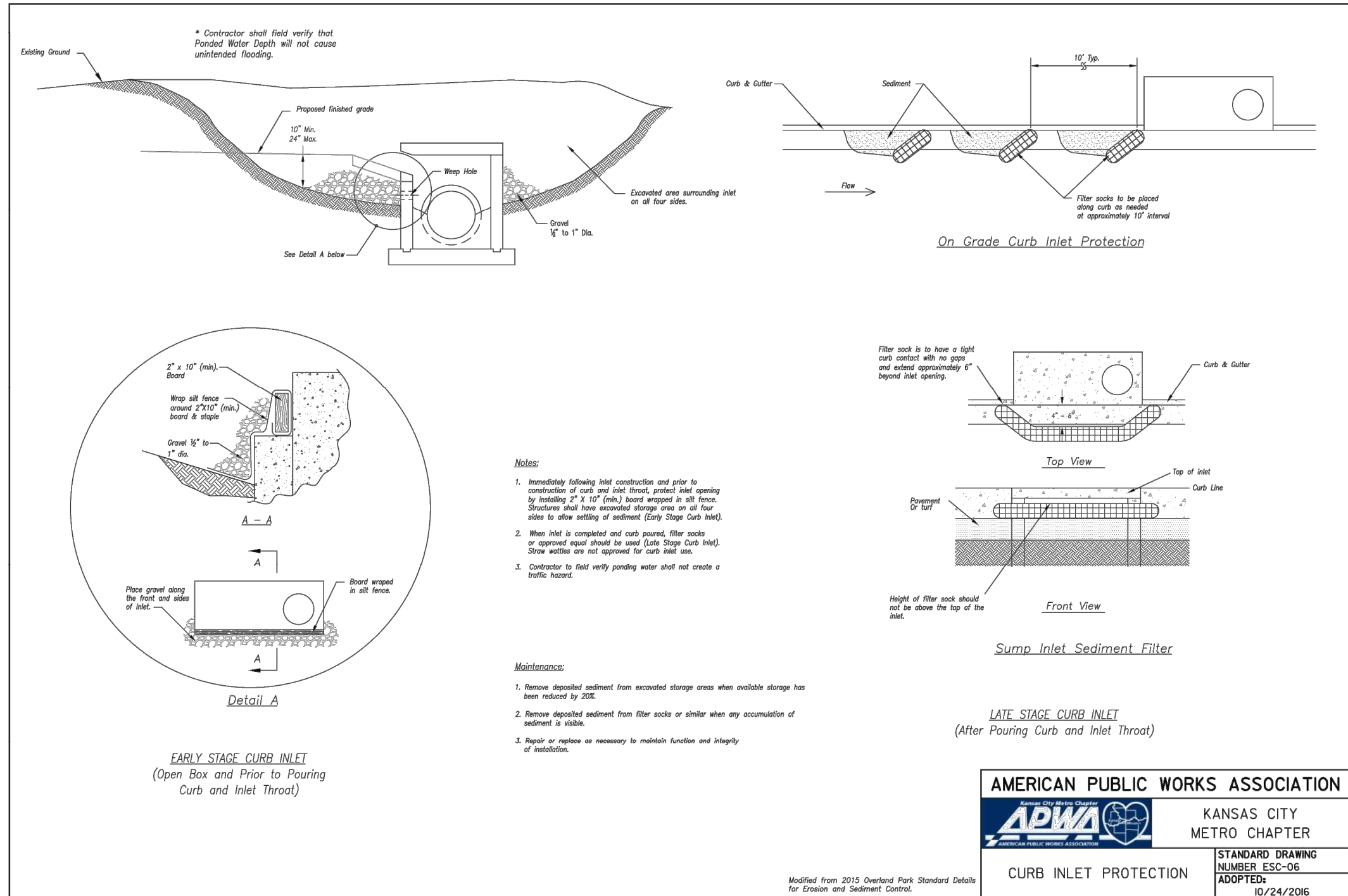
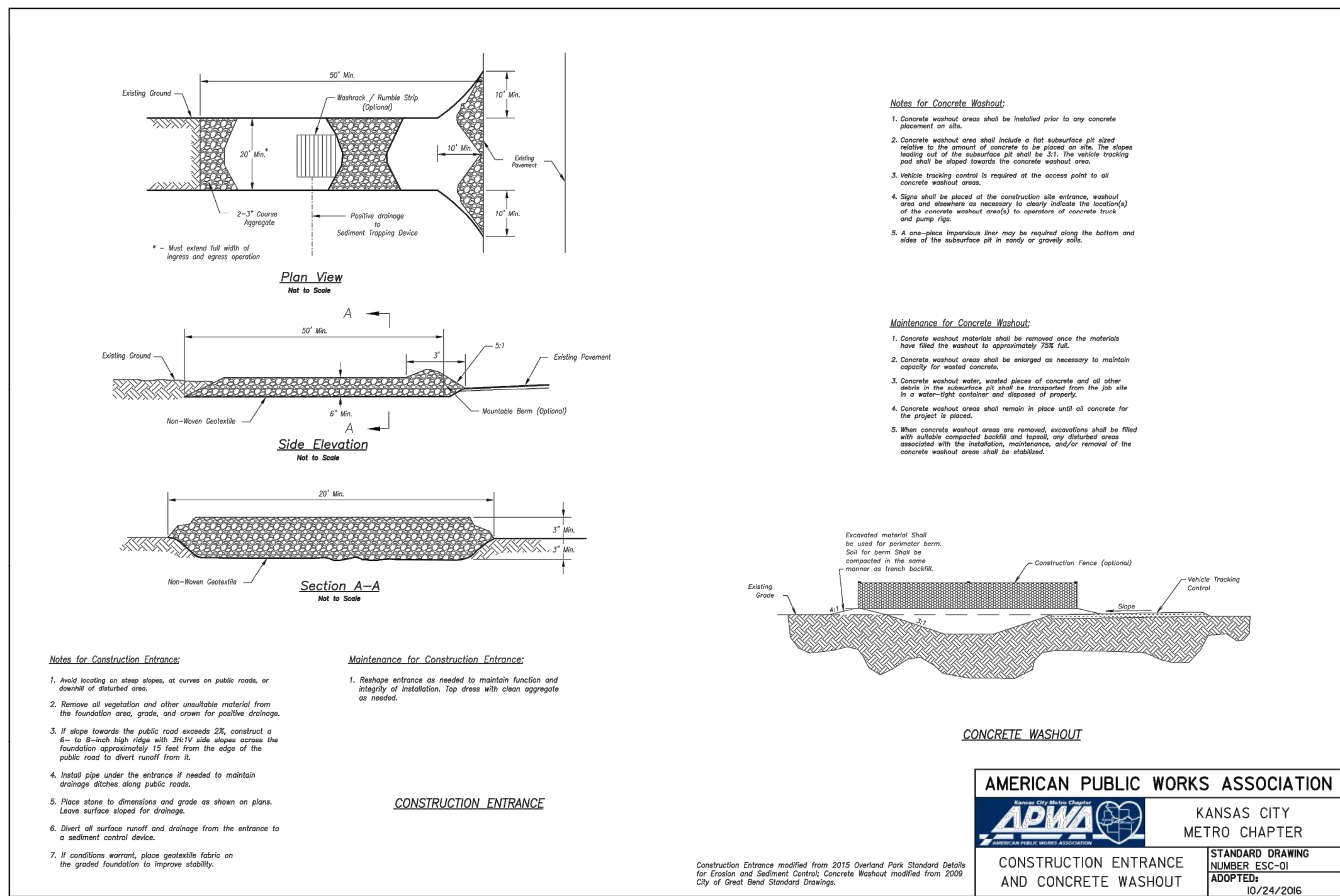
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EROSION CONTROL PLAN
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Revisions:	No.	Date	By	App.
REVISED PER CITY COMMENTS	1.	3-16-20	SNH	DEU

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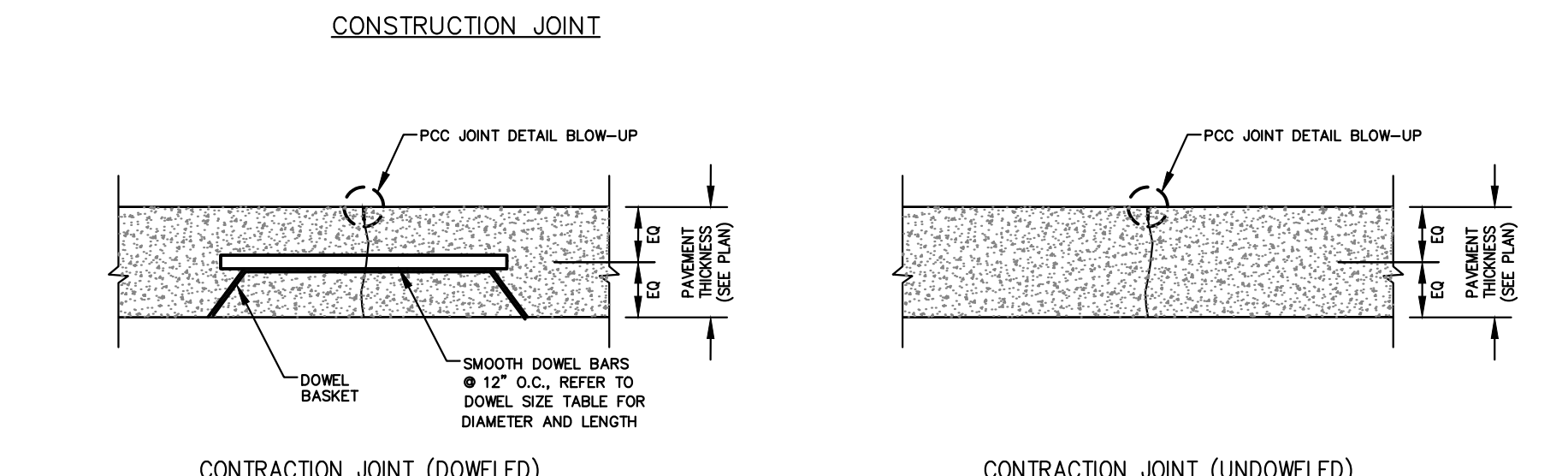
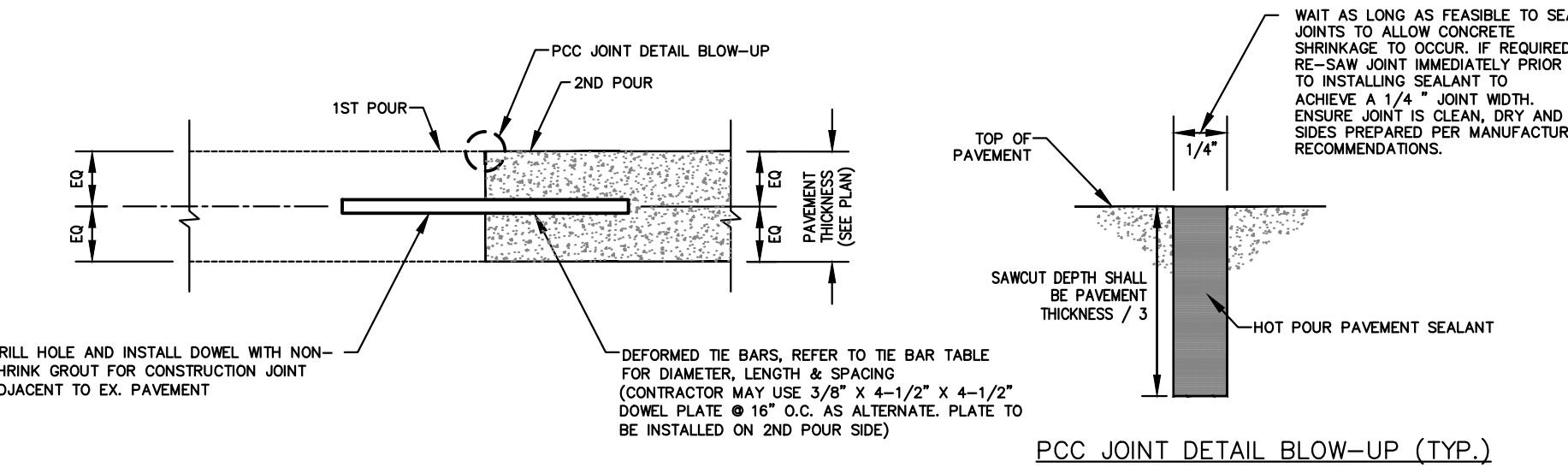


PROJECT NO.	171125	DATE	3-16-20	BY	App.
CHECKED	DAF	APPROVED	DEU	SMH	DEU
DATE	01-28-20	DRAWN	SMH		
REVISIONS		REVISED PER CITY COMMENTS			
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Dowel size*			
Slab depth, in. (mm)	Dowel diameter, in. (mm)	Dowel embedment, in. (mm)	Total dowel length, in. (mm)
5 (125)	5/8 (16)	5 (125)	12 (300)
6 (150)	3/4 (19)	6 (150)	14 (360)
7 (180)	7/8 (22)	6 (150)	14 (360)
8 (200)	1 (25)	6 (150)	14 (360)
9 (230)	1-1/8 (29)	7 (180)	16 (400)

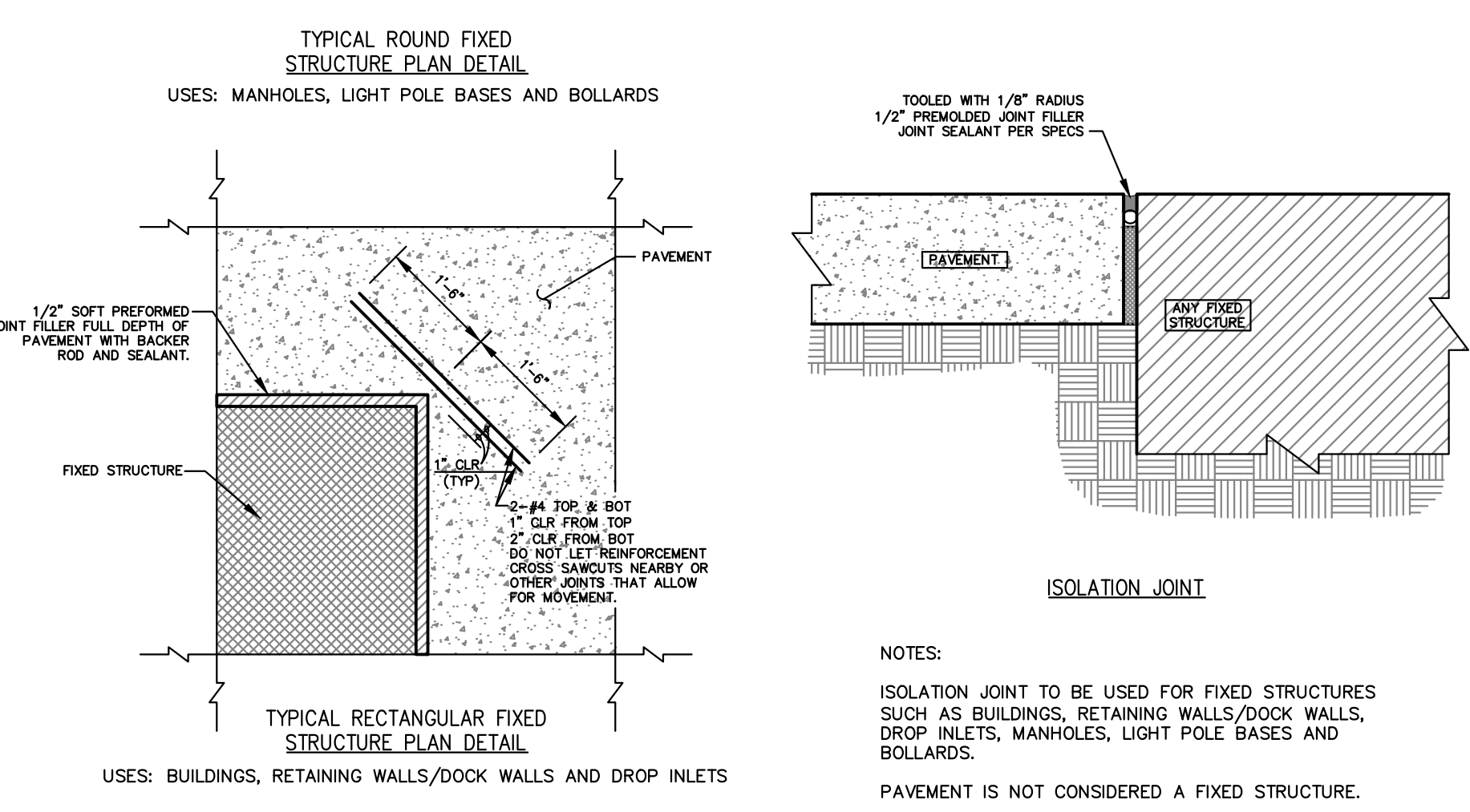
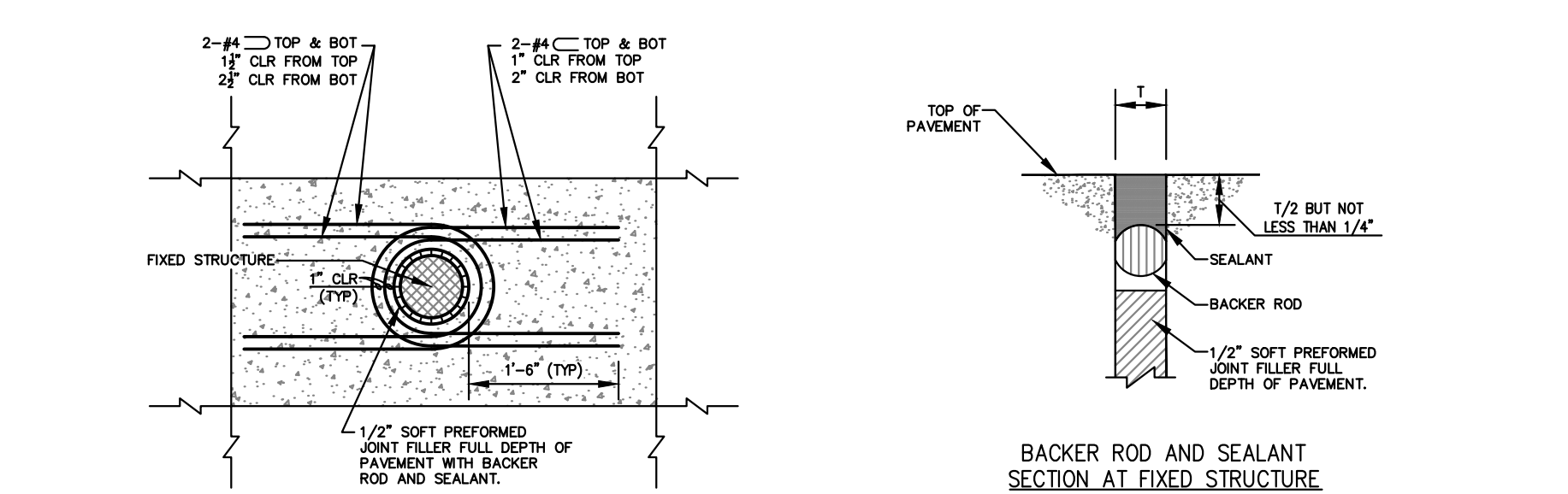
*All dowels spaced at 12 in. (300 mm) centers.
†On each side of joint.
‡Allowance made for joint openings and for minor errors in positioning dowels.

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



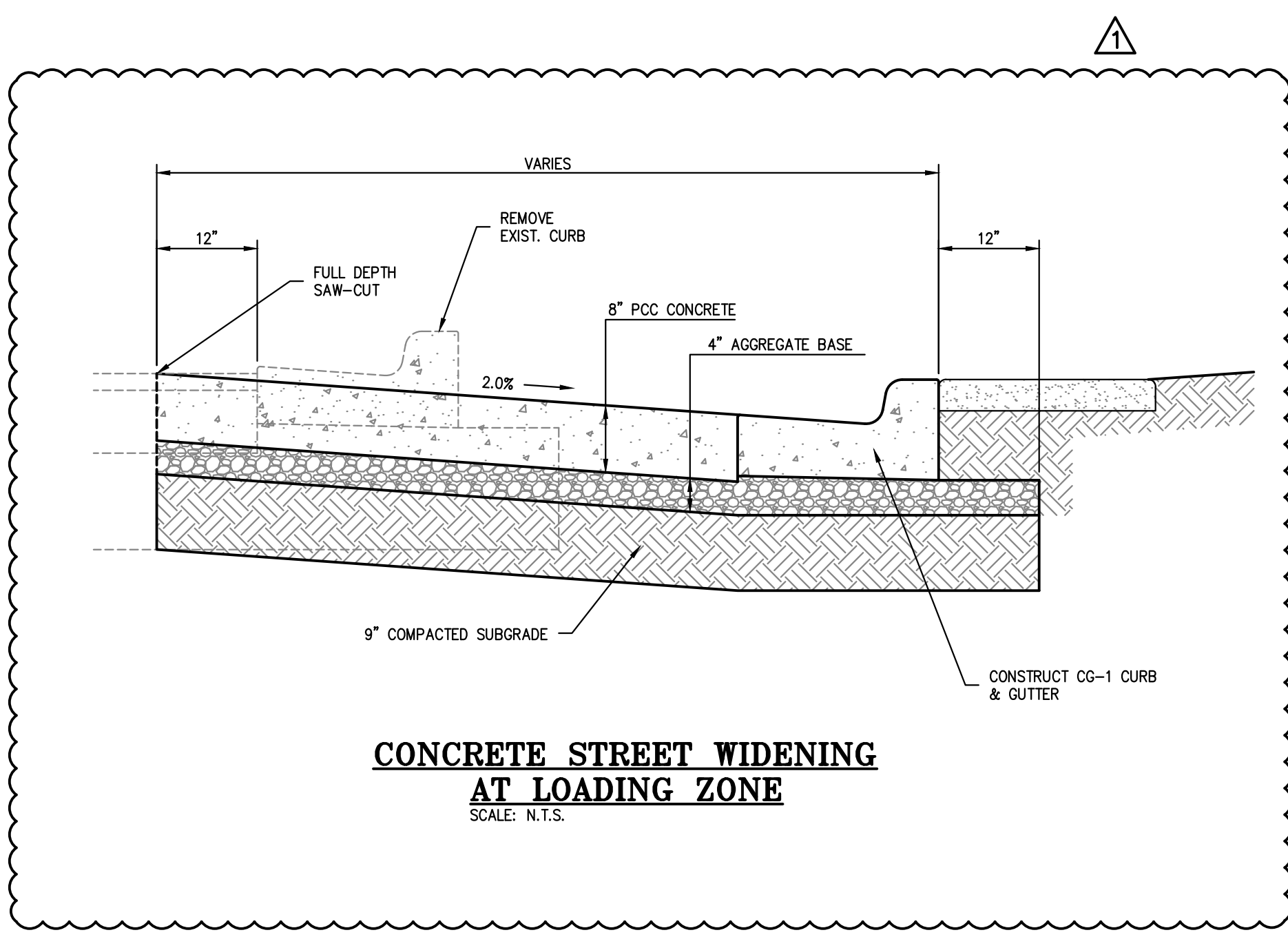
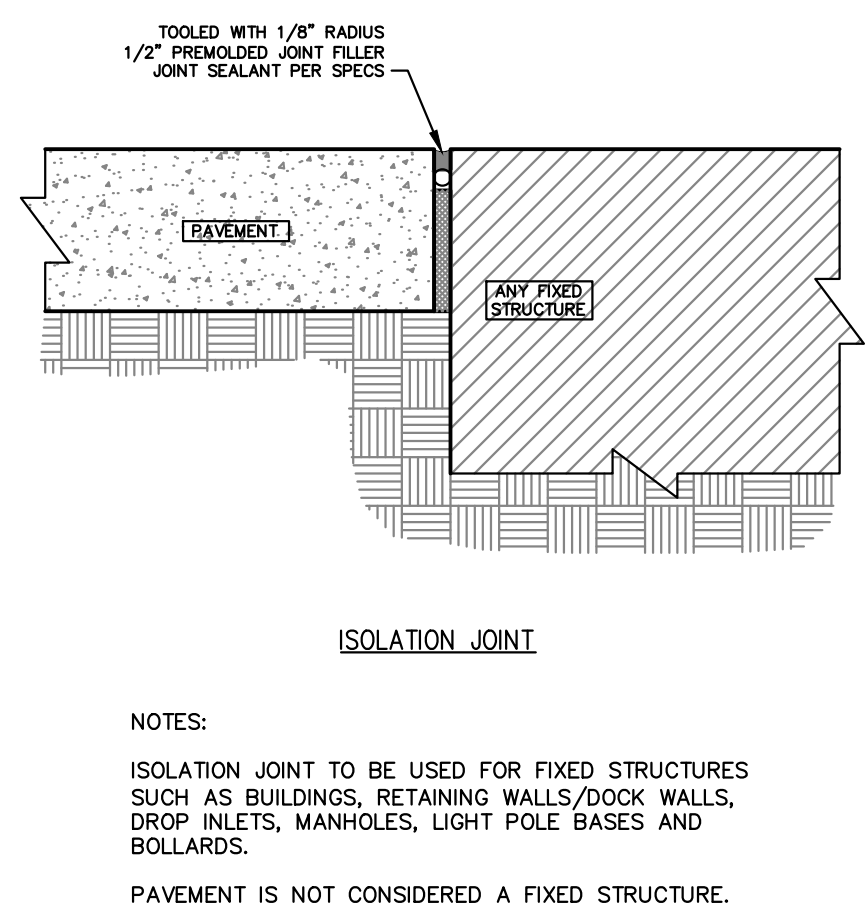
CONCRETE JOINT DETAILS

SCALE: N.T.S.



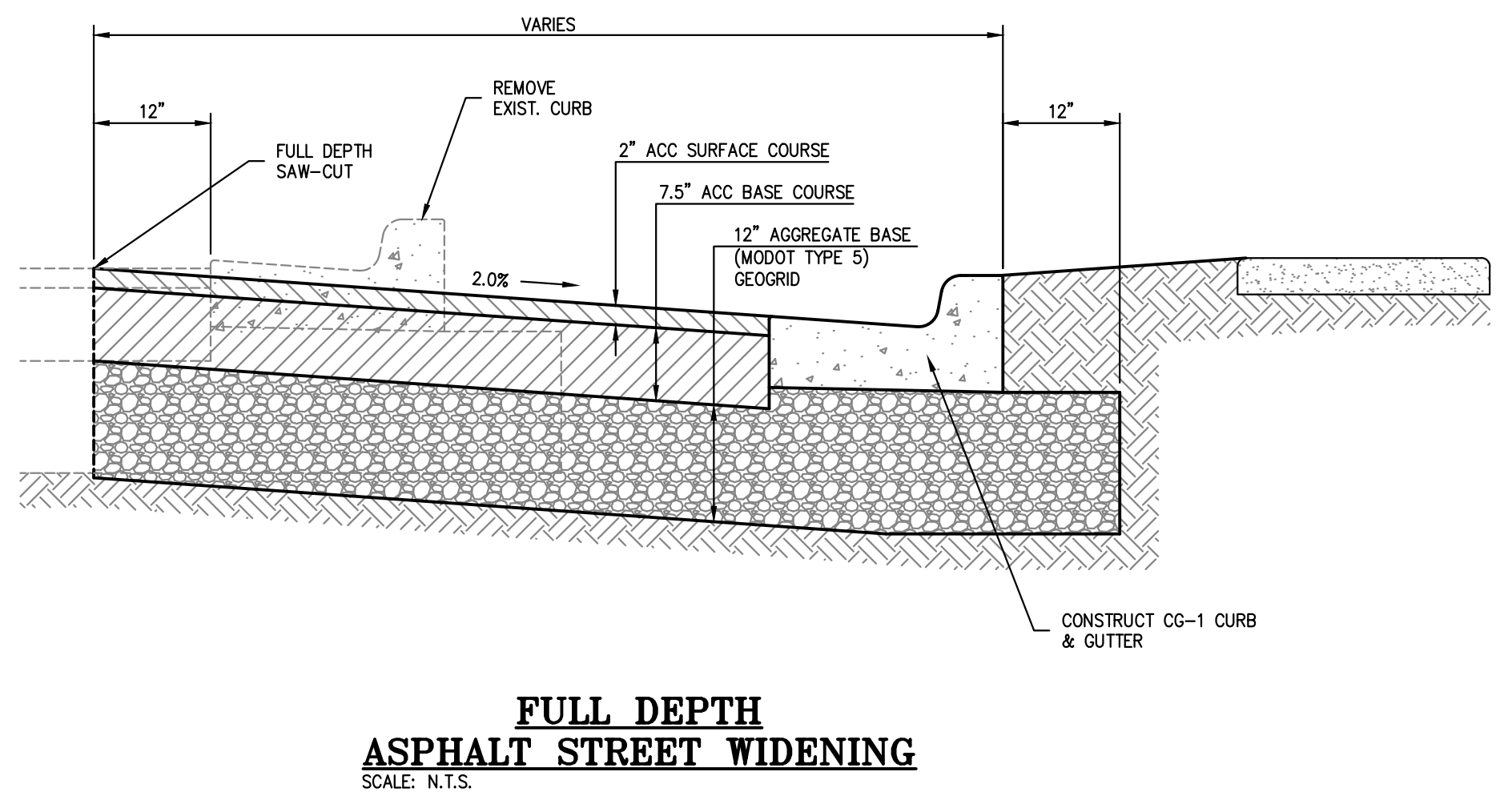
ISOLATION JOINT DETAILS

SCALE: N.T.S.



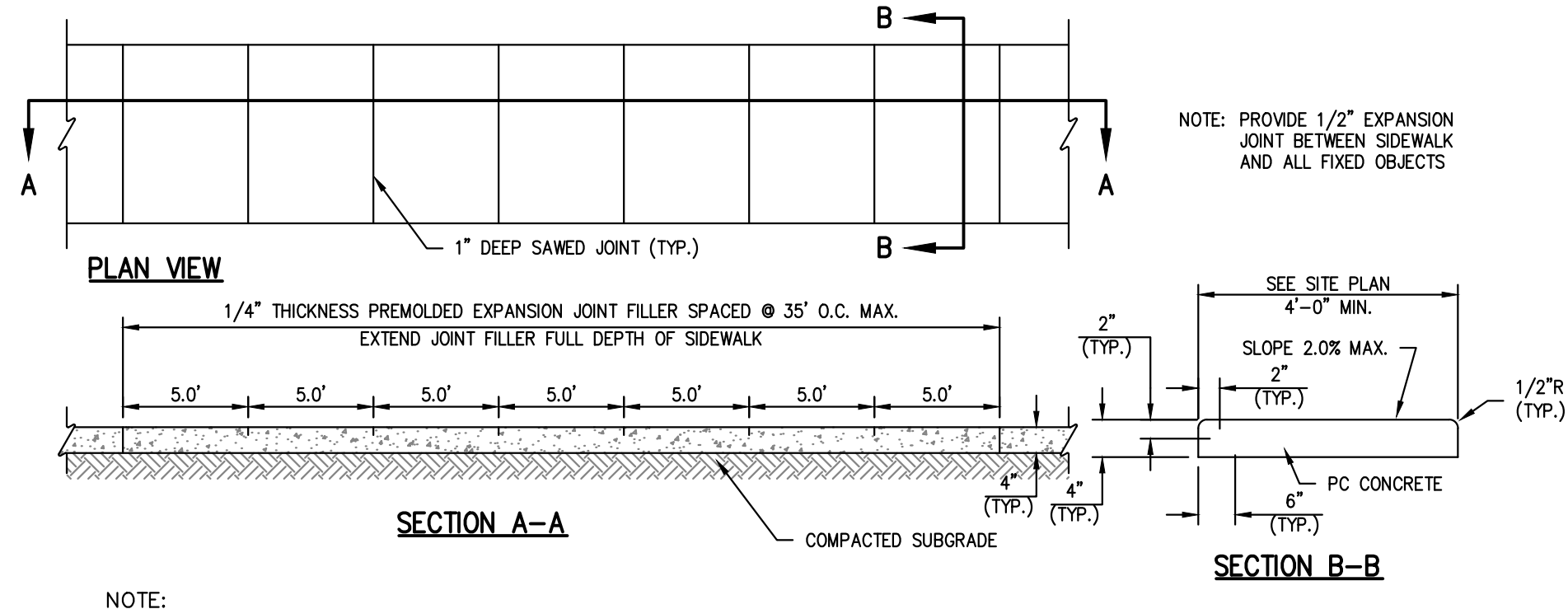
CONCRETE STREET WIDENING AT LOADING ZONE

SCALE: N.T.S.



FULL DEPTH ASPHALT STREET WIDENING

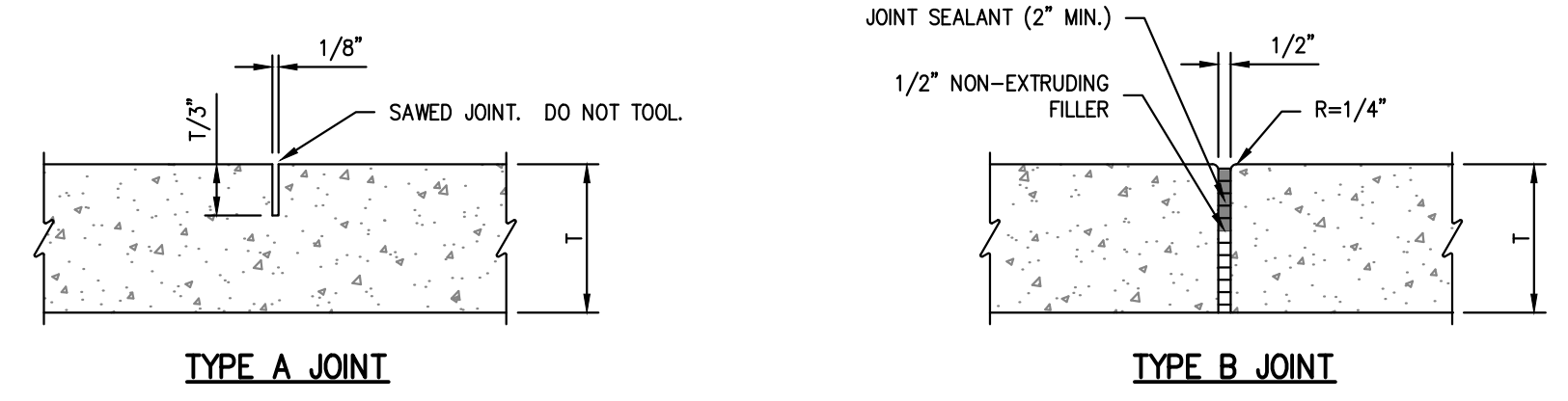
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- NOTE:
- USE KANSAS CITY MATERIALS METRO BOARD (KCMMB) MIX DESIGN SPECIFICATIONS FOR 4,000 P.S.I. AIR ENTRAINED CONCRETE FOR ALL PRIVATE SIDEWALKS.

PRIVATE CONCRETE SIDEWALKS (NON REINFORCED)

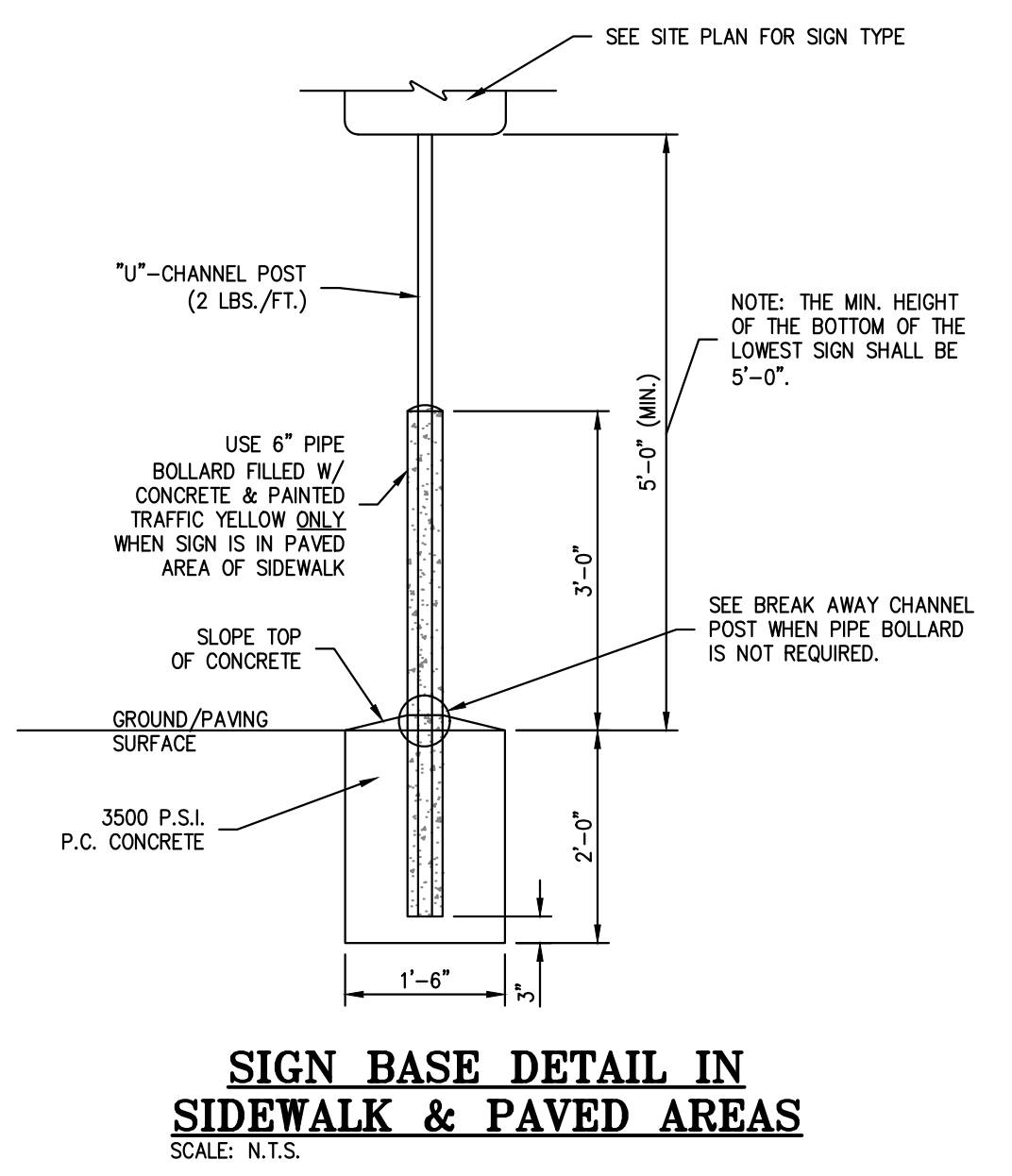
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NOTE: TYPE A JOINTS SHALL NOT EXCEED 20 TIMES THE PAVEMENT THICKNESS (T).

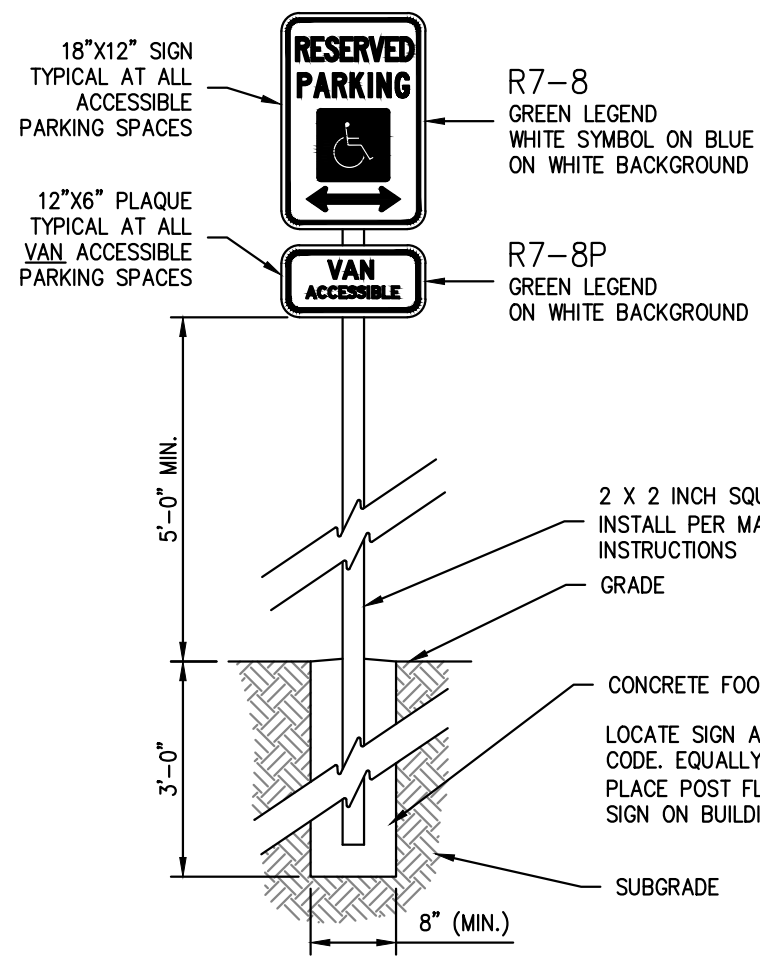
CONCRETE SIDEWALK JOINT DETAILS

SCALE: N.T.S.



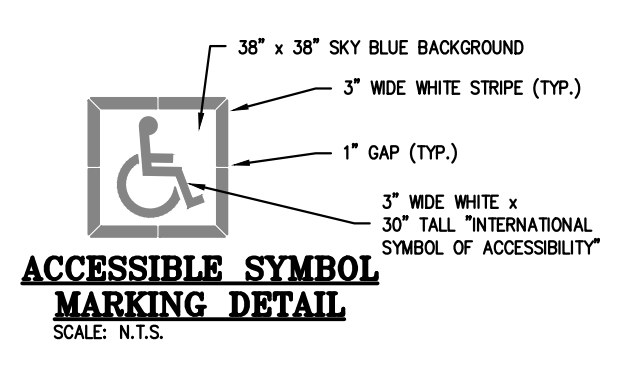
SIGN BASE DETAIL IN SIDEWALK & PAVED AREAS

SCALE: N.T.S.



ACCESSIBLE SIGN DETAIL IN GRASS AREA

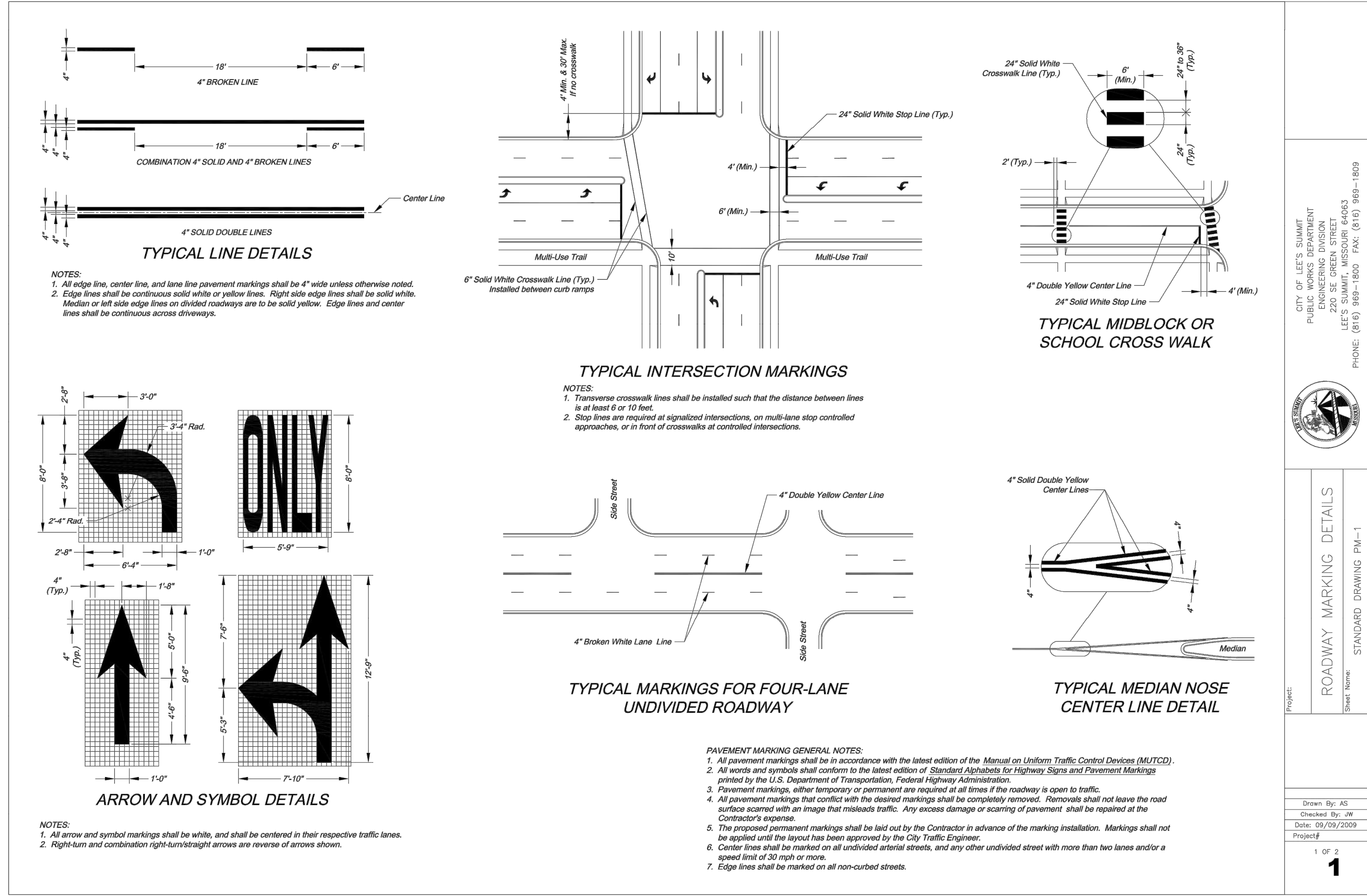
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- GENERAL NOTES:
- ALL PAVEMENT MARKINGS SHALL BE APPLIED BY A QUALIFIED CONTRACTOR HAVING A MINIMUM 3 YEARS EXPERIENCE IN TRAFFIC GRADE PAVEMENT MARKING APPLICATIONS.
 - PAINT SHALL BE A NON-BLEEDING, QUICK-DRYING, ALKID PETROLEUM BASE PAINT SUITABLE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

ACCESSIBLE PARKING SPACE DETAIL

SCALE: N.T.S.



PROJECT NO.	171125	No.	Date	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH	1.	3-16-20	REVISED PER CITY COMMENTS	SNH	DEU
CHECKED: DAF	APPROVED: DEU					
CERTIFICATE OF AUTHORIZATION						
LAND SURVEYING - LS-82						
ENGINEERING - E-361						
CERTIFICATE OF AUTHORIZATION						
LAND SURVEYING-2007010728						
ENGINEERING-2007050209						

SHEET
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PAVEMENT DETAILS
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

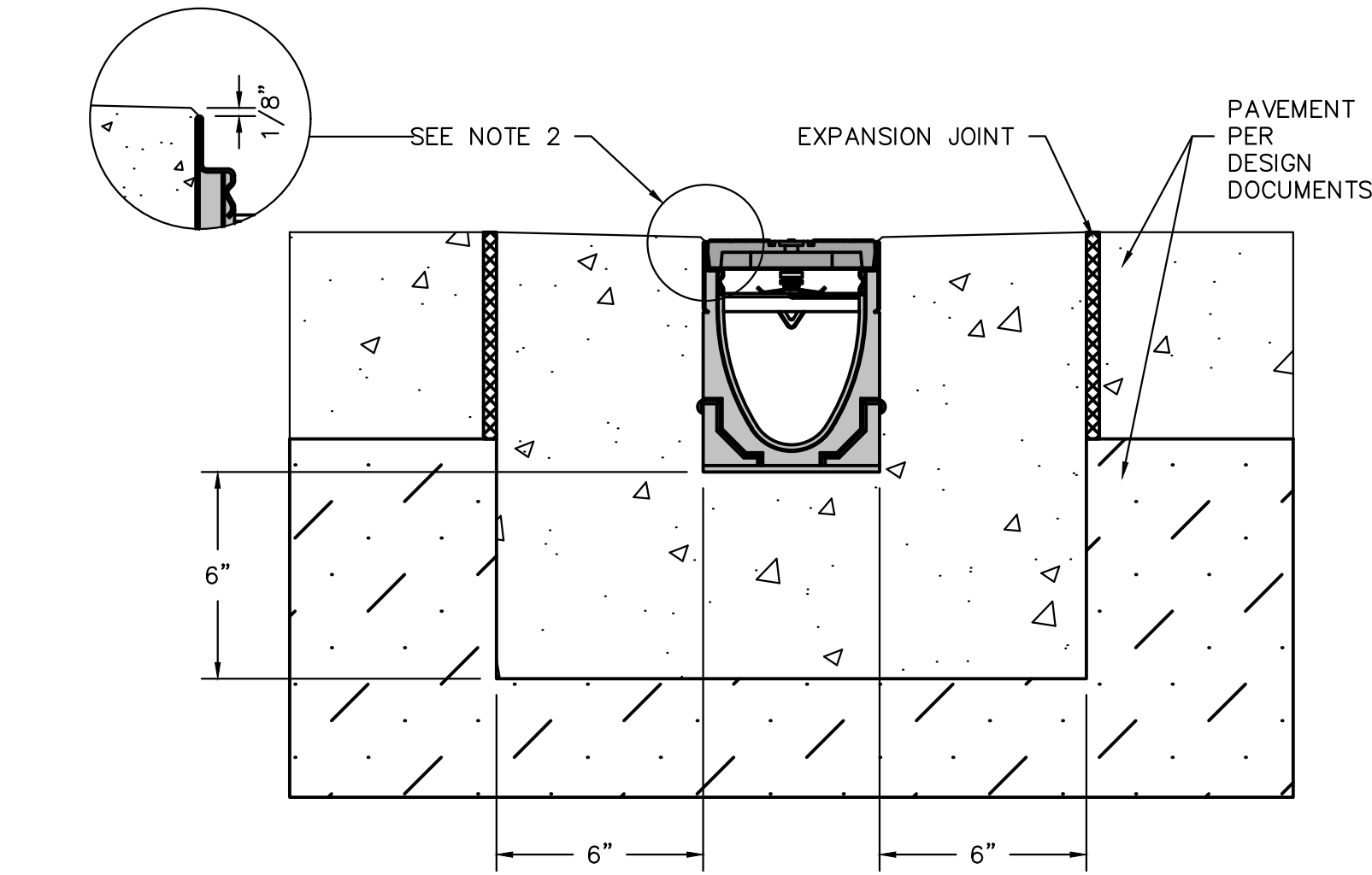
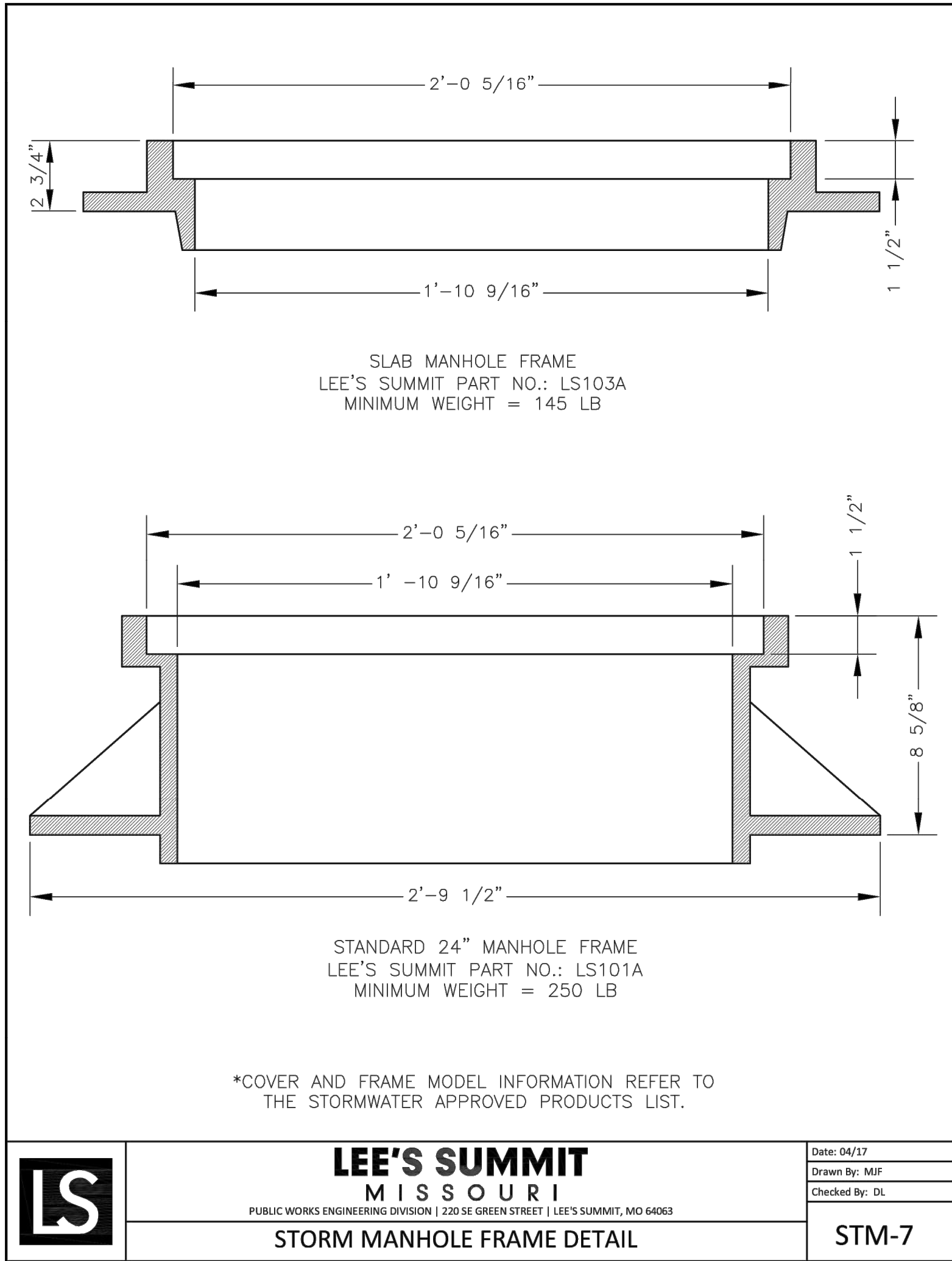
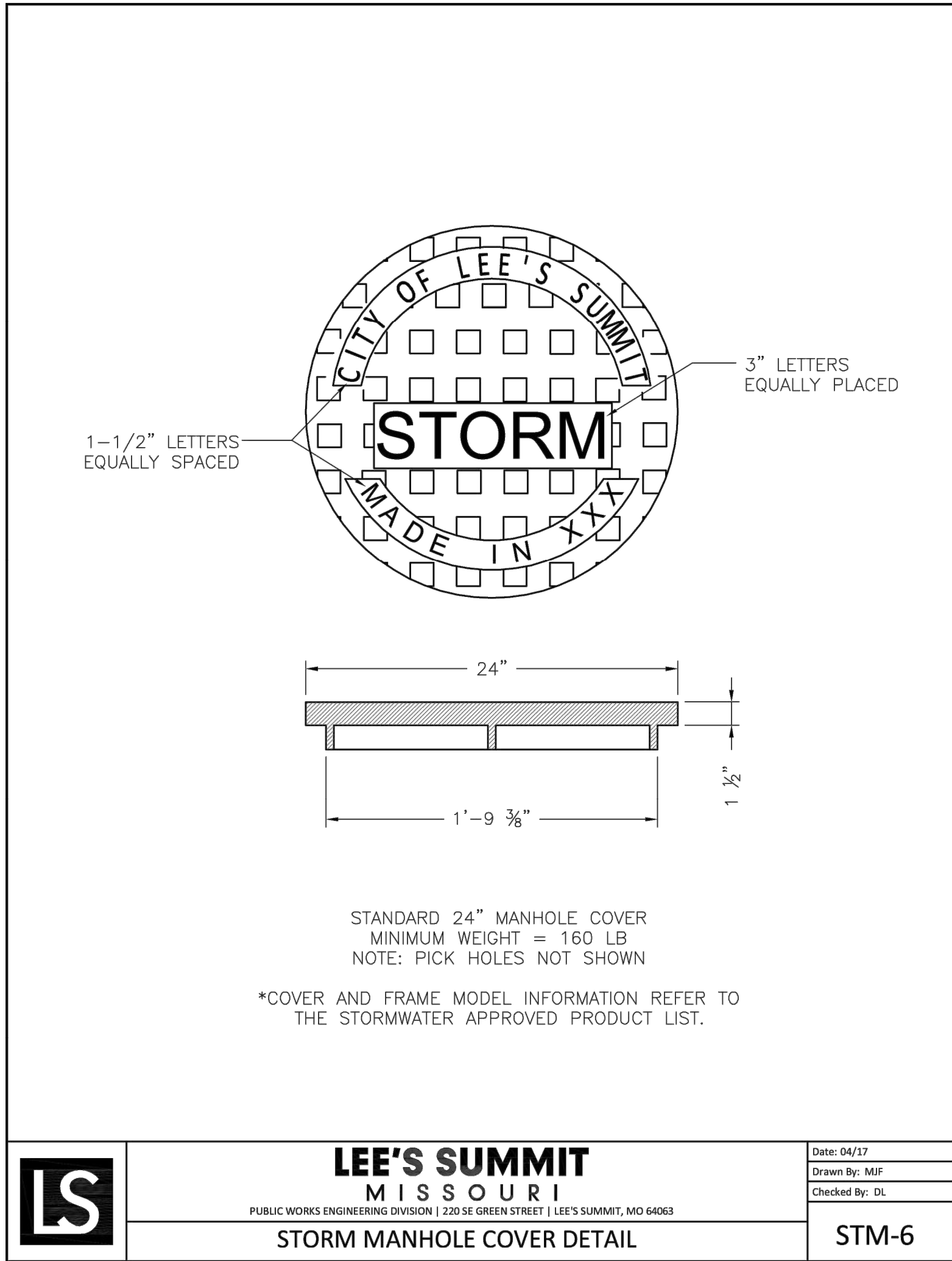
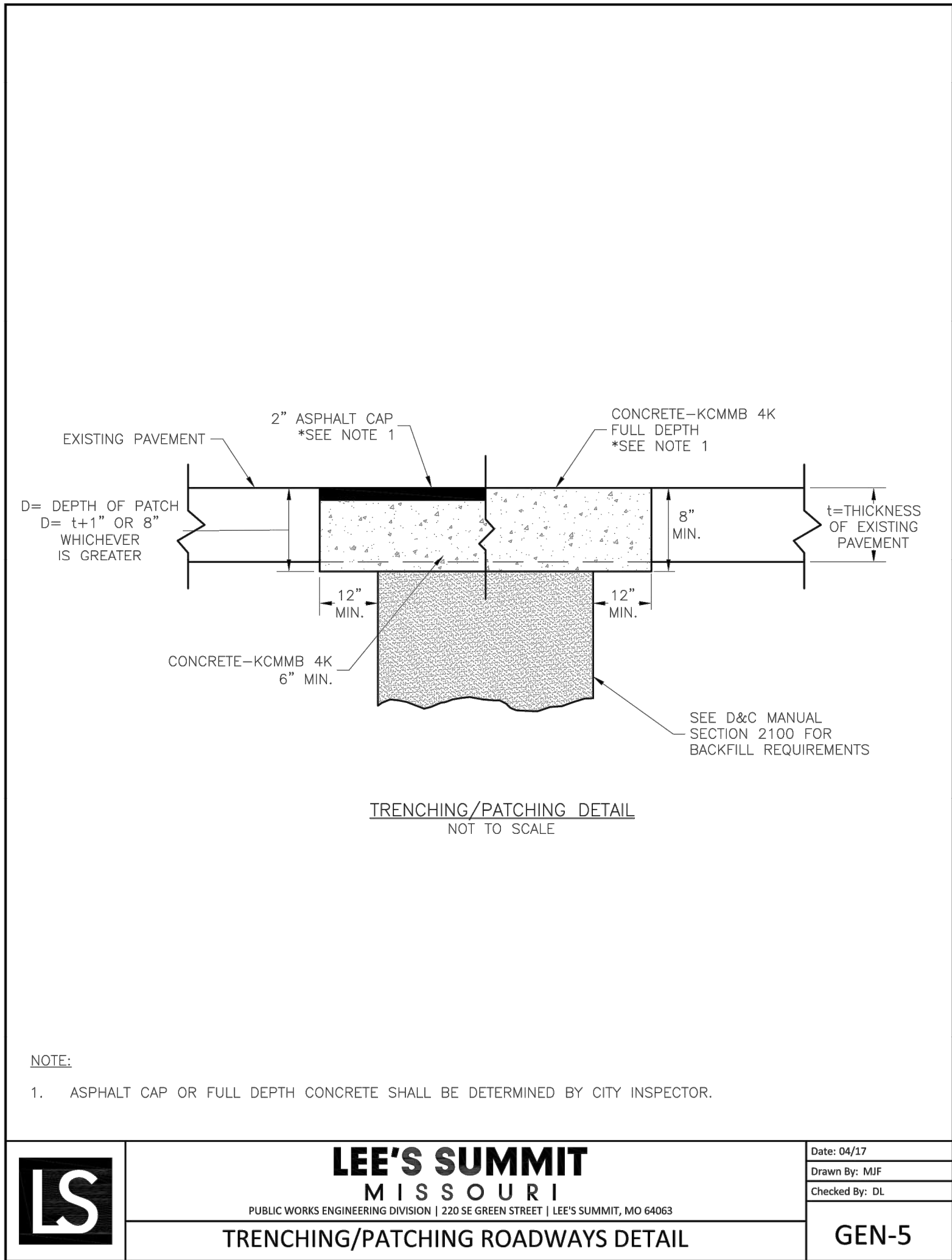
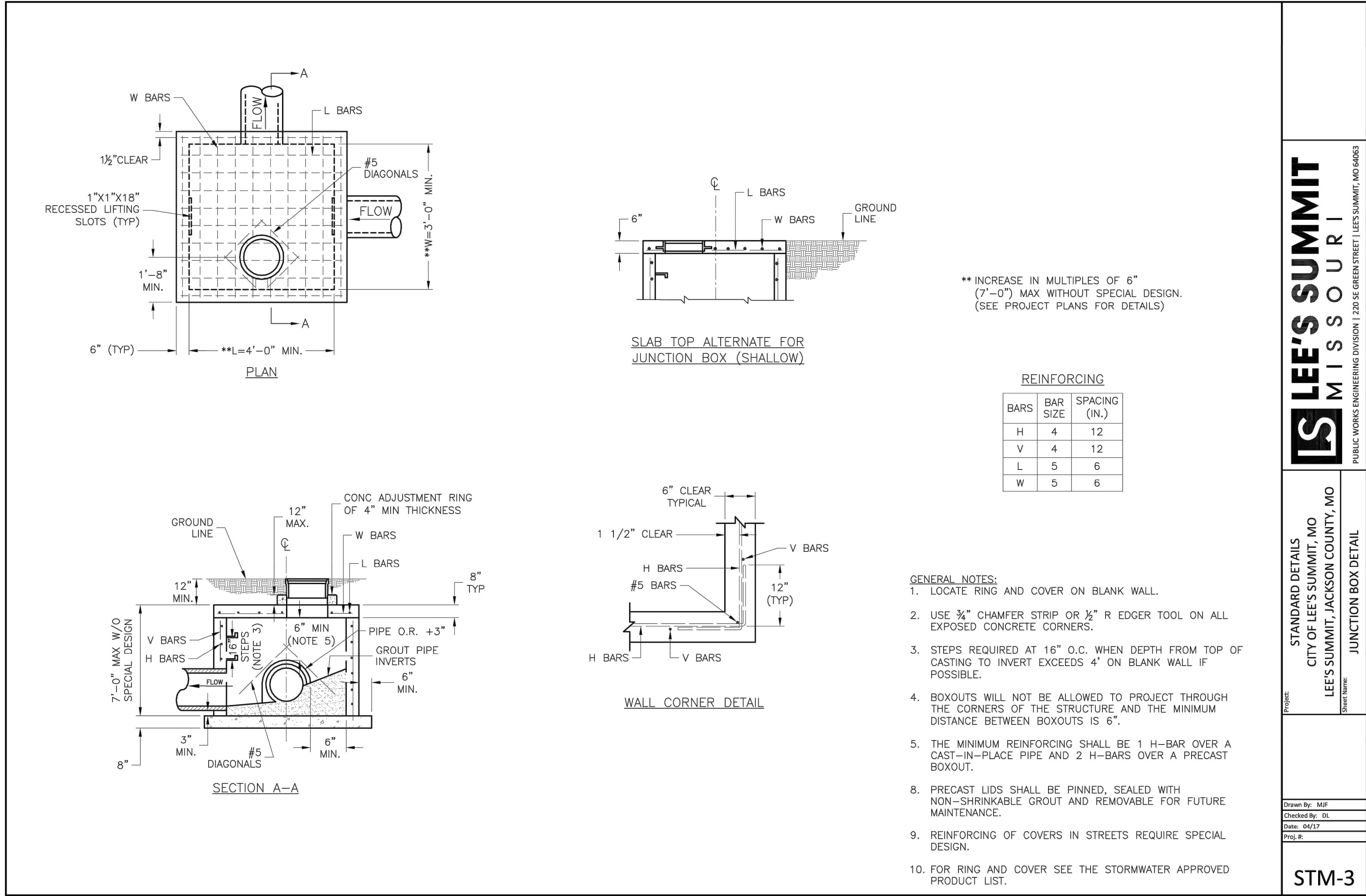
PHILIPS ENGINEERING, INC.
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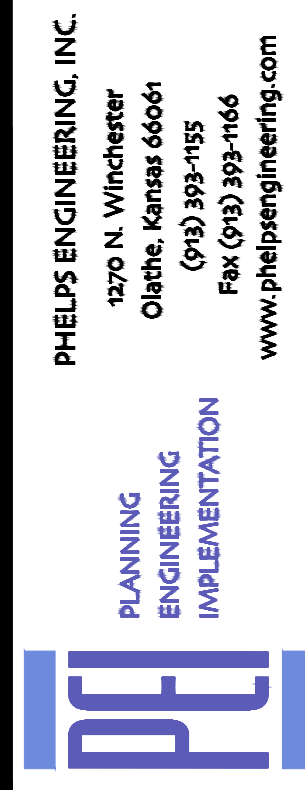
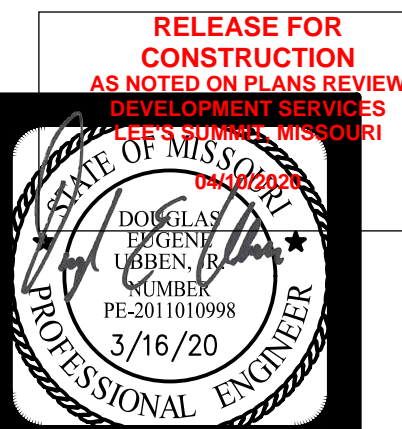


TRENCH DRAIN INSTALLATION DETAIL

STORM SEWER DETAILS
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	No.	1.	Date	3-16-20	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH	CHECKED: DAF	APPROVED: DEU	REVISIONS:	REVISED PER CITY COMMENTS	SNH	DEU	
CERTIFICATE OF AUTHORIZATION								
LAND SURVEYING - LS-82								
ENGINEERING - E-361								
CERTIFICATE OF AUTHORIZATION								
LAND SURVEYING-2007010728								
ENGINEERING-2007000209								

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STORM SEWER DETAILS
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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Section 2723

Engineered Surface Drainage Products

GENERAL

PVC surface drainage inlets shall be of the curb inlet structure type as indicated on the contract drawings and referenced within the contract specifications. The **ductile iron frame, grate and hood** for each of these structures are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The curb inlet structure shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc. or prior approved equal.

MATERIALS

The curb inlet structure required for this contract shall be manufactured from PVC pipe stock, utilizing a thermo-molding process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to **ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals**. The flexible elastomeric seals shall conform to **ASTM F477**. The pipe bell spigot shall be joined to the main body of the structure. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to **ASTM D1784 cell class 12454**.

The grate, frame and hood for all curb inlet structures shall be ductile iron and shall be made specifically for each so as to provide a round bottom flange that closely matches the diameter of the PVC structure body. The grate, frame and hood shall be capable of supporting H-20 wheel loading for traffic areas. The hood section will have a solid back and be adjustable by use of three (3) locking hex head bolts. The metal used in the manufacture of the castings shall conform to **ASTM A536 grade 70-50-05 for ductile iron**.

INSTALLATION

The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class I, class 2, or class 3 material as defined in **ASTM D2321**. Bedding and backfill for the curb inlet structure shall be placed and compacted uniformly in accordance with **ASTM D2321**. The curb inlet structure body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For H-20 load rated installations, a concrete ring will be poured under the frame, grate, and hood. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to **ASTM D2321** guidelines.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.	DRAWN BY: CJA DATE: 03-10-16 REVISED BY: MNH DATE: 03-10-16	MATERIAL: PROJECT NO. NAME: DATE: 03-10-16	Nyloplast 3130 VERONA AVE BURLING, GA 30501 PHN (770) 832-2443 FAX (770) 832-3498 www.nyloplast-us.com
TITLE: 2 FT X 2 FT X 3 FT CURB INLET STRUCTURE SPECIFICATIONS DWG NO. 7003-110-005 REV. H			

HOOD

GRATE

FRAME

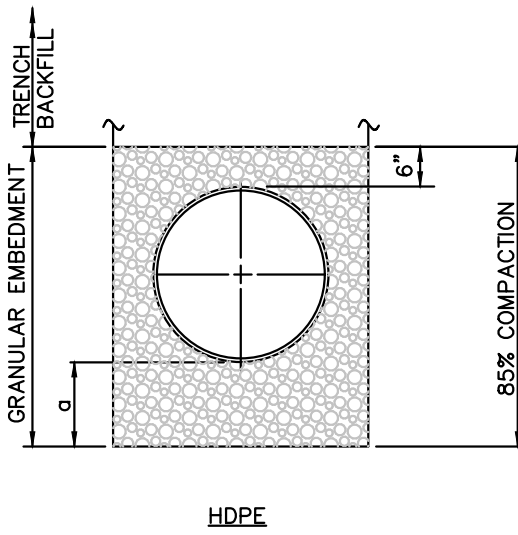
BASE PLATE

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TITLE: 2 FT X 3 FT INSTALLATION - 4 PIECE ASSEMBLY DETAIL DWG NO. 7003-110-026 REV. B			

ALL ADS-N12 PIPE INSTALLATIONS SHALL CONFORM TO MANUFACTURER'S INSTALLATIONS REQUIREMENTS, WHICH MAY BE FOUND AT <http://www.ads-pipe.com/en/documentlisting.aspxdocumenttypeID=682>

NYLOPLAST DRAIN BASIN WITH STANDARD GRATE

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TITLE: DRAIN BASIN WITH STANDARD GRATE QUICK SPEC INSTALLATION DETAIL DWG NO. 7003-110-104 REV. H			



NOTES:

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

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

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

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

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

3. TRENCH WIDTHS SHALL BE LIMITED BELOW AN ELEVATION OF ONE (1) FOOT ABOVE THE TOP OF THE INSTALLED PIPE AS FOLLOWS: NOT LESS THAN FIFTEEN (15) INCHES NOR MORE THAN TWENTY-FOUR (24) INCHES GREATER THAN THE NOMINAL OUTSIDE DIAMETER OF THE PIPE.

LEGEND

- D NOMINAL PIPE SIZE
o EMBEDMENT BELOW PIPE
- GRANULAR EMBEDMENT
- SELECT BACKFILL MATERIAL

TABLE OF EMBEDMENT DEPTH BELOW PIPE		
D	MIN. SOIL	3 MIN. ROCK
LESS THAN 60"	4"	6"
60" OR LARGER	6"	12"

EMBEDMENTS FOR STORM SEWER PIPE

SCALE: N.T.S.

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW BY: [Signature] DATE: 3/16/2020

PHILIPS ENGINEERING, INC.
1370 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax: (913) 393-1165
www.philipsengineering.com

**PLANNING
ENGINEERING
IMPLEMENTATION**

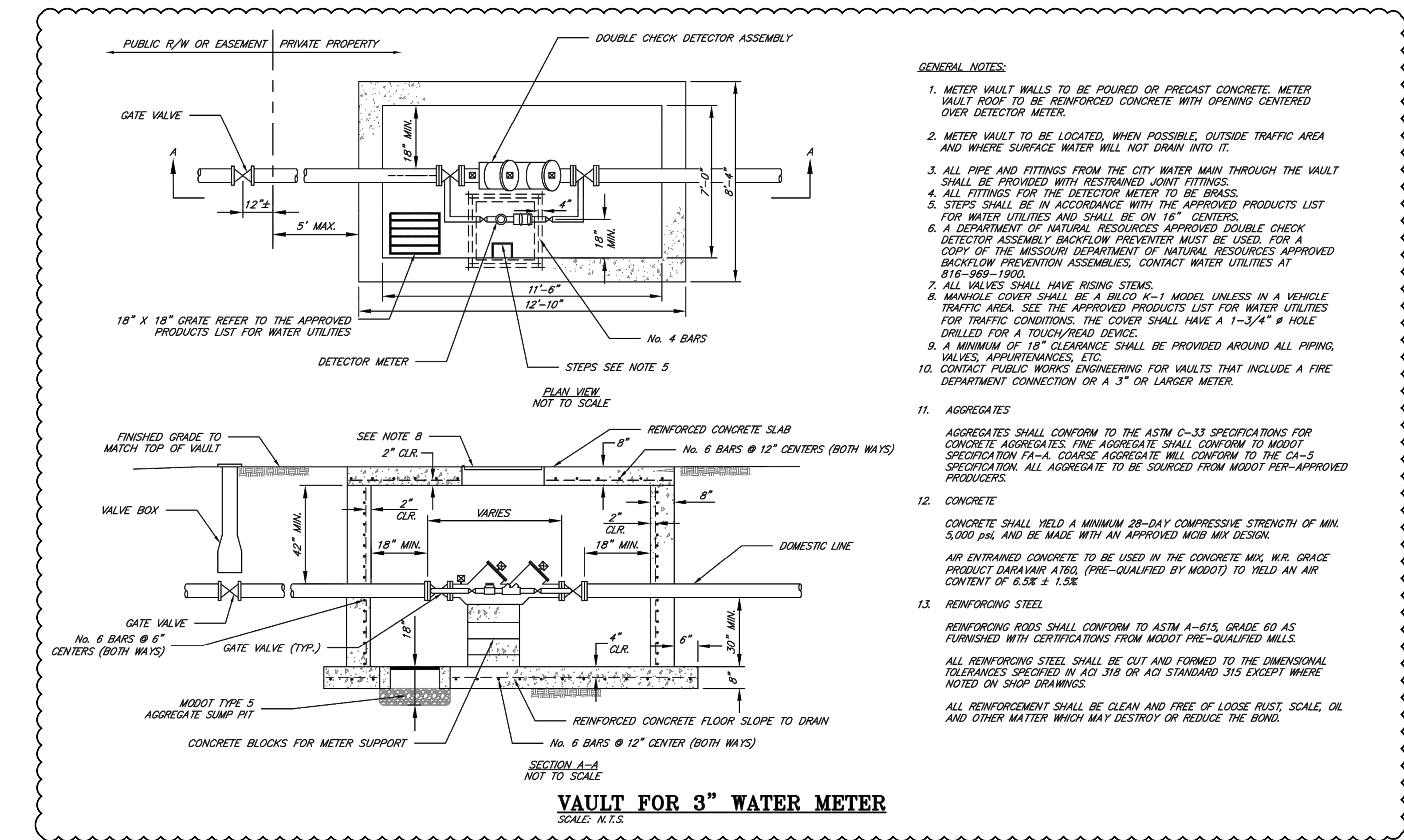
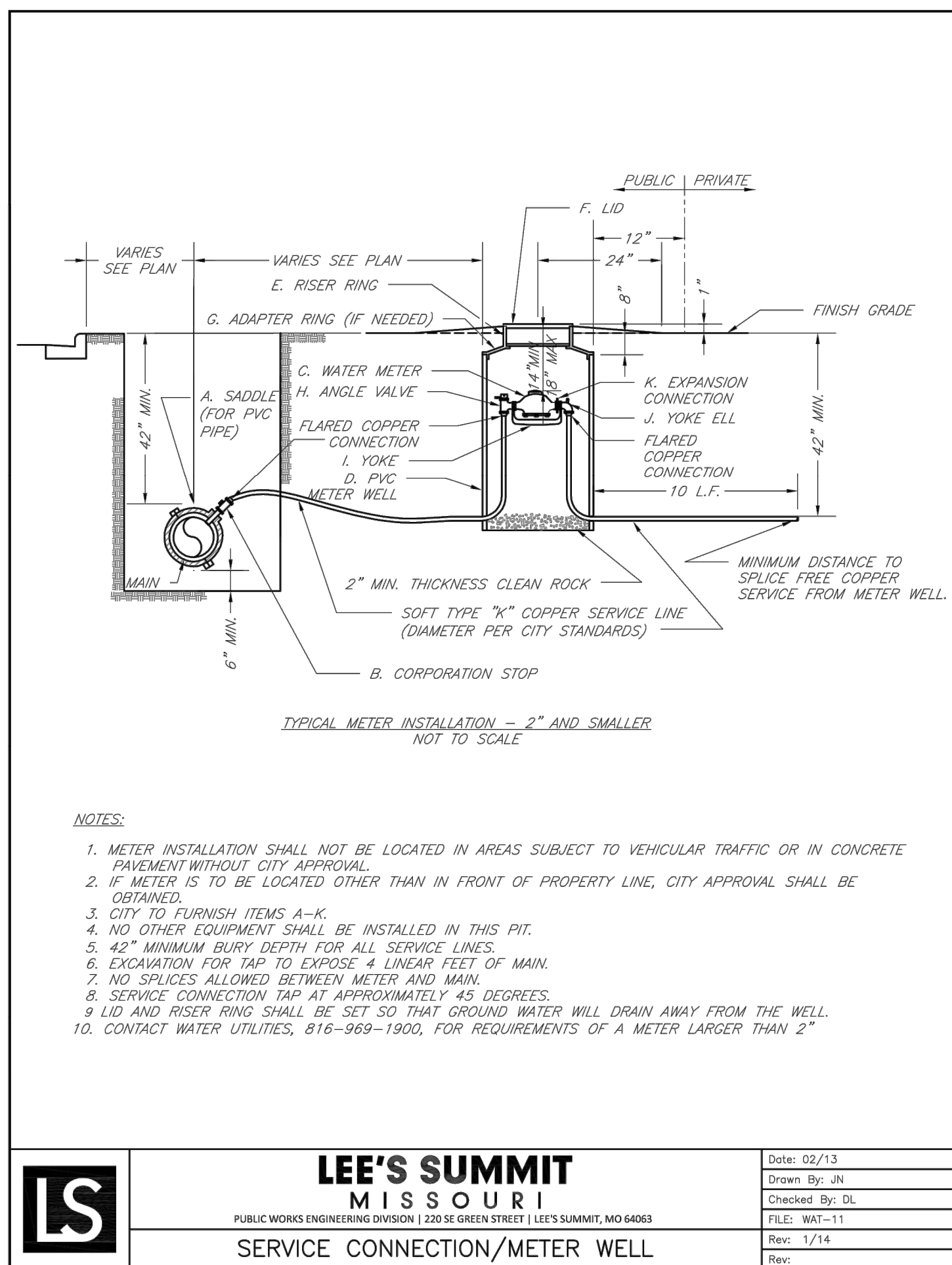
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STORM SEWER DETAILS
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

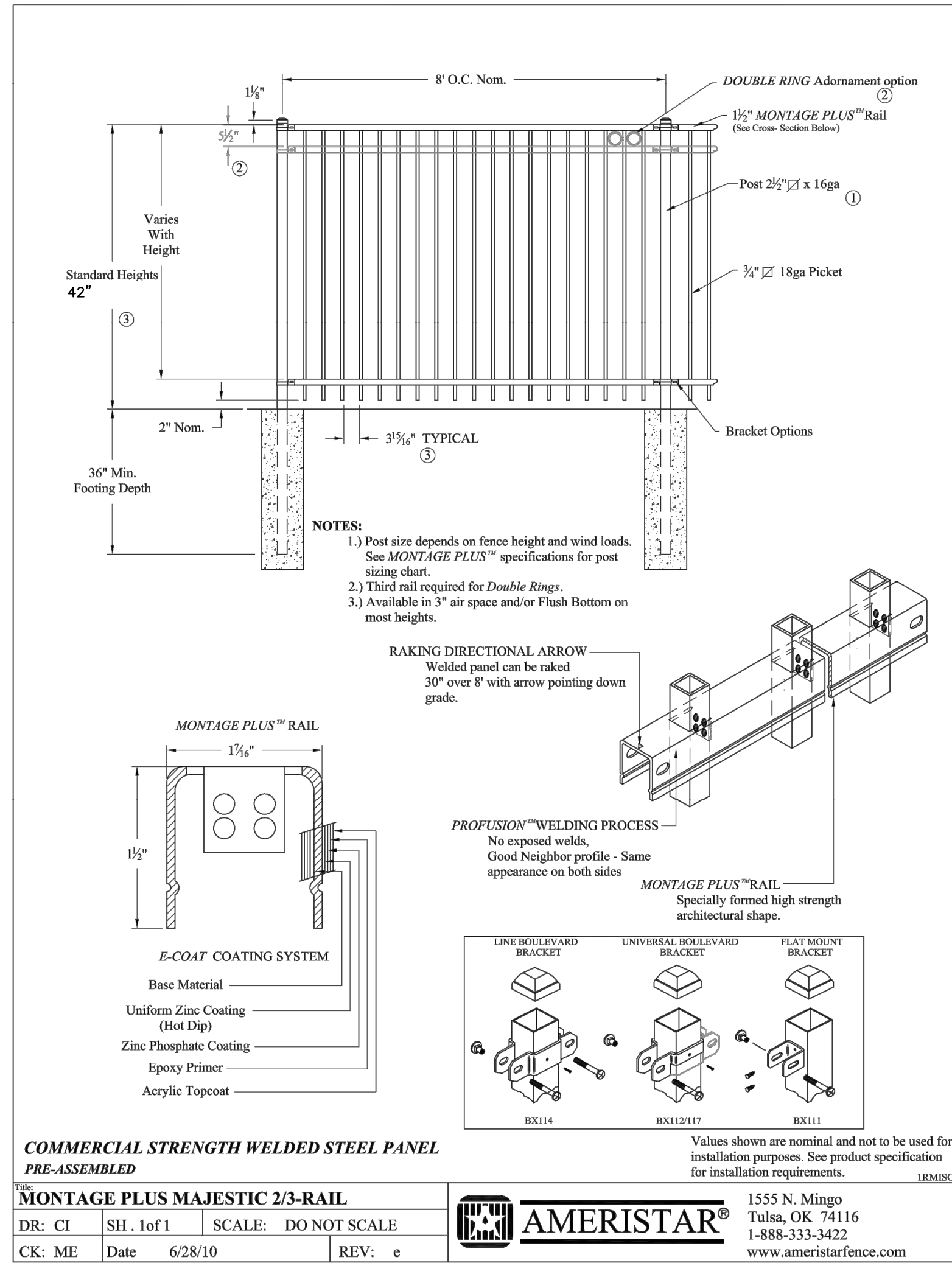
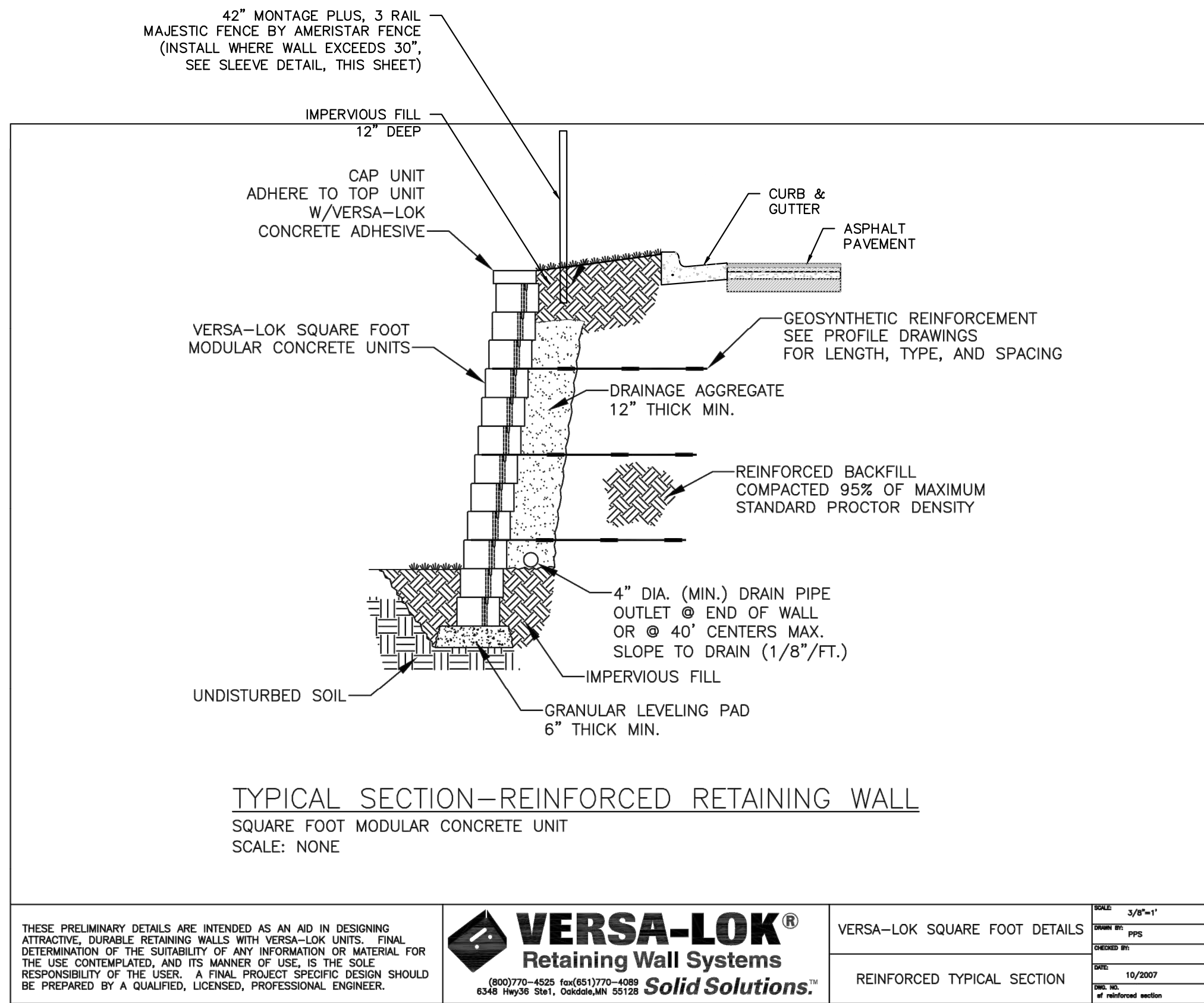
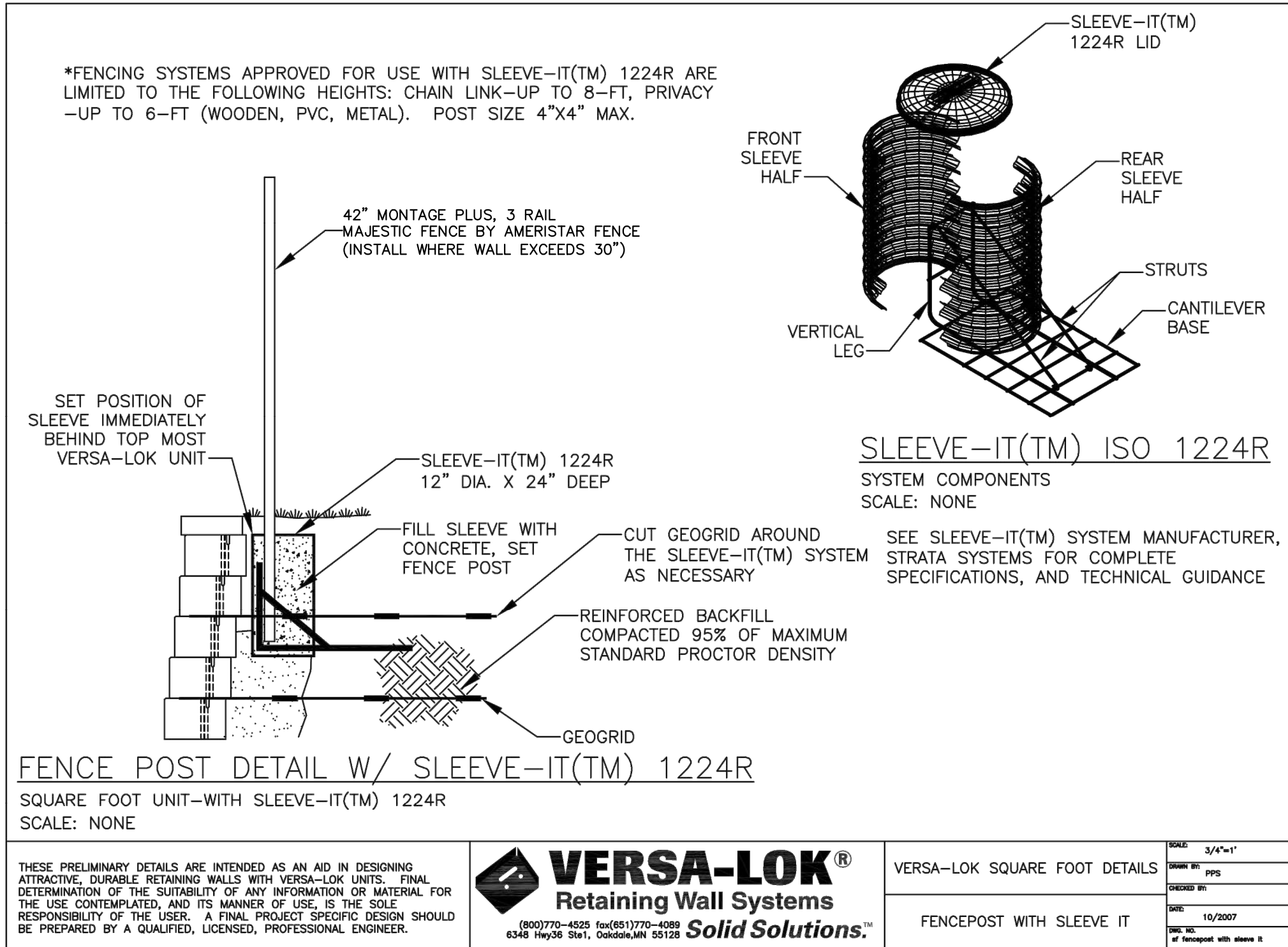
PROJECT NO.	171125	No.	1.	Date	3-16-20	By	App.	Revisions:
DATE: 01-28-20	DRAWN: SNH	CHECKED: DAF	APPROVED: DEU	CORPORATE AUTHORIZATION	LAND SURVEYING - LS-82	ENGINEERING - E-361	CERTIFICATE OF AUTHORIZATION	LAND SURVEYING - 200701028
[Empty rows for additional revisions]								

SHEET

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\\PHILIPS-SERVER\Projects\171125.dwg (Permit Plans) DETAILS -- PRIVATE.dwg Layout: WALL-FENCE Mar 17, 2020 -- 8:56am Shell: Hatcher



**HANDRAIL DETAIL AT TOP
OF RETAINING WALL**
SCALE: N.T.S.

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
BY: PHILIPS-SERVER
DATE: 03/17/2020

STATE OF MISSOURI
JACKSON COUNTY
PROFESSIONAL ENGINEER
PE-2011010998
3/16/20

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PLANNING
ENGINEERING
IMPLEMENTATION

WALL & FENCE DETAILS
DOWNTOWN LEE'S SUMMIT APARTMENTS
114 S.E. DOUGLAS STREET
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

PROJECT NO.	171125	No.	1.	Date	3-16-20	Revisions:	By	App.
DATE: 01-28-20	DRAWN: SNH					REVISED PER CITY COMMENTS	SNH	DEU
CHECKED: DAF	APPROVED: DEU							
CORPORATE SEAL								
LAND SURVEYING - LS-62								
ENGINEERING - E-361								
CERTIFICATE OF AUTHORIZATION								
LAND SURVEYING-2007001028								
ENGINEERING-2007000026								

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