

MASTER PLAN FOR: OLD KNIGHT ROAD OFFICE BUILDING

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA 27545

TOK PROJECT #ZCP-8-24

CONTACT LIST

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KNIGHTDALE, NC 27545
TEL: 919-217-2250
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SENIOR ENGINEER
cydney.terry@raleighnc.gov
ONE EXCHANGE PLAZA
RALEIGH, NC 27601
TEL: 919-996-3546
- NC DOT - STREETS & HIGHWAYS:**
DIVISION 5, DISTRICT 1
JEREMY WARREN, PE
jwarren@ncdot.gov
TEL: 919-733-3213

WATER ALLOCATION POLICY - POINTS TABLE

PROPOSED IMPROVEMENT	POINTS AWARDED
SINGLE USE OFFICE	41 BASE POINTS
ENHANCED ROADSIDE LANDSCAPING	2 BONUS POINTS
UNDERGROUND CISTERN	5 BONUS POINTS
OUTDOOR DISPLAY OF PUBLIC ART	4 BONUS POINTS
TOTAL = 52 POINTS	



MEMORANDUM

TO: Luke Krantz, E.I.
Pabst Design Group

FROM: Lawrence Green, PE, PTOE

DATE: September 17, 2024

SUBJECT: 700 Old Knight Road, Knightdale, North Carolina 27545 - Proposed Office Development

The purpose of this memorandum is to determine AM Peak Hour, PM Peak Hour, and Daily traffic trip generation of a proposed 7,000 square foot Office Building in Knightdale, NC. To determine the site trip generation, the Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition was utilized. Shown below are the projected trips:

- AM Peak Hour - 11 (9 IN & 2 OUT)
- PM Peak Hour - 10 (2 IN & 8 OUT)
- Daily Trips - 76 (38 IN & 38 OUT)

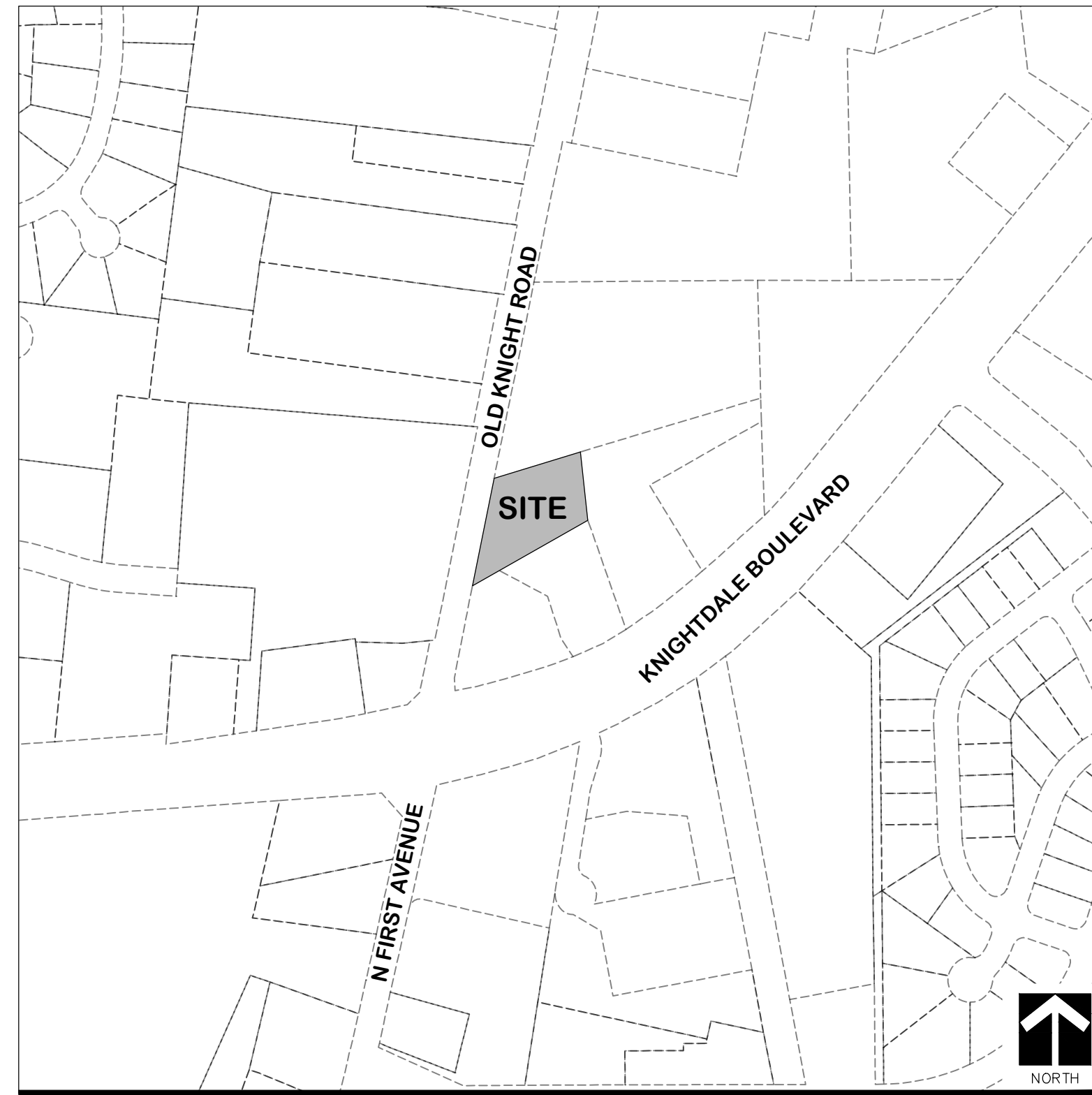
CONCLUSION

The NCDOT criteria for requiring a Traffic Impact Study are for proposed developments that are anticipated to generate 3,000 or more daily trips. As shown by the trip generation assessment above, the proposed 7,000 square foot Office Building will not exceed the NCDOT requirement for a Traffic Impact Study.

1223 Jones Franklin Rd.
Raleigh, NC 27606

www.wetherilleng.com

Office: 919.851.8077
Fax: 919.851.8107
Updated: 06/26/2019 Version 1.1



VICINITY MAP
1" = 300'

INDEX TO PLANS

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- C-1.0 EXISTING CONDITIONS & DEMOLITION PLAN
- C-1.1 EXISTING CONDITIONS PLAN (60 SCALE)
- C-2.0 SITE LAYOUT PLAN
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- C-4.0 GRADING & STORM DRAINAGE PLAN
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- L-1.0 LANDSCAPE PLAN
- L-1.1 LANDSCAPE DETAIL SHEET
- 24-0393A LIGHTING PLAN
- 1 ARCHITECTURAL PLAN
- 2-4 ARCHITECTURAL RENDERINGS

- OWNER:**
MOORE'S REALTY, INC.
JACKIE MOORE
623 NOON FLYER WAY
KNIGHTDALE, NC 27545
TEL: 919-931-1116
E-MAIL: jackie.moore@moorecrealty.com
- CIVIL ENGINEER:**
PABST DESIGN GROUP, PA
P. DAN PABST, PE
107 FAYETTEVILLE STREET, SUITE 200
RALEIGH, NC 27601
TEL: 919-646-4399
E-MAIL: dpabst@pabstdesign.com
- SURVEYOR:**
NEWCOMB LAND SURVEYORS, LLC
JUSTIN L. LUTHER, PLS
7005 HARPS MILL ROAD, SUITE 105
RALEIGH, NC 27615
TEL: 919-547-1800
E-MAIL: justin@nls-nc.com
- ARCHITECT:**
FURINI ARCHITECTS, PLLC
ALEX FURINI, RA, PRINCIPAL
202 WAYFIELD LANE
CARY, NC 27519
TEL: 919-646-5811
E-MAIL: alex@furiniarchitects.com

SITE DATA TABLE	
SITE ADDRESS:	700 OLD KNIGHT ROAD KNIGHTDALE, NORTH CAROLINA 27545
OWNER/APPLICANT:	JACKIE MOORE, MOORE'S REALTY, INC. 623 NOON FLYER WAY KNIGHTDALE, NORTH CAROLINA 27545
ENGINEER:	PABST DESIGN GROUP, PA 107 FAYETTEVILLE STREET, SUITE 200 RALEIGH, NC 27601 919.646.4399
DEED/PAGE:	DB 019200 PG 01486
PIN(S):	1754-56-9791
EXISTING ZONING DISTRICT:	HIGHWAY BUSINESS (HB)
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	OFFICE, PROFESSIONAL SERVICES
PARCEL AREA:	TOTAL BEFORE RW DEDICATION: 41,357 SF (0.949 AC) TOTAL AFTER RW DEDICATION: 39,089 SF (0.897 AC)
RIVERBASIN:	NEUSE
WATERSHED:	LOWER NEUSE RIVER
FLOODPLAIN DATA:	NO PORTION OF THE PROPERTY IS LOCATED WITHIN SPECIAL FLOOD HAZARD ZONE PER INSURANCE RATE MAP (RATE MAP 3720175400K DATED JULY 19, 2022)
PRE-DEVELOPED IMPERVIOUS:	ONSITE: ±0.08 ACRES (3,568 SF) OFFSITE: ±0.04 ACRES (1,787 SF) TOTAL: ±0.12 ACRES (5,355 SF)
POST-DEVELOPED IMPERVIOUS:	ONSITE: ±0.52 ACRES (22,541 SF) OFFSITE: ±0.13 ACRES (5,632 SF) TOTAL: ±0.65 ACRES (28,173 SF)
PROPOSED LAND DISTURBANCE:	±1.19 ACRES (51,969 SF)
PROPOSED BUILDING TYPE:	OFFICE, PROFESSIONAL SERVICES
PRINCIPAL BUILDING SETBACKS:	REAR SETBACK: 0' (MIN) SIDE SETBACK: 6' (MIN) FRONT SETBACK: 10' - 78' (MIN - MAX) (PER VARIANCE BK19337PG01399)
PARKING SETBACKS:	FRONT YARD: PROHIBITED SIDE YARD: 0' (MIN) REAR YARD: 5' (MIN)
BUILDING FLOOR AREA:	EXISTING = 0 GFA PROPOSED = 7,000 GFA
BUILDING HEIGHT:	MAX. BUILDING HEIGHT: 70'-0" (5 STORIES) PROPOSED BUILDING HEIGHT: 28'-8" (1 STORY)
MINIMUM PARKING REQUIREMENTS:	PROFESSIONAL SERVICES: MAXIMUM = 4 SPACES PER 1,000 SF GFA (28 SPACES); MINIMUM = 1/2 MAX (14 SPACES)
PUBLIC GATHERING SPACE:	1 SF / 25 SF GFA (REQUIRED) (1/25)*7000 SF = 280 SF 1,320 SF (PROVIDED)
	TOTAL REQUIRED: 14 SPACES TOTAL PROVIDED: 14 SPACES (INCLUDING 1 ADA VAN SPACE)
	EV PARKING: MINIMUM = 2 EV CHARGING STATIONS FOR NON-RESIDENTIAL USE WITH OFF-STREET PARKING FOR MOTORIZED VEHICLES TOTAL REQUIRED: 2 EV CHARGING STATIONS TOTAL PROVIDED: 2 EV CHARGING STATIONS
	BICYCLE PARKING: MINIMUM = 2 SPACES FOR NON-RESIDENTIAL USE WITH OFF-STREET PARKING FOR MOTORIZED VEHICLES TOTAL REQUIRED: 2 SPACES TOTAL PROVIDED: 2 SPACES (1 BICYCLE RACK)

GENERAL NOTES

- ALL DEVELOPMENT IS SUBJECT TO VAR-5-22 AS RECORDED IN BOOK 019337 PAGES 01398-01402 OF THE WAKE COUNTY REGISTER OF DEEDS.

JUSTIFICATION STATEMENT [UDO SEC. 7.1.D]

- ALL DEVELOPMENTS FEATURING ON-SITE PARKING LOTS SHALL BE DESIGNED TO ALLOW FOR CROSS-ACCESS TO ADJACENT PROPERTIES TO ENCOURAGE SHARED PARKING. [UDO SEC. 7.1(J)(3)]
- PROVIDING CROSS-ACCESS TO THE NORTHERN ADJACENT PROPERTY IS IMPRACTICAL DUE TO ENVIRONMENTAL CONSTRAINTS INCLUDING AN EXISTING STREAM AND POND ALONG THE SOUTHERN BORDER OF THE ADJACENT PROPERTY. [UDO SEC. 7.1.D]
- PROVIDING CROSS-ACCESS TO THE EASTERN ADJACENT PROPERTY IS IMPRACTICAL DUE TO ENVIRONMENTAL AND PARCEL AREA CONSTRAINTS. THERE ARE EXISTING WETLANDS ALONG THE FRONTAGE OF THE SUBJECT PROPERTY AND AN EXISTING ASPHALT DRIVE THAT FURTHER REDUCE THE SMALL AMOUNT OF USABLE AREA ON THE PROPERTY. [UDO SEC. 7.1.D]

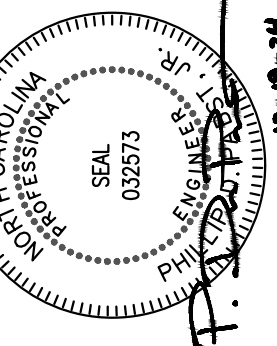
**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

PABST DESIGN GROUP, PA
Engineering | Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 646 4399 | Fax: 919 646 4399 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. 205
KNIGHTDALE, NORTH CAROLINA 27545
DATE: 06.24.2024
PROJECT ENGINEER:
PDP
PROJECT CADD DESIGNER:
PDP
PROJECT SURVEYOR:
PDP
WAKE COUNTY, NC

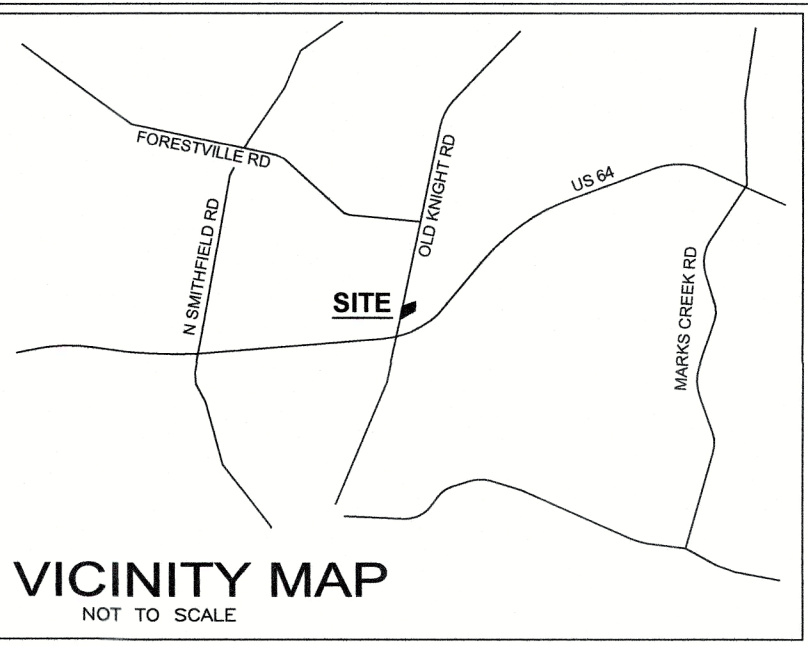
700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
COVER SHEET



NO.	DATE	REVISION

DRAWING SHEET
C-0.0

PROJECT NUMBER
627-22



VICINITY MAP
NOT TO SCALE

LEGEND and NOMENCLATURE

SYMBOLS	LINETYPES
○ Ex. iron pipe/rod or nail	— X — Fence
□ Ex. concrete monument	— OU — Overhead utility
● New iron pipe	— W — Water
○ Calculated point	— SS — Sanitary sewer
▣ Cable pedestal	— SD — Storm drain
▣ Telephone pedestal	
▣ Electric pedestal	
▣ Fiber-optic marker	
▣ Traffic signal box	
▣ Water meter	
▣ Fire hydrant	
▣ Valve (water or gas)	
▣ Sanitary sewer manhole	
▣ Sanitary sewer cleanout	
▣ Storm curb inlet	
▣ Drainage inlet (w/ grate)	
▣ Storm drain manhole	
▣ Utility pole	
▣ Lamp post	
▣ Signal pole	
▣ Guy wire	
▣ Sign post	
	ABBREVIATIONS
	DB Deed Book
	PB or BM Plat Book / Book of Maps
	N/F Now or formerly
	Pg. Page
	SF Square feet
	Ac. Acres
	R/W Right-of-way
	NCSR North Carolina State Route
	NCDOT North Carolina Dept. of Transportation
	R/W Right-of-way
	Ex. Existing
	RCP Reinforced concrete pipe
	PVC Polyvinyl chloride pipe
	(M) Measured
	AG Above ground
	BG Below ground

NOTES:

- 1) All distances are horizontal ground distances in u.s. survey feet unless otherwise noted. Area(s) computed by coordinate geometry.
- 2) This survey does not include nor depict any environmental evaluations. No investigation into the existence of wetlands or riparian buffers performed in the preparation of this survey. Wetlands shown hereon field located by this office as placed by Sage Ecological Services per a sketch map provided dated 7/11/22.
- 3) Field survey performed February 1 thru 6, 2023 and November 20 thru November 22, 2023.
- 4) Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence or any other facts that an accurate and current title search may disclose.
- 5) The locations of underground utilities as shown hereon (if any) are based on aboveground structures and aboveground visual evidence only. Locations of underground utilities/structures may vary from location shown hereon. Additional buried utilities/structures may be encountered. No excavations were made during the progress of this survey to locate buried utilities/structures.
- 6) Subject property is NOT located within a special flood hazard zone per FEMA Flood Insurance Rate Map (FIRM) #3720175400K, effective date July 19, 2022.
- 7) The State Plane Coordinates for this project were produced with RTK GPS observations and processed using the North Carolina VRS network. The network positional accuracy of the derived positional information is ±0.07'.

HORIZONTAL DATUM = NAD 83/2011
VERTICAL DATUM = NAVD 88

THIS SURVEY IS OF AN EXISTING PARCEL OR PARCELS OF LAND OR ONE OR MORE EXISTING EASEMENTS AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.

I, Justin L. Luther, certify that this plat was drawn under my supervision from an actual survey made under my supervision from references as noted on said plat; that the boundaries not surveyed are clearly indicated as drawn from information as indicated under references; that the ratio of precision as calculated is greater than 1:10,000; that this plat was prepared in accordance with NCGS 47-30 as amended.

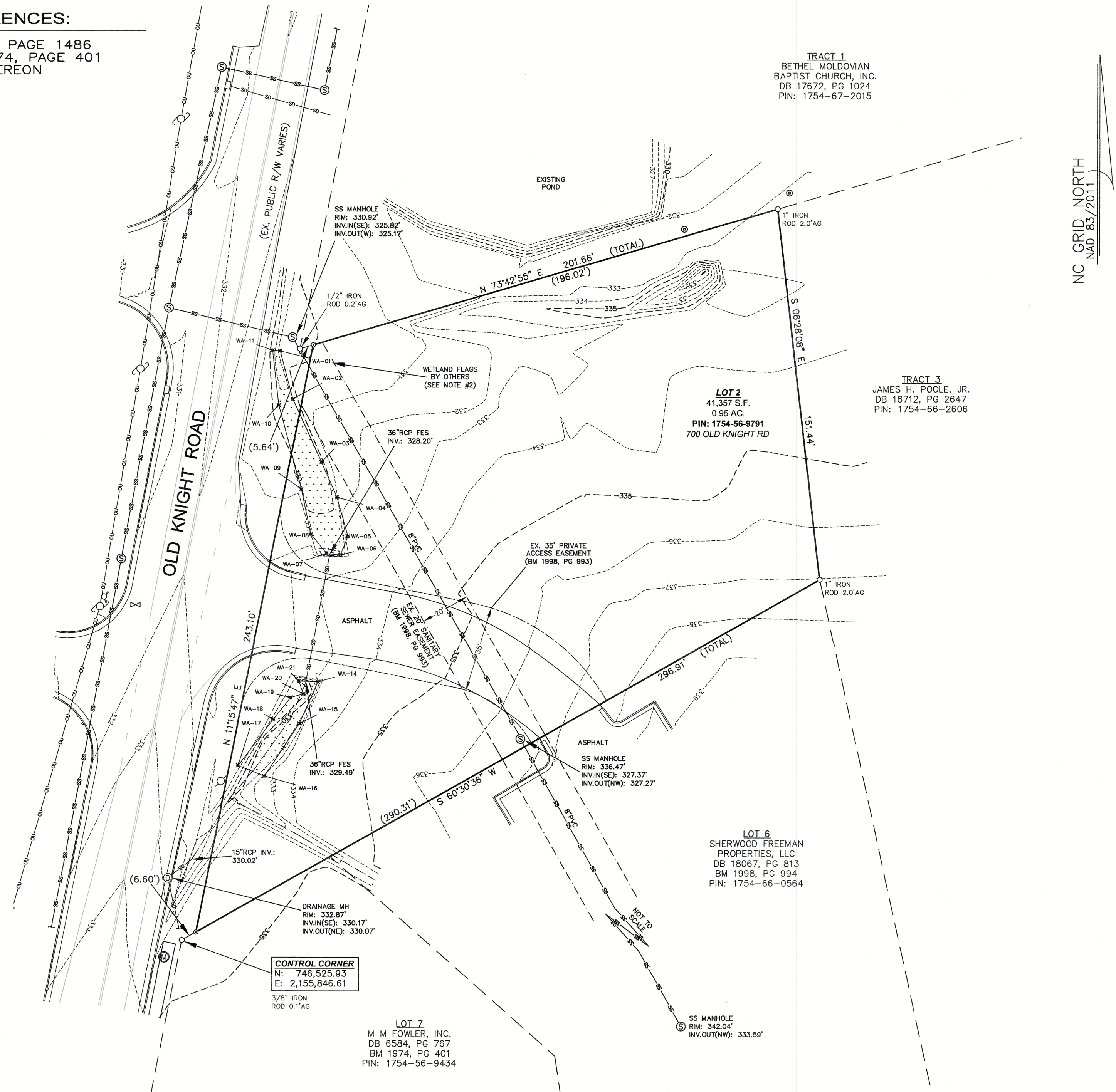
Witness my original signature, license number and seal this day of DECEMBER, 2023.

Justin L. Luther
Professional Land Surveyor (L-5107)



REFERENCES:

DEED BOOK 19200, PAGE 1486
BOOK OF MAPS 1974, PAGE 401
*OTHERS SHOWN HEREON



TRACT 1
BETHEL MOLDOVIAN
BAPTIST CHURCH, INC.
DB 17672, PG 1024
PIN: 1754-67-2015

TRACT 3
JAMES H. POOLE, JR.
DB 16712, PG 2647
PIN: 1754-66-2606

LOT 2
41,357 S.F.
0.95 AC.
PIN: 1754-66-9791
700 OLD KNIGHT RD

LOT 6
SHERWOOD FREEMAN
PROPERTIES, LLC
DB 18067, PG 813
BM 1998, PG 994
PIN: 1754-66-0564

LOT 7
M. M. FOWLER, INC.
DB 6584, PG 767
BM 1974, PG 401
PIN: 1754-56-9434

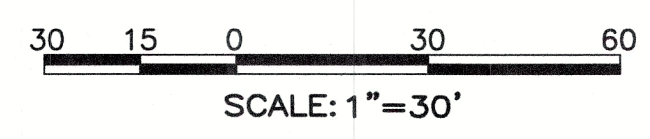
CONTROL CORNER
N: 746,525.93
E: 2,155,846.61
3/8" IRON
ROD 0.1' AG

NC GRID NORTH
NAD 83/2011

BOUNDARY & TOPOGRAPHIC SURVEY

MOORE'S REALTY, INC.

ST. MATTHEW'S TOWNSHIP WAKE COUNTY NORTH CAROLINA



LEGEND

Table with 3 columns: Symbol, Description, and Symbol. Lists various construction elements like limits of construction, existing utilities, proposed pipes, and stabilization methods.

SURVEY LEGEND and NOMENCLATURE

Table with 3 columns: SYMBOLS, LINETYPES, and ABBREVIATIONS. Lists symbols for iron pipes, concrete monuments, calculated points, and abbreviations for books, pages, and areas.

SURVEY NOTES:

- 1. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. AREA(S) COMPUTED BY COORDINATE GEOMETRY.
2. THIS SURVEY DOES NOT INCLUDE NOR DEPICT ANY ENVIRONMENTAL EVALUATIONS. NO INVESTIGATION INTO THE EXISTENCE OF WETLANDS OR RIPARIAN BUFFERS PERFORMED IN THE PREPARATION OF THIS SURVEY.
3. FIELD SURVEY PERFORMED FEBRUARY 1 THRU 6, 2023.
4. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

DEMOLITION NOTES:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
2. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT, AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
3. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF NEW CONSTRUCTION SHALL BE RAZED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET, ARCHITECTURAL PLANS AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS, AND FOOTINGS.

SITE LAYOUT NOTES:

- 1. ALL CONSTRUCTION AND EXCAVATION SHALL BE CONFINED TO THE LIMITS OF CONSTRUCTION, AND SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE, CITY OF RALEIGH, NCDOT, & NCECD STANDARDS AND SPECIFICATIONS.
2. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, EDGE OF SIDEWALK, FACE OF CURB, CENTERLINE OF COLUMN AND FACE OF BUILDING WALL, UNLESS OTHERWISE NOTED. ALL RADIUS DIMENSIONS TO BACK OF CURB.
3. ALL PAINT STRIPING, PAVEMENT MARKINGS, AND SIGNAGE SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" OR AS REQUIRED IN SPECIFICATIONS.
4. ALL STRIPING SHALL BE 4" WIDE UNLESS NOTED OTHERWISE.
5. ALL RADI TO BE 3'-0" BOC UNLESS OTHERWISE NOTED.

GRADING NOTES:

- 1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PABST DESIGN GROUP, PA, THE CURRENT REQUIREMENTS OF WAKE COUNTY, THE APPLICABLE SECTIONS OF THE NCDOT STANDARD SPECIFICATIONS

FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.

- 2. ALL EXISTING TREES, VEGETATION, PAVEMENTS, CONCRETE FOUNDATIONS, STRUCTURES AND ORGANIC TOPSOIL SHALL BE STRIPPED AND REMOVED FROM NEW CONSTRUCTION AREAS UNLESS OTHERWISE NOTED.
3. ALL AREAS NOT PAVED SHALL BE TOPSOILED, SEED, MULCHED OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER.
4. CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIALS OFF SITE. THIS RESPONSIBILITY SHALL INCLUDE ALL REQUIRED APPROVALS AND CONDITIONS DICTATED BY WAKE COUNTY.
5. ALL OPEN STORM DRAIN PIPES SHALL BE PROTECTED WITH STONE FILTER PROTECTION AFTER STOPPAGE OF WORK EACH DAY.

GENERAL UTILITY NOTES:

- 11. CONTRACTOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY IN RELATION TO THE PROPOSED GRADES TO ENSURE DRAINAGE IN THE DIRECTION INDICATED ON PLANS.
12. INITIATE CONSTRUCTION SEQUENCE BEFORE BEGINNING CLEARING AND GRADING ON-SITE OPERATIONS.
13. STRIP TOPSOIL TO FULL DEPTH IN AREAS TO BE GRADED.
14. MAXIMUM GRADED SLOPE SHALL NOT EXCEED 2:1, UNLESS OTHERWISE NOTED.
15. AREAS TO BE GRADED SHALL BE CLEARED OF ALL EXISTING VEGETATION. CONTRACTOR TO PROTECT VEGETATION LOCATED BEYOND GRADING LIMITS.
16. COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY, OR PER GEOTECHNICAL RECOMMENDATIONS.

CITY OF RALEIGH UTILITY NOTES:

- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
2. UTILITY SEPARATION REQUIREMENTS.
a. A DISTANCE OF 100" SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS, HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
b. WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10". IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.

- 10. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDOW, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
11. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
12. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX-B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THESE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-9923 OR joanie.hartley@raleighnc.gov FOR MORE INFORMATION.

GENERAL PLANTING NOTES:

- 1. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES AND SHALL MEET ALL STANDARDS AS STATED IN THE LATEST EDITION OF 'AMERICAN STANDARD FOR NURSERY STOCK'.
2. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN THE EVENT OF QUANTITY DISCREPANCIES, THE DRAWINGS SHALL TAKE PRECEDENCE.
3. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER OR LANDSCAPE DESIGNER.
4. CONTRACTOR SHALL HAVE UTILITY COMPANY LOCATE ALL UTILITIES PRIOR TO DIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES INCURRED BY HIS/HER WORK.
5. METHODS OF TREE STAKING INDICATED ON THE DRAWINGS ARE SUGGESTIONS ONLY. THE LANDSCAPE CONTRACTOR SHALL USE WHATEVER METHOD HE DEEMS FIT, HOWEVER HE WILL BE HELD LIABLE FOR ANY DAMAGES CAUSED TO TREES BY IMPROPER STAKING METHODS (OR ABSENCE OF STAKING) AND IS RESPONSIBLE FOR UPRIGHTING AND REPLANTING TREES WHICH ARE BLOWN OVER.

E&S CONSTRUCTION SEQUENCE - PHASE 1:

- 1. SCHEDULE AN INITIAL PRE-CONSTRUCTION CONFERENCE WITH THE TOWN OF KNIGHTDALE.
2. OBTAIN A LAND-DISTURBANCE PERMIT.
3. OBTAIN AN APPROVED (STAMPED) E&S CONTROL PLAN AND KEEP IT ON SITE, EITHER IN THE INSPECTION BOX, CONSTRUCTION OFFICE OR WITH THE CONTRACTOR.
4. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION TO AVOID CONFLICT DURING GRADING OPERATION. CONTRACTOR SHALL CALL 1-800-632-4949 N.C. "ONE CALL" PRIOR TO DIGGING TO LOCATE ALL EXISTING UNDERGROUND UTILITIES ON SITE.
5. INSTALL ALL PERIMETER CONTROLS AS SHOWN ON THE APPROVED PLANS, CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. CLEARING SHOULD BE LIMITED TO A 35" "RIBBON" AROUND PERIMETER TO INSTALL CONTROLS. NO GRADING OR EXCAVATION SHOULD OCCUR.
6. SCHEDULE AN ONSITE PRE-CONSTRUCTION MEETING WITH THE TOWN OF KNIGHTDALE TO INSPECT THE INSTALLED PERIMETER CONTROLS.

E&S CONSTRUCTION SEQUENCE - PHASE 2:

- 1. REFER TO SHEET C-5.0 IN THIS PLAN SET FOR PHASE 1 E&S OPERATIONS PRIOR TO BEGINNING THIS CONSTRUCTION SEQUENCE AND INSTALLATION OF MEASURES ON SHEET C-5.1.
2. CONTINUE BRINGING THE SITE TO FINAL GRADES, INSTALLING UTILITIES AND RETAINING WALL AT THE SAME TIME AS NECESSARY. CONTACT TOWN OF KNIGHTDALE INSPECTOR FOR INSPECTION.
3. AS PERMANENT STORMWATER PIPES AND STRUCTURES ARE INSTALLED, INSTALL INLET PROTECTION AND PLUG THE PIPES UNTIL THE MAJORITY OF THE SITE IS STABILIZED. PERIODICALLY OR AFTER LARGE RAIN EVENTS, PUMP OUT WATER AND SEDIMENT FROM ANY STORM STRUCTURES THAT RECEIVED WATER AND SEDIMENT PAST THE INLET PROTECTION) INTO SILT BAG AND DISPOSE OF APPROPRIATELY.
4. CUT AND FILL SLOPES WILL BE STABILIZED WITHIN 14 DAYS OF ANY PHASE OF GRADING. (SEE STABILIZATION CRITERIA ON SHEET 4-1).

PABST DESIGN GROUP, PA
Engineering | Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 848 4999 | Fax: 919 848 4951 | NC LICENSE NUMBER: C-3011

PREPARED FOR:
MORRIS REALTY, INC.
101 FOREST DRIVE, STE. 20-205
KNIGHTDALE, NORTH CAROLINA 27545
DATE: 06.24.2022
PROJECT ENGINEER:
PROJECT CAD: DESIGNER:
PROJECT SURVEYOR:
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
LEGENDS & NOTES

CITY OF RALEIGH
PLUMBING DEPARTMENT
SEAL:
DATE:
REVISION:
NO.

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

DRAWING SHEET
C-0.1
PROJECT NUMBER
627-22

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E&S PLAN MAINTENANCE NOTES:

1. PROVIDE A PLAN DETAIL, CONSTRUCTION SPECIFICATIONS, AND SPECIFIC MAINTENANCE REQUIREMENTS FOR ALL PROPOSED SEDIMENT AND EROSION CONTROL STRUCTURES INCLUDED ON THE PLAN. RECOMMEND PLACING MAINTENANCE REQUIREMENTS WITH THE ASSOCIATED CONSTRUCTION DETAIL.
2. MAINTENANCE AND/OR CLEAN OUT, IS NECESSARY ANYTIME THE DEVICE IS AT 50% CAPACITY. ALL SEDIMENT STORAGE MEASURES WILL REMAIN ON SITE AND FUNCTIONAL UNTIL ALL GRADING AND FINAL LANDSCAPING OF THE PROJECT IS COMPLETE.
3. AS DESIGNATED BY NCDEQ NCG01 PERMITTING, SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF 1 INCH OR GREATER. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED.
4. PROVIDE THE MINIMUM MAINTENANCE STANDARDS AS SPECIFIED BELOW:
 - 4.1. SURVEYOR FLAGS/TAPE/STAKES:
 - REPLACE IDENTIFIERS IF DAMAGED OR KNOCKED DOWN DURING DEVELOPMENT.
 - ENSURE KEY ENVIRONMENTAL AND/OR CULTURAL RESOURCES MAINTAIN IDENTIFIERS.
 - COLORS SHOULD ADHERE TO THE APWA UNIFORM COLOR CODE. USE ACCEPTED SURVEY SYMBOLS AND ENSURE OPERATORS UNDERSTAND DESIGNATIONS. UTILITY LINE OWNERS/OPERATORS SHALL IDENTIFY THE DESIGNATING FIRM.
 - 4.2. PERMITS / NCG01 INSPECTIONS BOX:
 - CONFIRM BOX IS SECURELY FASHIONS TO A POST OR WALL IN A VISIBLE LOCATION IN PROXIMITY TO THE CONSTRUCTION ENTRANCE.
 - MAINTAIN RELEVANT IDENTIFICATION ON THE EXTERIOR OF THE BOX.
 - ENSURE PAPER DOCUMENTS REMAIN DRY / LEGIBLE (LAMINATION, TICKET HOLDERS, BINDERS, ETC.)
 - REPLACE ANY MISSING DOCUMENTS IMMEDIATELY. CONSIDER PLACING TIES OR FASTENERS IF NECESSARY.
 - 4.3. RAIN GAUGE:
 - CHECK AND REMOVE ANY ITEMS FROM THE RAIN FUNNEL AND THE DEBRIS FILTER (DUST, BUGS, OTHER DEBRIS)
 - OPEN THE RAIN GAUGE AND REMOVE ANY FOREIGN OBJECTS.
 - PERFORM ROUTINE MAINTENANCE AS SPECIFIED BY THE MANUFACTURER.
 - CHECK THAT THE GAUGE IS NOT BEING OBSTRUCTED FROM RAIN CAPTURE AND IS LEVEL BEFORE AND AFTER REASSEMBLY.
 - 4.4. TREE PROTECTION FENCE:
 - PRUNE ANY DAMAGED TREES. (IF) DAMAGE TO PROTECTED TREES OCCURS, REPAIR ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM IMMEDIATELY.
 - REPAIR ROOTS BY CUTTING OFF THE DAMAGED AREAS AND PAINTING THEM WITH TREE PAINT. SPREAD PEAT MOSS OR MOIST TOPSOIL OVER EXPOSED ROOTS.
 - REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREA, TAPER THE CUT TO PROVIDE DRAINAGE AND PAINT WITH TREE PAINT.
 - CUT OFF ALL THE DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH. USE THREE SEPARATE CUTS TO AVOID PEELING BARK FROM HEALTHY AREAS OF THE TREE.
 - 4.5. SILT FENCE:
 - SHOULD THE FABRIC OF THE SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUTS.
 - REMOVE ALL THE FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
 - 4.6. SILT FENCE OUTLET:
 - FRESHEN STONE WHEN SEDIMENT ACCUMULATION EXCEEDS 6 INCHES.
 - KEEP MESH FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW AND REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING.
 - 4.7. CONSTRUCTION ENTRANCE:
 - MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2 INCH STONE.
 - IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.
 - 4.8. INLET PROTECTION (PIPE / YARD / DROP / CURB):
 - INSPECT INLET PROTECTIONS AND REMOVE SEDIMENT AFTER EACH RAIN EVENT.
 - KEEP FREE OF DEBRIS TO PROVIDE ADEQUATE FLOW AND IF PRESENT REPLACE STONE AS NEEDED TO FACILITATE DE-WATERING.

TOWN OF KNIGHTDALE SCM PLANTING NOTES:

1. THE DAM STRUCTURE, INCLUDING FRONT AND BACK EMBANKMENT SLOPES, OF THE POND SHALL BE VEGETATED WITH NON-CLUMPING TURF GRASS OR SOD. (CENTIPEDE/HYBRID-BERMUDA) 90% GERMINATION OF NON-CLUMPING TURF WILL BE REQUIRED PRIOR TO FINAL CERTIFICATION FROM THE TOWN.
2. THE VEGETATED SHELF SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200 FEET OF SHELF AREA.
3. CONTRACTOR TO WORK WITH SOILS SCIENTIST TO ENSURE SOILS ARE ADEQUATE TO SUPPORT PROPER ESTABLISHMENT AND GROWTH OF THE AQUATIC PLANTINGS. CONTRACTOR TO AMEND SOILS AND INSTALL SOILS IN PLANT, SHRUB, AND TREE AREAS PER DETAILS, SOIL SPECIFICATIONS, NCDENR SPECIFICATION, AND SOIL SCIENTIST RECOMMENDATIONS.
4. ALL AQUATIC PLANTINGS ARE TO BE INSTALLED DURING THE APPROPRIATE TIME OF YEAR TO ENSURE SURVIVABILITY. (LAST SPRING FROST AND THE FIRST FALL FROST)
5. ALL DISTURBED AREAS AROUND THE OUTSIDE OF THE DEVICE SHALL BE SEEDED WITH A LAWN AREA SEED MIX (PER SEEDING SPECIFICATIONS) NATIVE GRASSES, LEGUMES, CLOVERS, AND WILDFLOWERS.
6. IF THE DEVICE WAS USED DURING CONSTRUCTION AS A SEDIMENT BASIN OR TRAP, THE BASIN MUST BE CLEANED OUT, GRADED, APPROPRIATE AREAS COVERED WITH 4" OF TOPSOIL AS SPECIFIED IN NOTE #2 ABOVE, AND VEGETATED WITHIN 14 DAYS OF THE COMPLETION OF CONSTRUCTION.
7. CONTRACTOR SHALL WATER ALL VEGETATION AND GRASS ON A WEEKLY BASIS AS NEEDED TO ENSURE GRASS AND PLANT SURVIVAL UNTIL AFTER THE SCM IS CERTIFIED AND ACCEPTED BY THE TOWN.

TOWN OF KNIGHTDALE SCM INSPECTION NOTES:

1. WHEN SCHEDULING INSPECTIONS, PLEASE CALL THE PUBLIC WORKS ADMINISTRATIVE ASSISTANT AT (919) 217-2250.
2. THE FOLLOWING PERSONNEL MUST BE PRESENT AT ALL INSPECTIONS:
 - 1) SITE SUPERVISOR
 - 2) GEOTECH
 - 3) AS-BUILT CERTIFYING ENGINEER OR SOMEONE UNDER THEIR SUPERVISION
3. THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SCM WITH DAM:
 - 1) KEY TRENCH EXCAVATION
 - 2) PRINCIPAL SPILLWAY PIPE AND ASSOCIATED COMPONENTS:
 - a. CONCRETE CRADLE
 - b. ANTI-SLEEP COLLAR
 - c. SEEPAGE DIAPHRAGM
 - 3) OUTLET STRUCTURE
 - 4) ANTI-FLOATATION BALLAST
 - 5) ANY SITE-CONSTRUCTED REINFORCED CONCRETE STRUCTURES
4. THE FOLLOWING ITEMS MUST BE INSPECTED BY TOK STAFF DURING THE INSTALLATION OF ANY SAND FILTERS OR BIORETENTION DEVICES:
 - a. SUBGRADE OR CONSTRUCTED FOUNDATION
 - b. OUTLET OR RISER IN COMBINATION WITH CONNECTING UNDERDRAINS
 - c. FILTER MEDIA
 - d. DAM ITEMS ON PREVIOUS LIST IF APPLICABLE
5. GEOTECHNICAL TESTING AND CERTIFICATION - ALL REPORTS ARE TO BE SUBMITTED WITHIN 30-DAYS OF DAM COMPLETION. REQUIRED GEOTECHNICAL RECORDS INCLUDE:
 - 1) DAM EMBANKMENT MATERIAL COMPOSITION AND DENSITY TESTING
 - 2) MAP THAT LABELS ALL POINTS WHERE THE DAM AND DAM FOUNDATION AREAS WERE TESTED.
 - 3) DIGITAL PHOTOS SHOWING THE DAM FOUNDATION AREAS, THE RISER, THE PRINCIPAL SPILLWAY PIPE, THE CONCRETE CRADLE, THE SEEPAGE DIAPHRAGM, RELIEF DRAINS, ETC., BEING INSTALLED.

**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

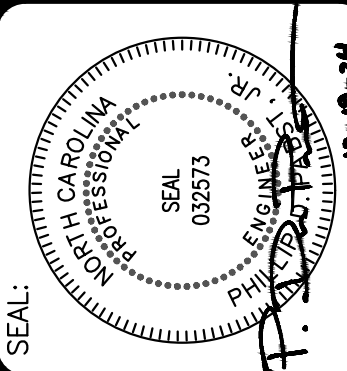
NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

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PAST DESIGN GROUP, PA
Engineering | Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 848 4399 | Fax: 919 948 4395 | NC LICENSE NUMBER: C-3311

PREPARED FOR: MOORE'S REALTY, INC. 101 FOREST DRIVE, STE. B-205 KNIGHTDALE, NORTH CAROLINA 27645
DATE: 06.24.2022 PROJECT ENGINEER: PJP PROJECT CADD DESIGNER: PJP PROJECT SURVEYOR: WAKE COUNTY, GS

700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
LEGENDS & NOTES



NO.	DATE	REVISION

DRAWING SHEET
C-0.2

PROJECT NUMBER
627-22

BK019337PG01398

WAKE COUNTY, NC 49
TAMMY L. BRUNNER
REGISTER OF DEEDS
PRESENTED & RECORDED ON
05/18/2023 12:34:05

BOOK:019337 PAGE:01398 - 01402

Prepared by and Return to:
Town of Knightdale
950 Steeple Square Court
Knightdale, North Carolina 27545



NORTH CAROLINA
WAKE COUNTY

TOWN OF KNIGHTDALE

950 STEEPLER SQUARE COURT • KNIGHTDALE, NC 27545
OFFICE (919) 217-2242 • FAX (919) 217-2249

ORDER GRANTING A VARIANCE

THE TOWN OF KNIGHTDALE

On the date listed below, the Knightdale Board of Adjustment, held a public hearing to consider the following application:

APPLICANT: Morningstar Law Group
PROPERTY OWNERS: Jackie Moore, Moore's Realty, Inc.
(Formerly Owned by Greg and Angela Jones)
PROJECT NUMBER: VAR-5-22
PROJECT LOCATION: 700 Old Knight Road
WAKE COUNTY PIN: 1754-56-9791
BOARD OF ADJUSTMENT MEETING DATE: October 25, 2022

BK019337PG01399

The Board of Adjustment, for the Town of Knightdale held a public hearing on Tuesday, October 25, 2022 to receive evidence presented by interested parties on a request for variance from the Knightdale Unified Development Ordinance.

The Board of Adjustment, having considered the verified application, the staff reports, and the testimony, exhibits, and arguments presented at the public hearing, makes the following FINDINGS OF FACT:

- 1. Applicants seek a variance to Section 6.9 of the Town of Knightdale Unified Development Ordinance (UDO) to allow for the construction of a commercial building type at 700 Old Knight Road in Knightdale. The proposed commercial building will have a maximum front setback of 78 feet, where a minimum of 10 feet and maximum of 30 feet is required per the UDO.
- 2. There is present in this matter an identified hardship based on the existing sewer easement, cross-access easement, and wetlands on the lot. These constraints restrict the buildable area along the lot frontage making the construction of the proposed building not possible within the existing front yard setbacks.
- 3. There is present in this matter an identified hardship in the way of carrying out the strict application of the Ordinance regarding the front yard setback requirements prescribed by the UDO. The intent of the front yard setback maximum in UDO section 6.9 is to provide convenient automobile access from the fronting thoroughfare, while minimizing the negative impacts of parking lots on an active pedestrian realm. The proposed parking is shown in the rear and side yards of the property. The proposed development permits reasonable use of the property and maintains public interest in the existing sewer easement.
- 4. Neither of the above hardships is a result of any action taken by the applicants. The sewer and cross access easement agreements were entered into by the owners prior to the adoption of Section 6.9 of the UDO requiring a maximum setback of 30 feet. Prior to the UDO update in 2021, the UDO had a maximum front setback of 90 feet for the Highway Business zoning district.

THEREFORE, based on the foregoing Findings of Fact, the Board of Adjustment makes the following CONCLUSIONS OF LAW:

- 1. There are unnecessary hardships in complying with the strict application of the Ordinance.
- 2. The identified hardships result from conditions peculiar to the property, including location, size and topography.
- 3. The identified hardships did not result from actions taken by the applicant or property owners; and
- 4. The variance is consistent with the spirit, purpose and intent of this Ordinance; such that public safety is secured and substantial justice is achieved.

Having heard all of the evidence and arguments presented at the hearing, the Board of Adjustment hereby grants the variance VAR-5-22. A variance is granted from the following sections of the Unified Development Ordinance:

BK019337PG01400

Section 6.9 Commercial Building Type Standards (Front Setbacks). The Unified Development ordinance requires a minimum front setback of 10 feet and maximum front setback of 30 feet. The applicant is specifically granted a front maximum setback of 78 feet.

This order of the Board of Adjustment in granting this Variance shall expire if a building permit has not been obtained within two (2) years from the date of its decision.

Ordered this 3rd day of November, 2022 and subsequently revised on this 17th day of May, 2023.

Acting Chairperson, Joe Mecca
Board of Adjustment

NOTE: If you are dissatisfied with the decision of this board, an appeal may be taken to the Superior Court of Wake County within thirty (30) days after the date this order is served on you. See Chapter 12, Development Process, of the Knightdale Unified Development Ordinance.

BK019337PG01401

NORTH CAROLINA
WAKE COUNTY

IN WITNESS WHEREOF, the Town of Knightdale has caused this order to be issued in its name, and the undersigned being all of the property owners of the properties above described, do hereby accept this Variance, together with all its conditions, as binding upon them and their successors in interest or ownership.

Jackie Moore, Moore's Realty, Inc.

ATTEST:

Heather M. Smith, Town Clerk



I, Britney Hunt, a Notary Public in and for said County and State, do hereby certify that Heather Smith, Town Clerk of Knightdale, personally came before me this day and being by me duly sworn says that she knows the corporate seal of the Town of Knightdale and that the seal affixed to the foregoing instrument is the corporate seal of the Town of Knightdale, that Heather Smith, Town Clerk for the Town of Knightdale subscribed her name thereto; that the corporate seal of the Town of Knightdale was affixed thereto, all by virtue of an order of the Board of Adjustment and that said instrument is the act and deed of the Town of Knightdale.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 18th day of May, 2023.

Britney Hunt
Notary Public
My Commission Expires: 11/16/2027



BK019337PG01402

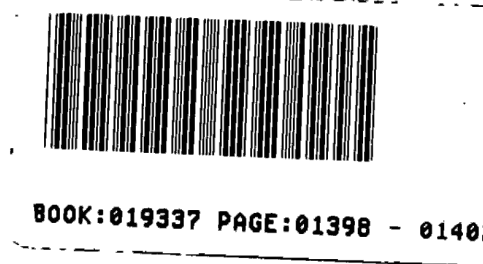


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It is part of the recorded document and must be submitted with the original for re-recording.

Tammy L. Brunner
Register of Deeds
Wake County Justice Center
300 South Salisbury Street, Suite 1700
Raleigh, NC 27601

- New Time Stamp \$25 Non-Standard Fee
- Additional Document Fee Additional Reference Fee

This Customer Group # of Excessive Entities
This Document # of Pages



BOOK:019337 PAGE:01398 - 01402

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PAST DESIGN GROUP, PA
Engineering & Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 846 4399 | Fax: 919 946 4395 | NC LICENSE NUMBER: C-3311

PREPARED FOR: MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. 10-205
KNIGHTDALE, NORTH CAROLINA 27545
DATE: 06.24.2022
PROJECT ENGINEER:
PROJECT CADD DESIGNER:
PROJECT SURVEYOR:
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
APPROVED VARIANCE DOCUMENT

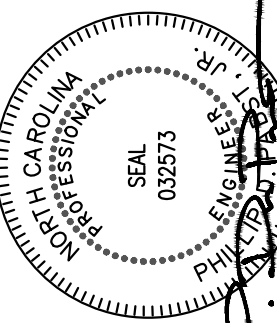


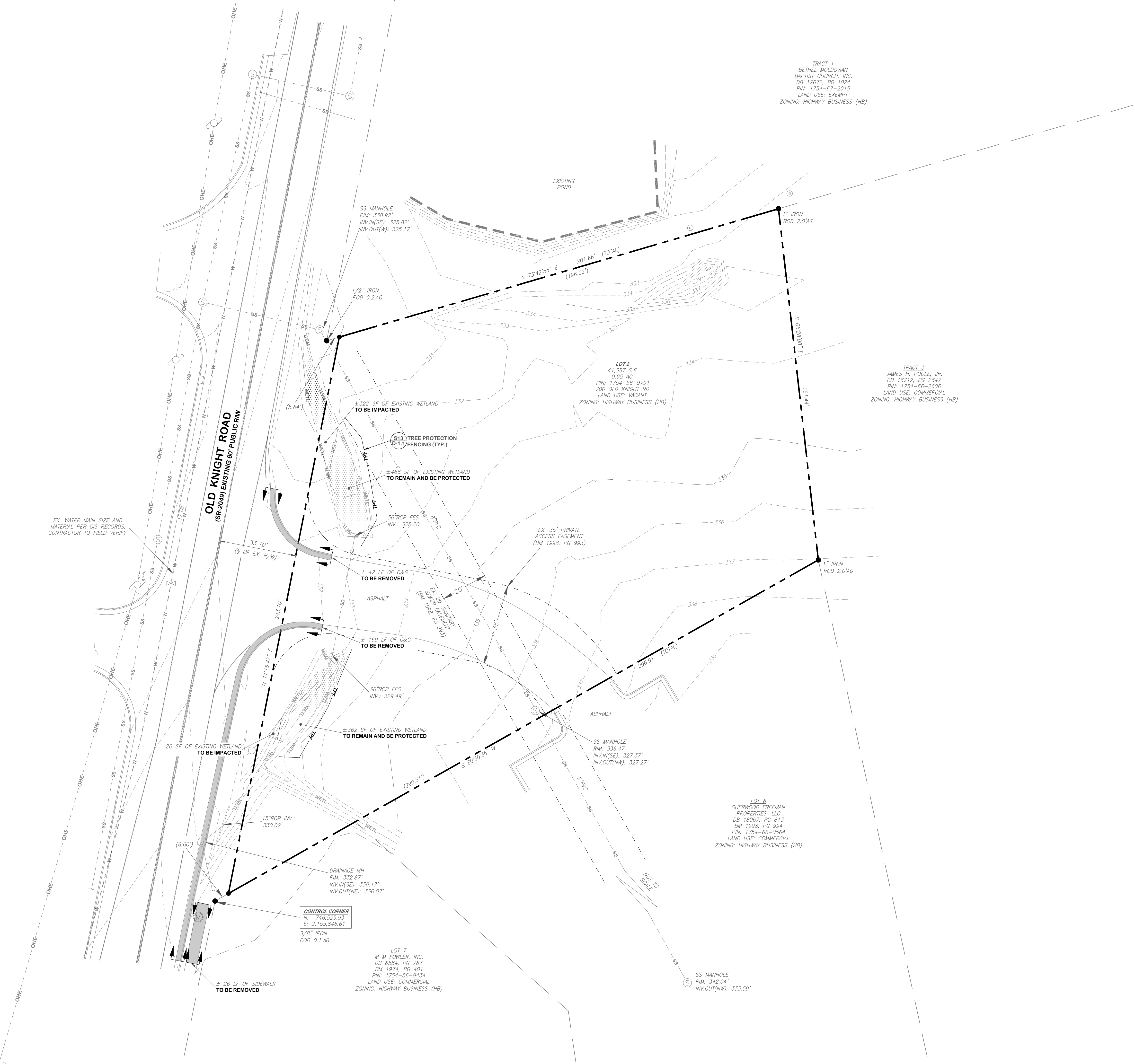
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PROJECT NUMBER
627-22

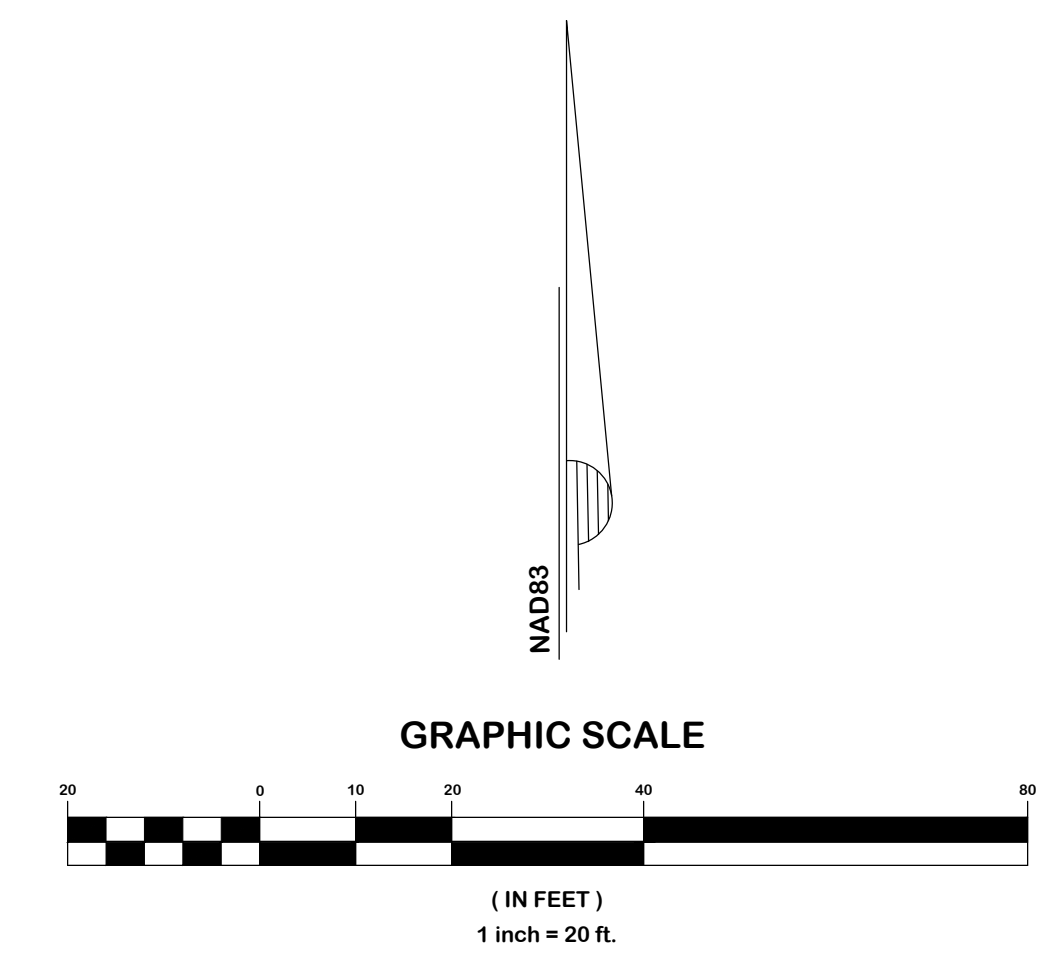
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LANDSCAPE NOTES

1. LANDSCAPED AREAS REQUIRED BY THIS CHAPTER SHALL NOT CONTAIN ANY DEVELOPMENT, IMPERVIOUS SURFACES, OR SITE FEATURES THAT DO NOT FUNCTION TO MEET THE APPLICABLE STANDARDS FOR THAT AREA OR THAT REQUIRE REMOVAL OF EXISTING SIGNIFICANT VEGETATION [UDO SEC. 7.4.E.1].
2. NO GRADING, DEVELOPMENT, OR LAND-DISTURBING ACTIVITIES SHALL OCCUR WITHIN A BUFFER YARD IF FOREST CANOPY, SPECIMEN TREES OR SIGNIFICANT VEGETATION EXISTS WITHIN THESE AREAS, UNLESS APPROVED BY THE LAND USE ADMINISTRATOR. IF GRADING WITHIN A BUFFER YARD IS PROPOSED, SLOPES OF 1:3 OR LESS ARE ENCOURAGED TO ENSURE THE PROPER TRANSITION OF GRADES TO THE ADJACENT PROPERTY AND TO FACILITATE LANDSCAPING AND MAINTENANCE [UDO SEC. 7.4.E.2].



**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

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PAST DESIGN GROUP, PA
Engineering | Consulting
 107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
 Phone: 919 845 4399 | Fax: 919 845 0951 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. 60-205
KNIGHTDALE, NORTH CAROLINA 27645

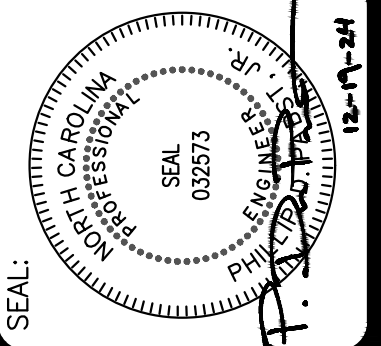
DATE: 06.24.2022

PROJECT ENGINEER:
PJP

PROJECT CADD DESIGNER:
PJP

PROJECT SURVEYOR:
PJP
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
 KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
EXISTING CONDITIONS & DEMOLITION PLAN

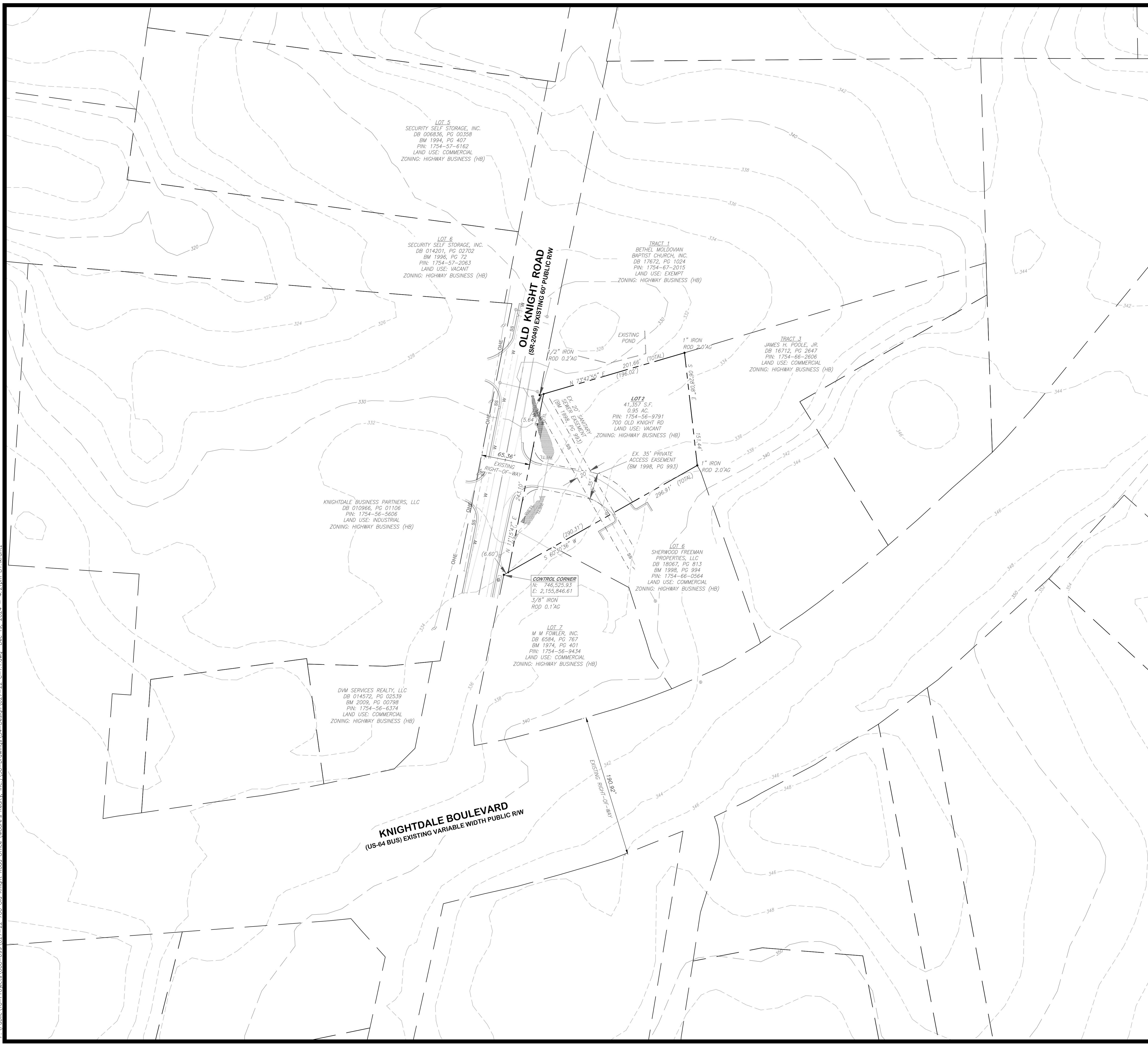


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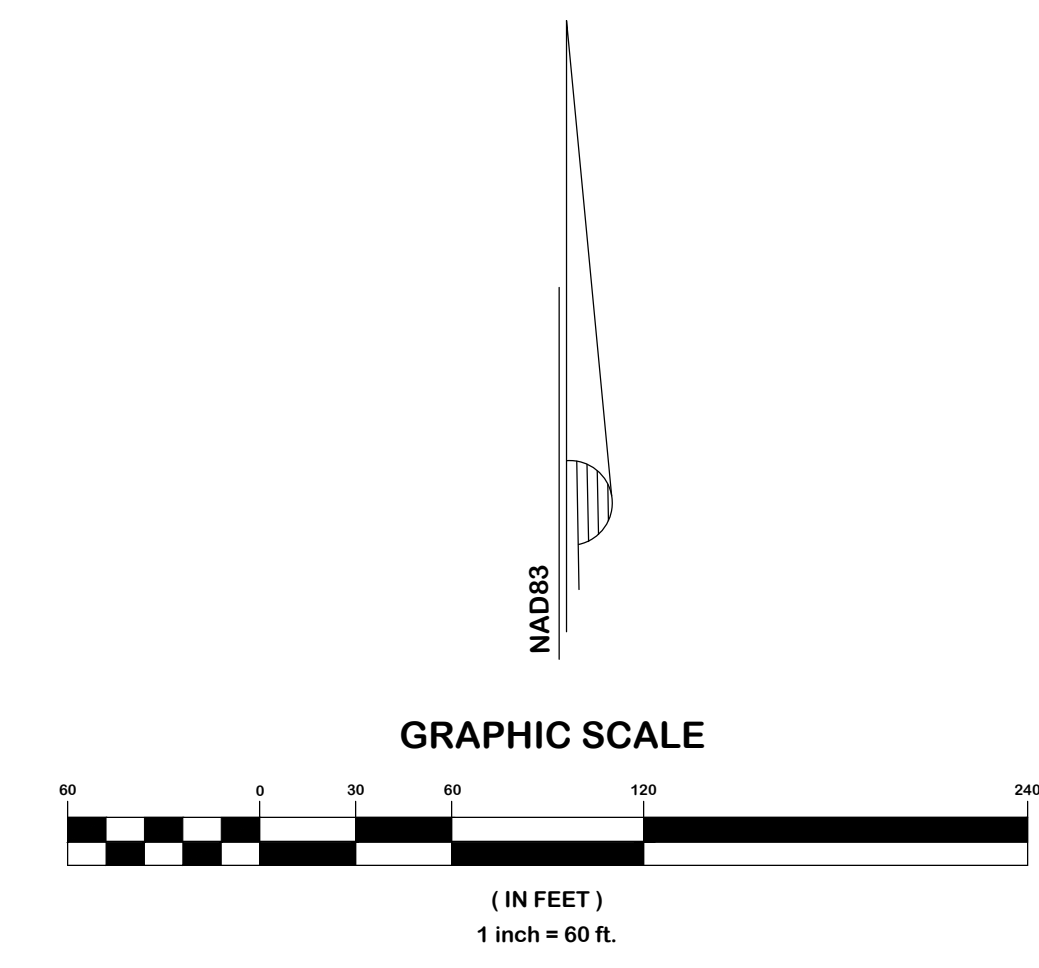
PROJECT NUMBER
627-22

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GENERAL NOTES

- 1. ALL TOPOGRAPHY AND ADJACENT PROPERTY LINES PER GIS RECORDS.



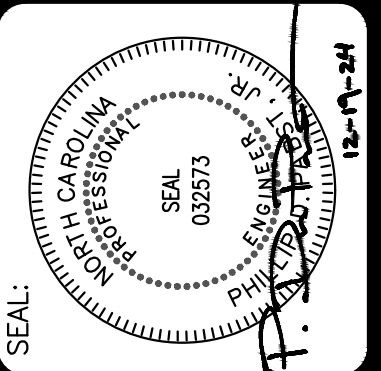
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PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. B-205
KNIGHTDALE, NORTH CAROLINA 27645
DATE: 06.24.2022
PROJECT ENGINEER:
PROJECT CADD DESIGNER:
PROJECT SURVEYOR:
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
EXISTING CONDITIONS PLAN (60 SCALE)



NO.	REVISION	DATE

DRAWING SHEET
C-1.1

PROJECT NUMBER
627-22

LANDSCAPE NOTES

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KEY ITEM	DESCRIPTION	WIDTH
P2 PAINT	WHITE STOP BAR	24"
QF PAINT	WHITE COMBO, LEFT/ RIGHT	
T3 THERMO	WHITE CROSSWALK LINE	
PE PAINT	WHITE SOLID LANE LINE	4"

SIGNS		
	R1-1 MUTCD "STOP" R1-1	REFER TO PLAN

NOTE: ALL SIGNS SHALL USE PRISMATIC SHEETING THAT MEETS MINIMUM RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST EDITION OF THE MUTCD.

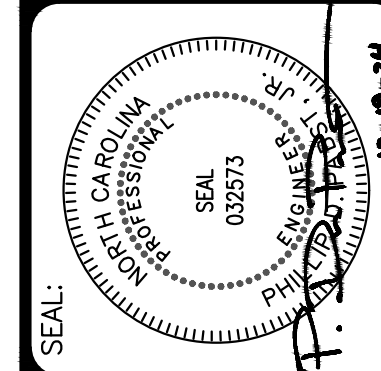
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SITE ADDRESS:	700 OLD KNIGHT ROAD KNIGHTDALE, NORTH CAROLINA 27545
OWNER/APPLICANT:	JACKIE MOORE, MOORE'S REALTY, INC. 623 NOON FLYER WAY KNIGHTDALE, NORTH CAROLINA 27545
ENGINEER:	PABST DESIGN GROUP, PA 107 FAYETTEVILLE STREET, SUITE 200 RALEIGH, NC 27601 919.848.4399
DEED/PAGE:	DB 019200 PG 01486
PIN(S):	1754-56-9791
EXISTING ZONING DISTRICT:	HIGHWAY BUSINESS (HB)
EXISTING LAND USE:	VACANT
PROPOSED LAND USE:	OFFICE, PROFESSIONAL SERVICES
PARCEL AREA:	TOTAL BEFORE RW DEDICATION: 41,357 SF (0.949 AC) TOTAL AFTER RW DEDICATION: 39,089 SF (0.897 AC)
RIVERBASIN:	NEUSE
WATERSHED:	LOWER NEUSE RIVER
FLOODPLAIN DATA:	NO PORTION OF THE PROPERTY IS LOCATED WITHIN SPECIAL FLOOD HAZARD ZONE PER INSURANCE RATE MAP (RATE MAP 3720175400K DATED JULY 19, 2022)
PRE-DEVELOPED IMPERVIOUS:	ONSITE: ±0.08 ACRES (3,568 SF) OFFSITE: ±0.04 ACRES (1,787 SF) TOTAL: ±0.12 ACRES (5,355 SF)
POST-DEVELOPED IMPERVIOUS:	ONSITE: ±0.52 ACRES (22,541 SF) OFFSITE: ±0.13 ACRES (5,632 SF) TOTAL: ±0.65 ACRES (28,173 SF)
PROPOSED LAND DISTURBANCE:	±1.19 ACRES (51,969 SF)
PROPOSED BUILDING TYPE:	OFFICE, PROFESSIONAL SERVICES
PRINCIPAL BUILDING SETBACKS:	REAR SETBACK: 0' (MIN) SIDE SETBACK: 6' (MIN) FRONT SETBACK: 10' - 78' (MIN - MAX) (PER VARIANCE BK019337PG01398)
PARKING SETBACKS:	FRONT YARD: PROHIBITED SIDE YARD: 0' (MIN) REAR YARD: 5' (MIN)
BUILDING FLOOR AREA:	EXISTING = 0 GFA PROPOSED = 7,000 GFA
BUILDING HEIGHT:	MAX. BUILDING HEIGHT: 70'-0" (5 STORIES) PROPOSED BUILDING HEIGHT: 28'-8" (1 STORY)
MINIMUM PARKING REQUIREMENTS:	PROFESSIONAL SERVICES: MAXIMUM = 4 SPACES PER 1,000 SF GFA (28 SPACES); MINIMUM = 1/2 MAX (14 SPACES)
	TOTAL REQUIRED: 14 SPACES TOTAL PROVIDED: 14 SPACES (INCLUDING 1 ADA VAN SPACE)
	EV PARKING: MINIMUM = 2 EV CHARGING STATIONS FOR NON-RESIDENTIAL USE WITH OFF-STREET PARKING FOR MOTORIZED VEHICLES
	TOTAL REQUIRED: 2 EV CHARGING STATIONS TOTAL PROVIDED: 2 EV CHARGING STATIONS
	BICYCLE PARKING: MINIMUM = 2 SPACES FOR NON-RESIDENTIAL USE WITH OFF-STREET PARKING FOR MOTORIZED VEHICLES
	TOTAL REQUIRED: 2 SPACES TOTAL PROVIDED: 2 SPACES (1 BICYCLE RACK)
PUBLIC GATHERING SPACE:	1 SF / 25 SF GFA (REQUIRED) (1/25)*7000 SF = 280 SF 1,320 SF (PROVIDED)

PABST DESIGN GROUP, PA
Engineering | Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 848 4399 | Fax: 919 948 0951 | NC LICENSE NUMBER: C-3311

PREPARED FOR: MOORE'S REALTY, INC. 101 FOREST DRIVE, STE. 205 KNIGHTDALE, NORTH CAROLINA 27545
DATE: 06.24.2022
PROJECT ENGINEER: PABST DESIGN GROUP, PA
PROJECT CADD DESIGNER: PABST DESIGN GROUP, PA
PROJECT SURVEYOR: PABST DESIGN GROUP, PA
WAKE COUNTY, NC

**700 OLD KNIGHT ROAD OFFICE BUILDING
MASTER PLAN
SITE LAYOUT PLAN**

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA



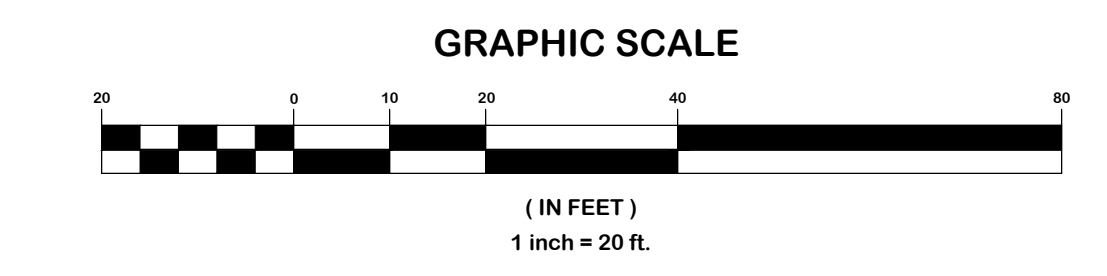
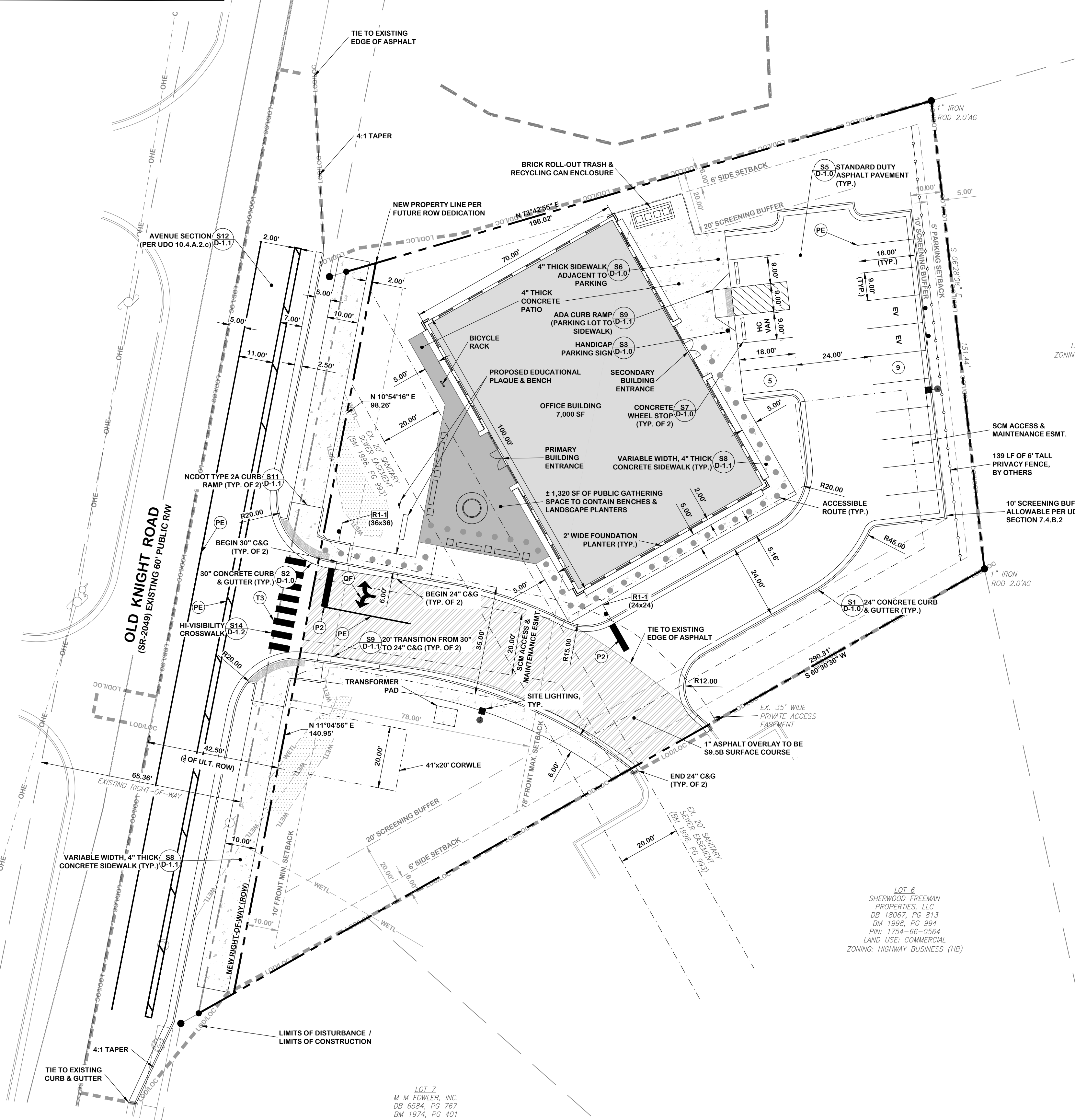
NO.	REVISION	DATE

DRAWING SHEET
C-2.0

PROJECT NUMBER
627-22

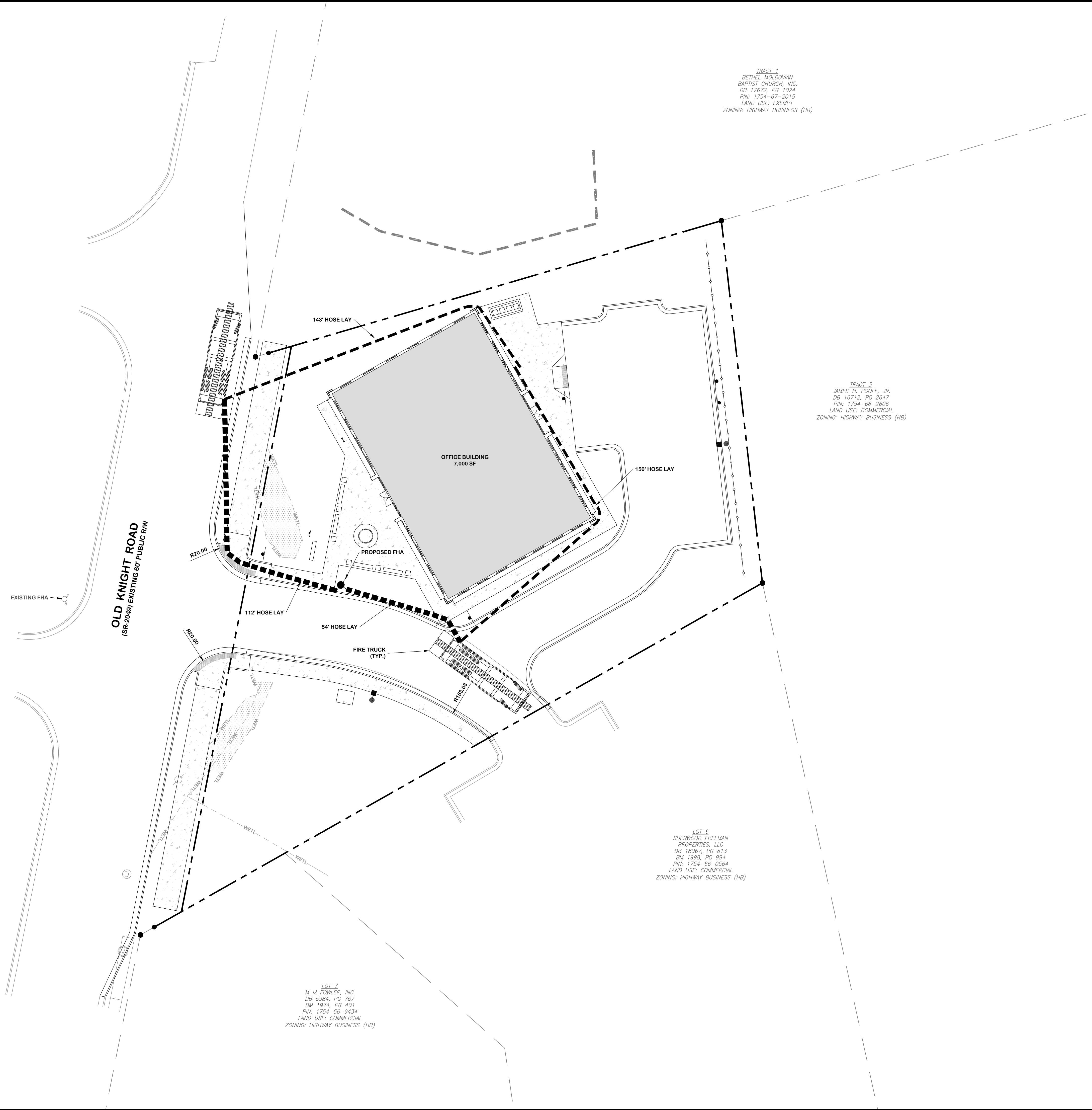
**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.



C:\Public\10-Projects\600-699\627-22_700_Old_Knight_Road_Office_Moore's_Realty_Inc.\50-Drawings\4-Design\627-22_C-2.0.dwg, Dec 19, 2024, 4:22pm, BTK/krantz

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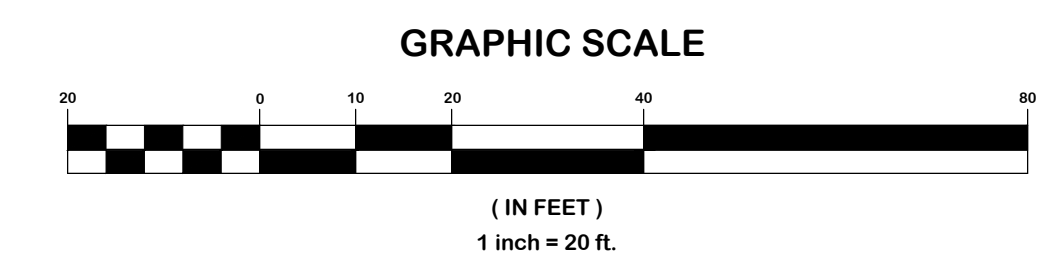


TRACT 1
BETHEL MOLDOVAN
BAPTIST CHURCH, INC.
DB 17672, PG 1024
PIN: 1754-67-2015
LAND USE: EXEMPT
ZONING: HIGHWAY BUSINESS (HB)

TRACT 3
JAMES H. POOLE, JR.
DB 16712, PG 2647
PIN: 1754-66-2806
LAND USE: COMMERCIAL
ZONING: HIGHWAY BUSINESS (HB)

LOT 6
SHERWOOD FREEDMAN
PROPERTIES, LLC
DB 18067, PG 813
BM 1998, PG 994
PIN: 1754-66-0594
LAND USE: COMMERCIAL
ZONING: HIGHWAY BUSINESS (HB)

LOT 7
M. M. FOWLER, INC.
DB 6584, PG 767
BM 1974, PG 401
PIN: 1754-56-9434
LAND USE: COMMERCIAL
ZONING: HIGHWAY BUSINESS (HB)



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PAST DESIGN GROUP, PA
Engineering | Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 843 4399 | Fax: 919 846 8951 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. B-205
KNIGHTDALE, NORTH CAROLINA 27545

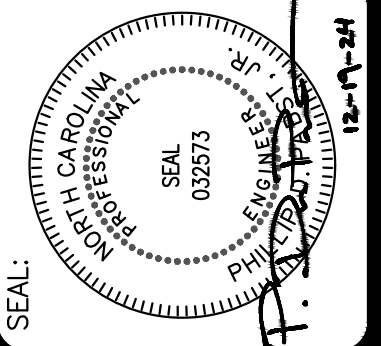
DATE: 06.24.2022

PROJECT ENGINEER:
PJP

PROJECT CADD DESIGNER:
PJP

PROJECT SURVEYOR:
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
FIRE APPARATUS ACCESS PLAN

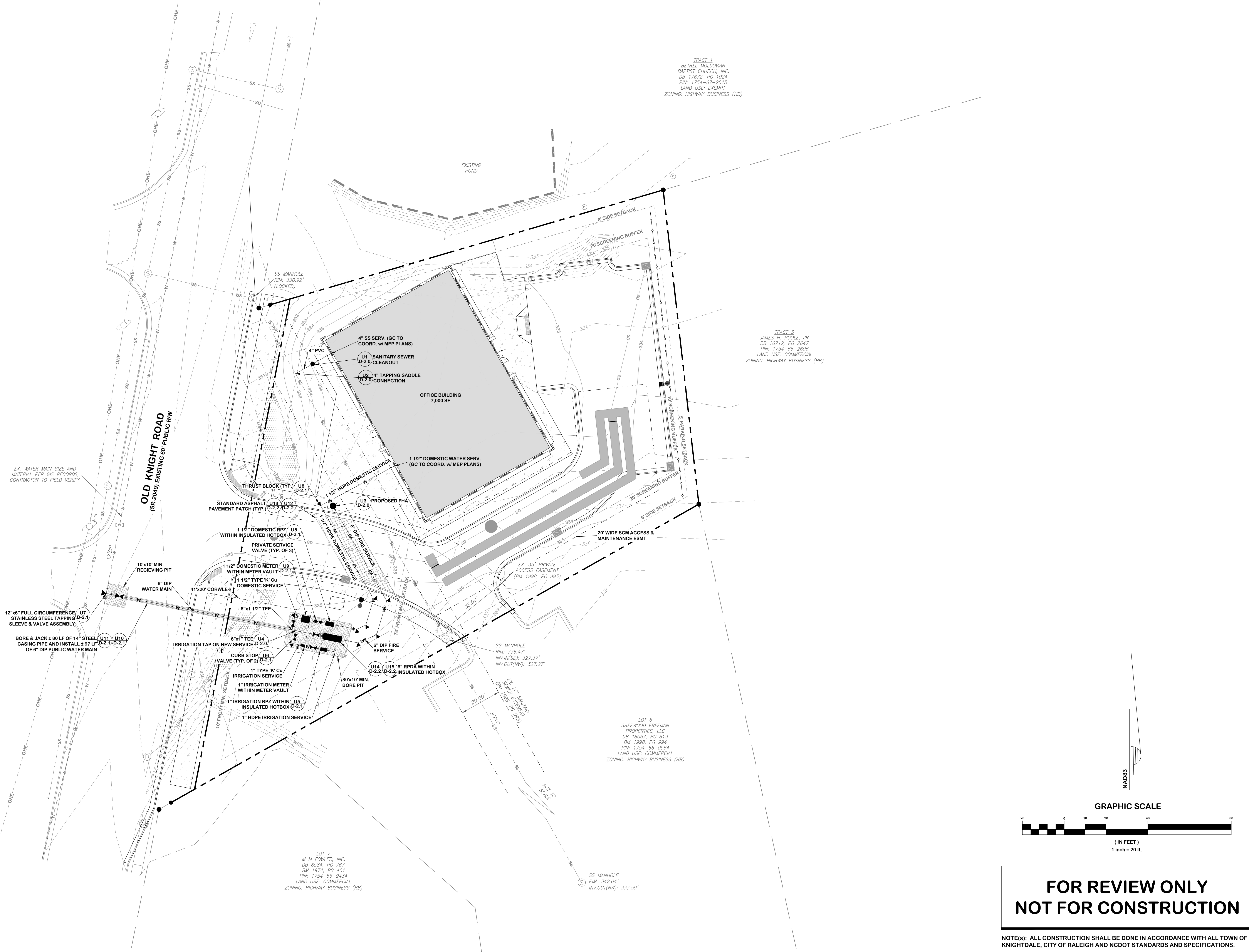


NO.	REVISION	DATE

DRAWING SHEET
C-2.1

PROJECT NUMBER
627-22

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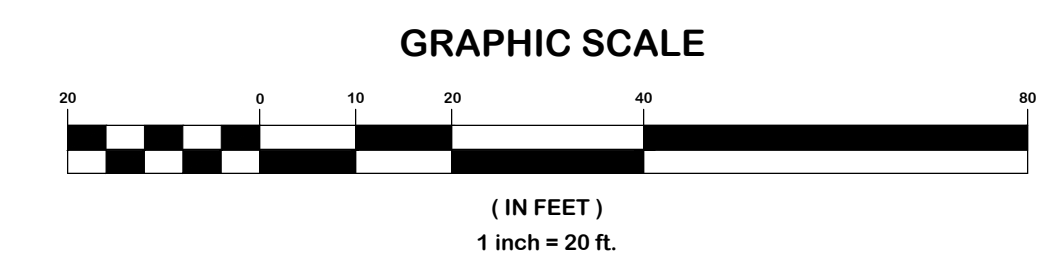


TRACT 1
 BETHEL MOLDOVAN
 BAPTIST CHURCH, INC.
 DB 17672, PG 1024
 PIN: 1754-67-2015
 LAND USE: EXEMPT
 ZONING: HIGHWAY BUSINESS (HB)

TRACT 3
 JAMES H. POOLE, JR.
 DB 16712, PG 2647
 PIN: 1754-66-2606
 LAND USE: COMMERCIAL
 ZONING: HIGHWAY BUSINESS (HB)

LOT 6
 SHERWOOD FREEMAN
 PROPERTIES, LLC
 DB 18067, PG 813
 BM 1998, PG 994
 PIN: 1754-66-0564
 LAND USE: COMMERCIAL
 ZONING: HIGHWAY BUSINESS (HB)

LOT 2
 M. M. FOWLER, INC.
 DB 6584, PG 767
 BM 1974, PG 401
 PIN: 1754-56-9434
 LAND USE: COMMERCIAL
 ZONING: HIGHWAY BUSINESS (HB)



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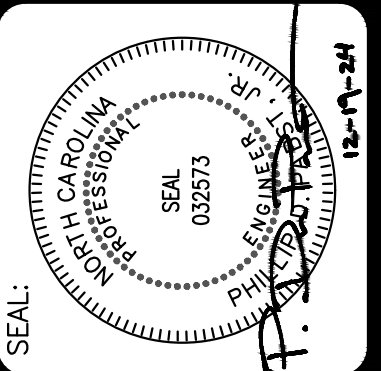
NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

PAST DESIGN GROUP, PA
 Engineering | Consulting
 107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
 Phone: 919 848 4399 | Fax: 919 848 4395 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
 MOORE'S REALTY, INC.
 101 FOREST DRIVE, STE. 50-205
 KNIGHTDALE, NORTH CAROLINA 27645

DATE: 06.24.2022
 PROJECT ENGINEER:
 PJP
 PROJECT CADD DESIGNER:
 PJP
 PROJECT SURVEYOR:
 PJP
 WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
 KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
**MASTER PLAN
 UTILITY PLAN**

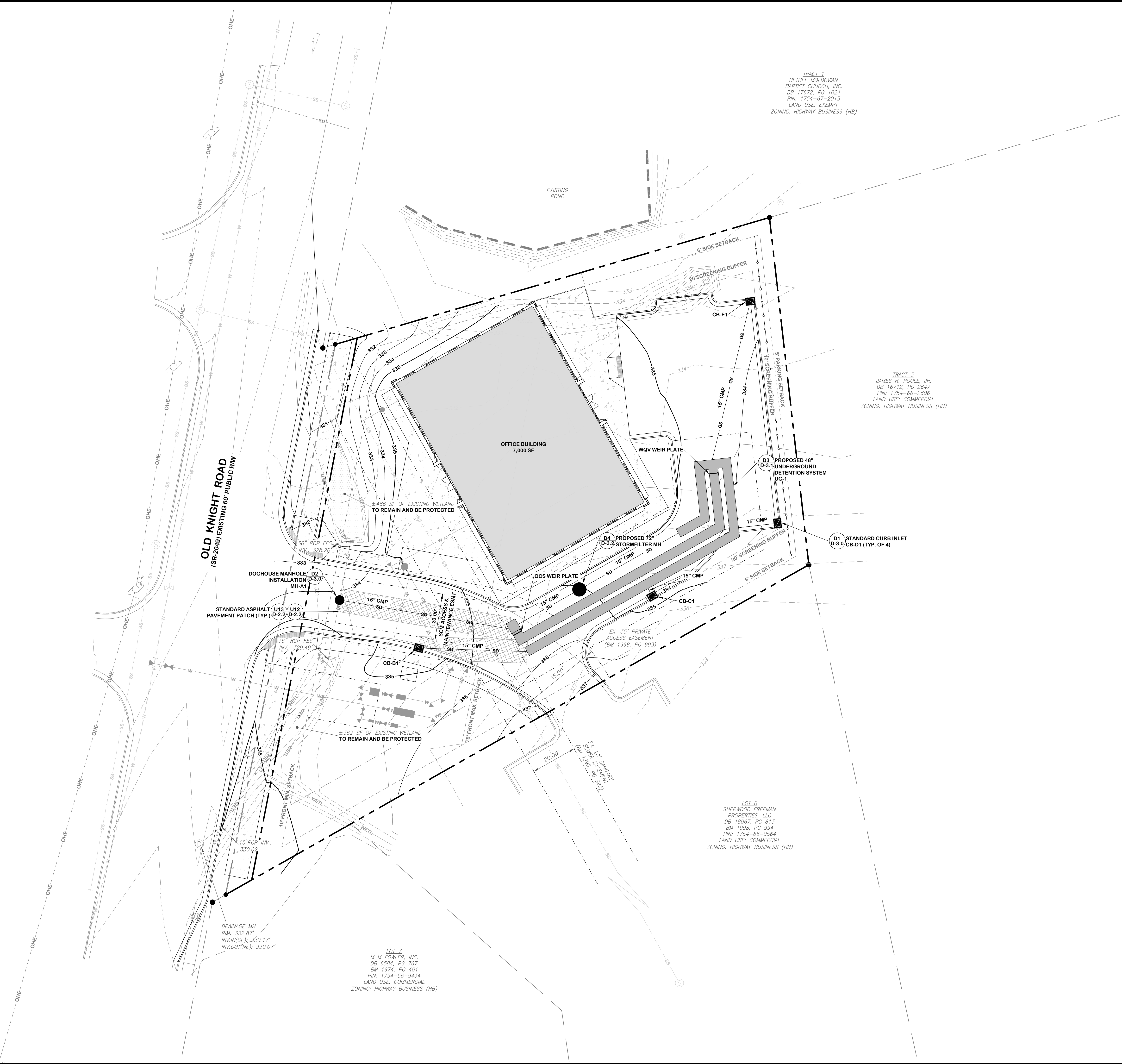


NO.	REVISION	DATE

**DRAWING SHEET
 C-3.0**

**PROJECT NUMBER
 627-22**

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TRACT 1
 BETHEL MOLDOVAN
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 DB 17872, PG 1024
 PIN: 1784-67-2015
 LAND USE: EXEMPT
 ZONING: HIGHWAY BUSINESS (HB)

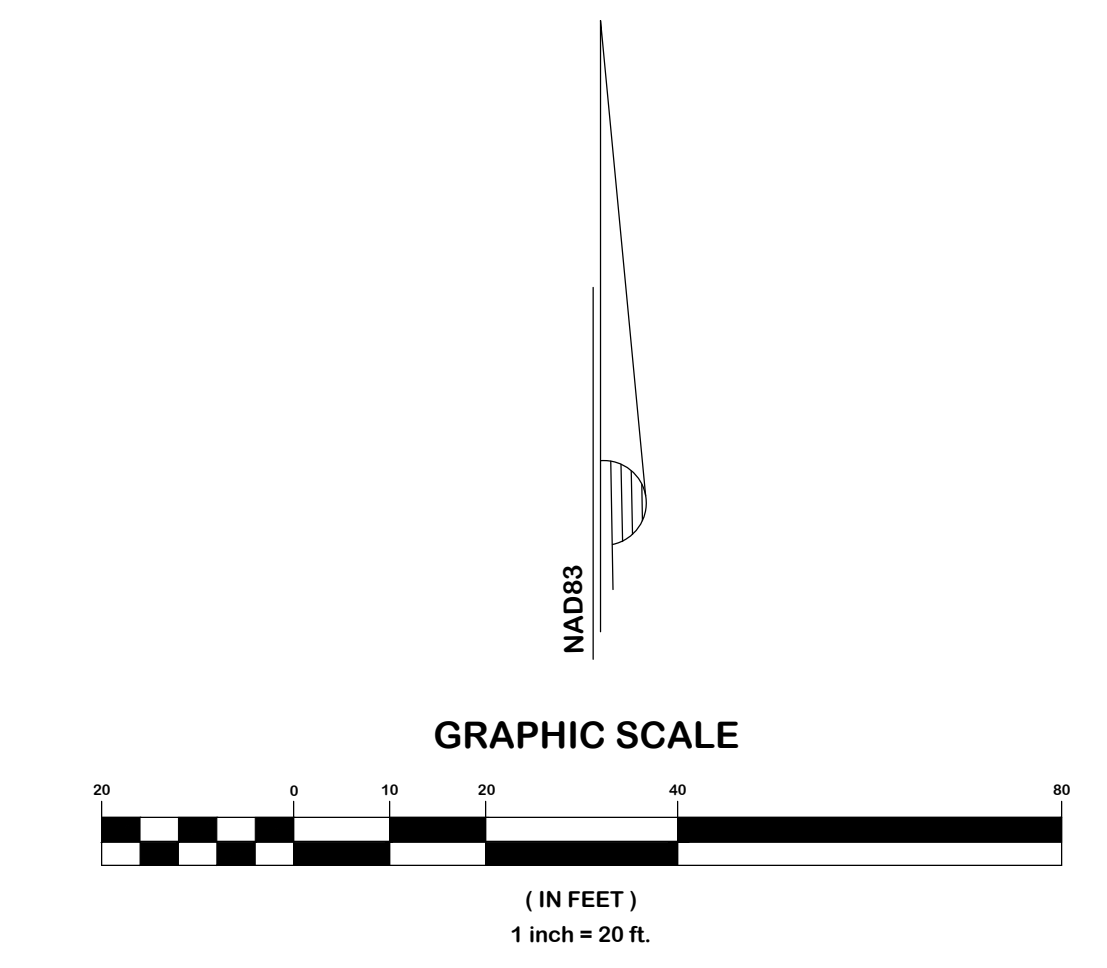
TRACT 3
 JAMES H. POOLE, JR.
 DB 16712, PG 2647
 PIN: 1784-66-2606
 LAND USE: COMMERCIAL
 ZONING: HIGHWAY BUSINESS (HB)

LOT 6
 SHERWOOD FREEMAN
 PROPERTIES, LLC
 DB 18067, PG 813
 BM 1998, PG 994
 PIN: 1784-66-0364
 LAND USE: COMMERCIAL
 ZONING: HIGHWAY BUSINESS (HB)

LOT 7
 M. M. FOWLER, INC.
 DB 6384, PG 767
 BM 1974, PG 401
 PIN: 1784-56-9434
 LAND USE: COMMERCIAL
 ZONING: HIGHWAY BUSINESS (HB)

LANDSCAPE NOTES

1. LANDSCAPED AREAS REQUIRED BY THIS CHAPTER SHALL NOT CONTAIN ANY DEVELOPMENT, IMPERVIOUS SURFACES, OR SITE FEATURES THAT DO NOT FUNCTION TO MEET THE APPLICABLE STANDARDS FOR THAT AREA OR THAT REQUIRE REMOVAL OF EXISTING SIGNIFICANT VEGETATION [UDO SEC. 7.4.E.1].
2. NO GRADING, DEVELOPMENT, OR LAND-DISTURBING ACTIVITIES SHALL OCCUR WITHIN A BUFFER YARD IF FOREST CANOPY, SPECIMEN TREES OR SIGNIFICANT VEGETATION EXISTS WITHIN THESE AREAS, UNLESS APPROVED BY THE LAND USE ADMINISTRATOR. IF GRADING WITHIN A BUFFER YARD IS PROPOSED, SLOPES OF 1:3 OR LESS ARE ENCOURAGED TO ENSURE THE PROPER TRANSITION OF GRADES TO THE ADJACENT PROPERTY AND TO FACILITATE LANDSCAPING AND MAINTENANCE [UDO SEC. 7.4.E.2].



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PAST DESIGN GROUP, PA
 Engineering | Consulting
 107 Fayetteville Street, Suite 300, Raleigh, North Carolina 27601
 Phone: 919 845 4399 | Fax: 919 845 0351 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
 MOORE'S REALTY, INC.
 101 FOREST DRIVE, STE. 80-205
 KNIGHTDALE, NORTH CAROLINA 27645

DATE: 06.24.2022

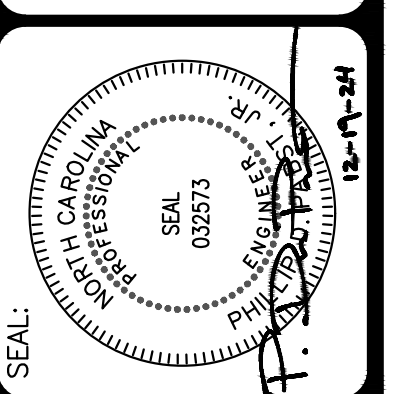
PROJECT ENGINEER:
 PJP

PROJECT CADD DESIGNER:
 PJP

PROJECT SURVEYOR:
 PJP

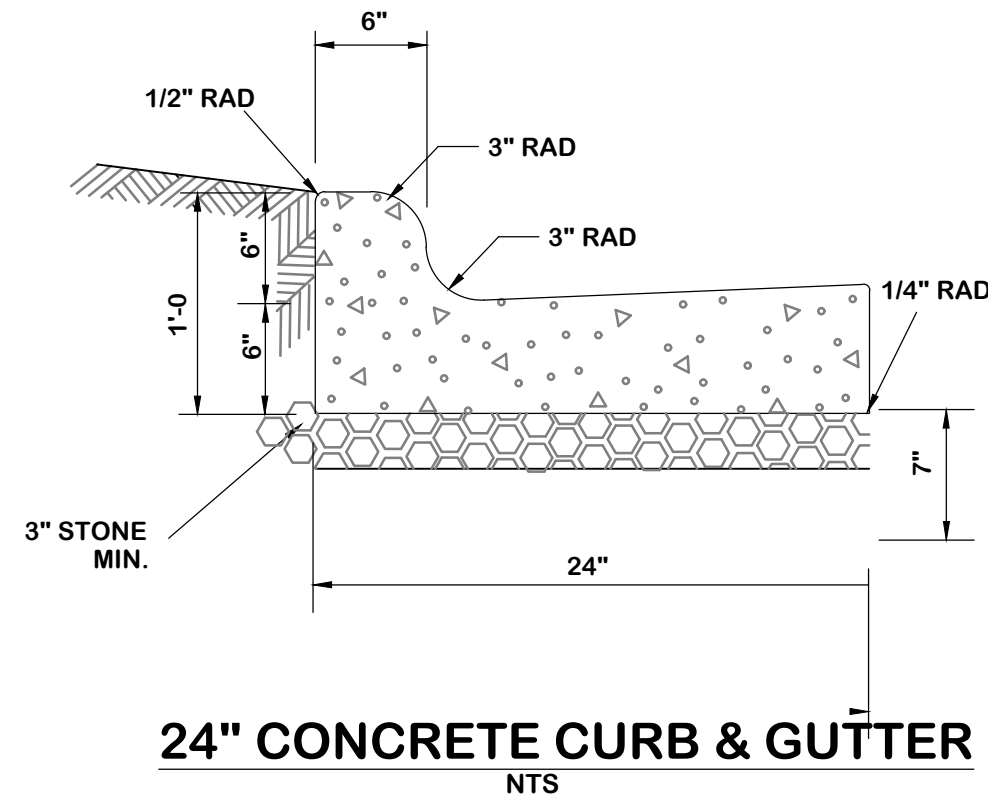
PROJECT COUNTY:
 WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
 KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
GRADING & STORM DRAINAGE PLAN

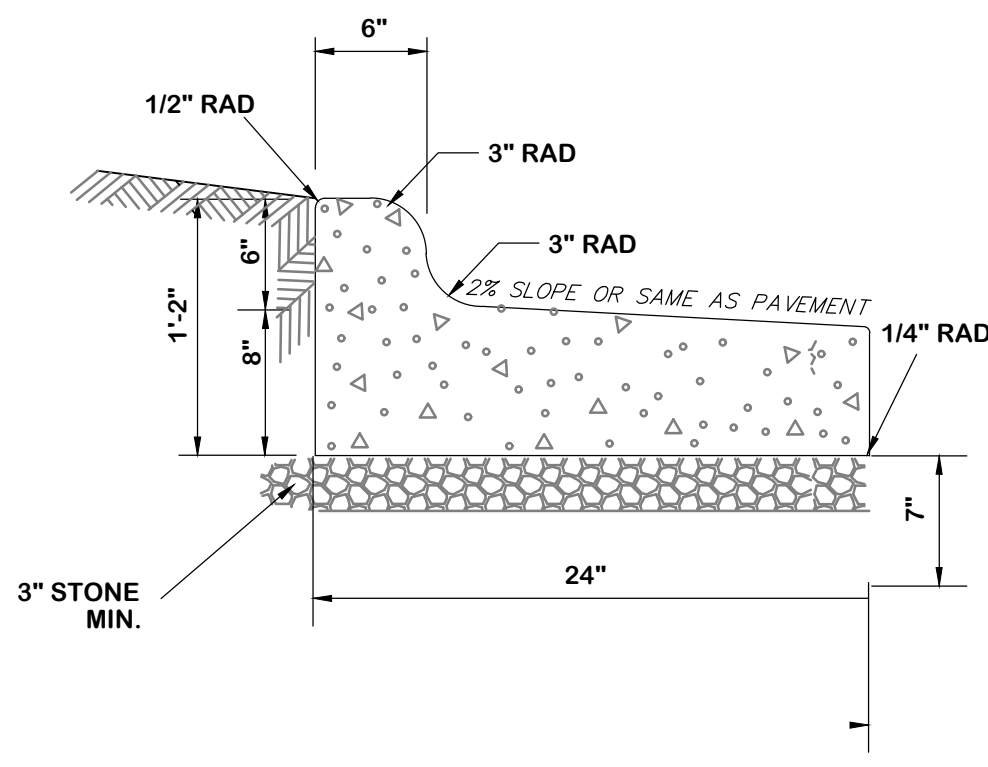


NO.	REVISION	DATE

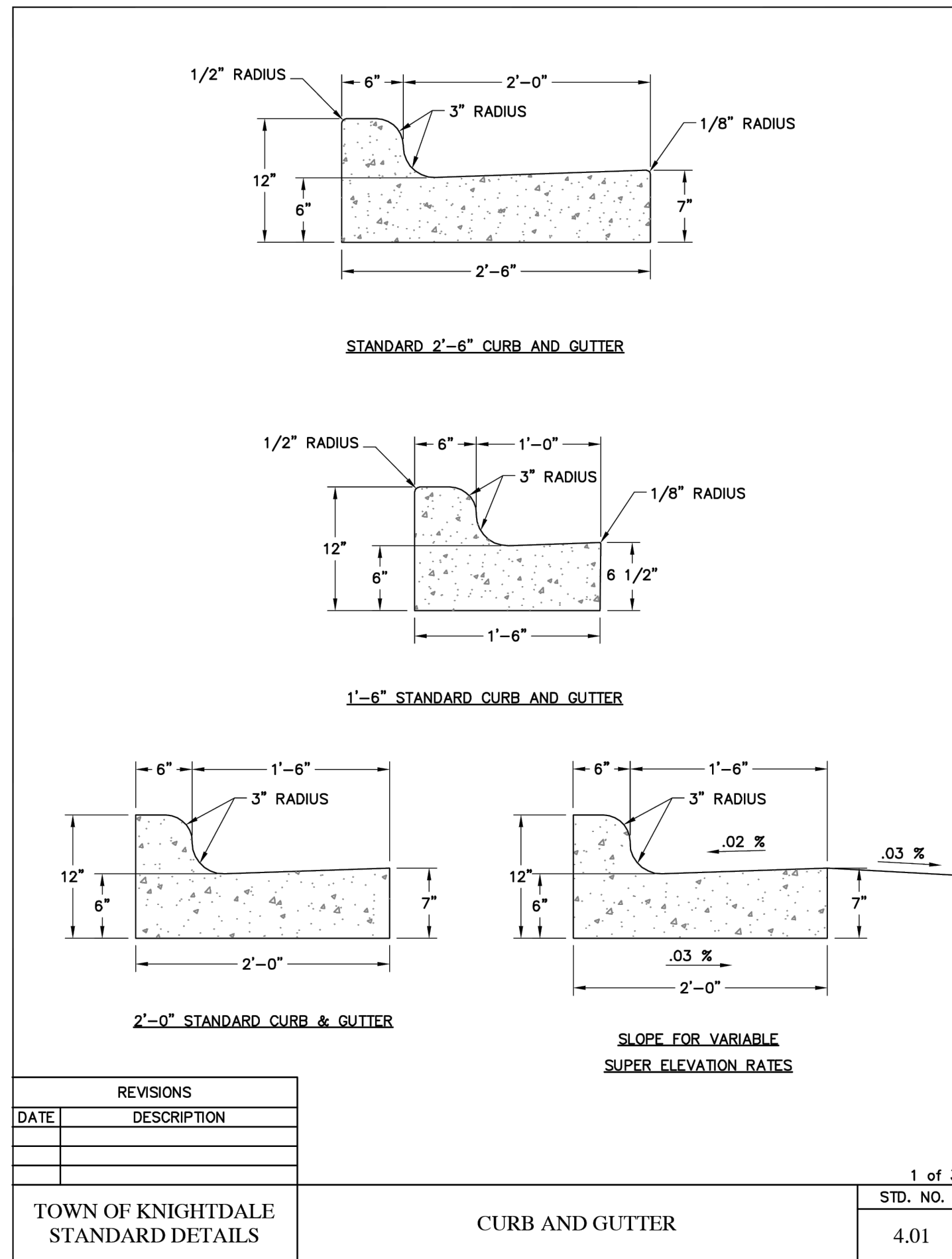
DRAWING SHEET
C-4.0
 PROJECT NUMBER
627-22



24" CONCRETE CURB & GUTTER
NTS



S1 24" CURB AND GUTTER

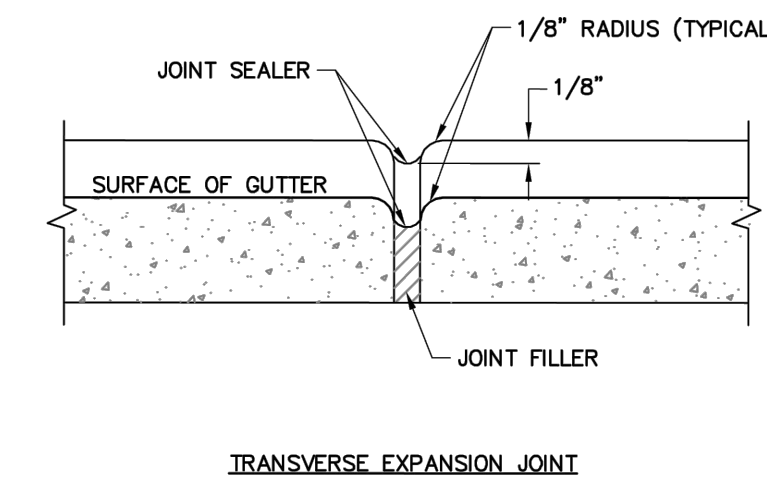


REVISIONS		1 of 3
DATE	DESCRIPTION	STD. NO.
		4.01

TOWN OF KNIGHTDALE
STANDARD DETAILS

CURB AND GUTTER

S2 30" CURB AND GUTTER



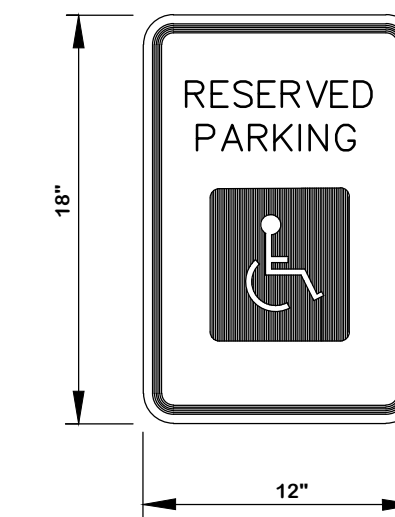
TRANSVERSE EXPANSION JOINT

- NOTES:**
- CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
 - CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED.
 - ALL EXPANSION JOINTS SHALL BE SPACED AT 90-FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK.
 - CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI IN 28 DAYS.
 - CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
 - TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.

REVISIONS		3 of 3
DATE	DESCRIPTION	STD. NO.
		4.01

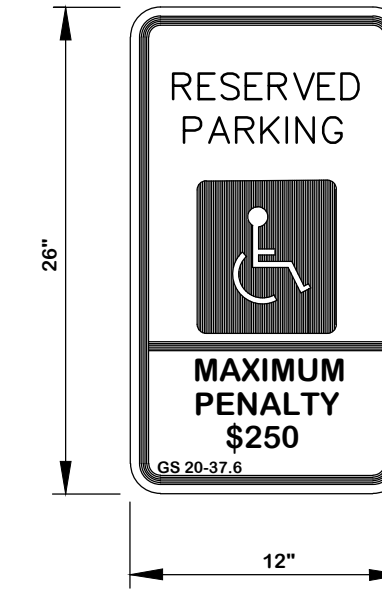
TOWN OF KNIGHTDALE
STANDARD DETAILS

CURB AND GUTTER



SIGN R7-8
SIGN APPROVED FOR USE UNDER GENERAL STATUTE 20-37.6

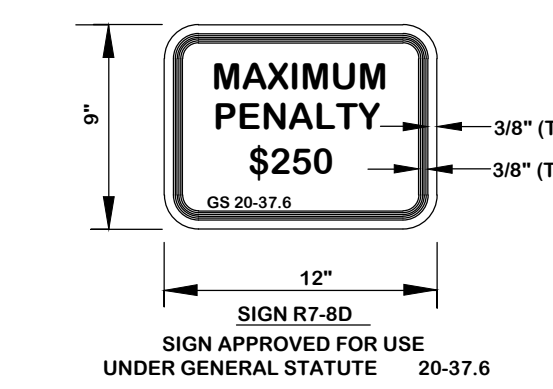
STANDARD COLORS (ALL SIGNS):
BACKGROUND - WHITE
LETTERING/BORDER - GREEN
ARROW - GREEN
FIGURE - WHITE ON BLUE FIELD
CORNER RADIUS - 1/12" (TYPICAL)



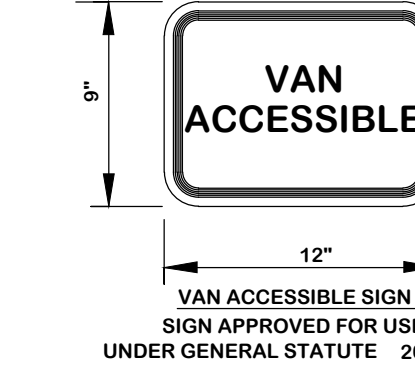
SIGN R7-8E
THIS SIGN MAY BE USED IN PLACE OF SIGNS R7-8/R7-8D

GENERAL NOTES:

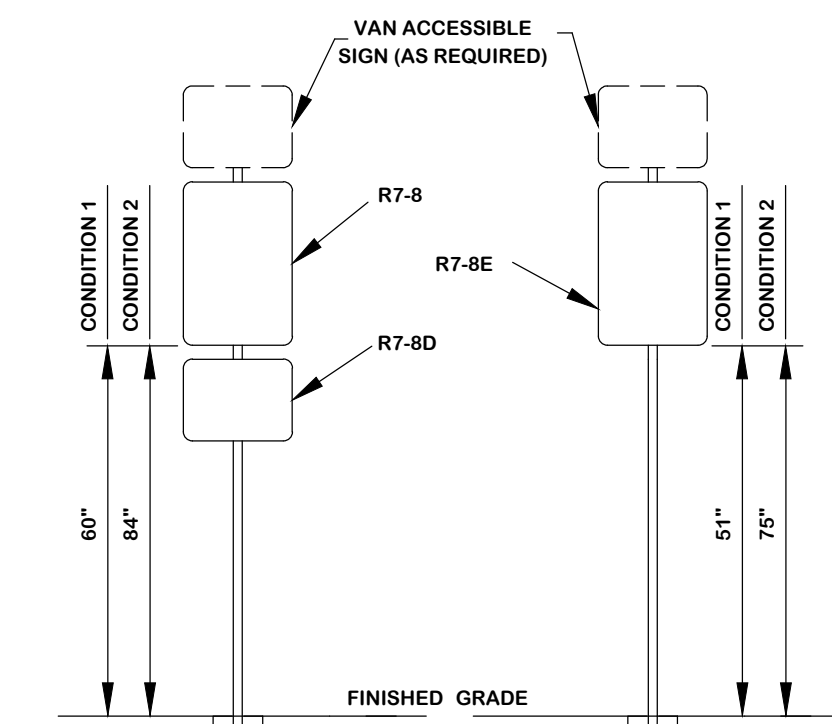
- REGARDLESS OF AGE, ALL ACCESSIBLE SPACES SHALL BE IDENTIFIED BY ABOVE-GROUND SIGNS ONLY. (SEE N.C.G.S.)
- NEW SPACES SHALL NOT USE GROUND-PAINTED SYMBOLS.
- ACCESSIBLE SPACES ARE REQUIRED TO BE STRIPED OFF ONLY; BLUE COLORING IS NOT NECESSARY NOR REQUIRED.
- STRIPING IS WHITE ON DARK PAVEMENT; BLACK ON LIGHT PAVEMENT. (N.C.D.O.T.)



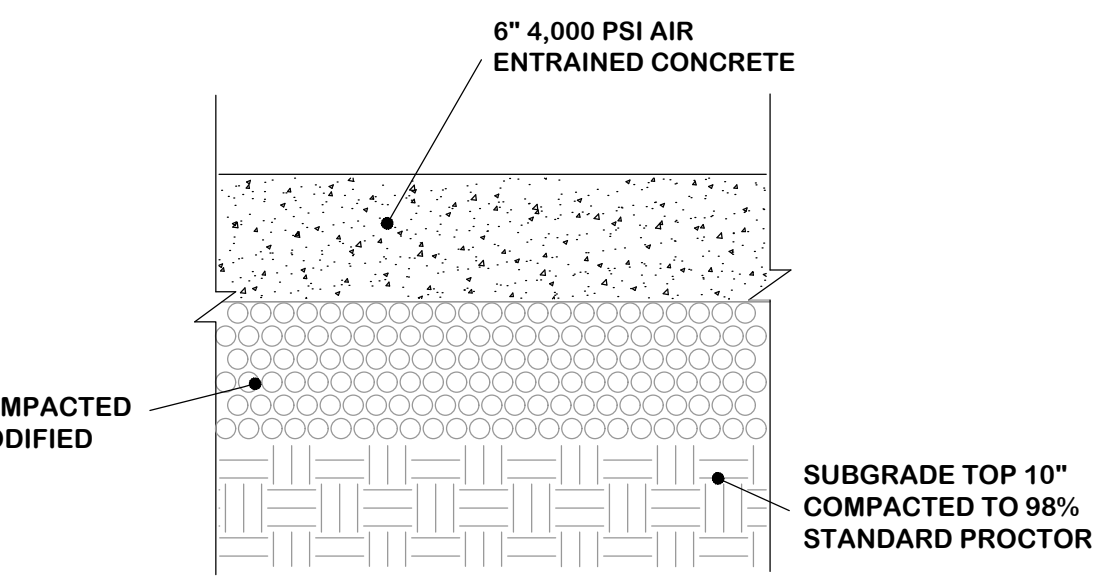
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SIGN APPROVED FOR USE UNDER GENERAL STATUTE 20-37.6



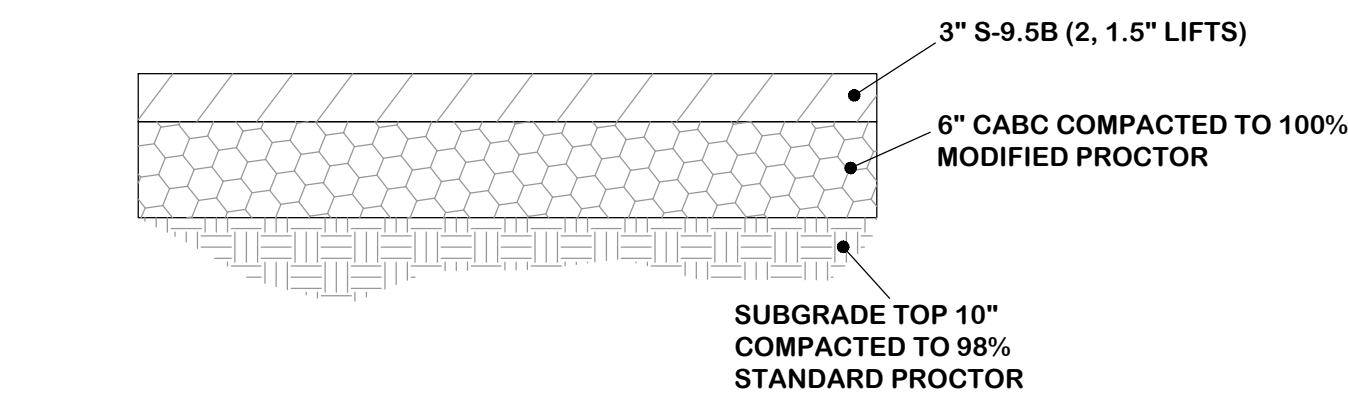
VAN ACCESSIBLE SIGN
SIGN APPROVED FOR USE UNDER GENERAL STATUTE 20-37.6



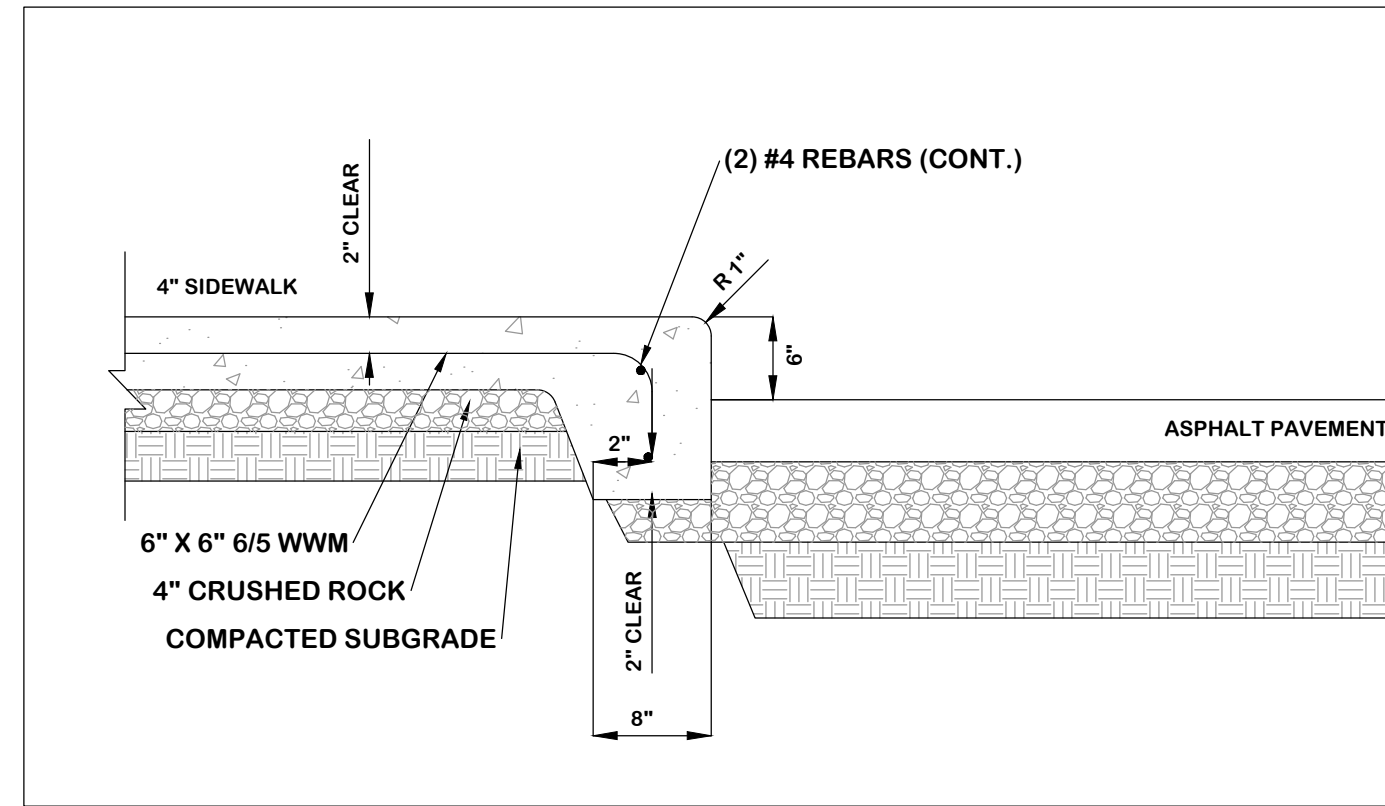
S3 ADA HANDICAP PARKING SIGN



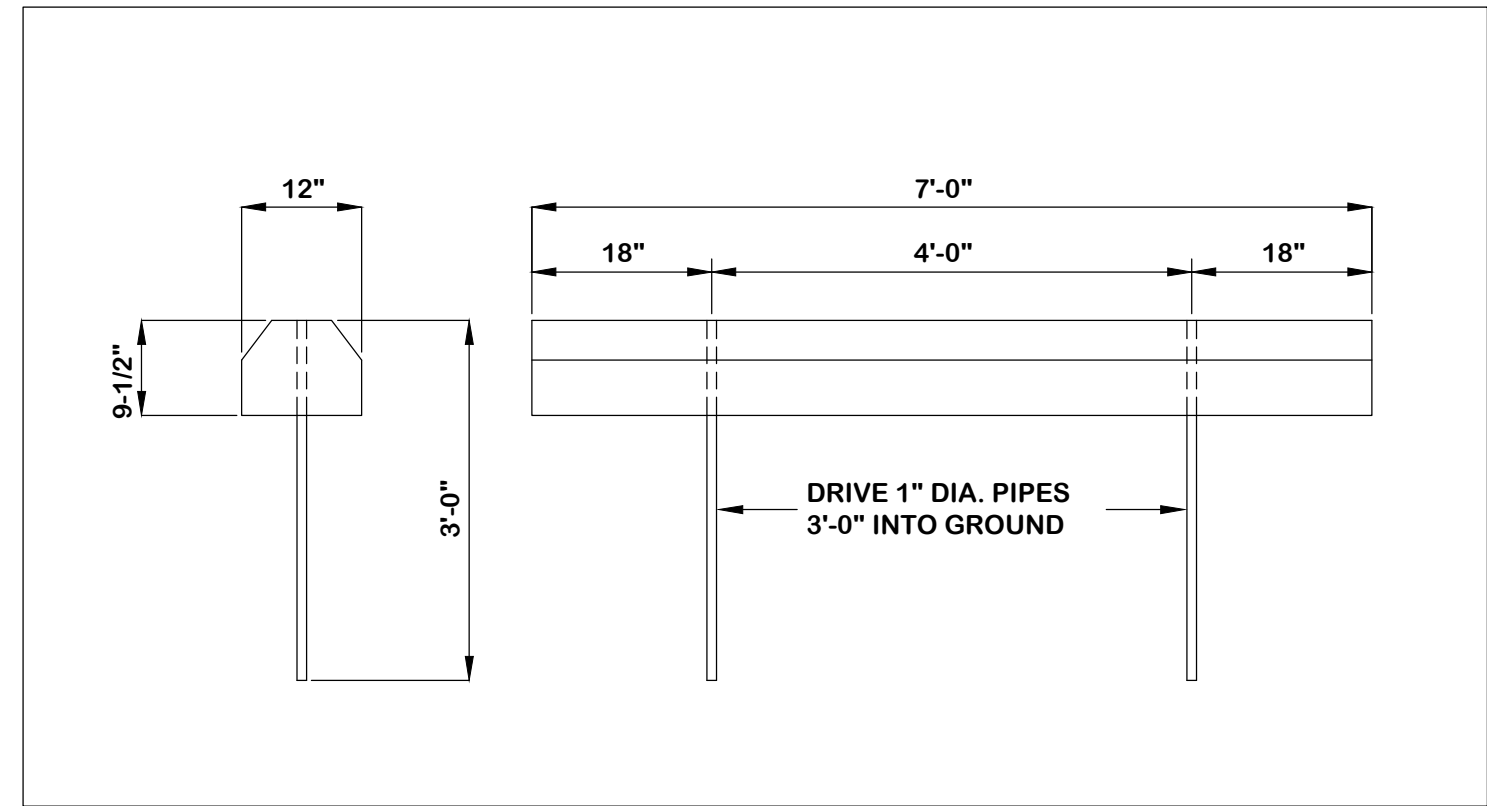
S4 CONCRETE PAVEMENT SECTION
PAVEMENT SECTION IS FOR REFERENCE ONLY. REFER TO GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT FOR PAVEMENT SECTION REQUIREMENTS



S5 STANDARD DUTY - ASPHALT PAVEMENT SECTION
PAVEMENT SECTION IS FOR REFERENCE ONLY. REFER TO GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT FOR PAVEMENT SECTION REQUIREMENTS



S6 SIDEWALK ADJACENT TO PARKING

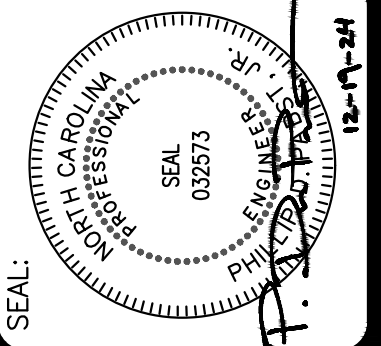


S7 CONCRETE WHEEL STOP

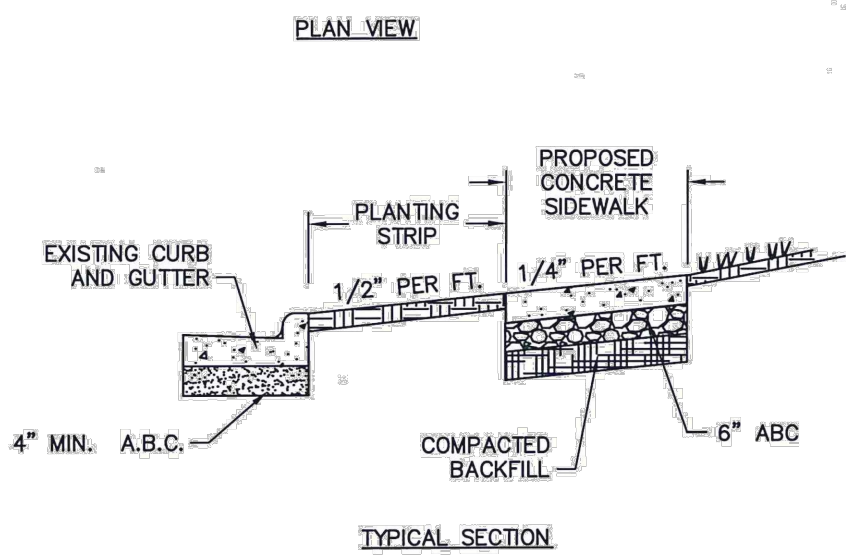
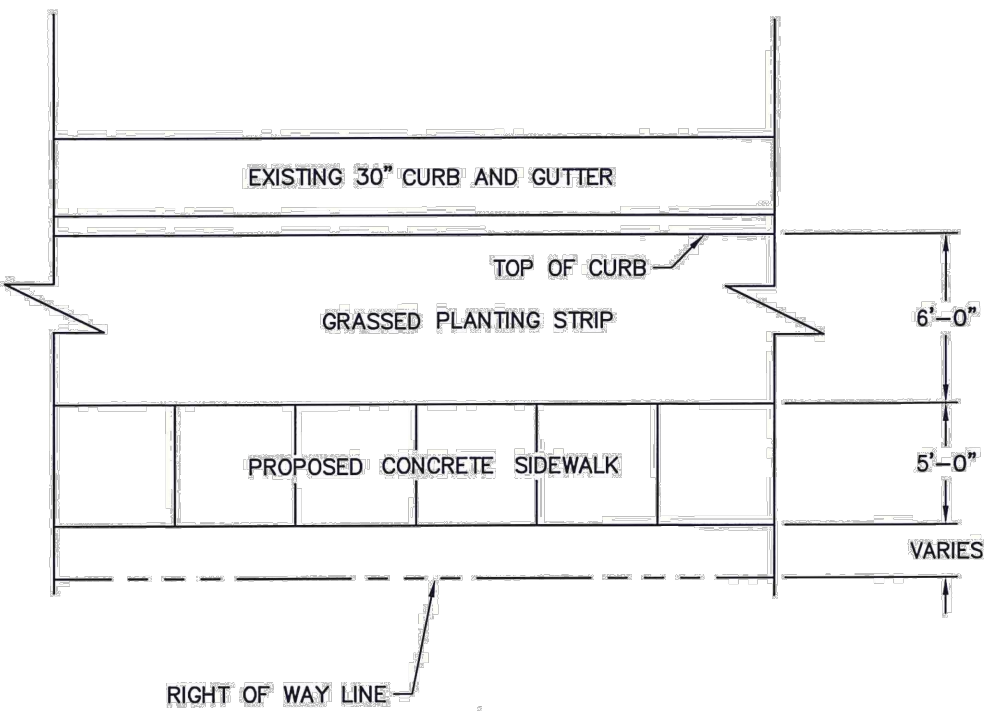
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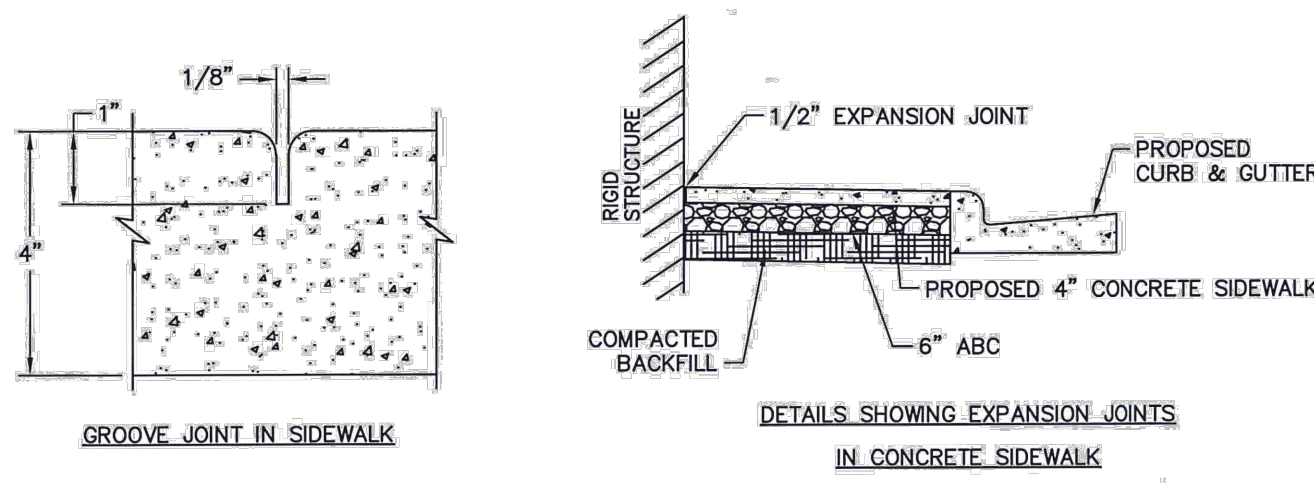
NO.	REVISION	DATE



- NOTES:**
1. TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET APART.
 2. CONTROL JOINTS TO BE AT 5 FEET O.C.
 3. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.

REVISIONS	DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	CONCRETE SIDEWALKS	STD. NO. 4.04-1
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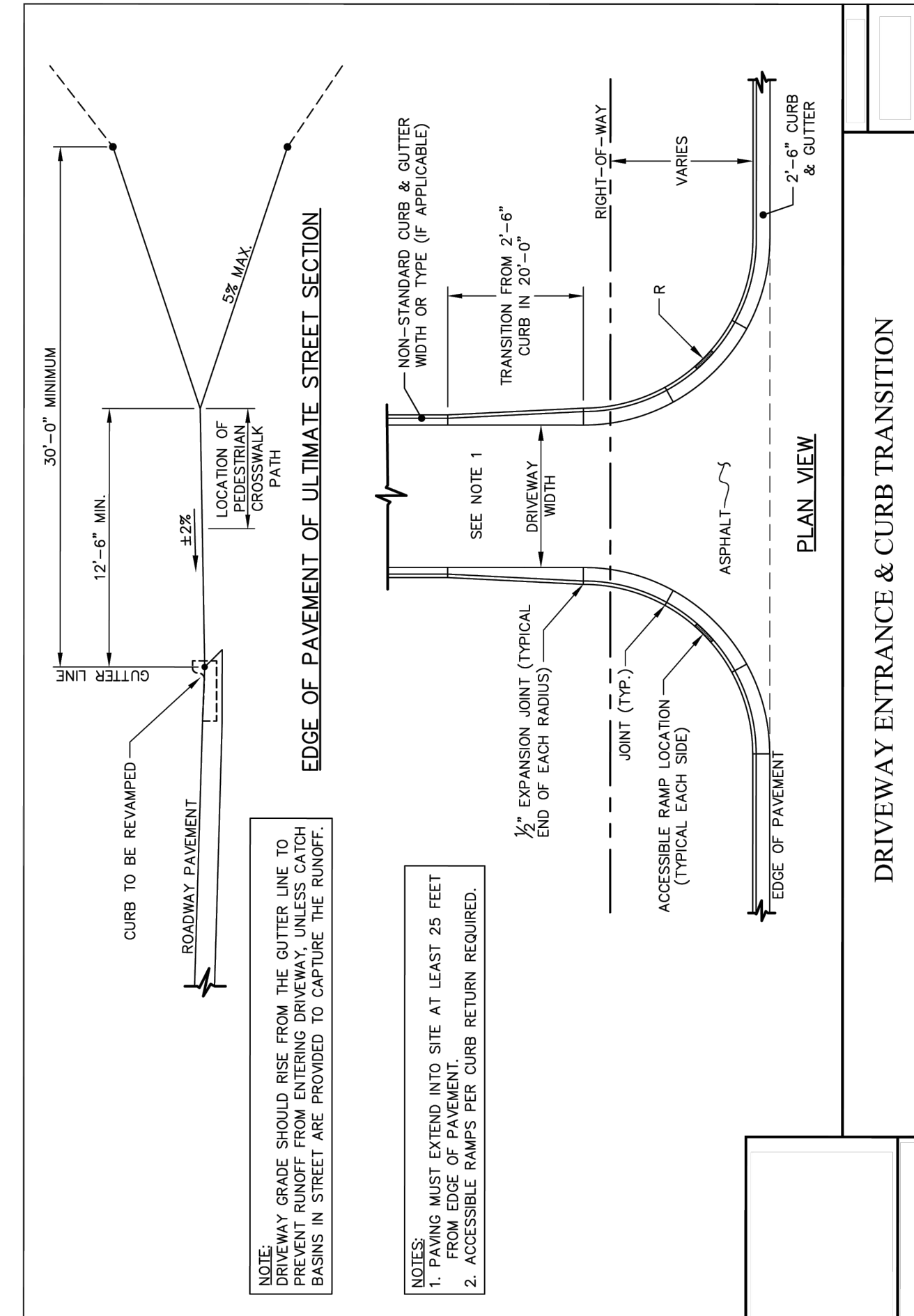


- NOTES:**
1. A GROOVE JOINT 1" DEEP WITH 1/8" RADI SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
 2. SIDEWALK AT DRIVEWAY ENTRANCES TO BE 6" THICK.
 3. WIDTH OF SIDEWALK SHALL CORRESPOND TO STREET CROSS SECTION BUT SHALL BE 5' AT A MINIMUM.
 4. SIDEWALK ADJACENT TO CURB AND GUTTER IN PARKING LOT OR ALONG STREET SHALL BE 6' WIDE AT A MINIMUM.
 5. SIDEWALK TO BE POURED TO END OF RADIUS AT INTERSECTING STREETS.
 6. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI IN 28 DAYS.

REVISIONS	DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	CONCRETE SIDEWALKS	STD. NO. 4.04-2
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S8 CONCRETE SIDEWALK

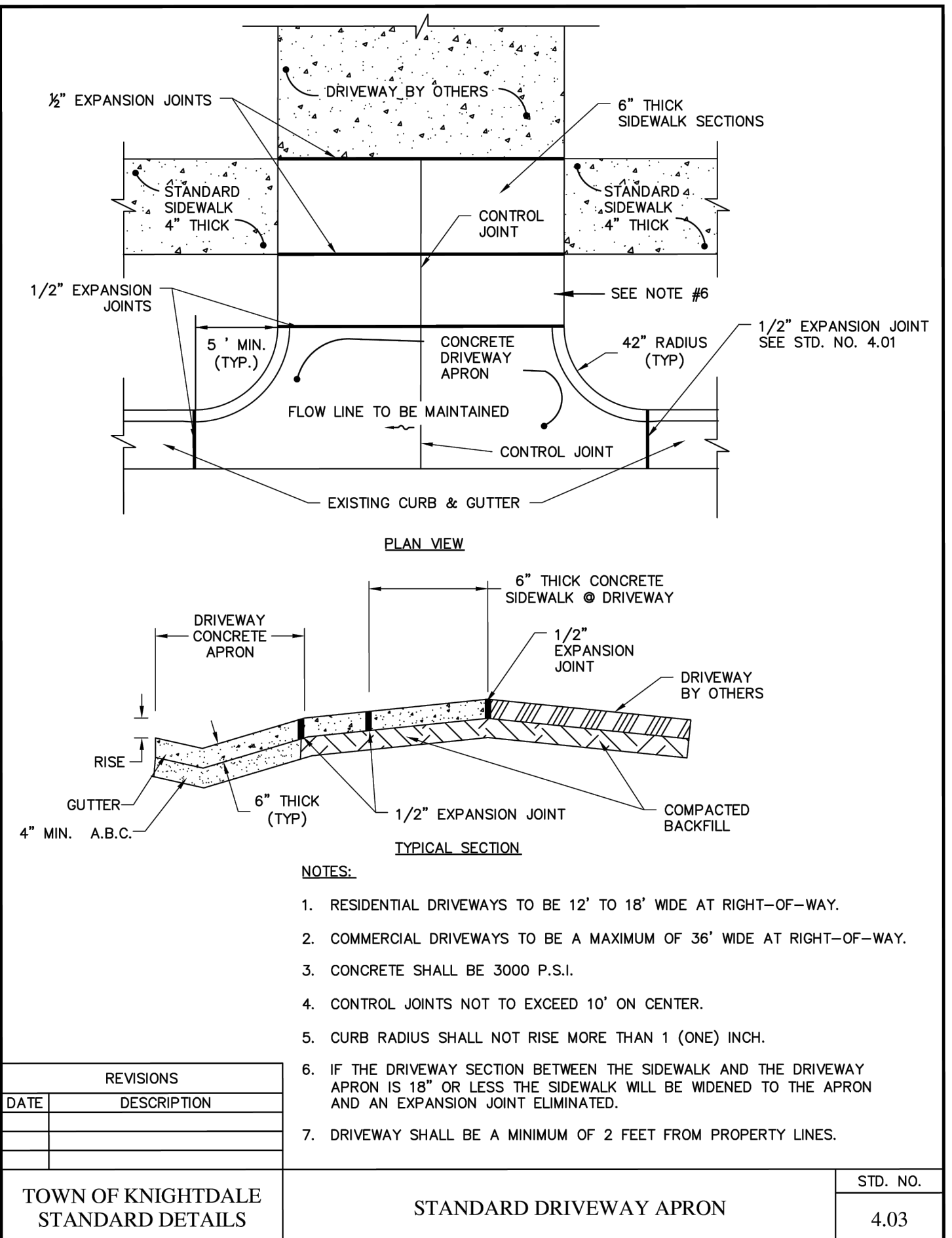


- NOTES:**
1. DRIVEWAY RAMP SHOULD RISE FROM THE GUTTER LINE TO PREVENT RUNOFF FROM ENTERING DRIVEWAY UNLESS CATCH BASINS IN STREET ARE PROVIDED TO CAPTURE THE RUNOFF.
 2. ACCESSIBLE RAMP PER CURB RETURN REQUIRED.

REVISIONS	DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	DRIVEWAY ENTRANCE & CURB TRANSITION	STD. NO. 4.03
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S9 DRIVEWAY ENTRANCE & CURB TRANSITION



- NOTES:**
1. RESIDENTIAL DRIVEWAYS TO BE 12' TO 18' WIDE AT RIGHT-OF-WAY.
 2. COMMERCIAL DRIVEWAYS TO BE A MAXIMUM OF 36' WIDE AT RIGHT-OF-WAY.
 3. CONCRETE SHALL BE 3000 P.S.I.
 4. CONTROL JOINTS NOT TO EXCEED 10' ON CENTER.
 5. CURB RADIUS SHALL NOT RISE MORE THAN 1 (ONE) INCH.
 6. IF THE DRIVEWAY SECTION BETWEEN THE SIDEWALK AND THE DRIVEWAY APRON IS 18" OR LESS THE SIDEWALK WILL BE WIDENED TO THE APRON AND AN EXPANSION JOINT ELIMINATED.
 7. DRIVEWAY SHALL BE A MINIMUM OF 2 FEET FROM PROPERTY LINES.

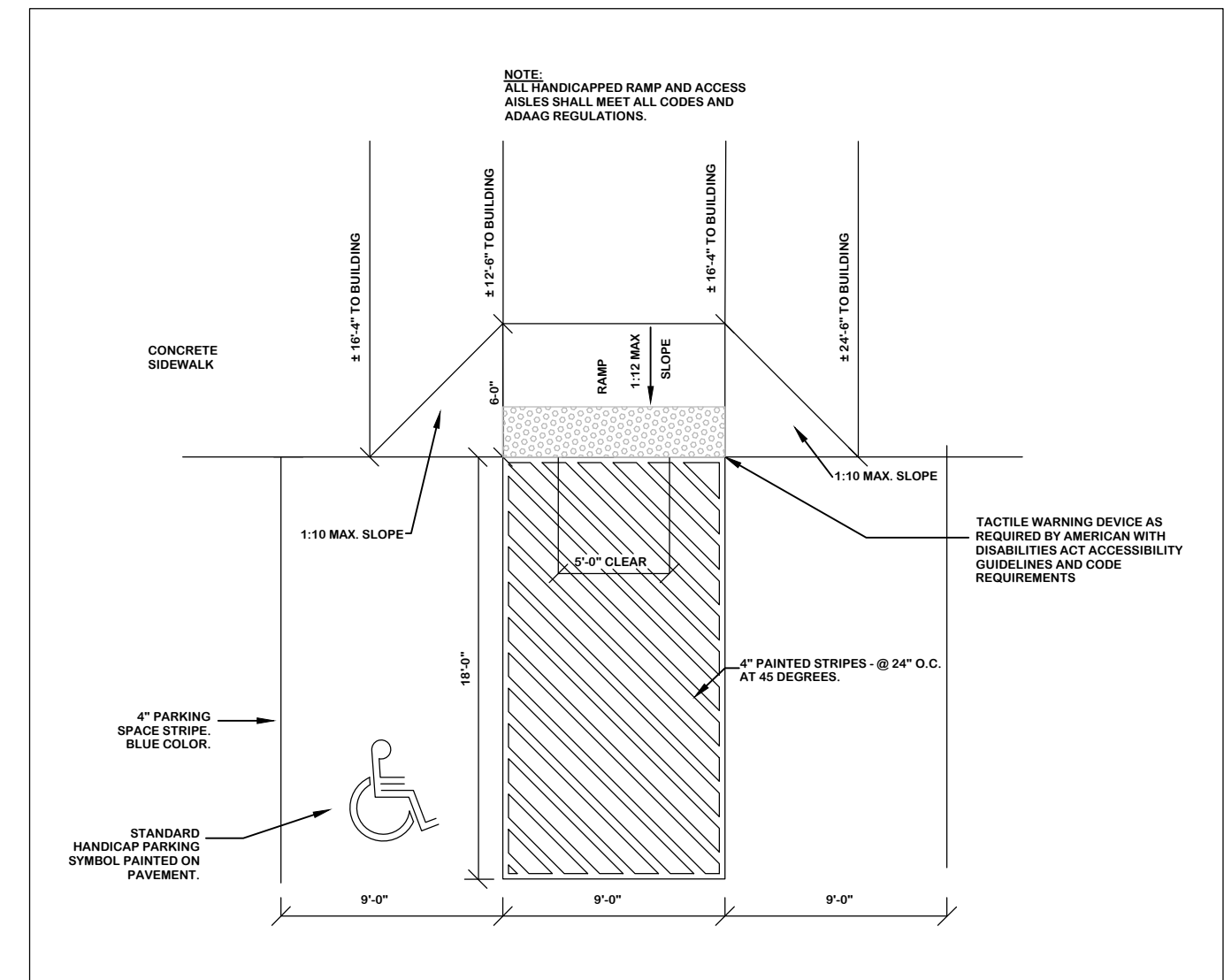
REVISIONS	DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	STANDARD DRIVEWAY APRON	STD. NO. 4.03
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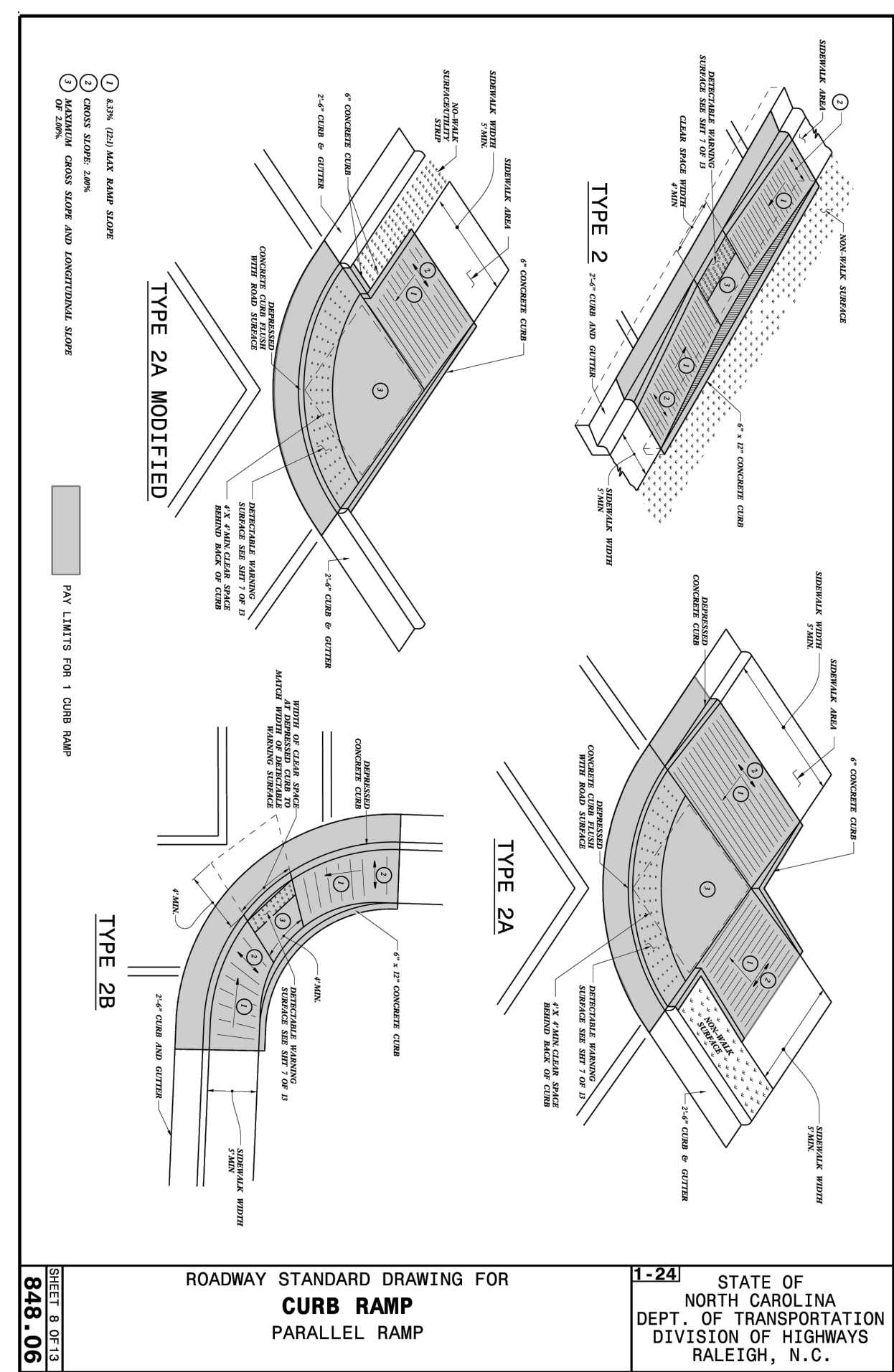
S13 TREE PROTECTION FENCING

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NOT FOR CONSTRUCTION**

NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE AND NCDOT STANDARDS AND SPECIFICATIONS.

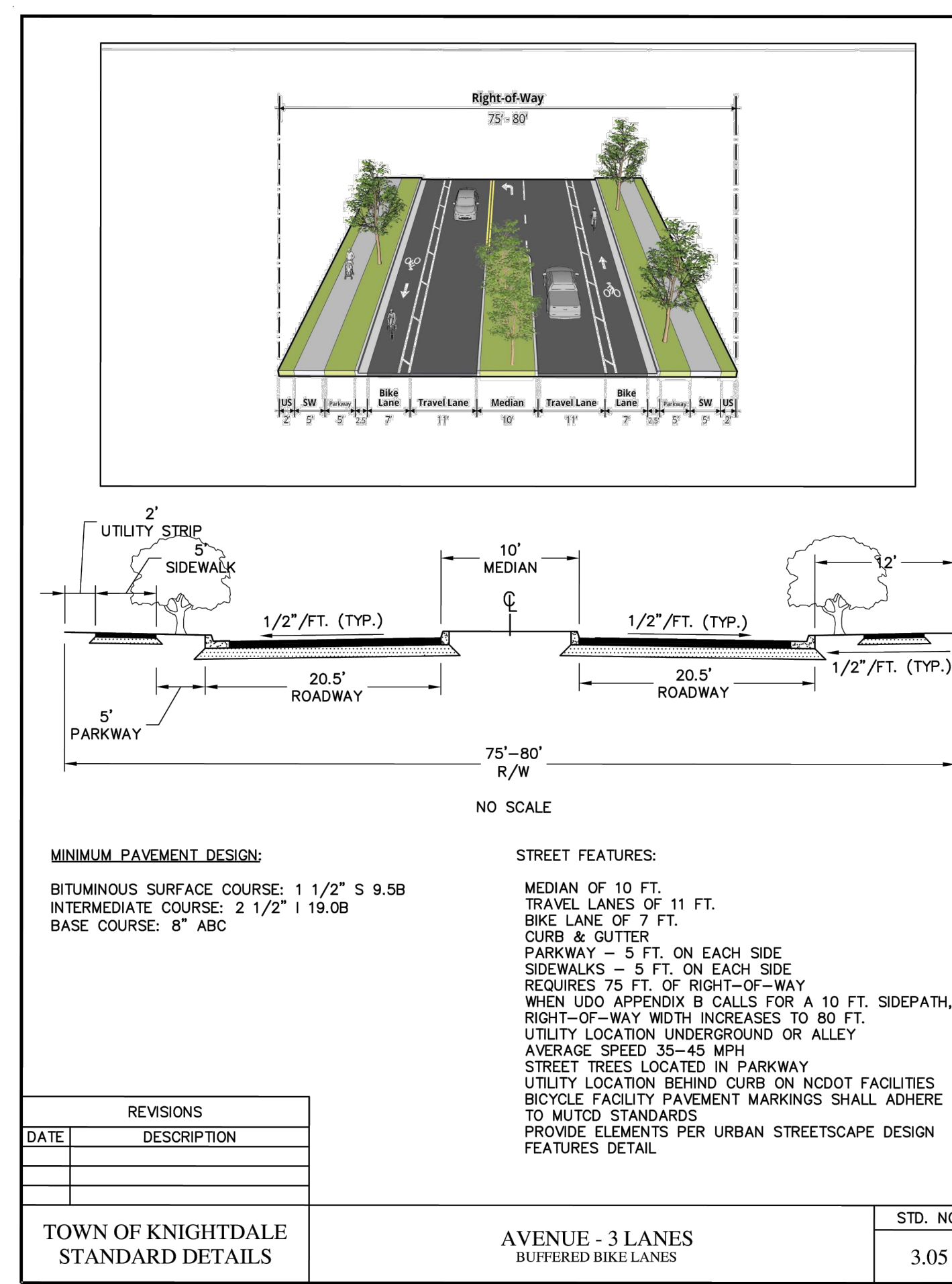


S10 ADA CURB RAMP (PARKING LOT TO SIDEWALK)



ROADWAY STANDARD DRAWING FOR CURB RAMP PARALLEL RAMP	STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
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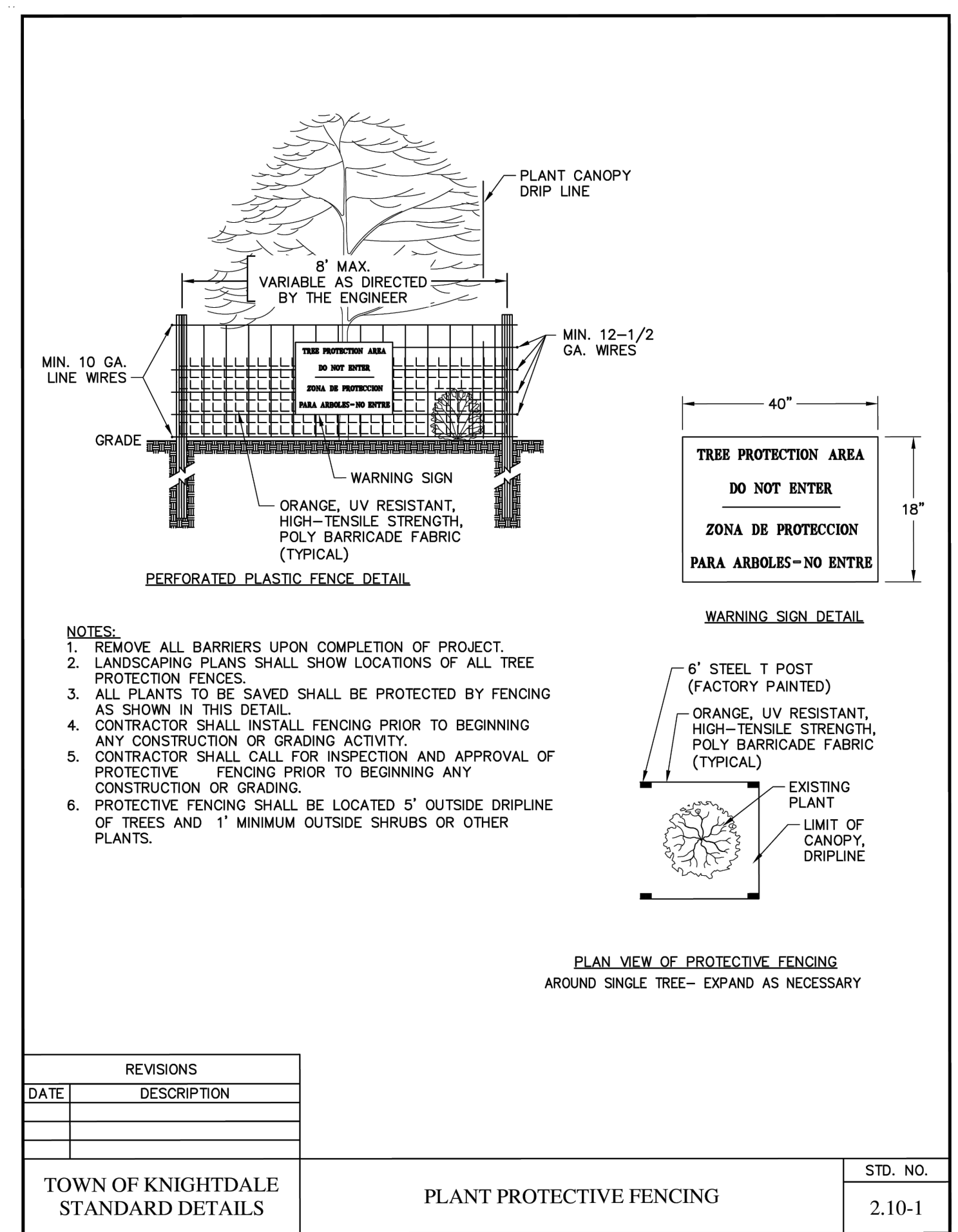
S11 ADA CURB RAMP



REVISIONS	DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	AVENUE - 3 LANES BUFFERED BIKE LANES	STD. NO. 3.05
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S12 AVENUE SECTION



- NOTES:**
1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
 2. LANDSCAPING PLANS SHALL SHOW LOCATIONS OF ALL TREE PROTECTION FENCES.
 3. ALL PLANTS TO BE SAVED SHALL BE PROTECTED BY FENCING AS SHOWN IN THIS DETAIL.
 4. CONTRACTOR SHALL INSTALL FENCING PRIOR TO BEGINNING ANY CONSTRUCTION OR GRADING ACTIVITY.
 5. CONTRACTOR SHALL CALL FOR INSPECTION AND APPROVAL OF PROTECTIVE FENCING PRIOR TO BEGINNING ANY CONSTRUCTION OR GRADING.
 6. PROTECTIVE FENCING SHALL BE LOCATED 5' OUTSIDE DRIPLENE OF TREES AND 1' MINIMUM OUTSIDE SHRUBS OR OTHER PLANTS.

REVISIONS	DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	PLANT PROTECTIVE FENCING	STD. NO. 2.10-1
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C:\Public\Projects\600-699\627-22_700 Old Knight Road Office (Moore's Realty, Inc.)\50-Drawings\4-Design\627-22 D-1 Series.dwg - 4:26pm BY:klrkmz

1-24] STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR PAVEMENT MARKINGS PEDESTRIAN CROSSWALKS

1205.07

CROSSWALK PLACEMENT GUIDANCE

GENERAL NOTES:

1. REFER TO NCOTD ROADWAY STANDARD DRAWINGS, WHICH ARE STANDARD FOR ADDITIONAL SUBSECTIONS.
2. THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE DRAWING SHALL BE FOR INFORMATION ONLY. THE CROSSWALK MARKINGS SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT CONTRACT, WHICH IS TO BE SUPPLIED BY THE ENGINEER.
3. LINES, THE HI-VISIBILITY CROSSWALK SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT CONTRACT, WHICH IS TO BE SUPPLIED BY THE ENGINEER.
4. STEP MARKS SHALL BE PLACED AT 4' INT. IN ADVANCE OF WALKER CROSSWALK LINE.
5. SET BACK CURBLINE FROM WALKER CROSSWALK MARKING TO WALKER EDGE OF TRAVEL, IS 4' MIN.
6. SETBACK THE WALKER EDGE SIGNAL, A CLEAR SPACE OF 4' x 4' MIN. SHALL BE PROVIDED AROUND THE MARKING.
7. SIGNAL STATIONARY CURB MARKS WITH 4" CHAM SIGNAL, WITH A SIGNAL OF 2" x 4" MIN. LONG.
8. CURB MARKS THROUGH MEDIAN SIGNALS, SIGNAL MARKS AT TOLLS, CROSSWALKS ON LIMITED ACCESS DIVISIONS, AND SIGNALS THROUGH MEDIAN SIGNALS, SIGNAL MARKS AT TOLLS, CROSSWALKS ON LIMITED ACCESS DIVISIONS, SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT CONTRACT, WHICH IS TO BE SUPPLIED BY THE ENGINEER.
9. SETBACK THE WALKER EDGE SIGNAL, A CLEAR SPACE OF 4' x 4' MIN. SHALL BE PROVIDED AROUND THE MARKING.
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ROADWAY STANDARD DRAWING FOR PAVEMENT MARKINGS HI-VISIBILITY CROSSWALKS NO-TRACK MARKING GUIDANCE

1205.07

CROSSWALK INTERSECTION DETAIL

GENERAL NOTES:

1. THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE DRAWING SHALL BE FOR INFORMATION ONLY. THE CROSSWALK MARKINGS SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT CONTRACT, WHICH IS TO BE SUPPLIED BY THE ENGINEER.
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ROADWAY STANDARD DRAWING FOR PAVEMENT MARKINGS HI-VISIBILITY CROSSWALKS NO-TRACK MARKING GUIDANCE

1205.07

CROSSWALK MARKING DETAIL

GENERAL NOTES:

1. THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE DRAWING SHALL BE FOR INFORMATION ONLY. THE CROSSWALK MARKINGS SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT CONTRACT, WHICH IS TO BE SUPPLIED BY THE ENGINEER.
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S14 HI-VISIBILITY CROSSWALK

**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

PAST DESIGN GROUP, PA
Engineering | Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 946 4399 | Fax: 919 946 4395 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. 50-205
KNIGHTDALE, NORTH CAROLINA 27645

PROJECT ENGINEER:
PJP

PROJECT CADD DESIGNER:
PJP

PROJECT SURVEYOR:
WAKE COUNTY, GS

DATE: 06.24.2022

700 OLD KNIGHT ROAD OFFICE BUILDING

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA

MASTER PLAN

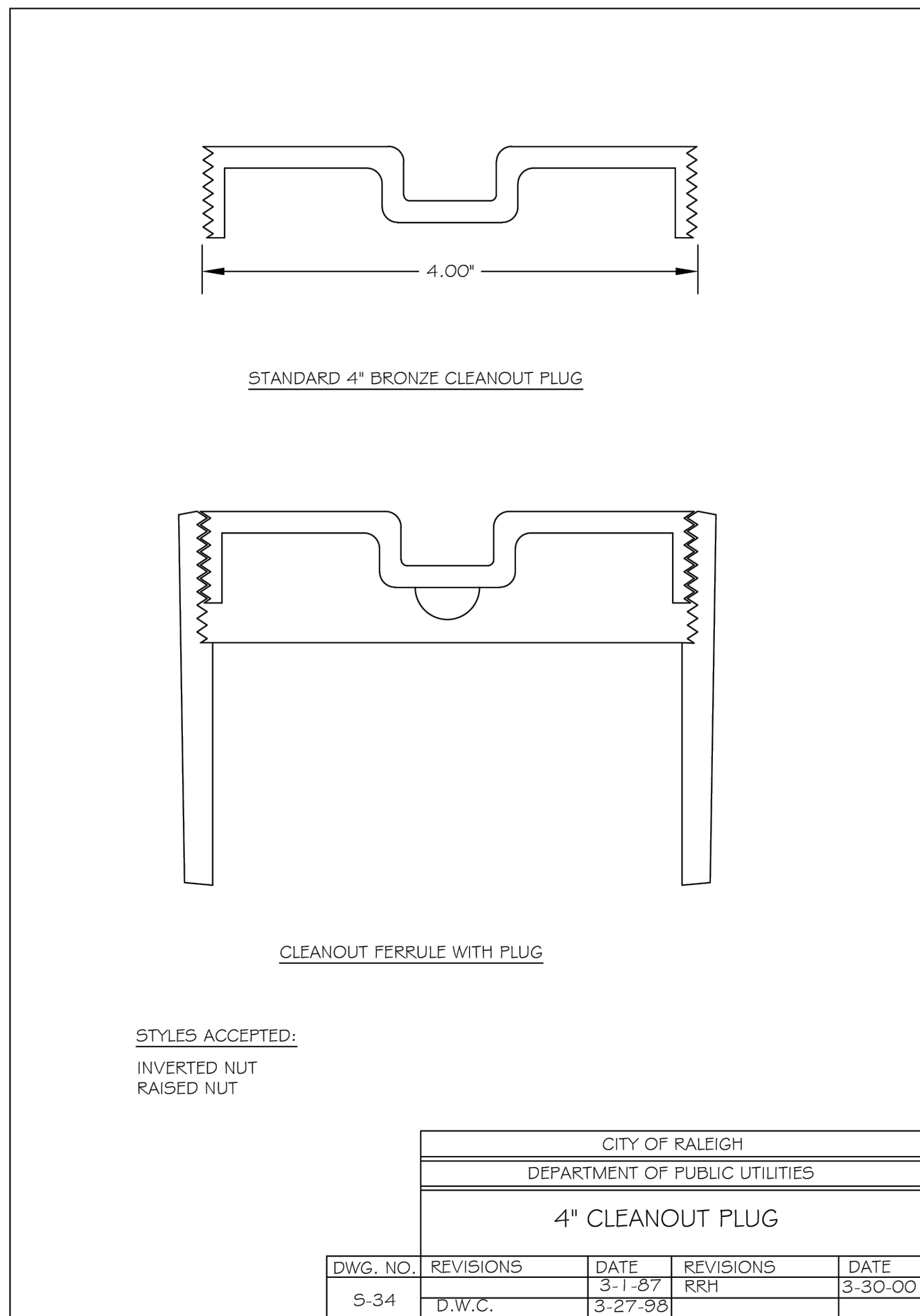
SITE DETAIL SHEET

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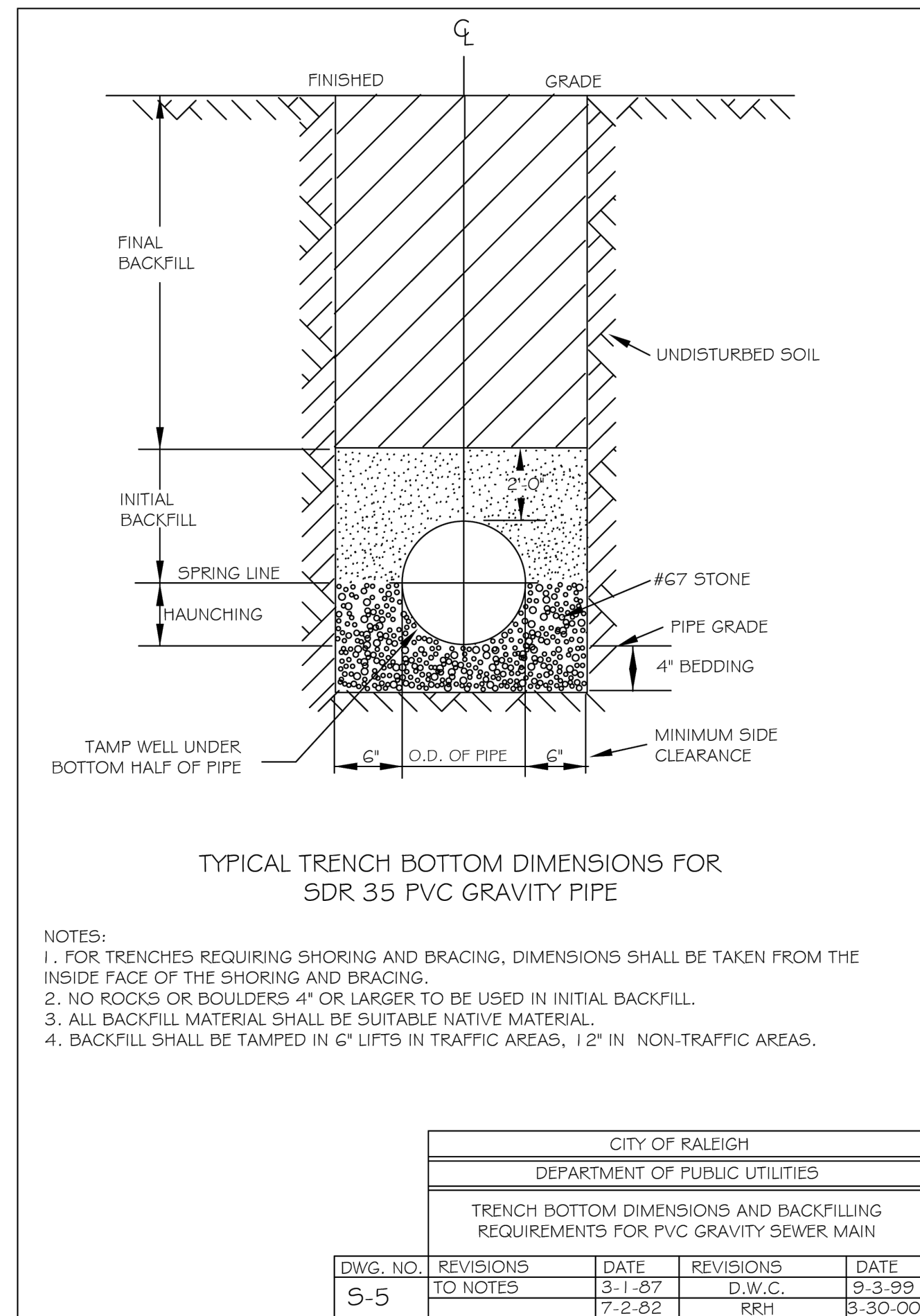
NO.	REVISION	DATE

DRAWING SHEET
D-1.2

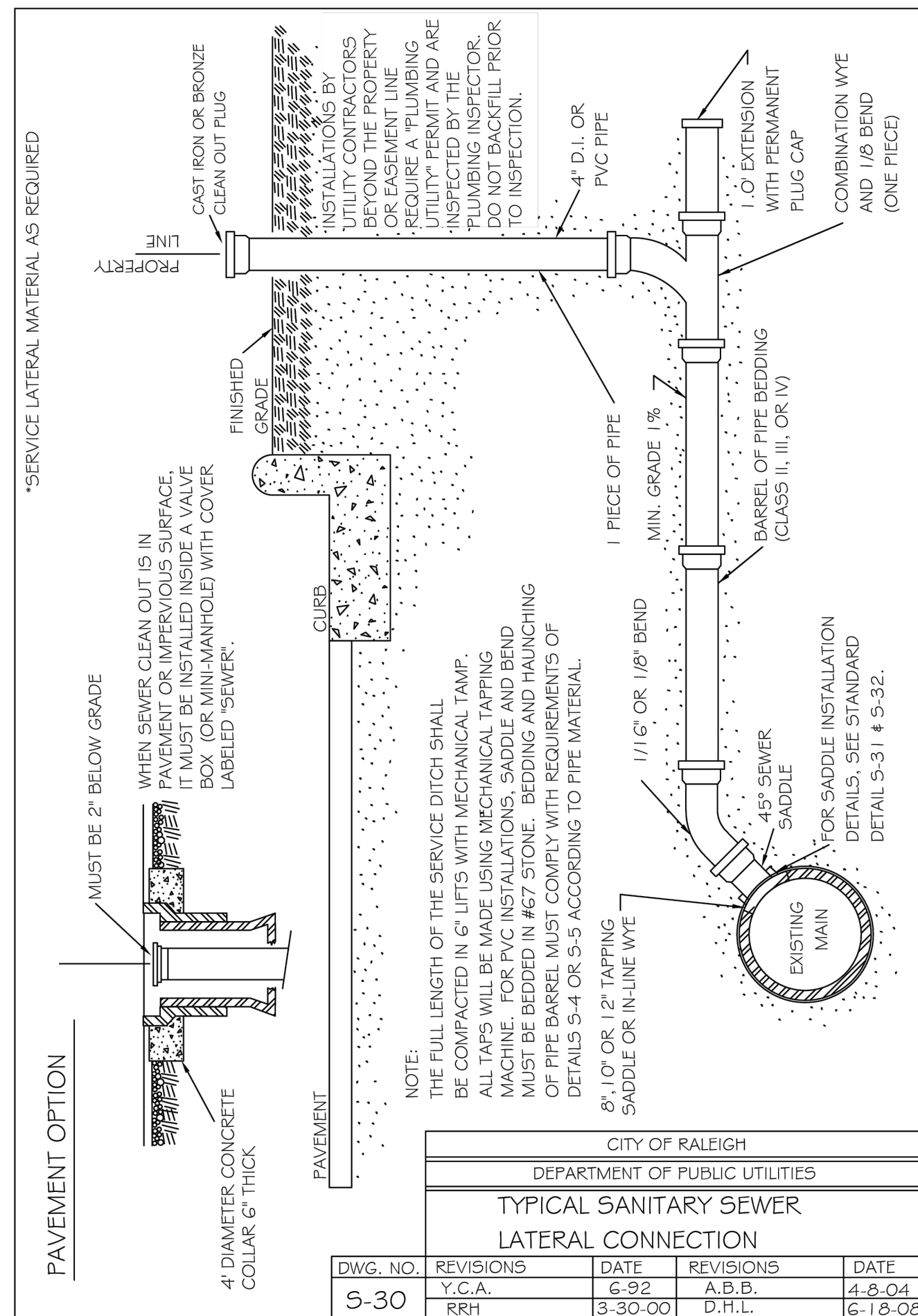
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627-22



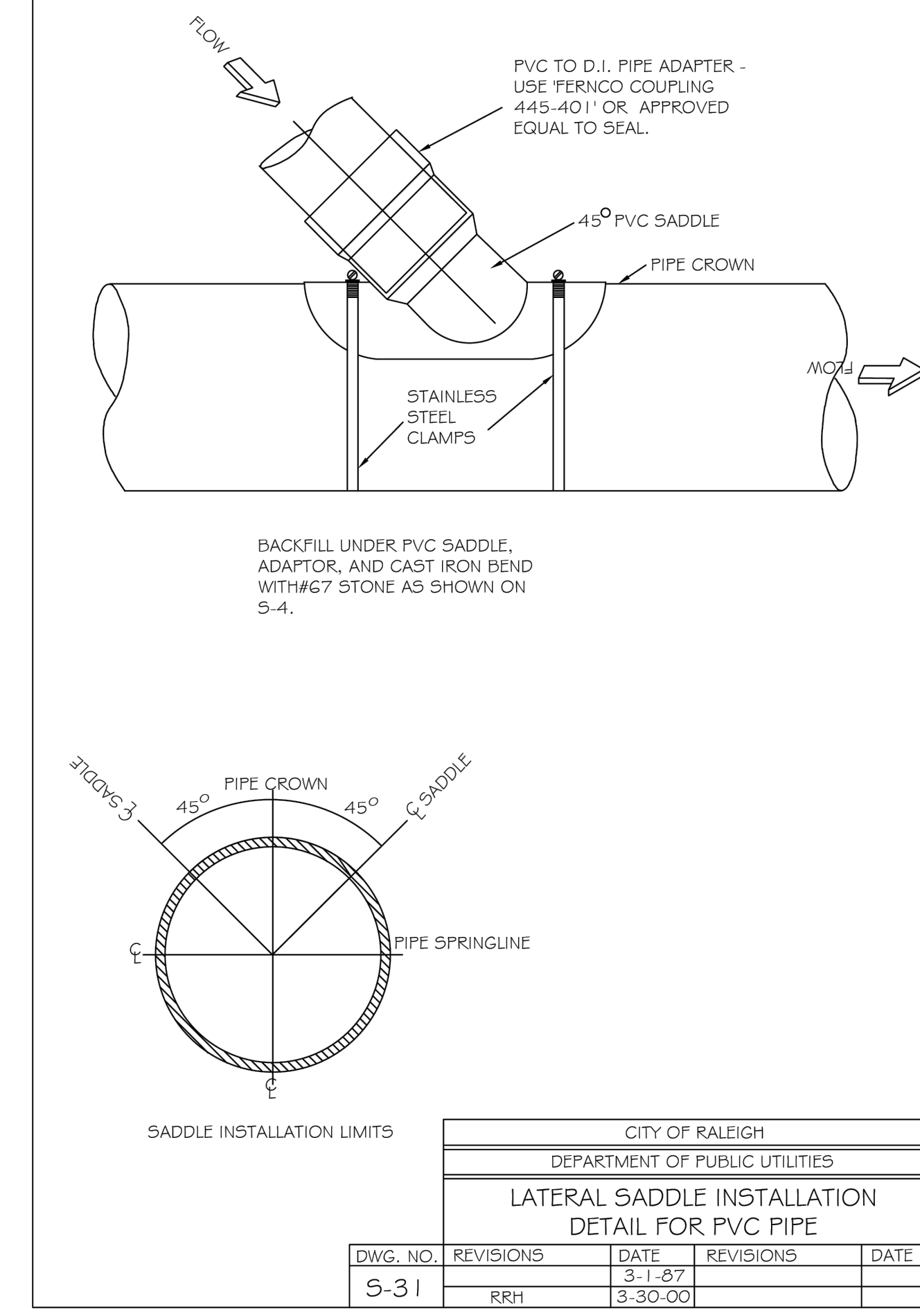
U1 SANITARY SEWER CLEANOUT



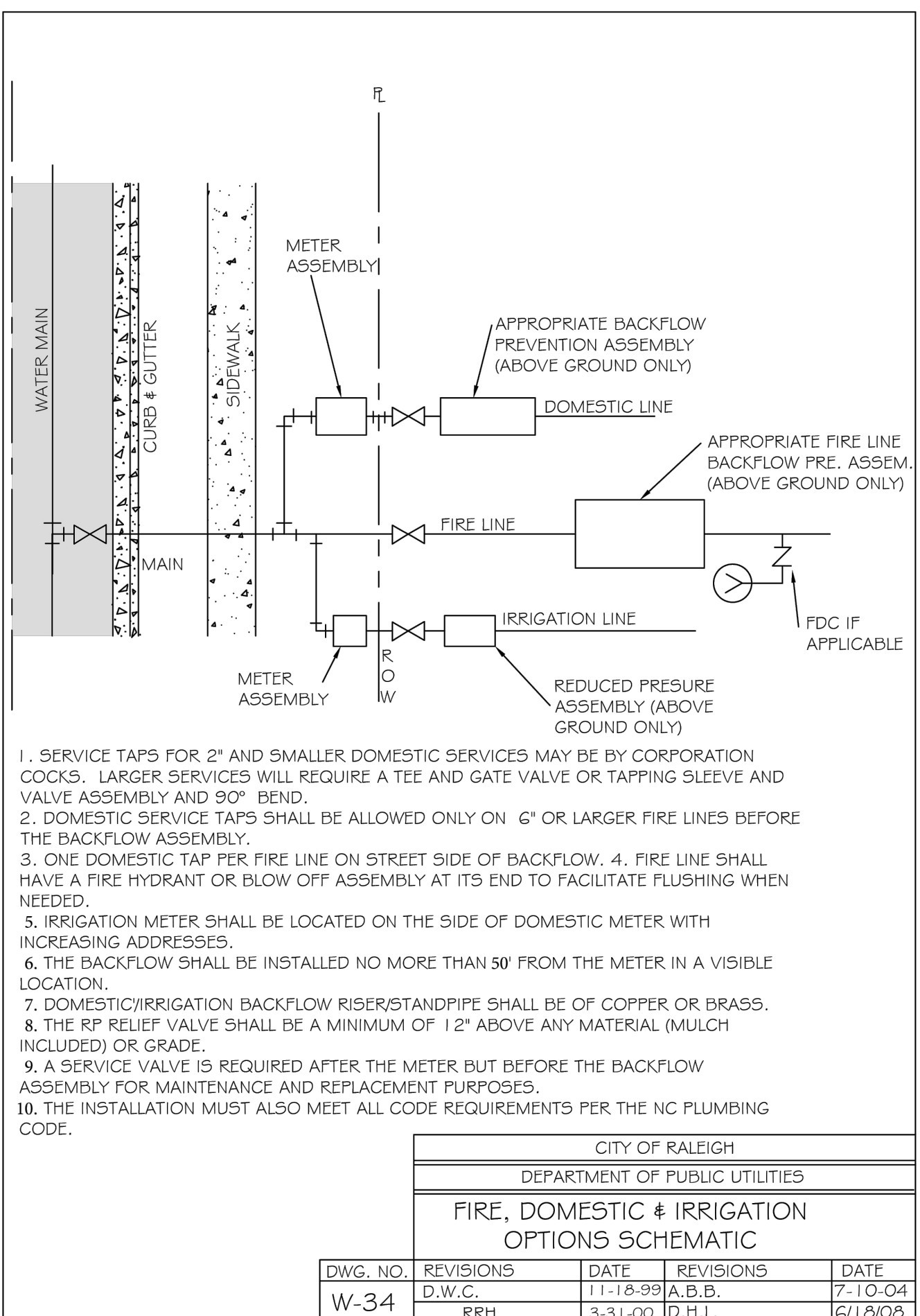
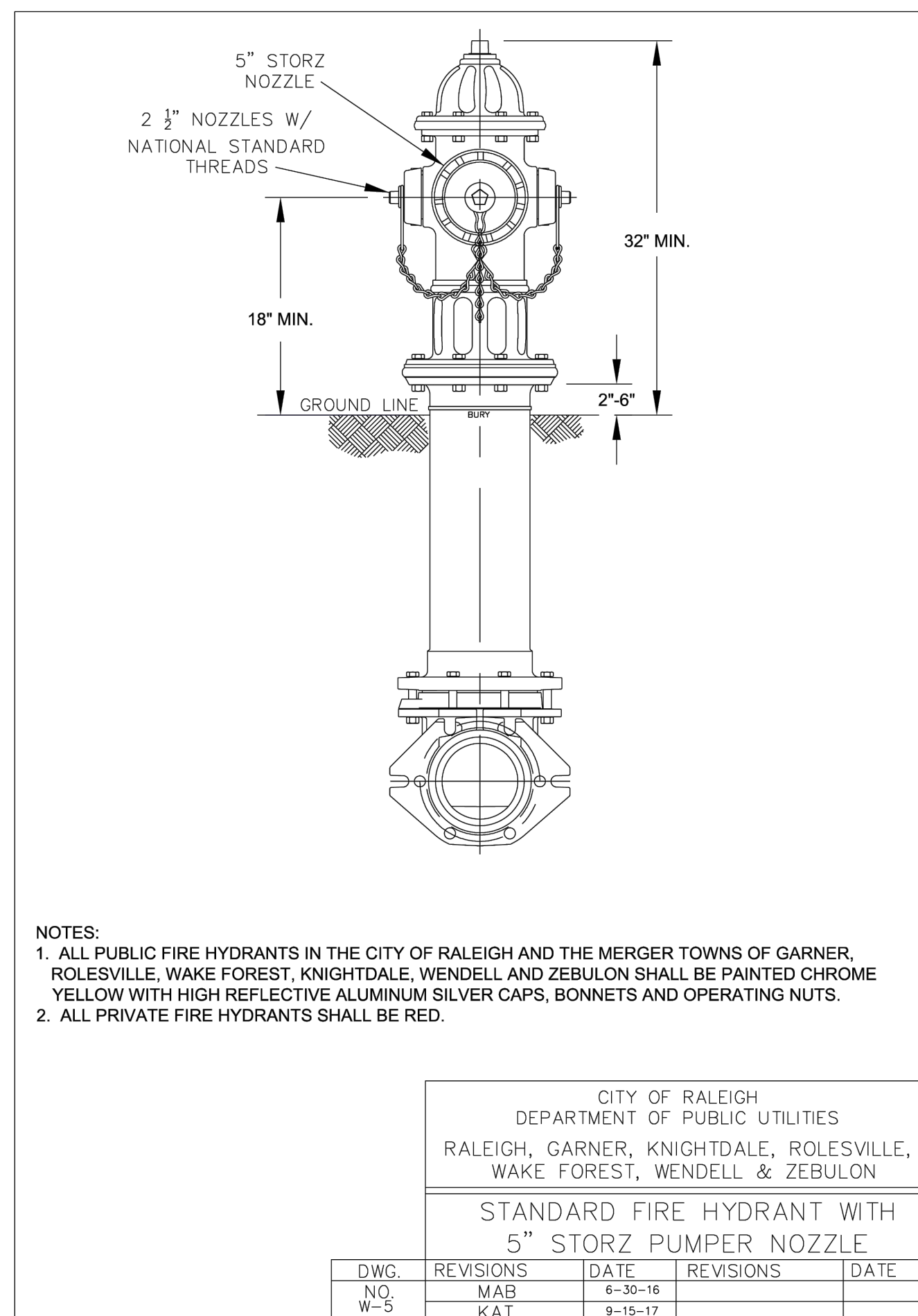
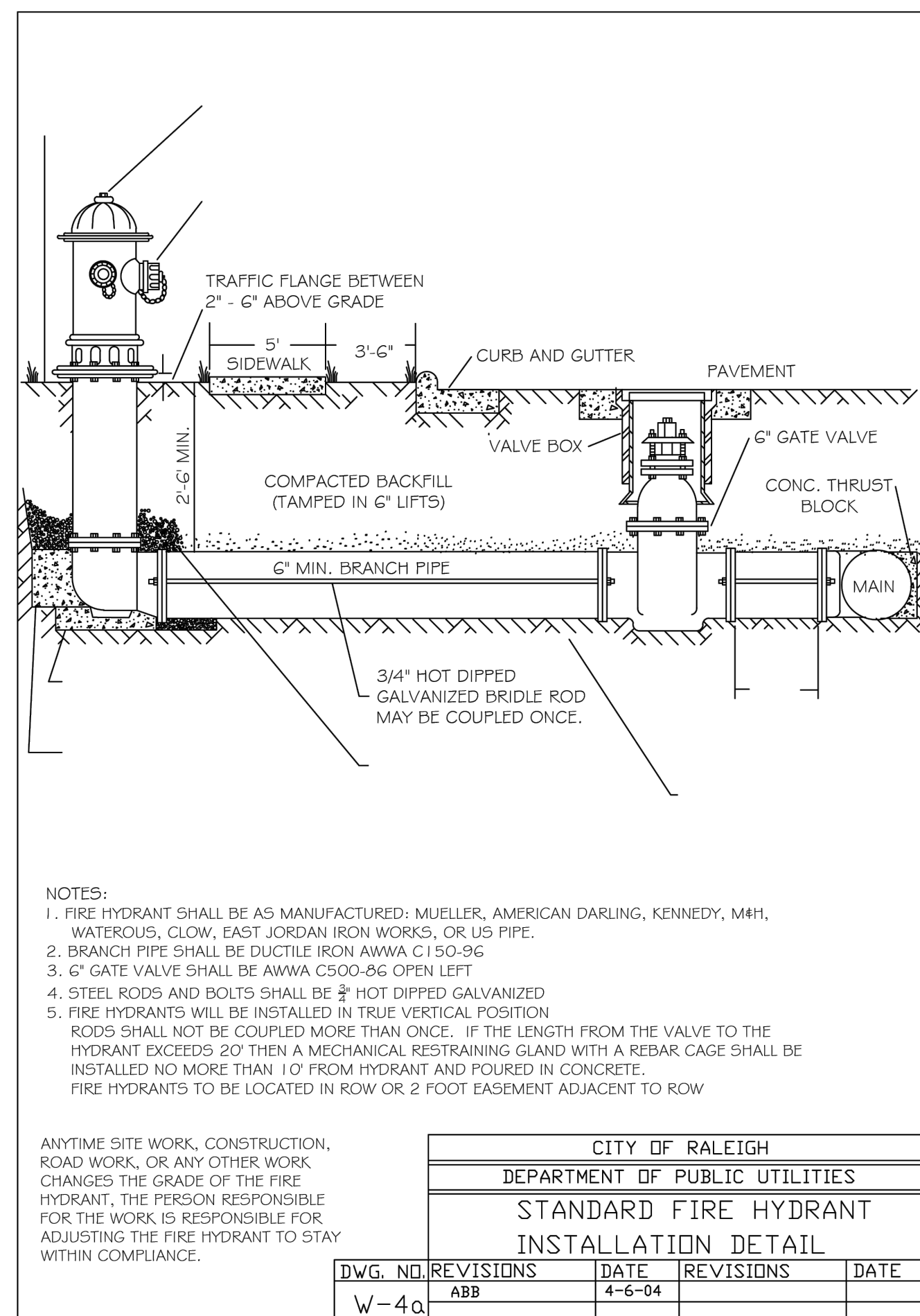
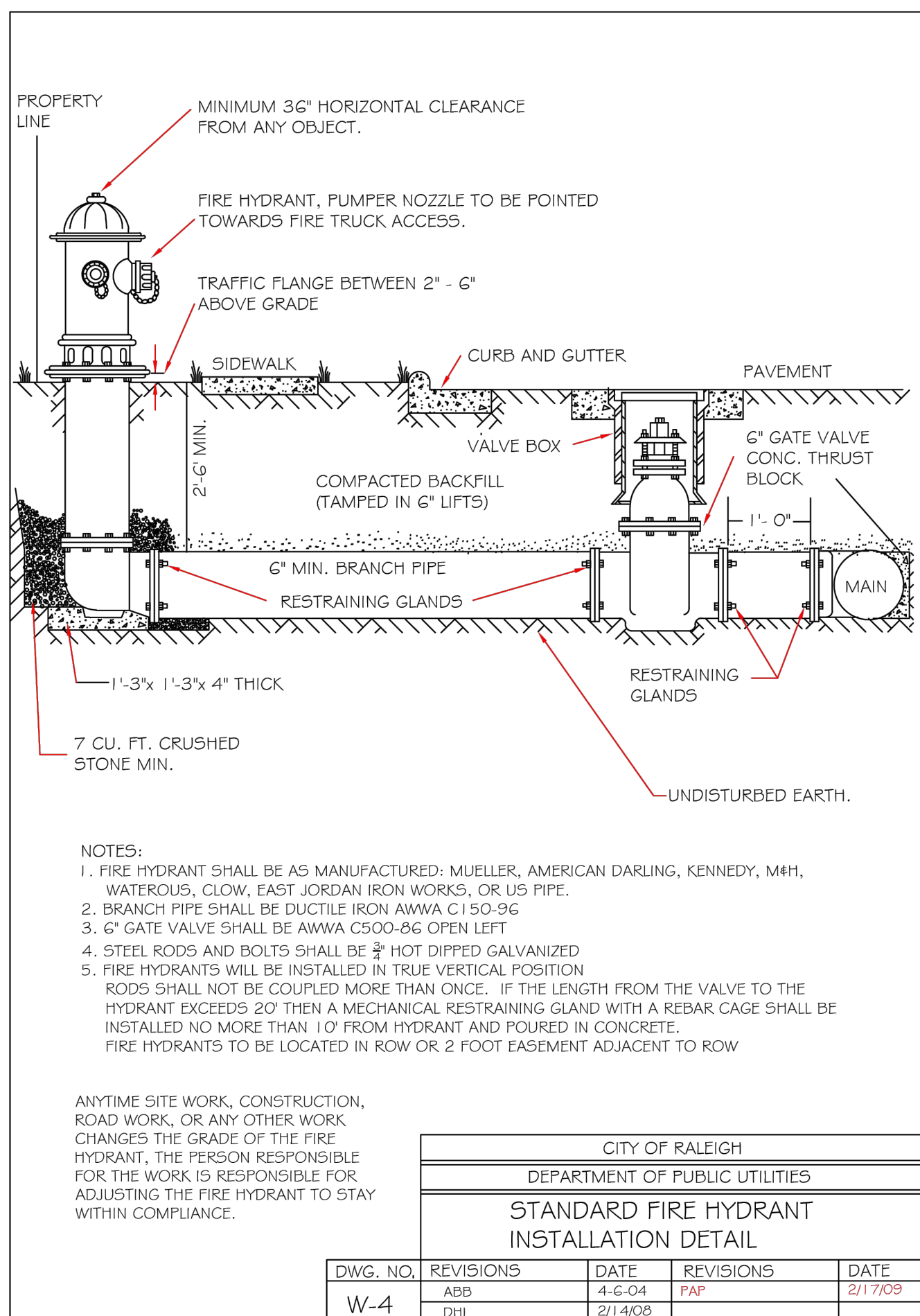
U3 STANDARD FIRE HYDRANT INSTALLATION



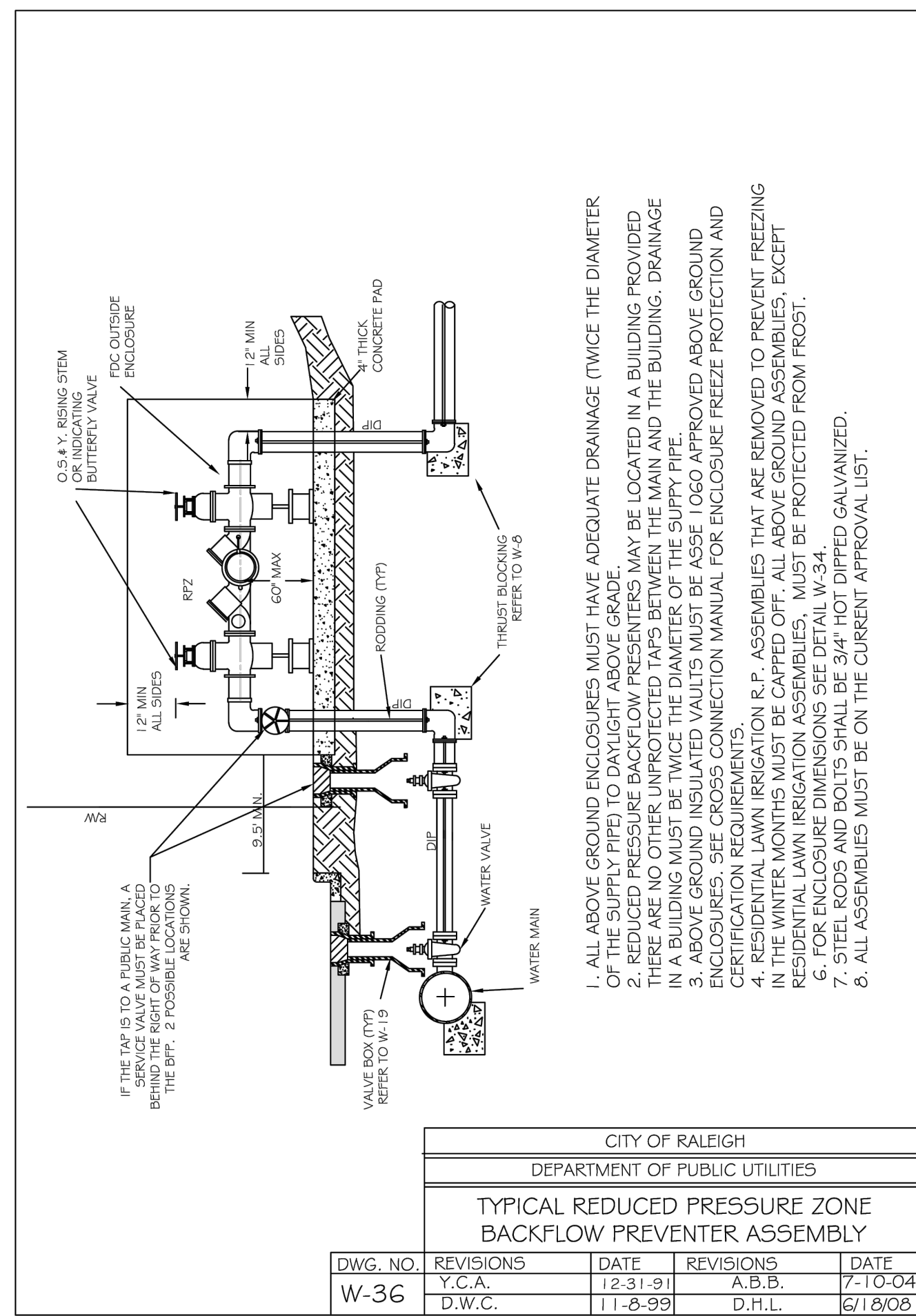
U2 4" TAPPING SADDLE CONNECTION



U4 FIRE, DOMESTIC & IRRIGATION SERVICE TAPS

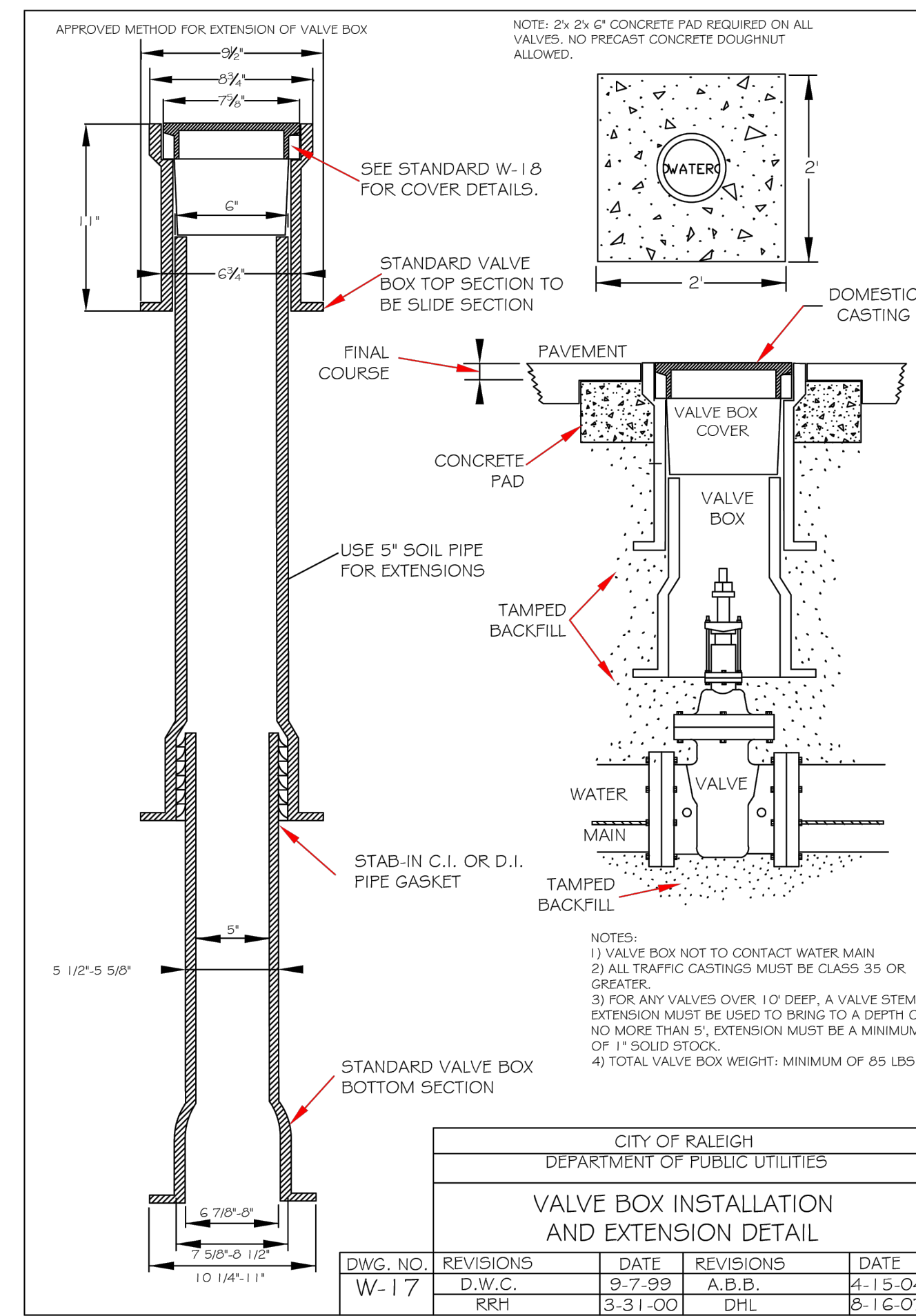


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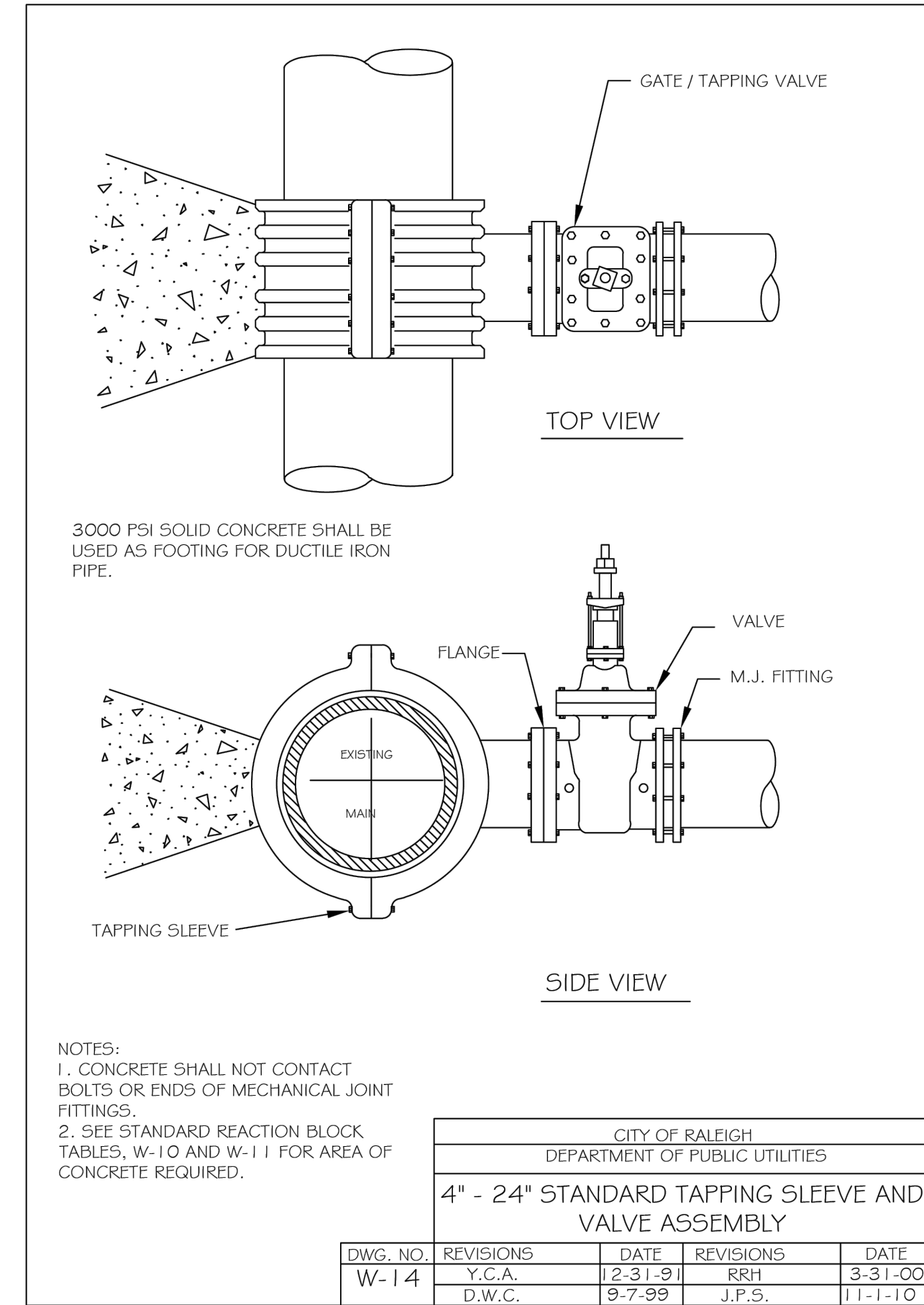
CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
TYPICAL REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY				
DWG. NO.	REVISIONS	DATE	DATE	
W-36	Y.C.A.	12-31-91	A.B.B.	7-10-04
	D.W.C.	11-8-99	D.H.L.	6/18/08

U5 TYPICAL RPZ BACKFLOW PREVENTER ASSEMBLY

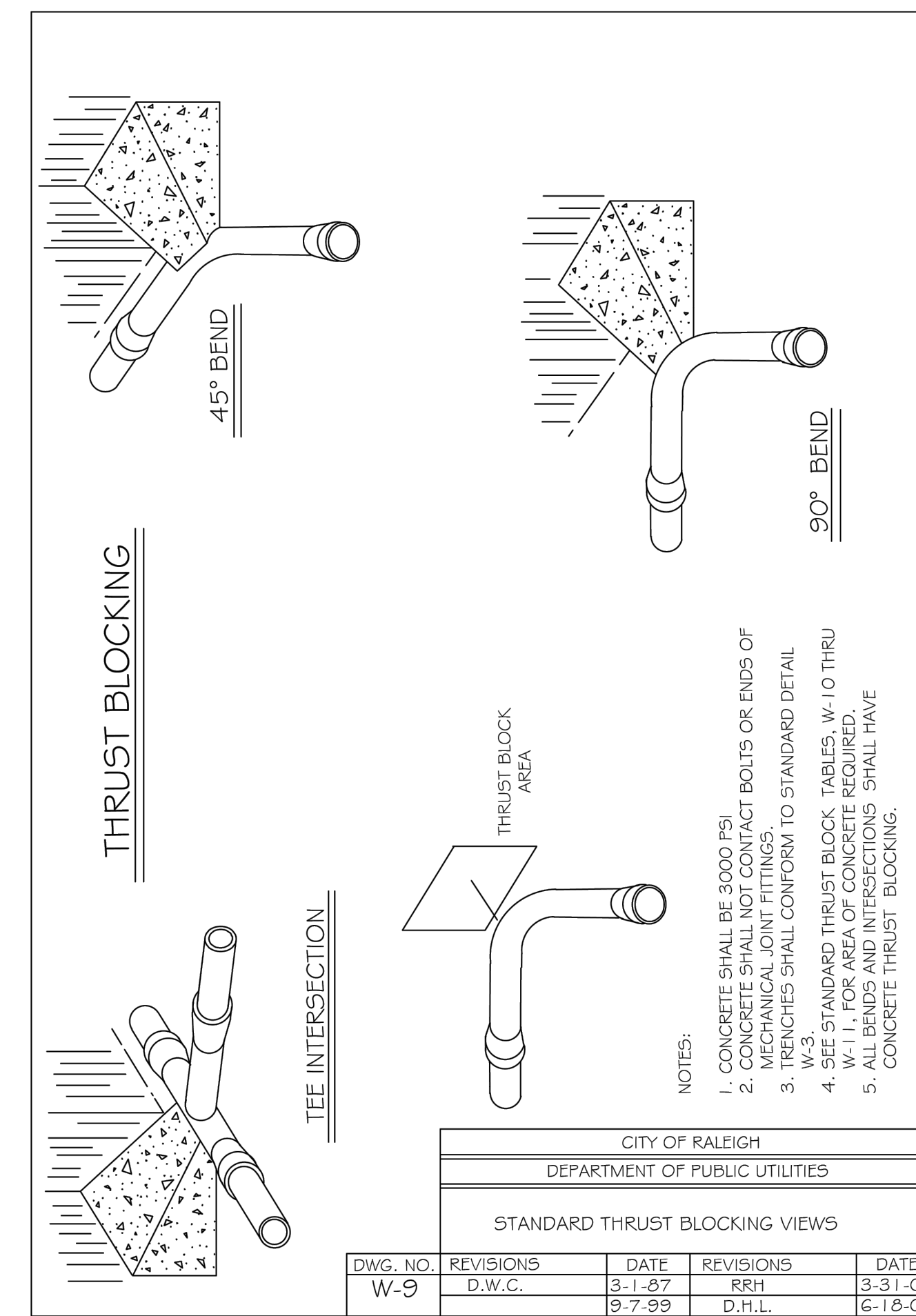


CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
VALVE BOX INSTALLATION AND EXTENSION DETAIL				
DWG. NO.	REVISIONS	DATE	DATE	
W-17	D.W.C.	9-7-99	A.B.B.	4-15-04
	RRH	3-31-00	DHL	8-16-07

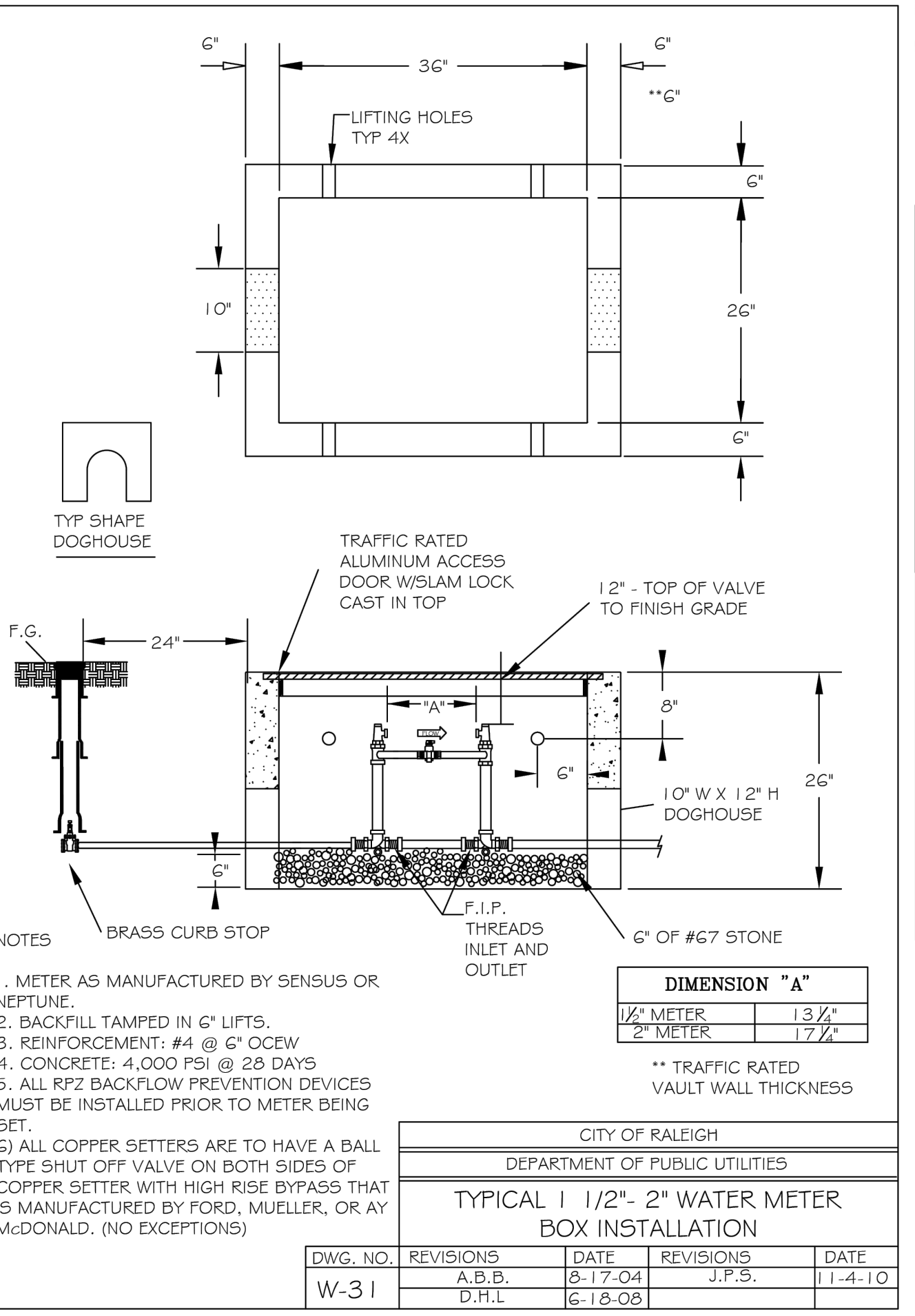
U6 VALVE BOX INSTALLATION AND EXTENSION DETAIL



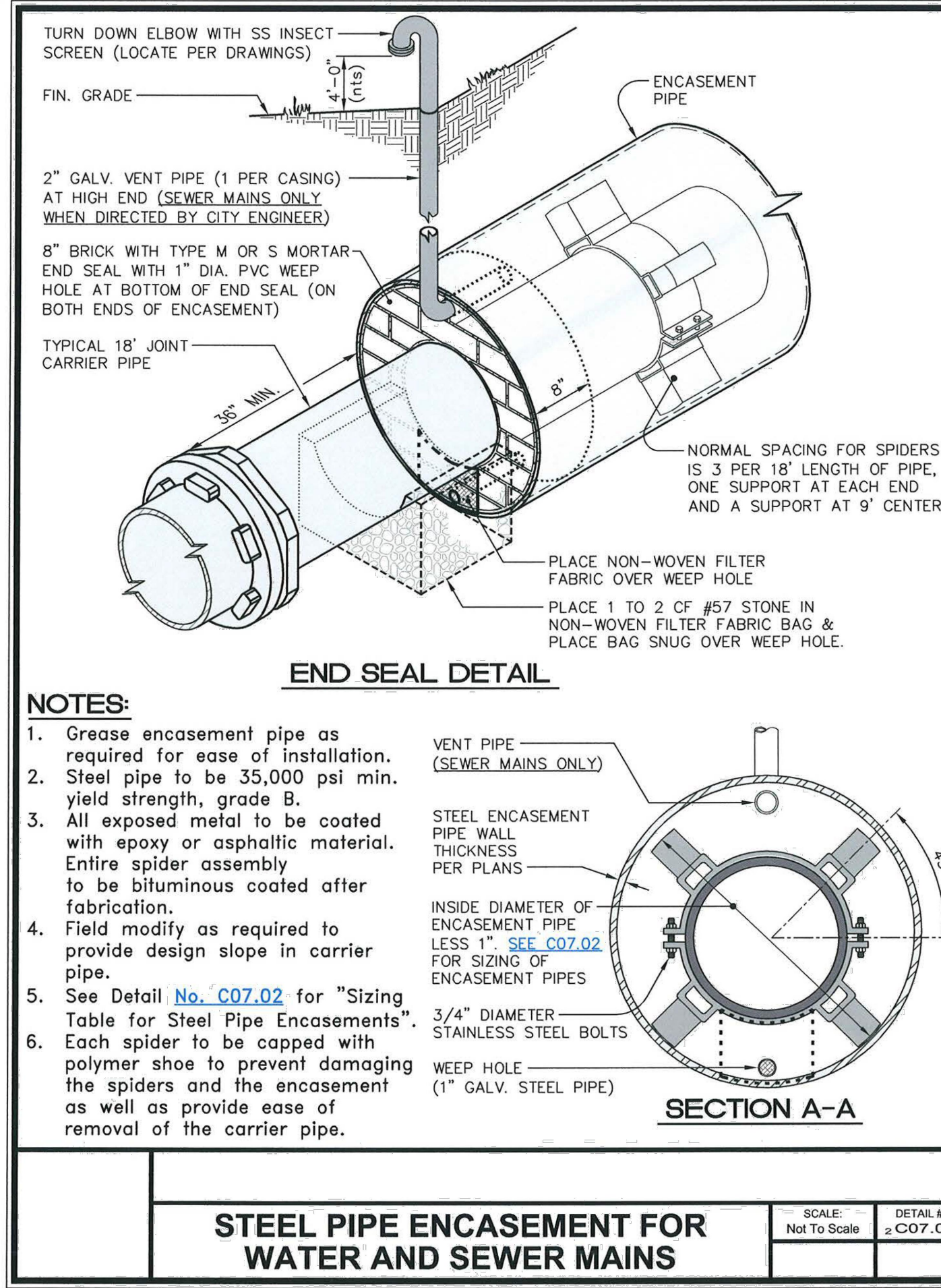
U7 FULL CIRCUMFERENCE STAINLESS STEEL TAPPING SLEEVE AND VALVE ASSEMBLY



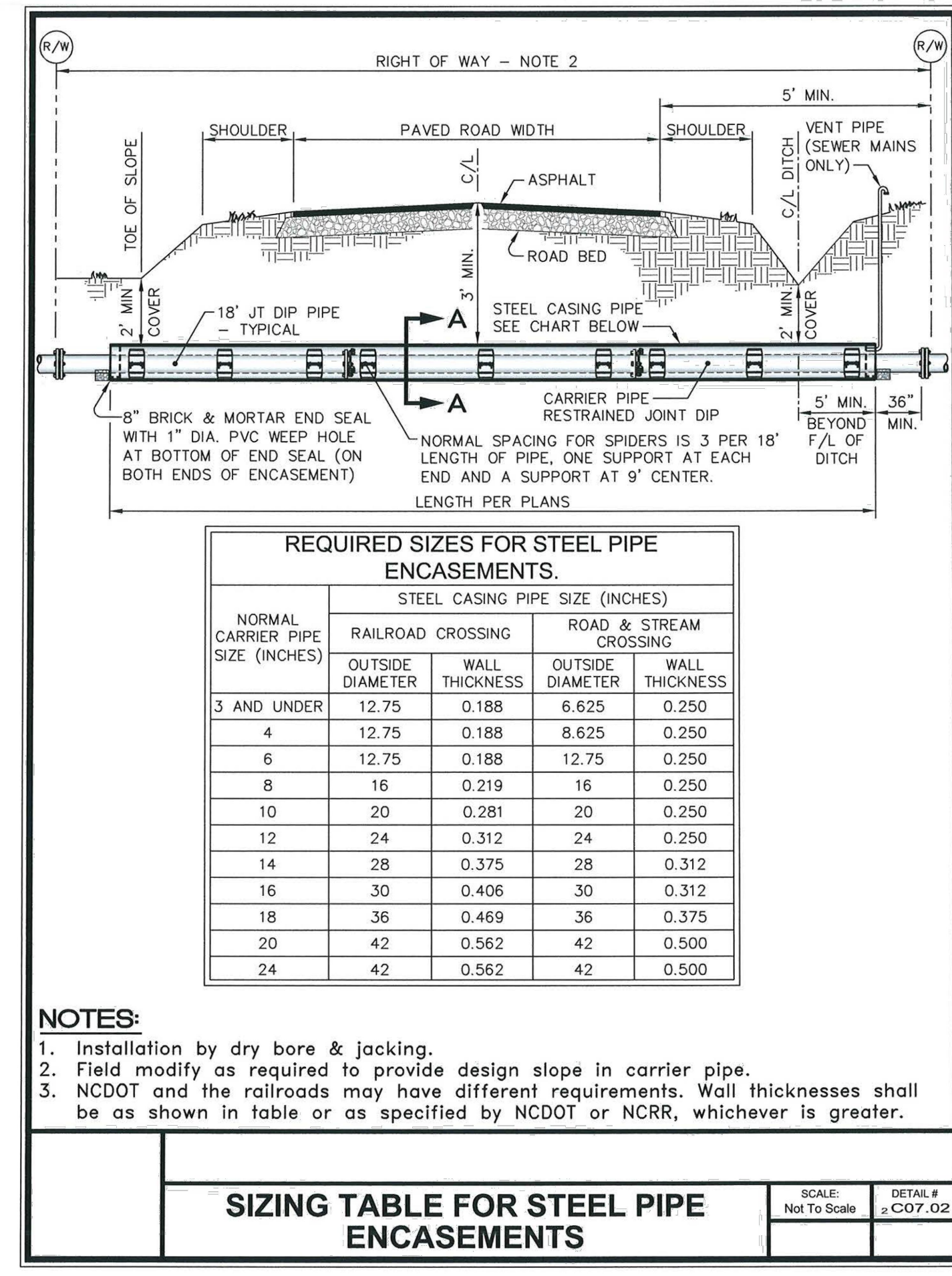
U8 STANDARD THRUST BLOCK



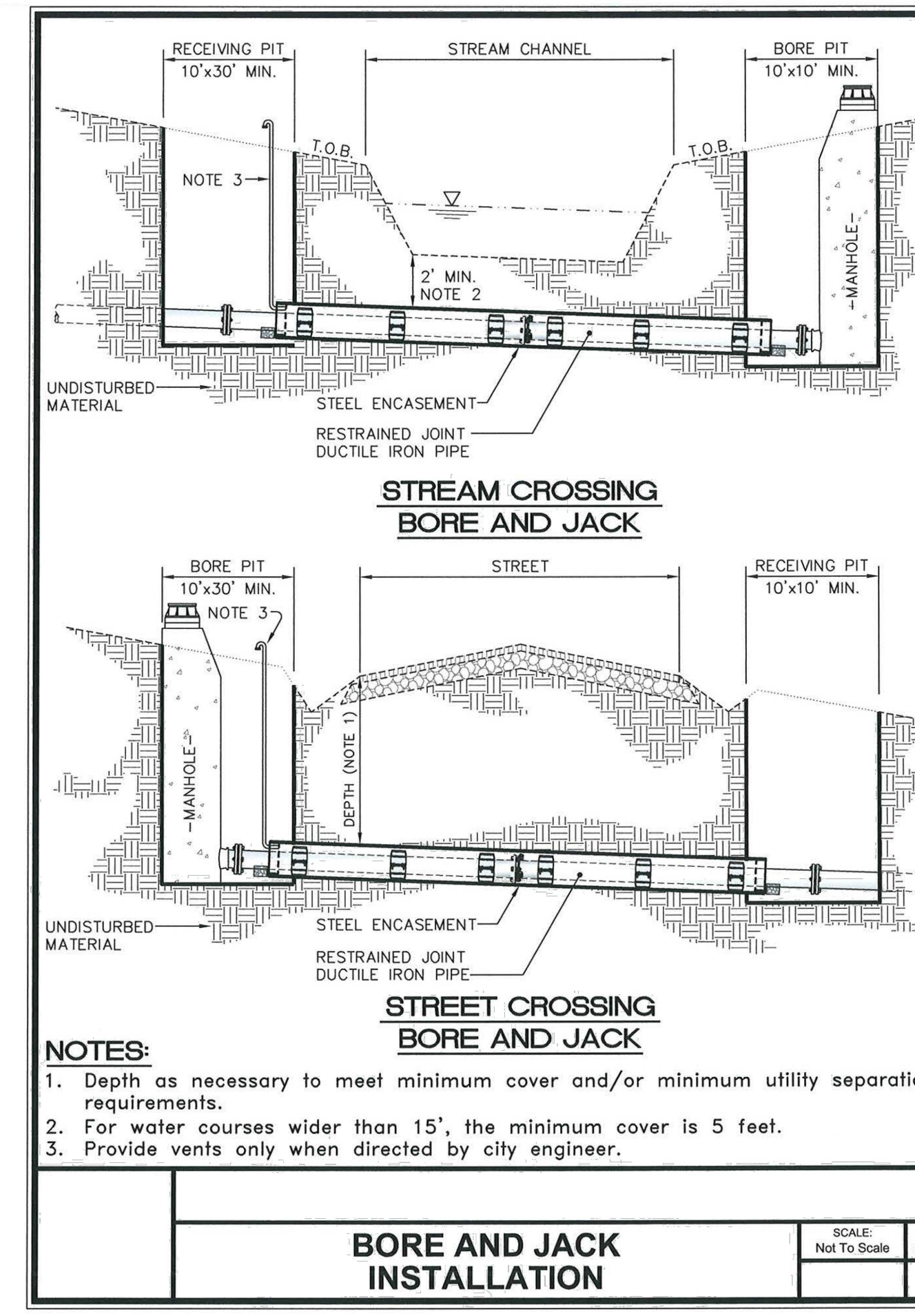
U9 TYPICAL 1 1/2" - 2" WATER METER BOX INSTALLATION



U10 STEEL PIPE ENCASMENT



U11 BORE AND JACK INSTALLATION



U11 BORE AND JACK INSTALLATION

F:\Public\Projects\600-699\627-22\700 Old Knight Road Office (Moore's Realty, Inc.)\50-Drawings\4-Design\627-22 D-2 Series.dwg - 4:28pm, 11/11/2024

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TYPICAL NOTES:

- 1)-ALL PIPING AND FITTINGS TO BE DUCTILE IRON, GALVANIZED, BRASS, STAINLESS STEEL, OR ALUMINUM
- 2)-ALL PIPING AND FITTINGS TO BE DUCTILE IRON ON CITY SIDE OF BACK FLOW PREVENTION ASSEMBLY
- 3)-40' MAX. FROM FDC TO APPARATUS ACCESS LOCATION
- 4)-FDC TO FACE FIRE APPARATUS ACCESS LOCATION (DOWNEY)
- 5)-DO NOT BLOCK APPARATUS ACCESS TO BUILDING WITH HOSE LAY FROM HYDRANT TO FDC
- 6)-MINIMUM DISTANCE 3 FEET BEHIND CURB, PROTECT FROM VEHICLES
- 7)-PROVIDE HEAT AND ALARM SUPERVISION TO HOT BOX (2 CONDUITS)
- 8)-COMPLY WITH PUBLIC UTILITIES HANDBOOK REQUIREMENTS

CITY OF RALEIGH FIRE DEPARTMENT
310 WEST MARTIN ST. RALEIGH, NC 27602

DESCRIPTION: **HOTBOX DETAIL REQUIREMENTS**

REVISIONS: 5-1-2017

DATE: 4-1-06

DRAWING NO: FP-27

U15 HOTBOX INSTALLATION

NOTES:

1. THE PAVEMENT CUT SHALL BE DEFINED BY A STRAIGHT EDGE AND CUT WITH AN APPROPRIATE SAW CUT MACHINE.
2. THE TRENCH SUBGRADE MATERIAL SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT.
3. THE FINAL 1" OF FILL SHALL CONSIST OF ABC MATERIAL COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT.
4. THE ENTIRE THICKNESS/ VERTICAL EDGE OF CUT SHALL BE TACKED.
5. THE SAME DEPTH OF PAVEMENT MATERIAL WHICH EXISTS SHALL BE REINSTALLED, BUT IN NO CASE SHALL THE ASPHALT BE LESS THAN 3" THICK.
6. THE ASPHALT PAVEMENT MATERIAL SHALL BE INSTALLED AND COMPACTED THOROUGHLY WITH A SMOOTH DRUM ROLLER TO ACHIEVE A SMOOTH LEVEL PATCH.
7. REFER TO CITY OF RALEIGH STANDARDS FOR TRENCHES AND PIPE BEDDING, W-3, FOR ADDITIONAL DETAILS.
8. NO HAND PATCHING ALLOWED.
9. PAVEMENT CUTS WITHIN NCDOT ROW SHALL CONFORM TO THE APPROVED ON SITE ENCROACHMENT PERMIT.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

STANDARD ASPHALT PAVEMENT PATCH DETAIL

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-2	RRH	3-31-00	A.B.B.	4-16-04
	D.W.C.	11-1-99	J.P.S.	10-29-10

U12 ASPHALT PAVEMENT PATCH

NOTES:

1. TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.
2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN BACKFILL.
3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
4. BACKFILL SHALL BE TAMPED IN 6" LIFTS.
5. ACHIEVE 95% COMPACTION IN BACKFILL.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-3	D.W.C.	9-3-99	ABB	2-15-05
	RRH	3-31-00	J.P.S.	10-29-10

U13 TRENCH DIMENSIONS & BACKFILLING REQUIREMENTS

CITY OF RALEIGH FIRE DEPARTMENT
FIRE PROTECTION DIVISION
310 WEST MARTIN ST. RALEIGH, NC 27602

DESCRIPTION: **HOTBOX INLINE BACKFLOW**

REVISIONS: 5-1-2017

DATE: 4-1-06

DRAWING NO: FP-17A

U14 FIRE LINE BACKFLOW

TYPICAL NOTES:

- 1)-ALL PIPING AND FITTINGS TO BE DUCTILE IRON, GALVANIZED BRASS, STAINLESS STEEL, OR ALUMINUM
- 2)-40' MAX. FROM FDC TO APPARATUS ACCESS LOCATION
- 3)-FDC TO FACE FIRE APPARATUS ACCESS LOCATION (DOWNEY)
- 4)-DO NOT BLOCK APPARATUS ACCESS TO BUILDING WITH HOSE LAY FROM HYDRANT TO FDC
- 5)-MINIMUM DISTANCE 3 FEET BEHIND CURB, PROTECT FROM VEHICLES
- 6)-PROVIDE HEAT AND ALARM SUPERVISION TO HOT BOX (2 CONDUITS)
- 7)-COMPLY WITH PUBLIC UTILITIES HANDBOOK REQUIREMENTS

CITY OF RALEIGH FIRE DEPARTMENT
FIRE PROTECTION DIVISION
310 WEST MARTIN ST. RALEIGH, NC 27602

DESCRIPTION: **HOTBOX INLINE BACKFLOW**

REVISIONS: 5-1-2017

DATE: 4-1-06

DRAWING NO: FP-17B

**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

700 OLD KNIGHT ROAD OFFICE BUILDING

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA

**MASTER PLAN
UTILITY DETAIL SHEET**

PREPARED FOR: MOORE'S REALTY, INC. 101 FOREST DRIVE, STE. B-205 KNIGHTDALE, NORTH CAROLINA 27545
DATE: 06.24.2022
PROJECT ENGINEER: PJP
PROJECT CAD/DRAWN: PJP
PROJECT SURVEYOR: WAKE COUNTY, NC

PAST DESIGN GROUP, PA
Engineering & Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 946 4399 | Fax: 919 946 4395 | NC LICENSE NUMBER: C-3311

NO. _____

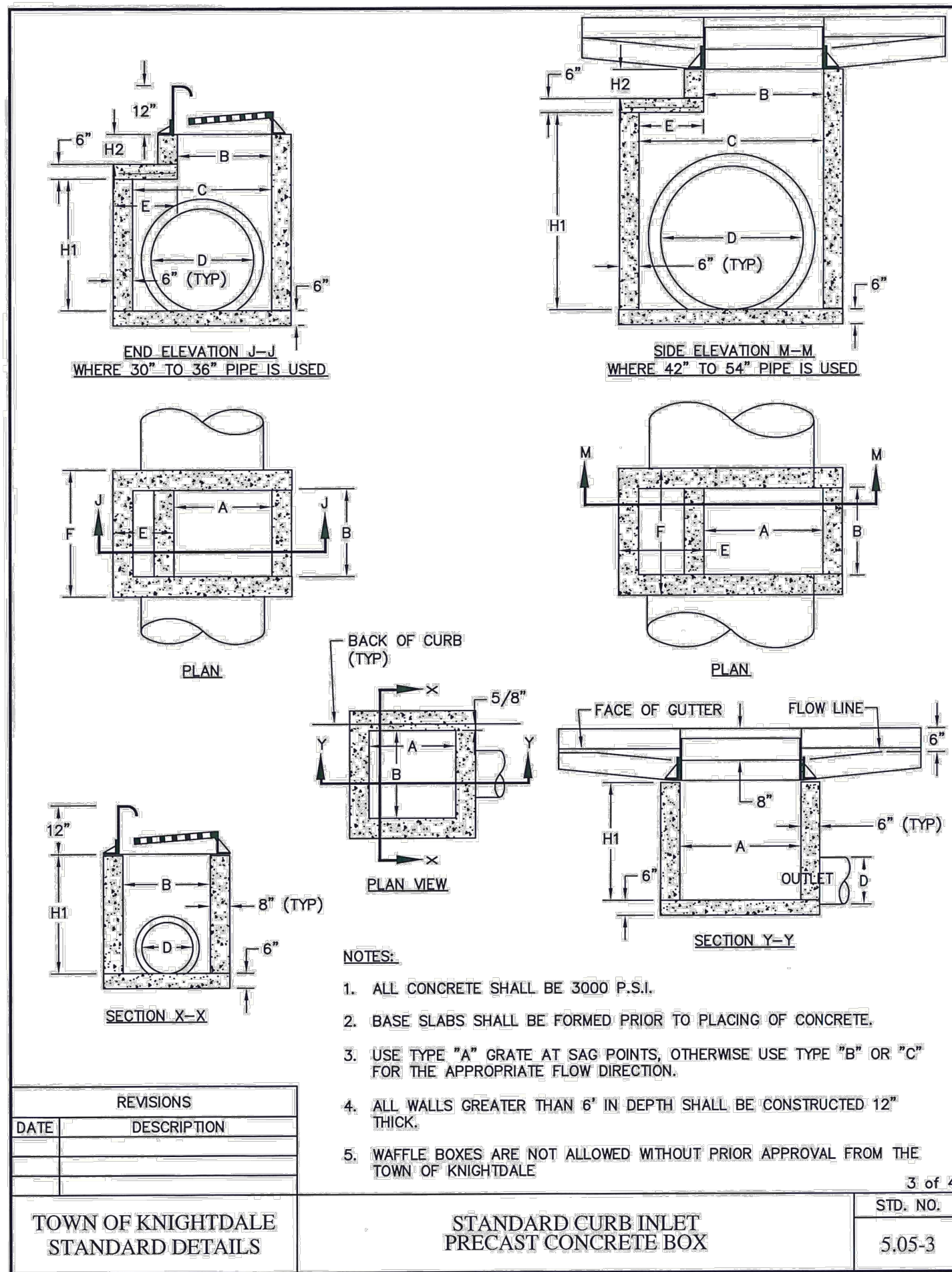
REVISION _____

DATE _____

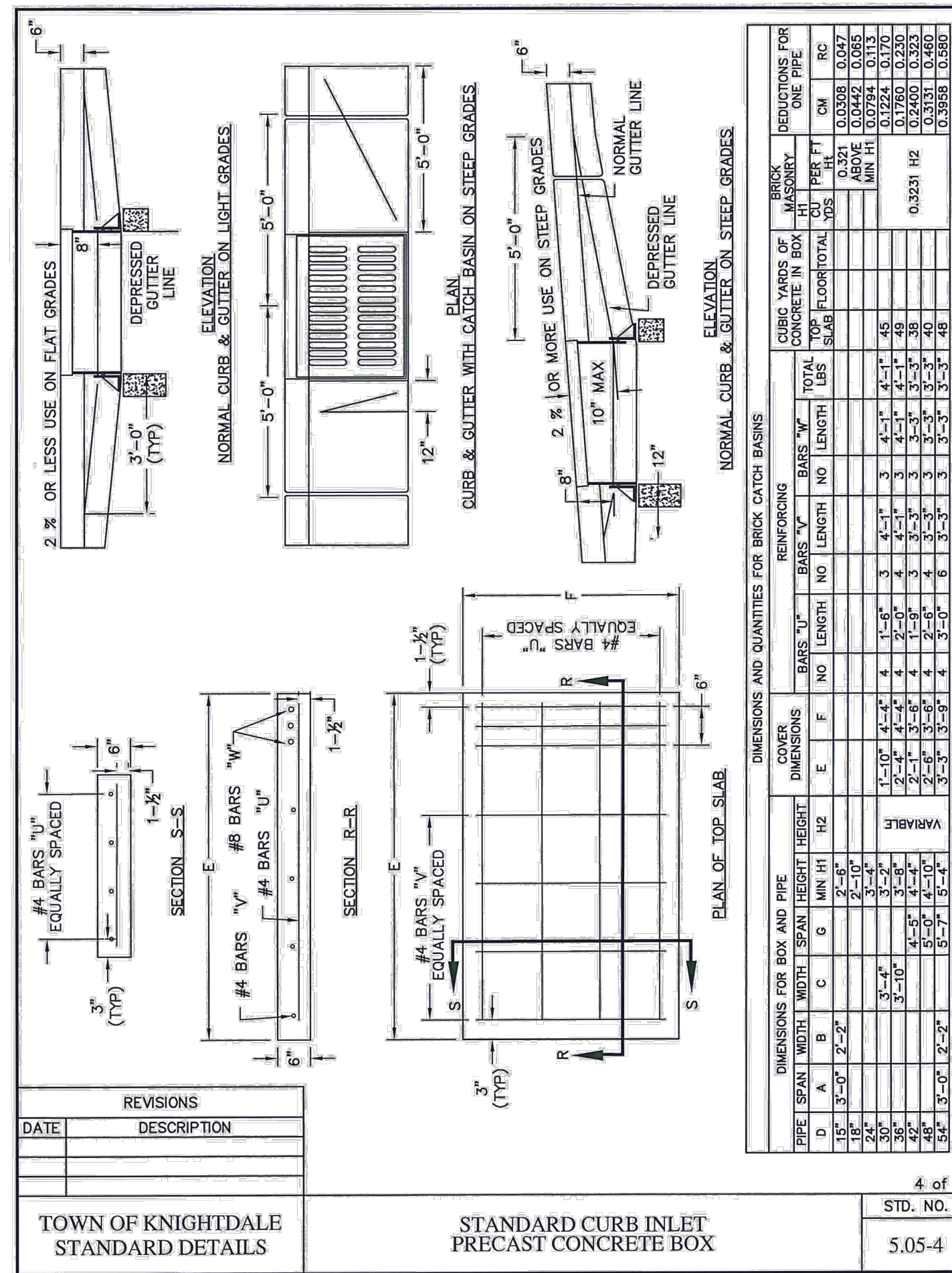
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DRAWING SHEET **D-2.2**

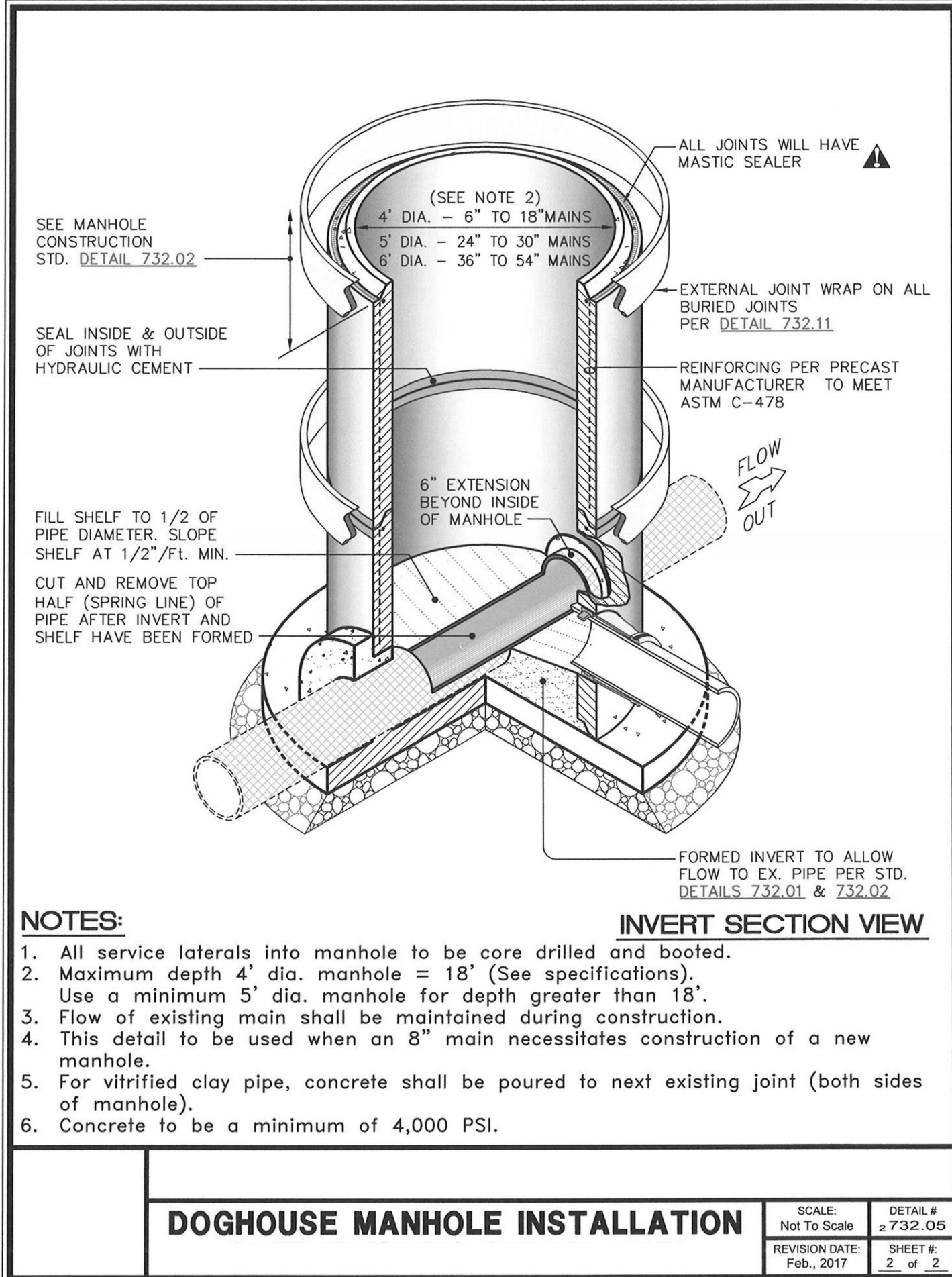
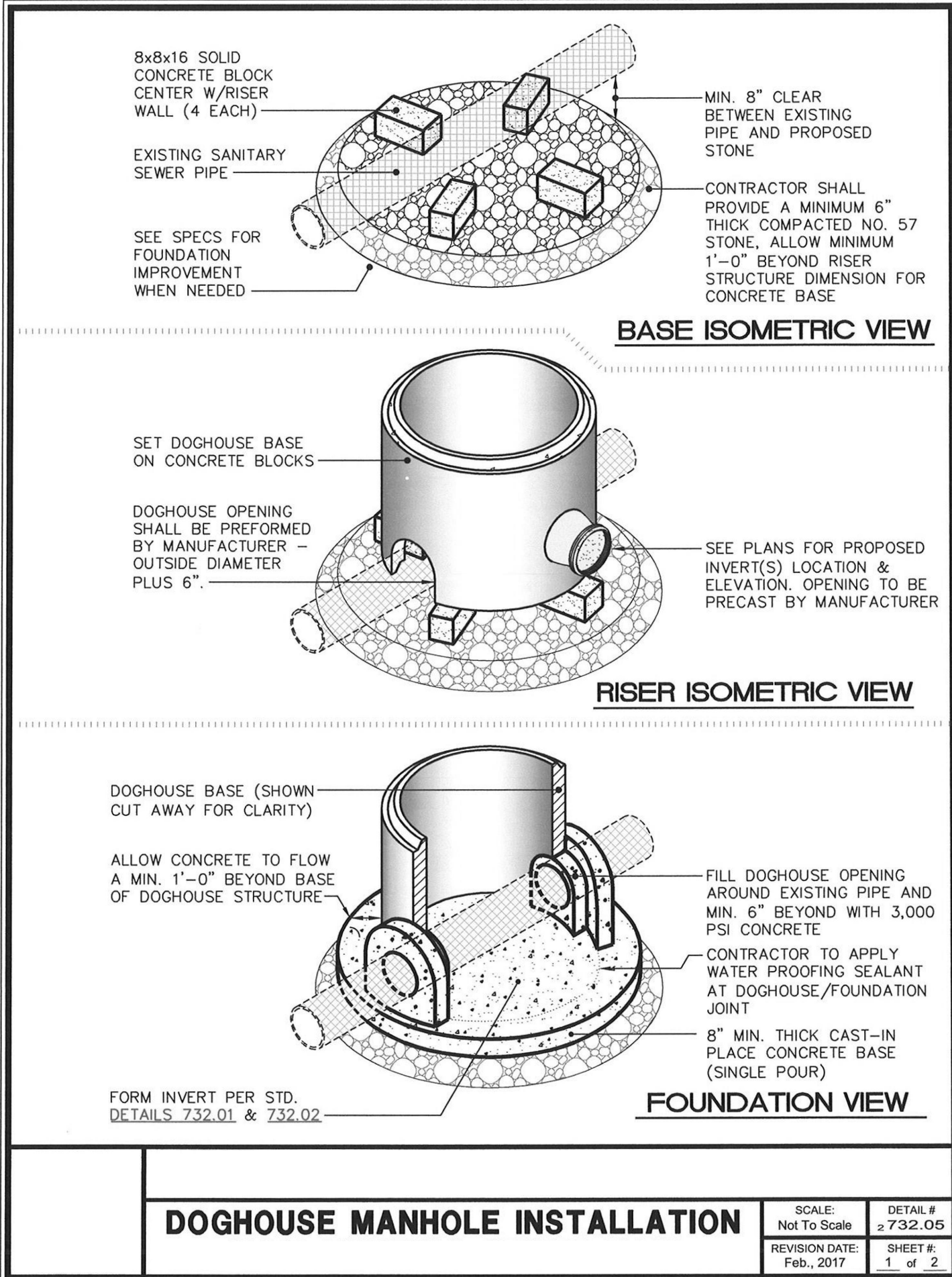
PROJECT NUMBER **627-22**



D1 STANDARD CURB INLET



D2 DOGHOUSE MANHOLE INSTALLATION

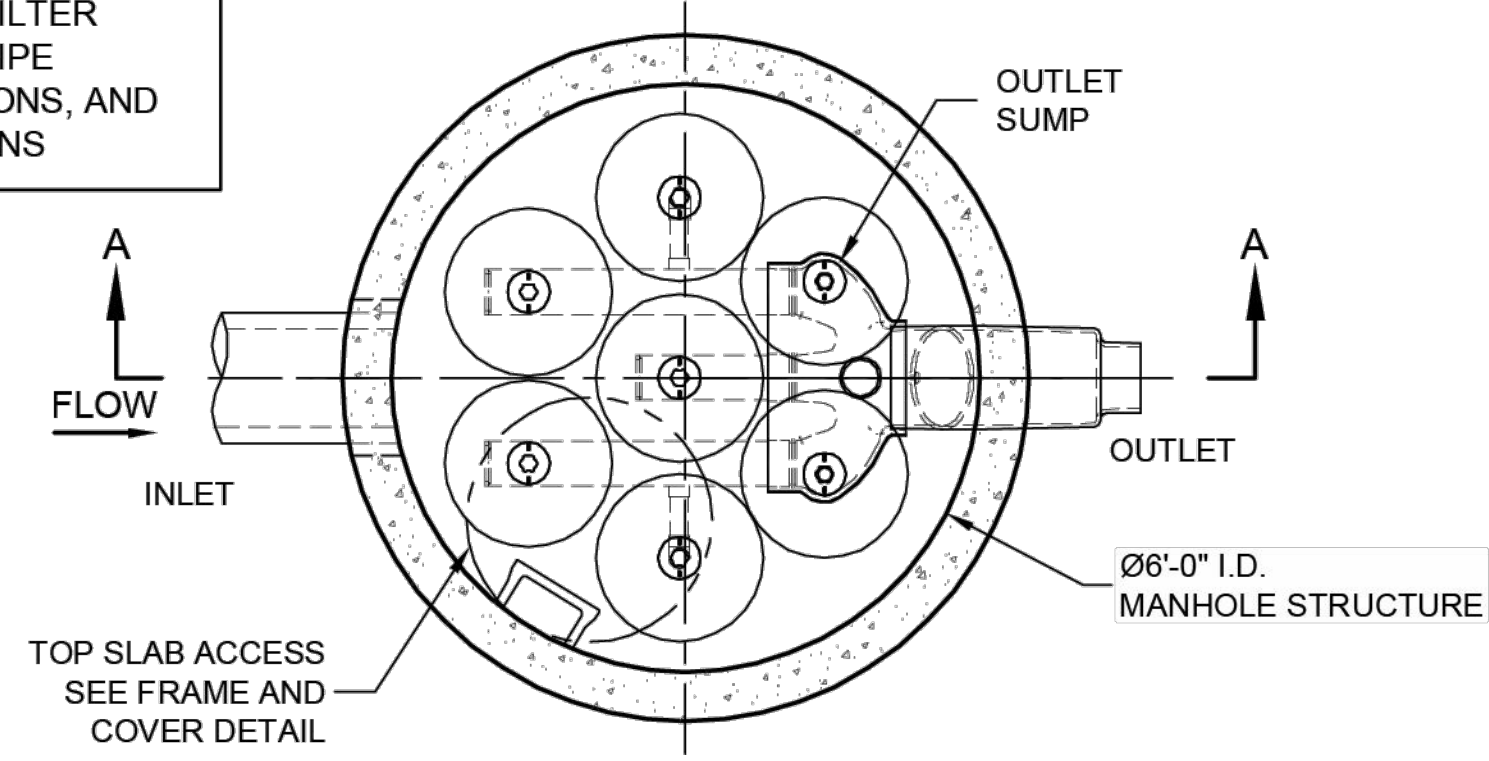


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SEE STORM DRAIN TABLES AND DETAILS PER EOR FOR SITE SPECIFIC STORMFILTER INLET/OUTLET PIPE DIAMETERS, ELEVATIONS, AND CONFIGURATIONS



STORMFILTER DESIGN NOTES

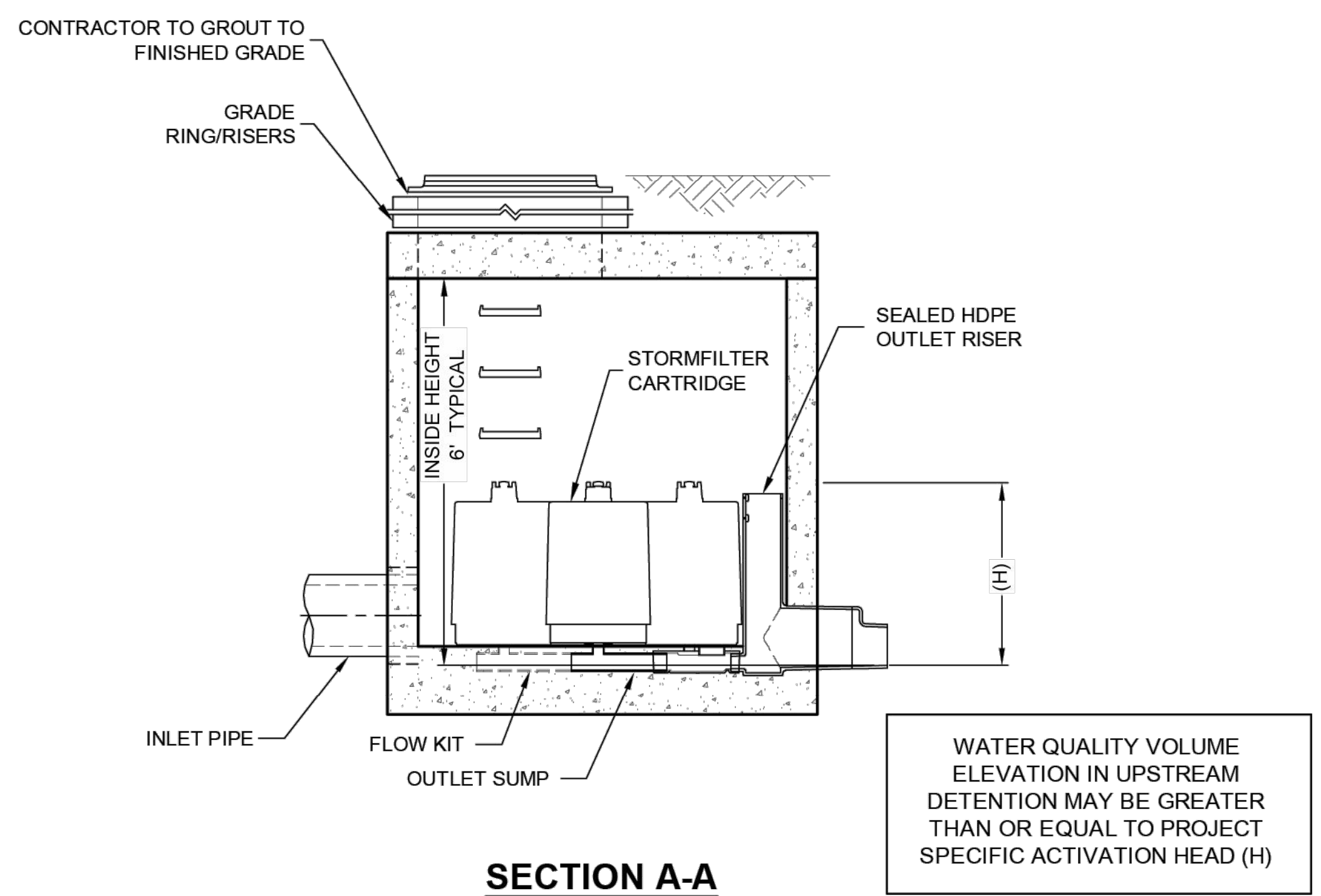
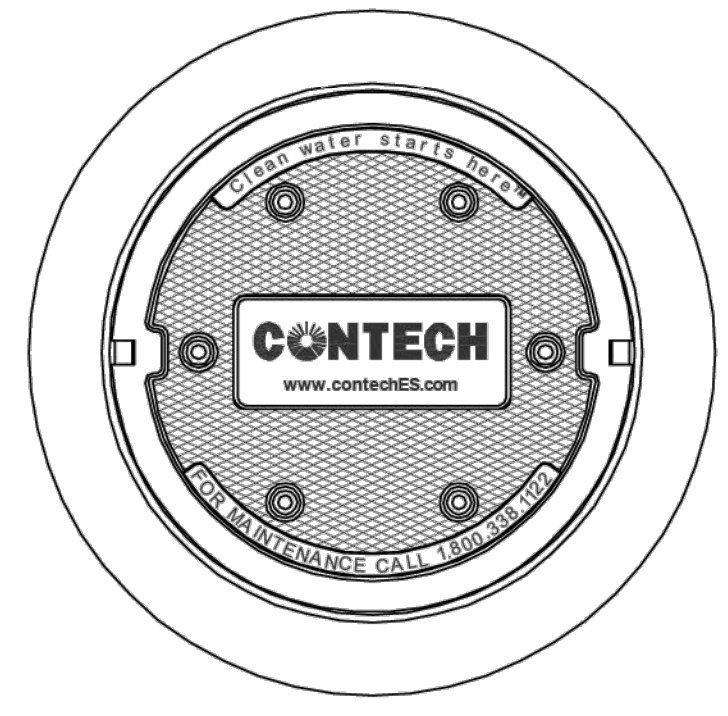
STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD VAULT STYLE IS SHOWN WITH THE MAXIMUM NUMBER OF CARTRIDGES (7). 6" OF DROP FROM INLET TO OUTLET IS REQUIRED FOR ALL CARTRIDGE SIZE OPTIONS.

CARTRIDGE SELECTION:

CARTRIDGE HEIGHT	27"	18"	LOW DROP
MINIMUM ACTIVATION HEAD (H)	3.05'	2.3'	1.8'
SPECIFIC FLOW RATE (PER NCDEQ MDC 2)	1 GPM/SF (ALL CARTRIDGE HEIGHTS)		
CARTRIDGE FLOW RATE	7.5 GPM (ALL CARTRIDGE HEIGHTS)		

700 Old Knight Road Office Building Knightdale, NC CES#821353-10

CARTRIDGE HEIGHT (SEE TABLE ABOVE)	18"
NUMBER OF CARTRIDGES REQUIRED	5
MEDIA TYPE	phosphosorb
NOTES/SPECIAL REQUIREMENTS:	



- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED VAULT DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' [1524 mm] AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
 - FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES [178 mm]. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
 - SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) [L/s] DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft)[m²].
 - STORMFILTER STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPE(S).
 - CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. IF OUTLET PIPE IS LARGER THAN 8 INCHES [200 mm], CONTRACTOR TO REMOVE THE 8 INCH [200 mm] OUTLET STUB AT MOLDED-IN CUT LINE. COUPLING BY FERNCO OR EQUAL AND PROVIDED BY CONTRACTOR.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

The Stormwater Management
StormFilter[®]

THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,322,626; 5,524,976; 5,707,527; 5,985,527; 6,027,036; 6,648,046. RELATED FOREIGN PATENTS, OR OTHER PATENTS PENDING.

CONTECH[®]
ENGINEERED SOLUTIONS LLC
www.contechES.com
8025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

SFMH72
POST DETENTION STORMFILTER
DETAIL

D4 72" STORMFILTER MANHOLE DETAIL

**FOR REVIEW ONLY
NOT FOR CONSTRUCTION**

NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

PAST DESIGN GROUP, PA
Engineering & Consulting
107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
Phone: 919 946 4399 | Fax: 919 946 4395 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. 80-205
KNIGHTDALE, NORTH CAROLINA 27545

DATE: 06.24.2022
PROJECT ENGINEER:
PROJECT CADD DESIGNER:
PROJECT SURVEYOR:
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING
KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
SCM DETAIL SHEET

SEAL: [Professional Engineer Seal]
DATE: [Blank]
REVISION: [Blank]

NO.	REVISION	DATE

DRAWING SHEET
D-3.2

PROJECT NUMBER
627-22

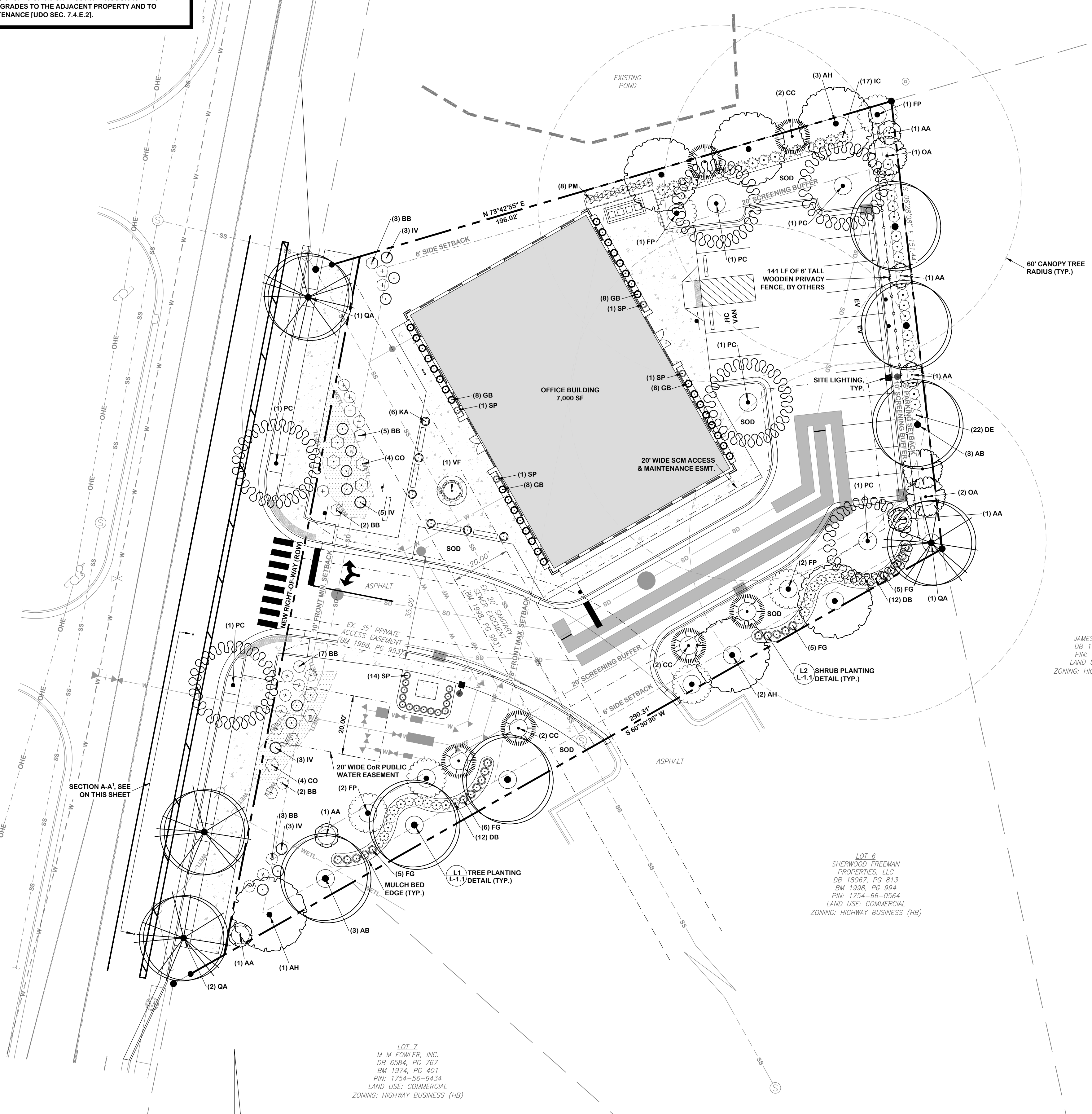
F:\Public\10-Projects\600-699\627-22_700_Old_Knight_Road_Office_(Moore's_Realty_Inc)\50-Drawings\4-Design\627-22_D-3.0.dwg Dec 19, 2024 - 4:31pm BY:krantz

LANDSCAPE NOTES

- LANDSCAPED AREAS REQUIRED BY THIS CHAPTER SHALL NOT CONTAIN ANY DEVELOPMENT, IMPERVIOUS SURFACES, OR SITE FEATURES THAT DO NOT FUNCTION TO MEET THE APPLICABLE STANDARDS FOR THAT AREA OR THAT REQUIRE REMOVAL OF EXISTING SIGNIFICANT VEGETATION [UDO SEC. 7.4.E.1].
- NO GRADING, DEVELOPMENT, OR LAND-DISTURBING ACTIVITIES SHALL OCCUR WITHIN A BUFFER YARD IF FOREST CANOPY, SPECIMEN TREES OR SIGNIFICANT VEGETATION EXISTS WITHIN THESE AREAS, UNLESS APPROVED BY THE LAND USE ADMINISTRATOR. IF GRADING WITHIN A BUFFER YARD IS PROPOSED, SLOPES OF 1:3 OR LESS ARE ENCOURAGED TO ENSURE THE PROPER TRANSITION OF GRADES TO THE ADJACENT PROPERTY AND TO FACILITATE LANDSCAPING AND MAINTENANCE [UDO SEC. 7.4.E.2].

PLANT_SCHEDULE_SHEET_L-1.0

CANOPY TREES	CODE	QTY	%	BOTANICAL / COMMON NAME	CALIPER	HEIGHT	CONTAINER	LOCATION
	PC	6	27.3	Pistacia chinensis Chinese Pistache	2" MIN.	8' MIN.	B&B	STREET, PARKING LOT
	QA	4	18.2	Quercus acutissima Sawtooth Oak	2" MIN.	8' MIN.	B&B	STREET, SOUTH BUFFER
	AH	6	27.3	Carpinus caroliniana American Hornbeam	2" MIN.	8' MIN.	B&B	NORTH & SOUTH BUFFERS
	AB	6	27.3	Acer rubrum 'Brandywine' Brandywine Maple Tree	2" MIN.	8' MIN.	B&B	EAST & SOUTH BUFFERS
UNDERSTORY TREES								
	FP	6	28.6	Cercis canadensis 'Forest Pansy' Forest Pansy Eastern Redbud	1.5" MIN.	6' MIN.	B&B	NORTH & SOUTH BUFFERS
	CC	6	28.6	Cotinus coggygria Smoketree	1.5" MIN.	6' MIN.	B&B	NORTH & SOUTH BUFFERS
	AA	6	28.6	Amelanchier arborea Downy Serviceberry	1.5" MIN.	6' MIN.	B&B	EAST & SOUTH BUFFERS
	OA	3	14.3	Oxydendron arboreum Sourwood	1.5" MIN.	6' MIN.	B&B	EAST BUFFER
SHRUBS								
	PM	8	4.1	Podocarpus macrophyllus 'Maki' Maki Shrubby Yew Podocarpus	36" MIN.	8'-10'	3'-4'	SCREENING (TRASH)
	DB	24	12.4	Distylium 'Blue Cascade' Blue Cascade Distylium	18" MIN.	3'-4'	3'-4'	SOUTH BUFFER
	IC	17	8.8	Ilex vomitoria 'Condeux' Bordeaux Yaupon Holly	18" MIN.	3'-4'	3'-4'	NORTH BUFFER
	FG	21	10.9	Gardenia jasminoides 'Frostproof' Frostproof Gardenia	18" MIN.	5'	4'	SOUTH BUFFER
	DE	22	11.4	Distylium x PHIDIST-I Emerald Heights Distylium	18" MIN.	5'	5'	EAST BUFFER
	SP	18	9.3	Ilex crenata 'Sky Pencil' Sky pencil Japanese Holly	36" MIN.	6'-8'	1'-3'	SCREENING (UTILITIES), FOUNDATION
	BB	22	11.4	Callicarpa americana American Beautyberry	18" MIN.	3'-8'	3'-6'	ENHANCED ROADSIDE
	CO	8	4.1	Cephalanthus occidentalis Button bush	18" MIN.	5'-8'	3'-6'	ENHANCED ROADSIDE
	IV	14	7.3	Itea virginica 'Henry's Garnet' Henry's Garnet Virginia Sweetspire	18" MIN.	3'-5'	3'-5'	ENHANCED ROADSIDE
	GB	32	16.6	Ilex glabra 'Gem Box' Gembox Inkberry Holly	12" MIN.	3'	3'	FOUNDATION
	KA	6	3.1	Abelia x grandiflora 'Kaleidoscope' Kaleidoscope Abelia	12" MIN.	2'-3'	3'-4'	PUBLIC GATHERING SPACE
	VF	1	0.5	Vitex x Flip Side Flip Side Chaste Tree	36" MIN.	8'	8'	PUBLIC GATHERING SPACE



LANDSCAPE CALCULATIONS:

INTERIOR PARKING LOT LANDSCAPING (UDO SEC. 7.4.J):
 NO PARKING SPACE SHALL BE MORE THAN 60 FT FROM THE BASE OF A DECIDUOUS CANOPY TREE. A DECIDUOUS CANOPY TREE SHALL BE PROVIDED AT THE END OF EACH PARKING ROW.
 DECIDUOUS CANOPY TREES REQUIRED: 4
 DECIDUOUS CANOPY TREES PROVIDED: 4

VEHICLE ACCOMMODATION SCREENING (UDO SEC. 7.5.B):
 VEHICLE ACCOMMODATION AREAS SHALL BE SCREENED FROM OFF-SITE VIEWS WITH A TYPE B BUFFER YARD. PER EVERY 100 LINEAR FEET (LF),
 3 CANOPY TREES, 5 UNDERSTORY TREES, AND 20 SHRUBS REQUIRED.

NORTHERN TYPE B BUFFER SCREENING: 85 LF
 CANOPY TREES REQUIRED: $3 \times 0.85 = 2.55 = 3$
 CANOPY TREES PROVIDED: 3
 UNDERSTORY TREES REQUIRED: $5 \times 0.85 = 4.25 = 4$
 UNDERSTORY TREES PROVIDED: 4
 SHRUBS REQUIRED: $20 \times 0.85 = 17$
 SHRUBS PROVIDED: 17

EASTERN TYPE B BUFFER SCREENING: 112 LF (EASTERN 20' PARKING LOT SCREENING REQUIREMENT HAS BEEN ADMINISTRATIVELY REDUCED TO 10'. PROVIDED THAT THE SAME NUMBER OF PLANTINGS REQUIRED BY THE 20' TYPE B BUFFER STILL BE PLANTED, AND A FENCE IS CONSTRUCTED.)
 CANOPY TREES REQUIRED: $3 \times 1.12 = 3.36 = 3$
 CANOPY TREES PROVIDED: 3
 UNDERSTORY TREES REQUIRED: $5 \times 1.12 = 5.6 = 6$
 UNDERSTORY TREES PROVIDED: 6
 SHRUBS REQUIRED: $20 \times 1.12 = 22.4 = 22$
 SHRUBS PROVIDED: 22

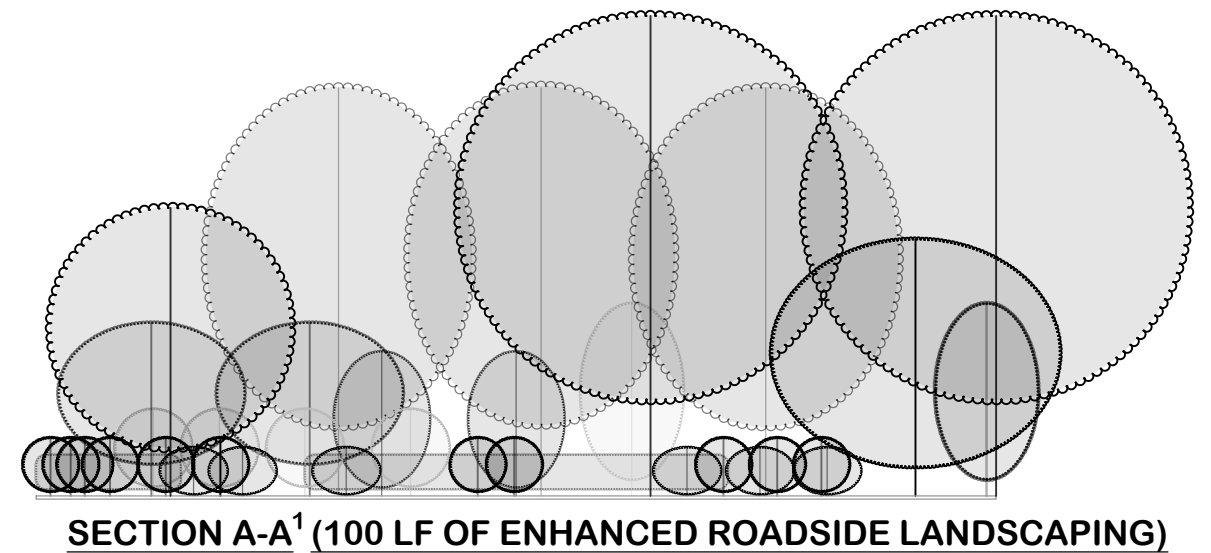
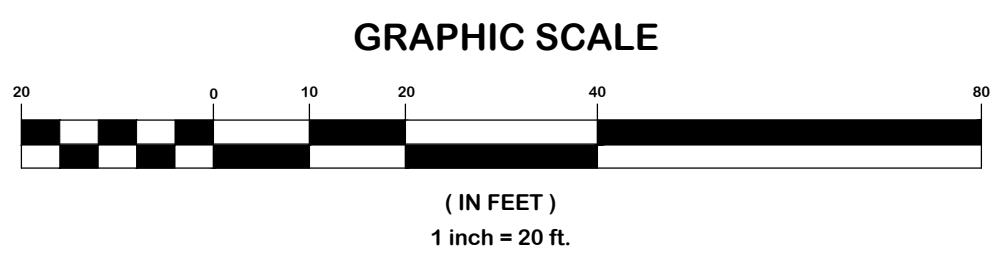
SOUTHERN TYPE B BUFFER SCREENING: 226 LF
 CANOPY TREES REQUIRED: $3 \times 2.26 = 6.78 = 7$
 CANOPY TREES PROVIDED: 7
 UNDERSTORY TREES REQUIRED: $5 \times 2.26 = 11.3 = 11$
 UNDERSTORY TREES PROVIDED: 11
 SHRUBS REQUIRED: $20 \times 2.26 = 45.2 = 45$
 SHRUBS PROVIDED: 45

TRASH RECEPTACLE SCREENING (UDO SEC. 7.5.E. & 7.1.3.):
 20 SHRUBS PER 100 LINEAR FEET = 20% = 0.5
 OFF-SITE VIEW SCREEN: $13.3 \text{ LF} \times 0.5 = 6.65 = 7$
 SHRUBS REQUIRED: 7
 SHRUBS PROVIDED: 8

STREET TREES (UDO SEC. 7.4.L):
 STREET TREES SPACED 40' AVG.
 240 LF RW - 33 SITE ACCESS = 207 LF
 STREET TREES REQUIRED: $207 / 40 = 5.18 = 5$
 STREET TREES PROVIDED: 5

ENHANCED ROADSIDE LANDSCAPING SHRUBS:
 LANDSCAPE ABOVE AND BEYOND UDO REQUIREMENTS
 REQUIRED: LANDSCAPE ABOVE AND BEYOND UDO REQUIREMENTS (MORE THAN JUST STREET TREES)
 PROVIDED: 44 DECIDUOUS SHRUBS

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F:\Public\Projects\600-699\627-22_700 Old Knight Road Office (Moore's Realty, Inc.)\50-Drawings\4-Design\627-22_L-1.0.dwg - 4:34pm By:tkranz

NOTE(s): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

PAST DESIGN GROUP, PA
 Engineering & Consulting
 107 Fayetteville Street, Suite 200, Raleigh, North Carolina 27601
 Phone: 919 846 4399 | Fax: 919 846 4395 | NC LICENSE NUMBER: C-3311

700 OLD KNIGHT ROAD OFFICE BUILDING
 KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA
MASTER PLAN
LANDSCAPE PLAN

PREPARED FOR:
 MOORE'S REALTY, INC.
 101 FOREST DRIVE, STE. 205
 WAKEFORD, NORTH CAROLINA 27545

PROJECT ENGINEER:
 PROJECT CADD DESIGNER:
 PROJECT SURVEYOR:
 WAKE COUNTY, NC

DATE: 06.24.2022

SCALE: 1" = 20'

NO.:

REVISION:

DRAWING SHEET

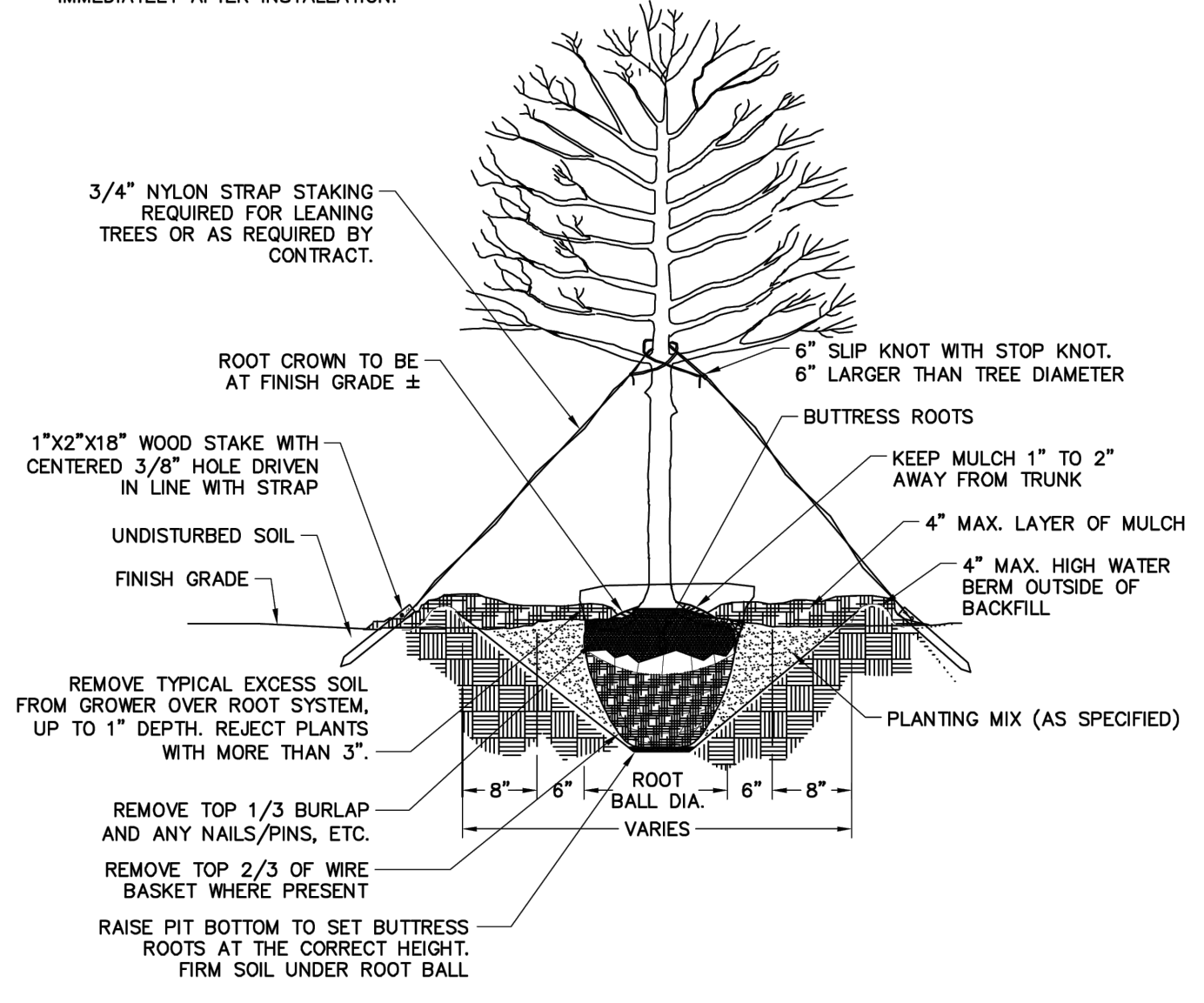
PROJECT NUMBER

L-1.0

627-22

NOTES:

1. REMOVE WIRE OR NYLON TWINE FROM BALL.
2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (AMSI, 1990, PART 1, "SHADE AND FLOWERING TREES")

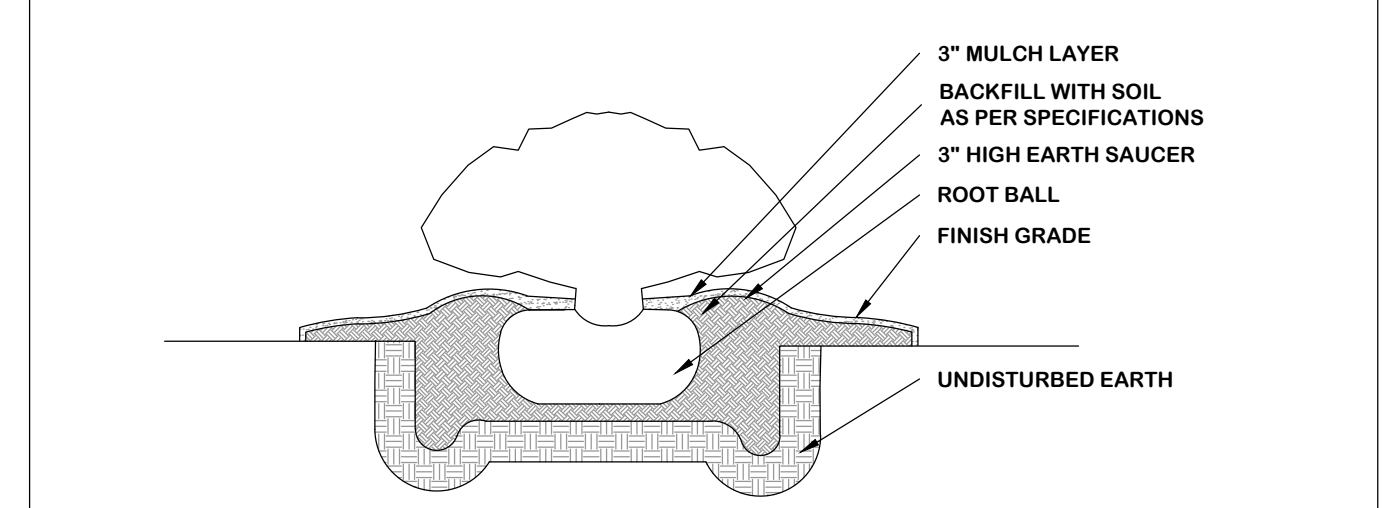
FOR EXAMPLE: CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
2"	12-14'	16'	24"	16"
3"	14-16'	18'	32"	21"

REVISIONS	
DATE	DESCRIPTION

TOWN OF KNIGHTDALE STANDARD DETAILS	TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)	STD. NO. 3.25
--	--	------------------

L1 TREE PLANTING DETAIL

SHRUB PLANTING DETAIL



- NOTES**
1. REMOVE THE BURLAP, BURLAP TIES AND WIRE BASKET FROM TOP 1/3 OF ROOTBALL. REMOVE ALL NYLON STRINGS, PLASTIC LINERS AND SYNTHETIC BURLAP - TYPE OF MATERIALS FROM THE ENTIRE ROOTBALL.
 2. SCARIFY ROOTBALL AND BOTTOM/SIDES OF PLANT PIT.
 3. EXCAVATE PLANTING PIT TWO TO THREE TIMES AS WIDE AS THE ROOTBALL. INSTALL ROOTBALL 1/4 TO 1/3 ABOVE EXISTING/PROPOSED GRADE. LOCATE ROOTBALL ON SOLID SOIL AND NOT LOOSE BACKFILL.
 4. ALL SAUCERS SHALL BE SOAKED WITH WATER AND MULCHED IMMEDIATELY FOLLOWING PLANTING.
 5. THE SIZE OF THE ROOTBALL SHALL CONFORM TO THE AAN STANDARDS.
 6. FERTILIZED ALL PLANTS WITH AGRIFORM FERTILIZER TABLETS OR EQUAL, TO BE APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATION.
 7. ALL ROOTBALLS AFTER REMOVING FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO BACKFILLING THE PLANTING HOLE.
 8. THOROUGHLY SOAK THE SHRUB ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND AT LEAST ONCE A WEEK FOR THE FIRST TWO GROWING SEASONS.

L2 SHRUB PLANTING DETAIL

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NOTE(S): ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH ALL TOWN OF KNIGHTDALE, CITY OF RALEIGH AND NCDOT STANDARDS AND SPECIFICATIONS.

F:\Public\10-Projects\600-699\627-22-700 Old Knight Road Office (Moore's Realty, Inc.)\50-Drawings\4-Design\627-22 L-1.dwg Dec 19, 2024 - 4:35pm By: kranz

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 Phone: 919 848 4399 | Fax: 919 848 4395 | NC LICENSE NUMBER: C-3311

PREPARED FOR:
MOORE'S REALTY, INC.
101 FOREST DRIVE, STE. 60-205
KNIGHTDALE, NORTH CAROLINA 27645

DATE: 06.24.2022

PROJECT ENGINEER:
PJP

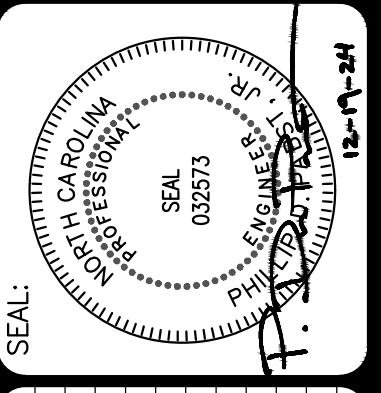
PROJECT CAD DESIGNER:
PJP

PROJECT SURVEYOR:
PJP
WAKE COUNTY, NC

700 OLD KNIGHT ROAD OFFICE BUILDING

KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA

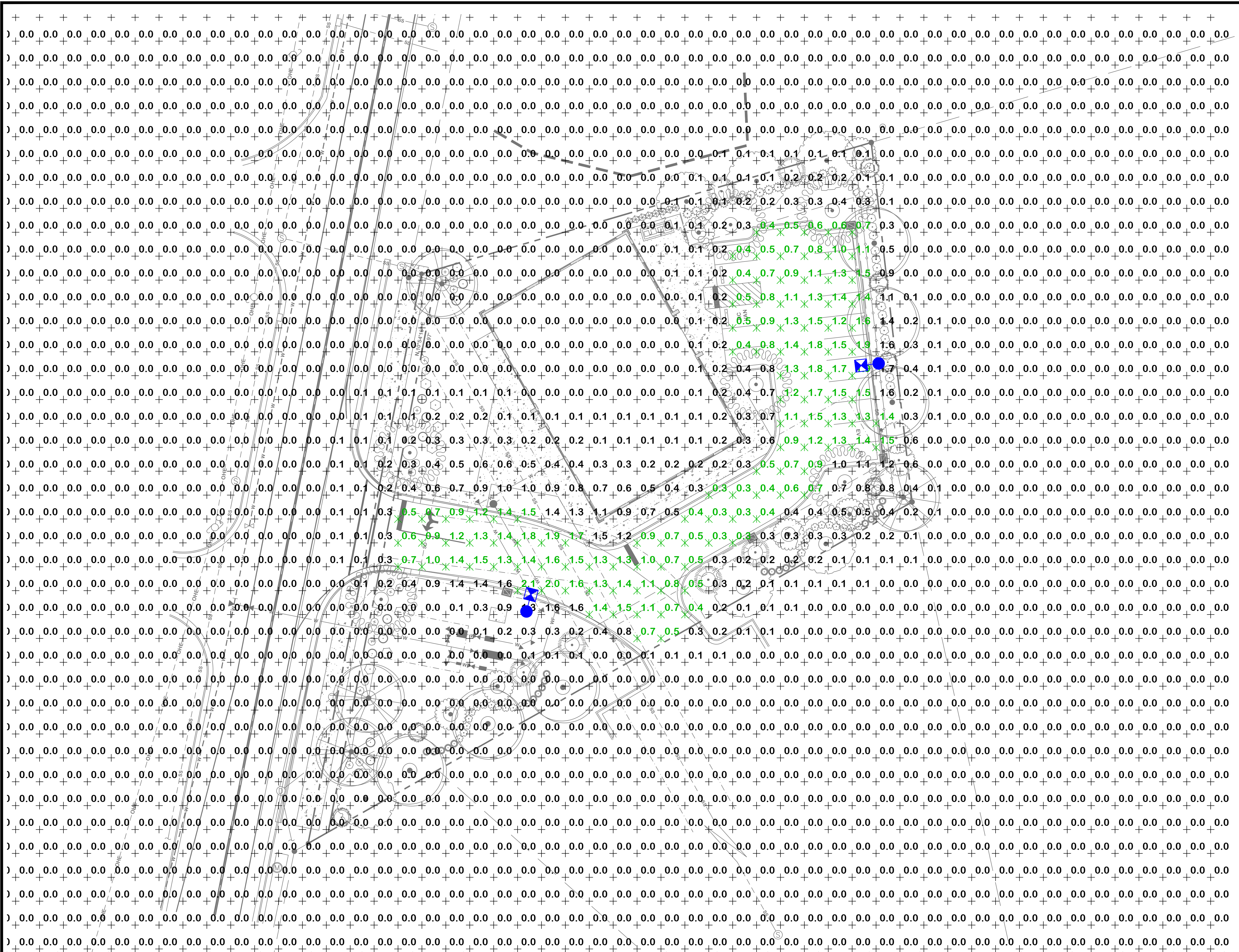
**MASTER PLAN
LANDSCAPE DETAIL SHEET**



NO.	REVISION	DATE

DRAWING SHEET
L-1.1

PROJECT NUMBER
627-22



Outdoor Lighting

SHOEBOX LED
(Meets Dark Sky Criteria)

Light source: LED (white)
 Wattage: 150 | 220 | 420 | 530 watts
 Light pattern: E3 Type V | Type IV (forward throw) | Type III
 IESNA cutoff classification: Full cutoff
 BUC rating: 150W Type III = BSU0003 / Type IV = BSU0004 / Type V = BSU0003
 220W Type III = BSU0004 / Type IV = BSU0004 / Type V = BSU0003
 420W Type IV = BSU0005 / Type V = BSU0005
 530W Type IV = BSU0006 / Type V = BSU0006
 Color temperature: 4,000K

POLE AVAILABLE	MOUNTING HEIGHT	COLOR
Round tapered decorative metal*	35'	Black, Bronze
Decorative square metal*	25' and 30'	Black, Bronze, Gray, White
Fiberglass	25' and 30'	Black (1 or 2 fixtures per pole) Gray (1 or 2 fixtures per pole)

FEATURES

- Turkey operation: Provides hassle-free installation and service
- Little or no installation cost: Frees up capital for other projects
- Design services by lighting professionals included: Meets industry standards and lighting ordinances
- Maintenance, electricity & warranty included: Eliminates high and unexpected repair bills
- One low monthly cost on your electric bill: Convenience and savings for you

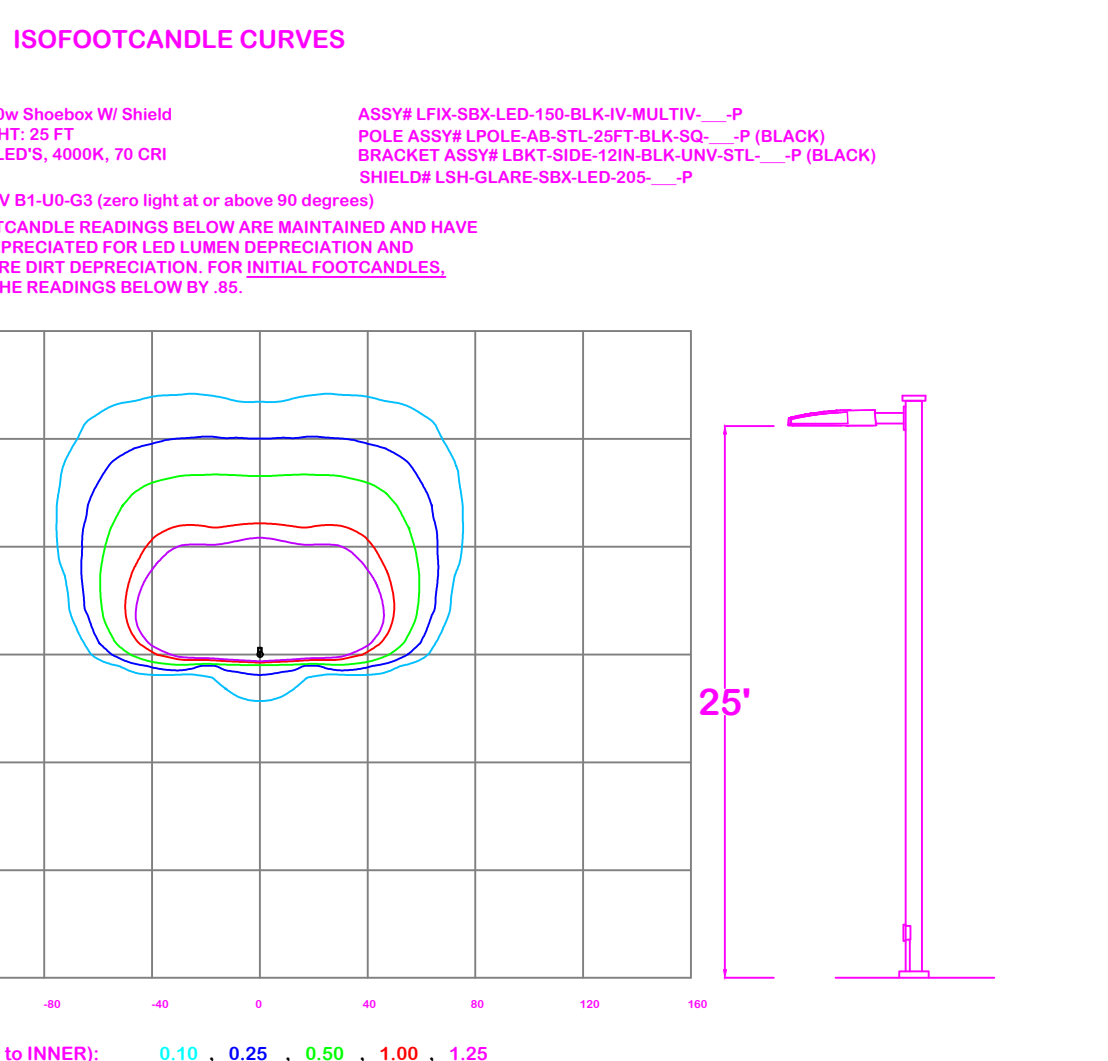
BENEFITS

- Light distribution pattern

For additional information, email us at: OLECrew@dukeenergy.com

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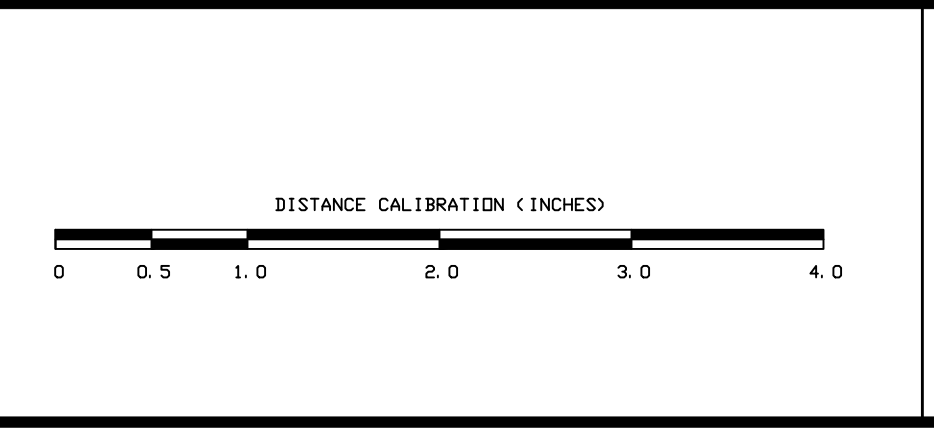
NOTE: ALL ACCENT LIGHTING, EXCEPT FOR LOW-VOLTAGE LIGHTING SYSTEMS (SECTION 7.7.B.7) SHALL MEET THE ADDITIONAL STANDARDS OUTLINED IN SECTION 7.7.E.3 OF THE UDO. ALL SECURITY LIGHTING SHALL MEET THE STANDARDS OUTLINED IN SECTION 7.7.E.5 OF THE UDO.



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking	✕	1.1 fc	2.1 fc	0.3 fc	7.0:1	3.7:1

Schedule						
Symbol	Label	QTY	Description	Number Lamps	Lamp Output	LLF
✕	A	2	LED 150w Shoebox - Type IV - 4000K - House Side Shield	48	253	0.85

NO.	DATE	REVISION	BY



PROPRIETARY & CONFIDENTIAL

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OLD KNIGHT ROAD OFFICE BUILDING
 Knightdale, NC
 SITE LIGHTING ARRANGEMENT
 Designed by DUKE ENERGY PROGRESS LIGHTING SOLUTIONS
 Reviewed by N. Johnson Scale 1" = 20'
 Date 09/26/2024 Size Drawing size "D"
 Description LED Shoebox
 Drawing No. 24-0393A Sht. 1 OF 1

PRELIMINARY
NOT FOR CONSTRUCTION

THESE DRAWINGS ARE INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF THE ARCHITECT. INFRINGEMENT WILL BE PROSECUTED. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND BE RESPONSIBLE FOR FIELD FIT AND QUANTITY OF WORK. NO ALLOWANCES SHALL BE MADE IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLECT ON HIS PART. DRAWING IS NOT TO BE SCALED. IF INDICATED IS FOR GENERAL REFERENCE ONLY.
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Table with 3 columns: No., Date, Description. Row 1: 1, 12/13/2024, SKETCH PLAN COMMENT REVISIONS

MOORE'S REALTY &
COWORKING

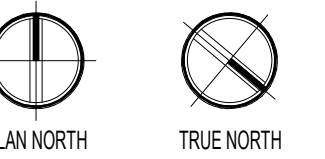
PROJECT #

2083

DATE

12/13/2024

700 OLD KNIGHT RD
KNIGHTDALE, NC 27545



PLAN NORTH TRUE NORTH

SCALE
As indicated

SHEET NAME

ELEVATIONS, PLAN, &
DETAILS

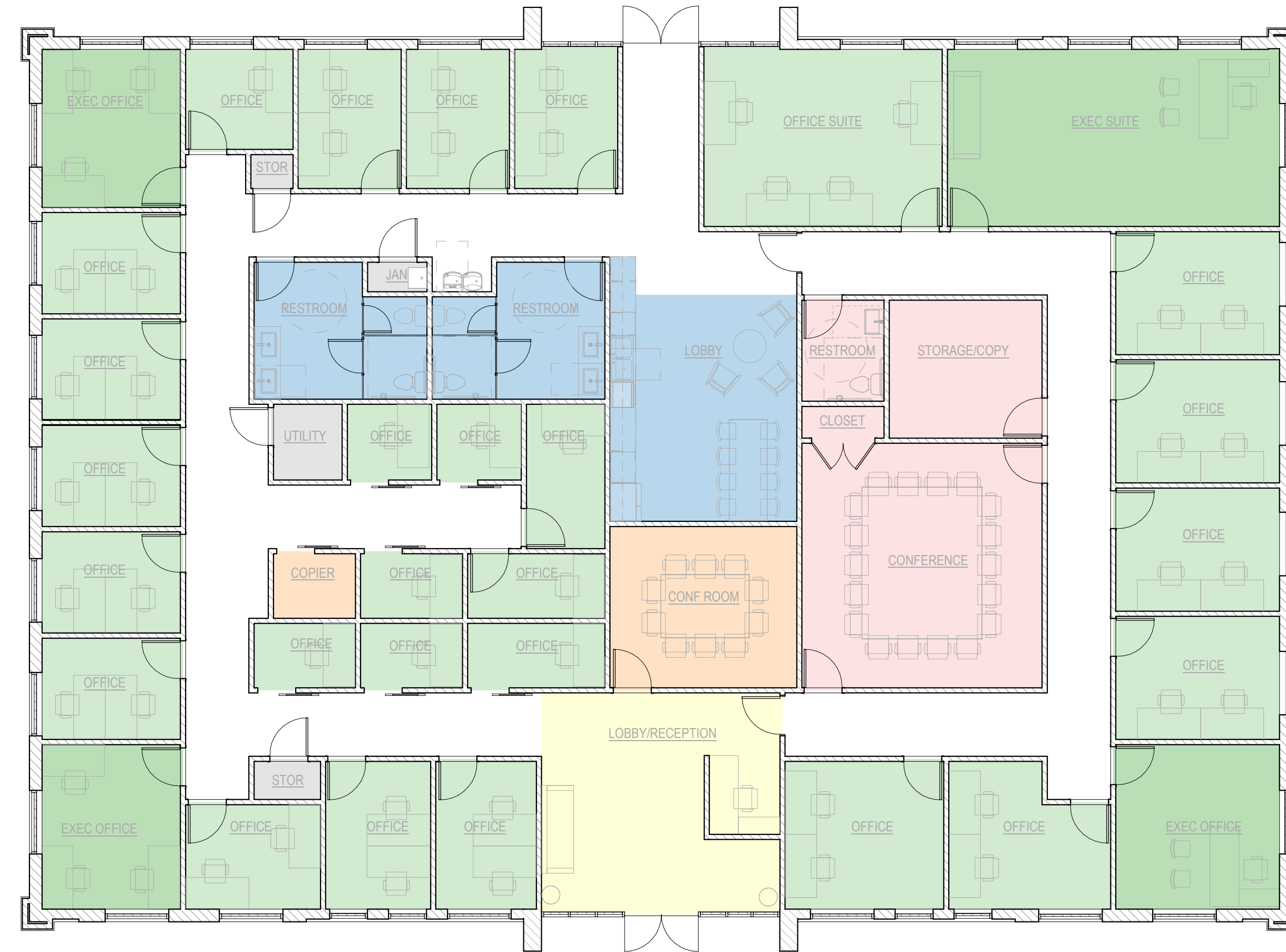
SHEET NUMBER

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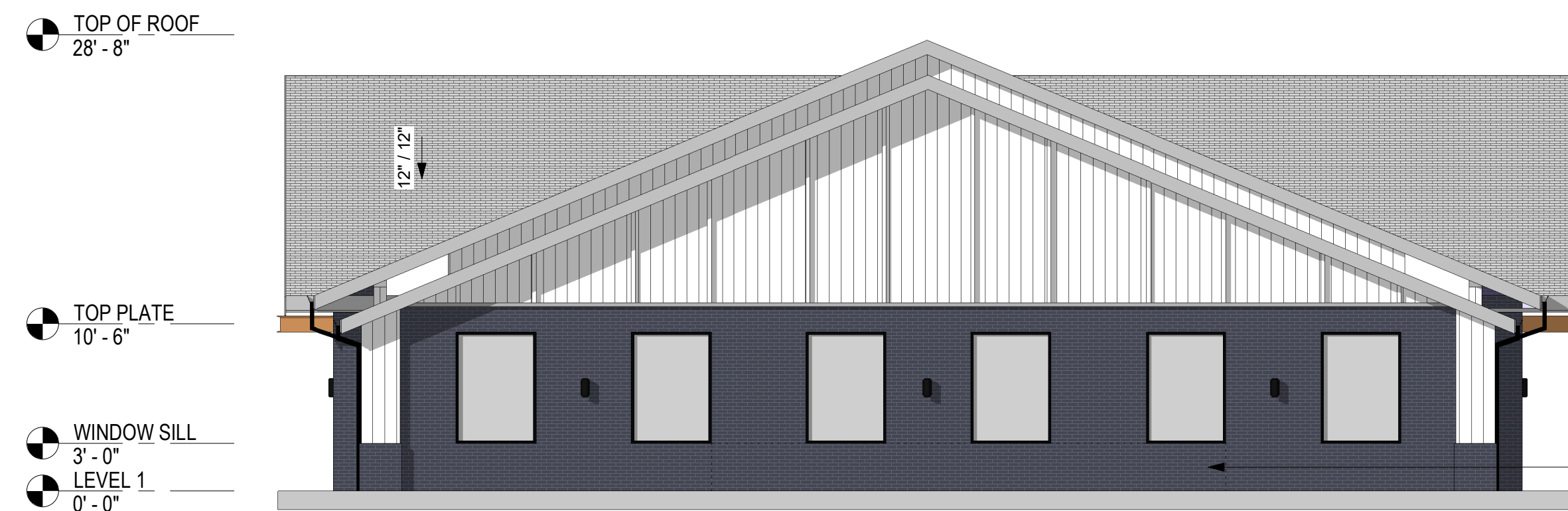
NOTE: ALL ACCENT LIGHTING, EXCEPT LOW-VOLTAGE LIGHTING SYSTEMS (SECTION 7.7.B.7) SHALL MEET THE ADDITIONAL STANDARDS OUTLINED IN SECTIONS 7.7.E.3 OF THE UDO. ALL SECURITY LIGHTING SHALL MEET THE STANDARDS OUTLINED IN SECTION 7.7.E.5 OF THE UDO.

EXTERIOR MATERIAL LEGEND

- B-1 BRICK - "COBALT BLACK WIRECUT"
FC-1 HARDIE PLANK FIBER CEMENT SIDING V GROOVE - WHITE
FC-2 HARDIE PLANK FIBER CEMENT BOARD AND BATTEN - WHITE
M-1 ANODIZED PAINTED METAL - BLACK
M-2 WEATHERED METAL FINISH
S-1 SHINGLES - LIGHT GRAY "FOX HOLLOW"



5 PLAN
1/8" = 1'-0"



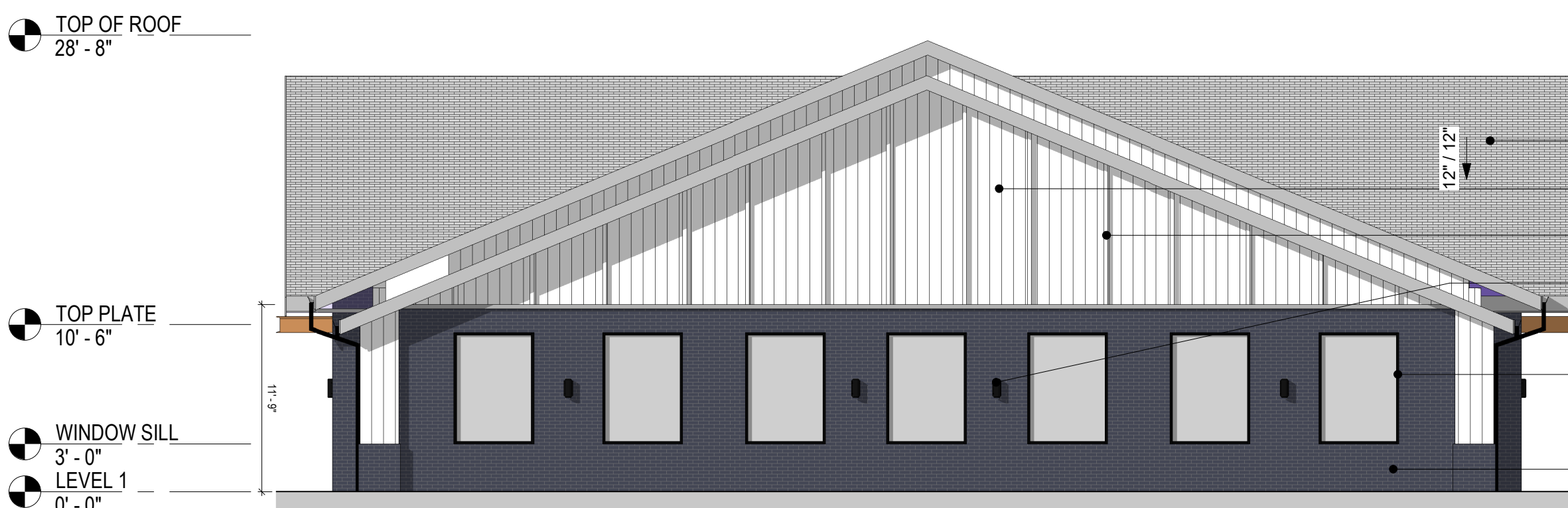
PRIMARY MATERIAL CALCULATIONS:
TOTAL FACADE AREA = 1,269SF
TOTAL GLAZING: 211SF
PRIMARY MATERIAL REQUIRED: (1,269SF - 211SF) = 1,058SF X .5 = 529SF REQUIRED (50%)
ACTUAL MASONRY PROVIDED: 586SF (55%)

4 NORTH ELEVATION
1/8" = 1'-0"



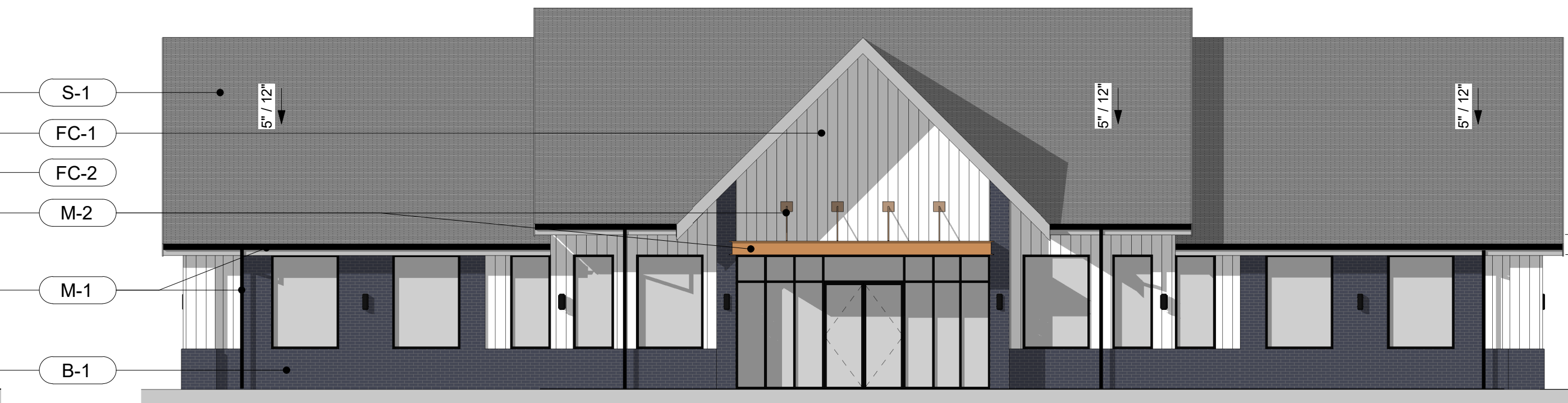
PRIMARY MATERIAL CALCULATIONS:
TOTAL FACADE AREA = 1,252SF
PRIMARY MATERIAL REQUIRED: (1,252SF - 470SF) = 782SF X .5 = 391SF REQUIRED (50%)
ACTUAL MASONRY PROVIDED: 401SF (51%)
GLAZING CALCULATIONS:
TOTAL FACADE AREA: (100'L X 10'H) = 1,000SF
GLAZING REQUIRED: 1,000SF X .4 = 400SF REQUIRED (40%)
ACTUAL GLAZING PROVIDED: 470SF (46%)

3 WEST ELEVATION - OLD KNIGHT ROAD
1/8" = 1'-0"



PRIMARY MATERIAL CALCULATIONS:
TOTAL FACADE AREA = 1,269SF
TOTAL GLAZING: 246SF
PRIMARY MATERIAL REQUIRED: (1,269SF - 246SF) = 1,023SF X .5 = 511SF REQUIRED (50%)
ACTUAL MASONRY PROVIDED: 544SF (53%)

2 SOUTH ELEVATION
1/8" = 1'-0"



PRIMARY MATERIAL CALCULATIONS:
TOTAL FACADE AREA = 1,252SF
PRIMARY MATERIAL REQUIRED: (1,252SF - 483SF) = 769SF X .5 = 385SF REQUIRED (50%)
ACTUAL MASONRY PROVIDED: 397SF (51%)
GLAZING CALCULATIONS:
TOTAL FACADE AREA: (100'L X 11'H) = 1,100SF
GLAZING REQUIRED: 1,100SF X .4 = 440SF REQUIRED (40%)
ACTUAL GLAZING PROVIDED: 483SF (47%)

1 EAST ELEVATION
1/8" = 1'-0"



MOORE'S REALTY & COWORKING

700 OLD KNIGHT RD
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DATE: 09/30/2024



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