

Administrative Site Review Application

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2500



This form is required when submitting site plans as referenced in Unified Development Ordinance (UDO) Section 10.2.8. Please check the appropriate building types and include the plan checklist document when submitting.

Office Use Only: Case #: _____	Planner (print): _____
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Please review UDO Section 10.2.8. to determine the site plan tier. If assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the [Permit and Development Portal](#). (Note: There is a fee for this verification service.)

Site Plan Tier: Tier Two Site Plan		Tier Three Site Plan
Building and Development Type (Check all that apply)		Site Transaction History
Detached Attached Townhouse Apartment Tiny house Open lot	General Mixed use Civic Cottage Court Frequent Transit Development Option	Subdivision case #: _____ Scoping/sketch plan case #: _____ Certificate of Appropriateness #: _____ Board of Adjustment #: _____ Zoning Case #: _____ Design Alternate #: _____
GENERAL INFORMATION		
Development name: _____		
Inside City limits? Yes No		
Property address(es): _____		
Site P.I.N.(s): _____		
Please describe the scope of work. Include any additions, expansions, and uses (UDO 6.1.4). _____		
Current Property Owner(s):		
Company: _____		Title: _____
Address: _____		
Phone #: _____		Email: _____
Applicant Name (If different from owner. See “who can apply” in instructions):		
Relationship to owner: Lessee or contract purchaser Owner’s authorized agent Easement holder		
Company: _____		Address: _____

Phone #:	Email:
NOTE: please attach purchase agreement or contract, lease or easement when submitting this form.	
Developer Contact:	
Company:	Title:
Address:	
Phone #: (404) 913-9131	Email:
Applicant Name:	
Company:	Address:
Phone #:	Email:

DEVELOPMENT TYPE + SITE DATE TABLE
(Applicable to all developments)

SITE DATA	BUILDING DATA
Zoning district(s) (please provide the acreage of each):	Existing gross floor area (not to be demolished):
Gross site acreage:	Existing gross floor area to be demolished:
# of parking spaces proposed:	New gross floor area:
Max # parking permitted (7.1.2.C):	Total sf gross (to remain and new):
Overlay District (if applicable):	Proposed # of buildings:
Existing use (UDO 6.1.4):	Proposed # of stories for each:
Proposed use (UDO 6.1.4):	Proposed # of basement levels (UDO 1.5.7.A.6)

STORMWATER INFORMATION

Imperious Area on Parcel(s): Existing (sf) _____ Proposed total (sf) _____	Impervious Area for Compliance (includes ROW): Existing (sf) _____ Proposed total (sf) _____
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RESIDENTIAL & OVERNIGHT LODGING DEVELOPMENTS

Total # of dwelling units:	Total # of hotel bedrooms:
# of bedroom units: 1br _____ 2br _____ 3br _____ 4br or more _____ N/A	
# of lots:	Is your project a cottage court? Yes No N/A
	A frequent transit development? Yes No N/A

Continue to Applicant Signature Block on Page Three.

APPLICANT SIGNATURE BLOCK

Pursuant to state law (N.C. Gen. Stat. § 160D-403(a)), applications for development approvals may be made by the landowner, a lessee or person holding an option or contract to purchase or lease land, or an authorized agent of the landowner. An easement holder may also apply for development approval for such development as is authorized by the easement.

By submitting this application, the undersigned applicant acknowledges that they are either the property owner or one of the persons authorized by state law (N.C.G.S. 160D-403(a)) to make this application, as specified in the application. The undersigned also acknowledges that the information and statements made in the application are correct and the undersigned understands that developments approvals are subject to revocation for false statements or misrepresentations made in securing the development approval, pursuant to N.C. Gen. Stat. § 160D-403(f).

The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified Development Ordinance.

The undersigned hereby acknowledges that, pursuant to state law (N.C.G.S. 143-755(b1)), if this permit application is placed on hold at the request of the applicant for a period of six consecutive months or more, or if the applicant fails to respond to comments or provide additional information requested by the City for a period of six consecutive months or more, then the application review is discontinued and a new application is required to proceed and the development regulations in effect at the time permit processing is resumed shall apply to the new application.

Signature:

Date:

Printed Name:

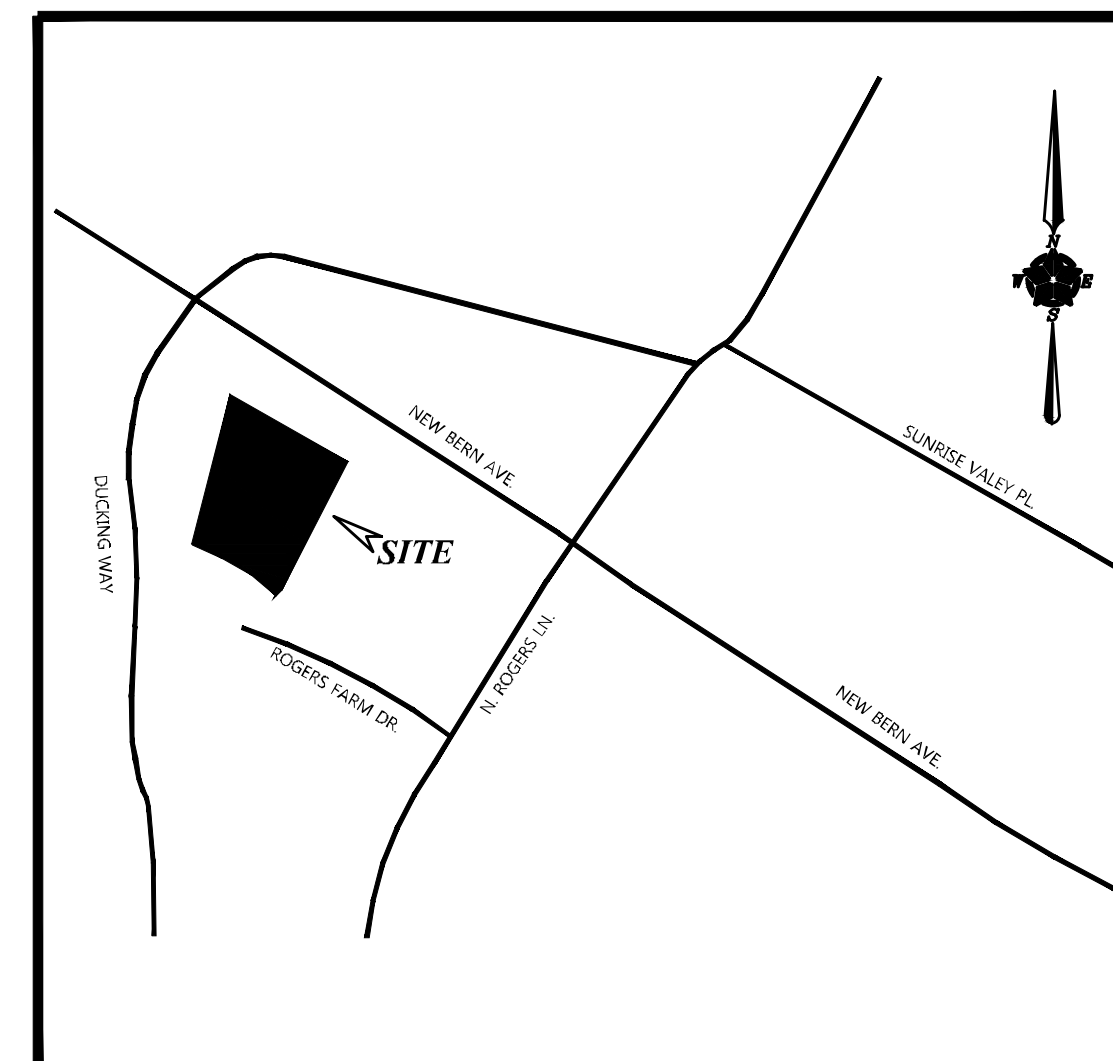
SITE DEVELOPMENT PLANS FOR TAKE FIVE EXPRESS CAR WASH

5150 NEW BERN AVE. RALEIGH, NC 27610

ZONING - PD

SHEET INDEX

C 001	COVER SHEET PLAT 1 PLAT 2
C 100	SITE PLAN
C 200	PAVING PLAN
C 300	GRADING PLAN
C 310	GRADING PLAN
C 320	GRADING PLAN
C 400	SOIL EROSION AND SEDIMENT CONTROL PLAN
C 410	SOIL AND EROSION CONTROL DETAILS
C 520	STORM DRAIN PLAN
C 600	UTILITY PLAN
C 610	UTILITY PLAN
C 700	DETAILS
C 710	DETAILS
C 720	ADS DETAILS
C 730	CITY DETAILS



LOCATION MAP
NOT TO SCALE

OWNER/DEVELOPER:
DRIVEN BRANDS, INC.
CONTACT: ELANA FACHIN
440 SOUTH CHURCH ST. SUITE 600
CHARLOTTE, NC 28202
(520) 812-9003

ENGINEER:
JM CIVIL ENGINEERING
CONTACT: JOHN MEASELS, PE (ENGINEER)
1101 CENTRAL EXPRESSWAY S., SUITE 215
ALLEN, TEXAS 75013
JMEASELS@JMCIVILENG.COM
(214) 491-1830

SURVEYOR:
SITE DESIGN, INC.
CONTACT: GCOBB@SITEDESIGN-INC.COM
225 ROCKY CREEK ROAD
GREENVILLE, SOUTH CAROLINA 29615
(864) 271-0496

UTILITY CONTACTS

ELECTRIC
DUKE ENERGY
MARIA
411 FAYATTEVILLE ST.
RALEIGH, NC 27601
TEL: (800) 636-0581

GAS
DOMINION ENERGY
MATT KOEHL
3516 SPRING FOREST RD
RALEIGH, NC 27616
TEL: (919) 501-7668

PHONE
SPECTRUM BUSINESS
KAYLEE BARLETT
TEL: (315) 481-0297

FIRE DEPARTMENT
CITY OF RALEIGH
HERBERT GRIFFIN
310 WEST MARTIN ST. SUITE 200
RALEIGH, NC 27602
TEL: (919) 996-5954

WATER/SEWER
PUBLIC UTILITIES DEPARTMENT
BRIAN CASEY
ONE EXCHANGE PLAZA SUITE 620
RALEIGH, NC 27601
TEL: (919) 996-2207

CABLE



1101 Central Expressway South
Suite 215
Allen, TX 75013
Ph. 214-491-1830
John Measels, PE
CIVIL ENGINEER



TAKE FIVE CAR WASH
5150 NEW BERN AVE.
RALEIGH, NC 27610

REV.	DATE	DESCRIPTION	NAME	INITIAL
	07/24/23	INITIAL SUBMITTAL	JMCE	

C 001

INITIAL SUBMITTAL
DATE: 07/24/2023



Know what's below.
Call before you dig.

CAUTION NOTICE TO CONTRACTOR
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 7 DAYS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES HORIZONTALLY AND VERTICALLY WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

BENCHMARKS
TBM;N=744,455.4397' E=2,133,279.8521;MAG NAIL FOUND
ELEV.=249.66' (NAD83/NAVD88)
TBM;N=744,070.0571' E=2,133,322.3900;MAG NAIL FOUND
ELEV.=229.70' (NAD83/NAVD88)
TBM;N=743,993.8481' E=2,133,552.3210;MAG NAIL FOUND
ELEV.=241.02' (NAD83/NAVD88)
TBM;N=744,128.0792' E=2,133,806.6069;MAG NAIL FOUND
ELEV.=256.69' (NAD83/NAVD88)

FLOODNOTE
ACCORDING TO THE F.I.R.M. NO. 3720173400K, THE SUBJECT PROPERTY LIES IN ZONE X AND DOES NOT LIE WITHIN A FLOOD PRONE HAZARD AREA, PER MAP REVISION DATED JULY 19, 2022.

RECORD LEGAL DESCRIPTION (FROM COMMITMENT)

LYING AND BEING SITUATE IN WAKE COUNTY, NORTH CAROLINA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEING ALL OF LOT 8 OF EDGEWATER PLACE, AS SHOWN ON A PLAT RECORDED IN BOOK OF MAPS 2003, PAGES 970-972, IN THE OFFICE OF THE REGISTER OF DEEDS FOR WAKE COUNTY, NORTH CAROLINA.

TITLE COMMITMENT EXCEPTION NOTES

- 5 ANY RIGHT, EASEMENT, SETBACK, INTEREST, CLAIM, ENCRICHMENT, ENCUMBRANCE, VIOLATION, VARIATIONS OR OTHER ADVERSE CIRCUMSTANCE AFFECTING THE TITLE DISCLOSED BY PLAT(S) RECORDED IN BOOK OF MAPS 2002, PAGES 1000-1001; BOOK OF MAPS 2002, PAGES 1759-1760; BOOK OF MAPS 2003, PAGES 156-158; BOOK OF MAPS 2003, PAGES 970-972. NOTE: PLAT RECORDED IN BOOK OF MAPS 2003, PAGES 156-158 AFFECTED BY THOSE RELEASES RECORDED IN BOOK 11103, PAGE 2598 AND BOOK 13249, PAGE 871. PLOTTED AND SHOWN

ZONING INFORMATION

(ZONING REPORT TO BE PROVIDED BY BUREAU VERITAS)

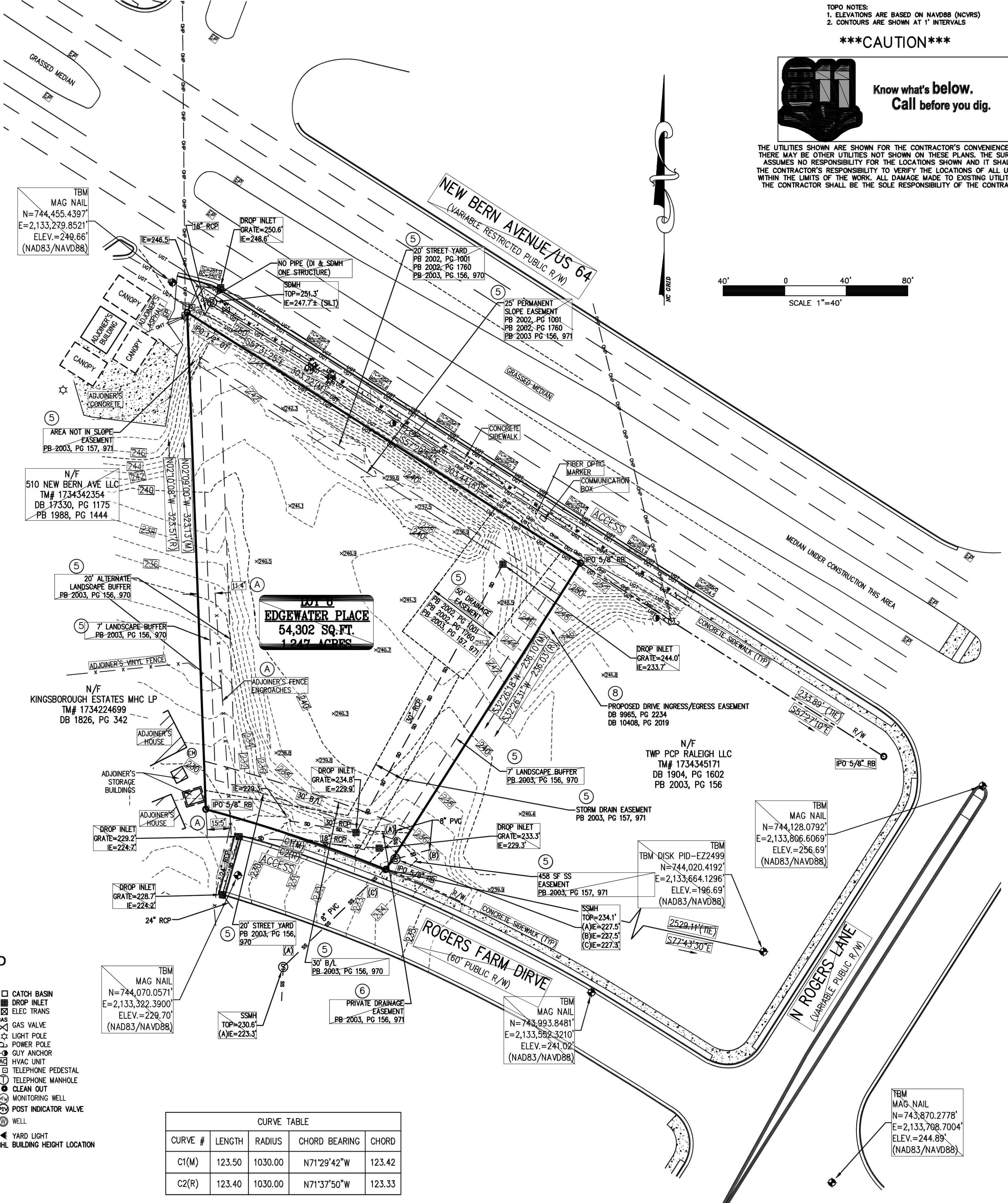
LIST OF POSSIBLE ENCRICHMENTS

(A) ADJOINER'S FENCE ENCRICHMENTS

LEGEND OF ALL SYMBOLS USED

- IPD IRON PIN OLD
IPF IRON PIN SET
CT CRAMP TOP
N&C NAIL & CAP
OT OPEN TOP
RB REBAR
PT POINT
SD STORM DRAIN
SS SANITARY SEWER
SSE SS EASEMENT
DE DRAINAGE EASEMENT
CMP CORRUGATED METAL PIPE
RCP REINFORCED CONC PIPE
VCP VITRIFIED CLAY PIPE
CPP CORRUGATED PLASTIC PIPE
C CENTERLINE
EP EDGE OF PAVEMENT
R/W RIGHT OF WAY
B/L BUILDING LINE
TC TOP/BOTTOM CURB
BC BOTTOM CURB
TW TOP/BOTTOM WALL
BW BOTTOM WALL
x90.0 ELEVATION

CURVE TABLE with columns: CURVE #, LENGTH, RADIUS, CHORD BEARING, CHORD

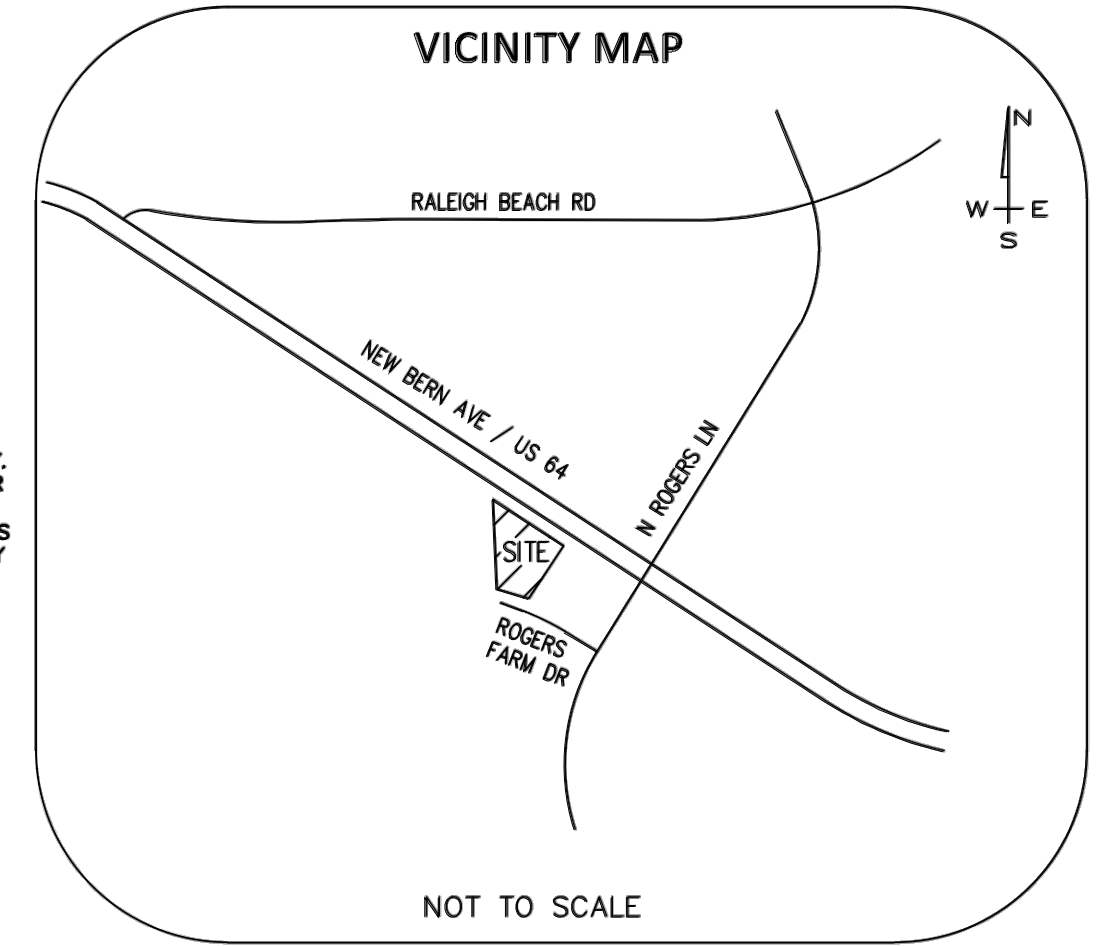
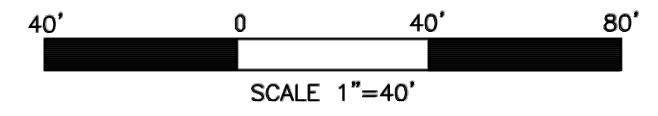


TOPO NOTES: 1. ELEVATIONS ARE BASED ON NAVD83 (NOVRS) 2. CONTOURS ARE SHOWN AT 1' INTERVALS

CAUTION



THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS...



GENERAL SURVEY NOTES:

- 1. THIS SURVEY WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF NORTH CAROLINA.
2. THE BASIS OF BEARING FOR THIS SURVEY IS NORTH CAROLINA STATE PLANE COORDINATES, AS SHOWN HEREON.
3. THE PROPERTY DESCRIBED HEREON IS THE SAME AS THE PROPERTY DESCRIBED IN CHICAGO TITLE INSURANCE COMPANY COMMITMENT NO. 23-002666B...

LAND AREA

54,302.55 SQ. FT. 1.247 ACRES

SURVEYOR'S CERTIFICATE

TO: TAKE 5 PROPERTIES SPV, LLC; DRIVEN BRANDS, INC., A DELAWARE CORPORATION; BOING US HOLDCO, INC., A DELAWARE CORPORATION AND CHICAGO TITLE INSURANCE COMPANY :

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS...

THE FIELD WORK WAS COMPLETED ON MARCH 16, 2023 DATE OF PLAT OR MAP MARCH 20, 2023

Justin A. McDaniel, P.L.S.

Table with 3 columns: NO., DESCRIPTION OF REVISIONS, DATE

ALTA /NSPS LAND TITLE SURVEY

TAKE 5 CAR WASH - RALEIGH, NC 5150 NEW BERN AVENUE WAKE COUNTY RALEIGH, NORTH CAROLINA

RESPONSIBLE SURVEYOR CONTACT INFORMATION

SITE DESIGN, INC.

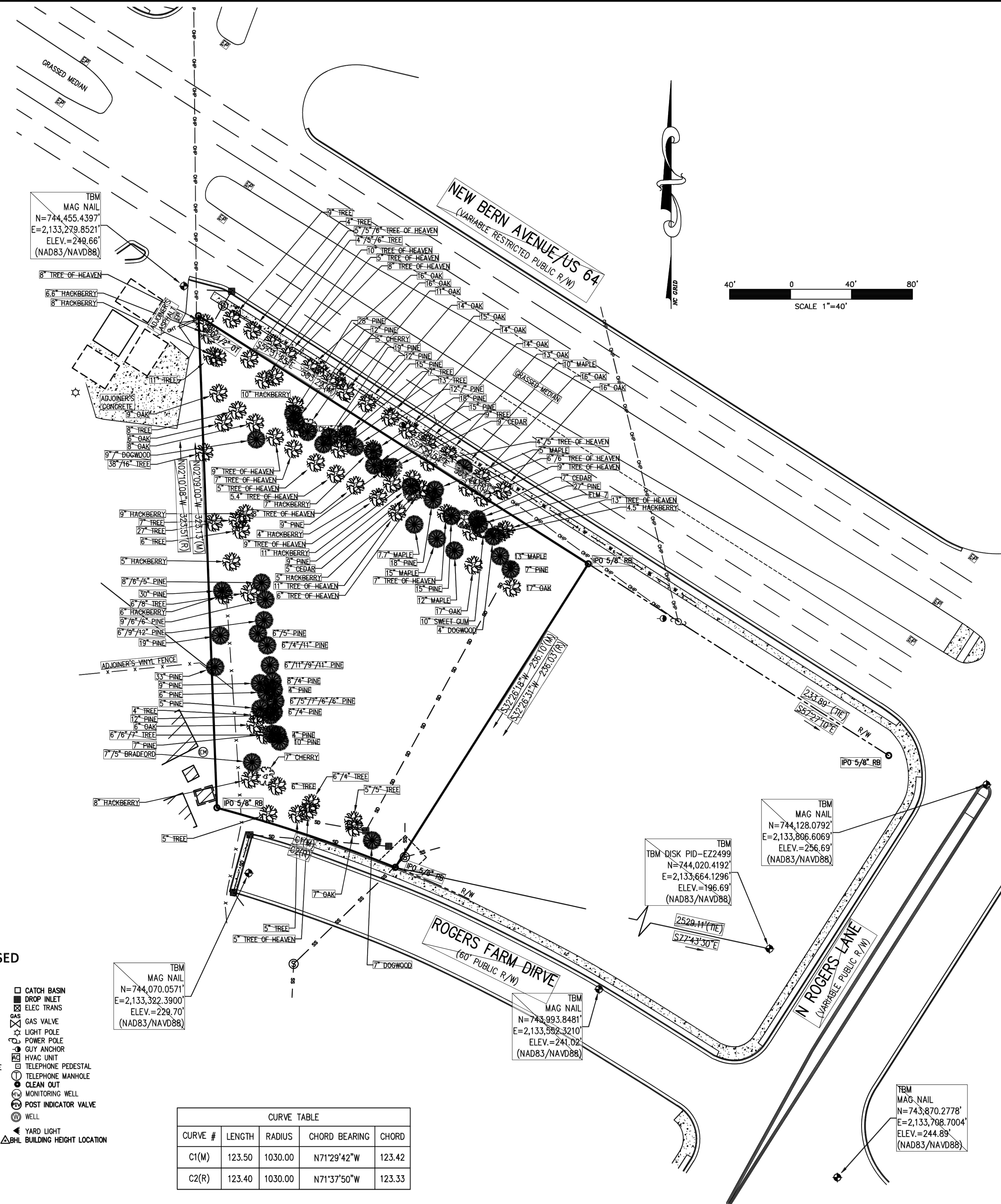
225 ROCKY CREEK ROAD GREENVILLE, SOUTH CAROLINA 29615 (864) 271-0496 GC0BB@SITEDESIGN-INC.COM S230182 SHEET 1 OF 2

Survey Coordinated by:

Bureau Veritas

510 E. Memorial Road, Suite A-1 Oklahoma City, OK 73114 800-411-2010 ALTA@bvna.com www.bvna.com





LEGEND OF ALL SYMBOLS USED

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> IPD ○ IRON PIN OLD IPF ○ IRON PIN SET CT CRIMP TOP N&C NAIL & CAP OT OPEN TOP RB REBAR △PT POINT SD STORM DRAIN SS SANITARY SEWER SSE SS EASEMENT DE DRAINAGE EASEMENT CMP CORRUGATED METAL PIPE RCP REINFORCED CONC PIPE VCP VITRIFIED CLAY PIPE CPP CORRUGATED PLASTIC PIPE CL CENTERLINE EP EDGE OF PAVEMENT R/W RIGHT OF WAY B/L BUILDING LINE TC= TOP/BOTTOM CURB BC= TW= TOP/BOTTOM WALL x90.0 ELEVATION | <ul style="list-style-type: none"> — x — FENCE LINE — CTV — CABLE TV — FOC — FIBER OPTIC CABLE — GAS — GAS LINE — OHP — OVERHEAD POWER — OHT — OVERHEAD TELEPHONE — SD — STORM DRAIN — SS — SANITARY SEWER — UGP — UNDERGROUND POWER — UGT — UNDERGROUND TELEPHONE — W — WATER LINE — SD — SD MANHOLE — SS — SS MANHOLE — G — GAS METER — E — ELECTRIC METER — W — WATER METER — V — WATER VALVE — FH — FIRE HYDRANT — C — CABLE TV PEDESTAL | <ul style="list-style-type: none"> □ CATCH BASIN ■ DROP INLET ⊠ ELEC TRANS ⊠ GAS VALVE ⊠ LIGHT POLE ⊠ POWER POLE ⊠ GUY ANCHOR ⊠ HVAC UNIT ⊠ TELEPHONE PEDESTAL ⊠ TELEPHONE MANHOLE ⊠ CLEAN OUT ⊠ MONITORING WELL ⊠ POST INDICATOR VALVE ⊠ WELL ⊠ YARD LIGHT ⊠ BHL BUILDING HEIGHT LOCATION |
|--|---|--|

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD
C1(M)	123.50	1030.00	N71°29'42"W	123.42
C2(R)	123.40	1030.00	N71°37'50"W	123.33

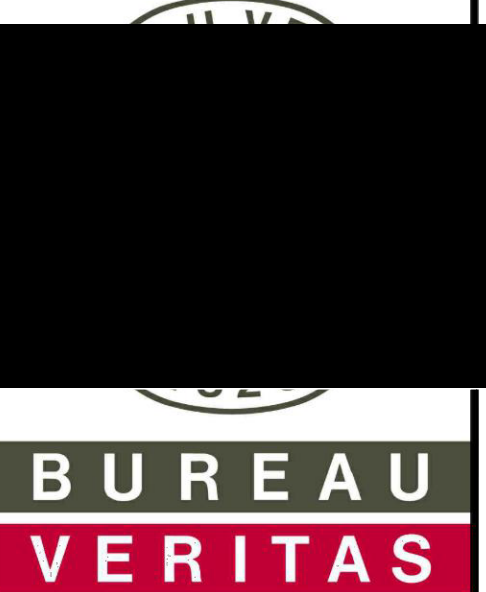
ALTA /NSPS LAND TITLE SURVEY

TAKE 5 CAR WASH - RALEIGH, NC
 5150 NEW BERN AVENUE
 WAKE COUNTY
 RALEIGH, NORTH CAROLINA

RESPONSIBLE SURVEYOR CONTACT INFORMATION
SITE DESIGN, INC.

225 ROCKY CREEK ROAD
 GREENVILLE, SOUTH CAROLINA 29615
 (864) 271-0496
 GCOBB@SITEDSIGN-INC.COM
 S230182
 SHEET 2 OF 2

Survey Coordinated by:
Bureau Veritas
 510 E. Memorial Road, Suite A-1
 Oklahoma City, OK 73114
 800-411.2010
 ALTA@bvna.com
 www.bvna.com



GENERAL SITE NOTES:

- PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL NECESSARY PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PERMITS HAVE BEEN RECEIVED.
- SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION WAS TAKEN FROM A SURVEY BY COMPANY NAME, STREET ADDRESS, CITY, STATE ZIPCODE. CONTACT: PERSON OR EMAIL (xxx) xxx-xxxx.
- IF THE CONTRACTOR, IN THE COURSE OF THE WORK, FINDS ANY DISCREPANCIES BETWEEN THE PLANS AND THE PHYSICAL CONDITIONS OF THE LOCALITY, OR ANY ERRORS OR OMISSIONS IN THE PLANS OR IN THE LAYOUT AS GIVEN BY THE ENGINEER, IT SHALL BE HIS DUTY TO IMMEDIATELY INFORM THE ENGINEER, IN WRITING, AND THE ENGINEER WILL PROMPTLY VERIFY THE SAME. ANY WORK DONE AFTER SUCH A DISCOVERY, UNTIL AUTHORIZED, WILL BE AT THE CONTRACTOR'S RISK.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS, AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE TO THE STATE AND LOCAL GOVERNMENT AGENCY LATEST CONSTRUCTION SPECIFICATIONS AND DETAILS.
- ALL ACCESSIBLE SITE FEATURES SHALL BE CONSTRUCTED TO MEET ALL FEDERAL, STATE AND LOCAL CODE.
- NOTIFY THE CITY INSPECTOR TWENTY-FOUR (24) HOURS BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.
- THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, REFERENCE POINTS, AND STAKES.
- ARCHITECTURAL PLANS ARE TO BE USED FOR BUILDING STAKE OUT.
- ALL DIMENSIONS ARE FROM FACE OF BUILDING, CURB, AND WALL UNLESS OTHERWISE SPECIFIED ON PLANS.
- CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMITS DUE TO CONSTRUCTION OPERATION.
- ALL STREET SURFACES, DRIVEWAYS, CULVERTS, CURB AND GUTTERS, ROADSIDE DRAINAGE DITCHES AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
- FOR WORK IN, OR ADJACENT TO, HIGHWAY RIGHT OF WAYS, CONTRACTOR SHALL ENSURE APPROPRIATE PERMITS ARE OBTAINED PRIOR TO CONSTRUCTION. CONTRACTOR TO ERRECT AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES IN CONFORMANCE WITH THE STATE MANUAL OF TRAFFIC CONTROL DEVICES, LATEST EDITION, ALONG WITH THE REQUIREMENTS OF THE LOCAL D.O.T. AREA OFFICE.
- ALL CURB RADII SHALL BE 3' OR 10' UNLESS OTHERWISE NOTED ON THE PLANS.
- DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

GENERAL UTILITY NOTES:

- CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND ENSURE NO CONFLICTS EXIST WITH PROPOSED IMPROVEMENTS. NOTIFY ENGINEER IMMEDIATELY IF UTILITIES ARE LOCATED DIFFERENTLY THAN SHOWN. THE CONTRACTOR SHALL COORDINATE WITH EACH RESPECTIVE UTILITY COMPANY IN ORDER TO RELOCATE IF NEEDED IN CONFORMANCE WITH THEIR GUIDELINES.
- CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO THE REMOVAL OF INDICATED UTILITIES ON SITE (SEE DEMOLITION PLAN). CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS REQUIRED FOR DEMOLITION AND HAUL OFF FROM THE APPROPRIATE AUTHORITIES.
- AUTHORIZATION MUST BE OBTAINED FROM THE LOCAL JURISDICTION WATER SYSTEM TO CONSTRUCT, ALTER OR MODIFY A WATER OR SEWER LINE. CONSTRUCTION OF WATER AND SEWER INFRASTRUCTURE WILL BE AUTHORIZED BY THE WATER SYSTEM UPON: APPROVAL OF SUBMITTED PLANS.
 - NOTIFICATION OF THE WATER SYSTEM AT LEAST 24 HOURS PRIOR TO STARTING CONSTRUCTION.
- AT THE COMPLETION OF THE WATER AND/OR SEWER CONSTRUCTION AND PRIOR TO RECORDING THE FINAL PLAT, THE CONTRACTOR WILL FURNISH THE WATER SYSTEM INSPECTOR RECORD DRAWINGS OF THE PROJECT.
- BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE GAS COMPANY FOR THE CONSTRUCTION OF THE GAS LINE BETWEEN METER AND MAIN.
- BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE POWER COMPANY FOR THE CONSTRUCTION OF ELECTRICAL CONDUIT TO PROVIDE SERVICE TO THE TRANSFORMER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING, PRIOR TO CONSTRUCTION, ALL EXISTING LOCATIONS AND INVERT ELEVATIONS OF SANITARY SEWERS, STORM DRAINAGE, AND WATER MAINS. IF ANY INVERT ELEVATION VARIES MORE THAN 0.1 FT. FROM RECORD ELEVATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. WORK SHALL NOT PROCEED UNTIL THE CONTRACTOR IS NOTIFIED BY THE ENGINEER.
- CONNECT TO EXISTING UTILITIES AND INSTALL UTILITIES IN COMPLIANCE WITH REQUIREMENTS OF APPROPRIATE JURISDICTIONAL AGENCIES.
- COORDINATE WITH BUILDING PLANS TO ASSURE ACCURACY OF UTILITY CONNECTIONS AND COMPLIANCE WITH LOCAL CODES.
- ALL SEWERS TO BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING CLEANING OF ANY SILT OR DEBRIS ACCUMULATED IN STRUCTURES.
- ALL SURPLUS EXCAVATED MATERIAL FROM THE TRENCH SHALL BE DISPOSED OFF THE SITE BY CONTRACTOR.
- COORDINATE EXACT TRENCHING, ROUTING, AND POINT OF TERMINATION WITH ALL UTILITY COMPANIES.
- MINIMUM SEPARATION BETWEEN WATER AND SANITARY SEWER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY AND 18" VERTICALLY.

GENERAL EROSION CONTROL NOTES:

- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND BECOME FAMILIAR WITH TCEQ TPDES GENERAL PERMIT TX150000 PLAN AND ITS CONTENTS.
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. SLOPES LEFT EXPOSED WILL, WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

GENERAL DEMOLITION NOTES:

- ANY DEMOLITION IS TO BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE CITY, COUNTY AND STATE, AND/OR GOVERNING BODY'S STANDARDS.
- THE DEMOLITION PLAN SHALL BE DONE IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION REPORT.
- EROSION AND SEDIMENT CONTROL MEASUREMENTS SHALL BE MAINTAINED AT ALL TIMES DURING DEMOLITION.
- THE PURPOSE OF THIS DRAWING IS TO CONVEY THE OVERALL SCOPE OF WORK AND IT IS NOT INTENDED TO COVER ALL DETAILS OR SPECIFICATIONS REQUIRED TO COMPLY WITH GENERALLY ACCEPTED DEMOLITION PRACTICES. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE SITE, SCOPE OF WORK, AND ALL EXISTING CONDITIONS AT THE JOB SITE PRIOR TO BIDDING AND COMMENCING THE WORK. THE DEMOLITION CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, OR PROCEDURES USED TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND IS LIABLE FOR THE SAFETY OF THE PUBLIC OR CONTRACTOR'S EMPLOYEES DURING THE COURSE OF THE PROJECT.
- THE DEMOLITION PLAN IS INTENDED TO SHOW REMOVAL OF KNOWN SITE FEATURES AND UTILITIES AS SHOWN ON THE SURVEY. THERE MAY BE OTHER SITE FEATURES, UTILITIES, STRUCTURES, AND MISCELLANEOUS ITEMS BOTH BURIED AND ABOVE GROUND THAT ARE WITHIN THE LIMITS OF WORK THAT MAY NEED TO BE REMOVED FOR THE PROPOSED PROJECT THAT ARE NOT SHOWN HEREON. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF SUCH ITEMS AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO DEMOLITION TO COORDINATE DISCONNECTION AND REMOVAL OF EXISTING UTILITIES WITHIN THE AREA OF WORK.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES THAT ARE INTENDED TO CONTINUE TO PROVIDE SERVICE WHETHER THESE UTILITIES ARE SHOWN ON THE PLAN OR NOT.
- UPON DISCOVERY OF ANY UNDERGROUND TANKS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE. NO REMOVAL OF TANKS SHALL OCCUR UNTIL AUTHORIZED BY OWNER.
- BUILDING AND APPURTENANCES DESIGNATED FOR DEMOLITION SHALL NOT BE DISTURBED BY THE CONTRACTOR UNTIL HE HAS FURNISHED WITH NOTICE TO PROCEED BY THE OWNER. AS SOON AS SUCH NOTICE HAS BEEN GIVEN, THE CONTRACTOR SHALL PERFORM THE DEMOLITION, UNDER THE DIRECTION OF THE OWNER'S REPRESENTATIVE.
- ALL EXISTING UTILITIES WITHIN THE EXISTING BUILDING ARE TO BE REMOVED, WHERE CONFLICTS OCCUR WITH GRADE, BEAMS, PILES, PROPOSED UTILITIES AND TRENCH BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS AND GEOTECHNICAL REPORT.
- FOUNDATIONS, FLOORS, FLOOR SLABS, AND ANY OTHER UNDERGROUND BUILDING STRUCTURES SHALL BE REMOVED IN ACCORDANCE WITH THE SPECIFICATIONS. AREAS OF STRUCTURE REMOVAL SHALL BE BACKFILLED IN ACCORDANCE WITH SPECIFICATIONS AND THE GEOTECHNICAL REPORT.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL UNSUITABLE MATERIAL AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL CITY, STATE, AND FEDERAL LAWS AND ORDINANCES.
- ALL MATERIAL, EXCEPT THAT BELONGING TO A PUBLIC UTILITY COMPANY OR DENOTED FOR SALVAGE, SHALL BECOME PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE OWNER OF WATER, ELECTRIC, OR GAS METERS WHEN THE METERS ARE READY FOR REMOVAL, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING ALL UTILITIES IN COMPLIANCE WITH LOCAL REQUIREMENTS. DISCONNECT TRANSFORMERS AS REQUIRED FOR BUILDING DEMOLITION.
- AS SOON AS DEMOLITION WORK HAS BEEN COMPLETED, THE FINAL GRADE OF BACKFILL IN DEMOLITION AREAS SHALL BE COMPACTED PER THE GEOTECHNICAL REPORT TO PRESENT A NEAT, WELL DRAINED APPEARANCE, AND TO PREVENT WATER FROM DRAINING UNNECESSARILY ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL GRADE SITE TO EXISTING STORM DRAINAGE SYSTEM TO REMAIN ON SITE.
- EXISTING TREES TO REMAIN SHOULD BE PROTECTED FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION.
- THE CONTRACTOR IS TO COORDINATE WORK IN THIS PROJECT TO ENSURE ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.

GENERAL PAVING NOTES:

- CONTRACTOR MUST SECURE ALL NECESSARY PERMITS PRIOR TO STARTING WORK.
- REFER TO GEOTECH REPORT FOR PREPARATION OF THE SUBGRADE.
- IF THE CONTRACTOR, IN THE COURSE OF THE WORK, FINDS ANY DISCREPANCIES BETWEEN THE PLANS AND THE PHYSICAL CONDITIONS OF THE LOCALITY, OR ANY ERRORS OR OMISSIONS IN THE PLANS OR IN THE LAYOUT AS GIVEN BY THE ENGINEER, IT SHALL BE HIS DUTY TO IMMEDIATELY INFORM THE ENGINEER, IN WRITING, AND THE ENGINEER WILL PROMPTLY VERIFY THE SAME. ANY WORK DONE AFTER SUCH A DISCOVERY, UNTIL AUTHORIZED, WILL BE AT THE CONTRACTOR'S RISK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS, AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE TO THE STATE AND LOCAL GOVERNMENT AGENCY LATEST CONSTRUCTION SPECIFICATIONS AND DETAILS.
- ALL ACCESSIBLE SITE FEATURES SHALL BE CONSTRUCTED TO MEET ALL FEDERAL, STATE AND LOCAL CODE.
- NOTIFY THE CITY INSPECTOR TWENTY-FOUR (24) HOURS BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.
- THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, REFERENCE POINTS, AND STAKES.
- ARCHITECTURAL PLANS ARE TO BE USED FOR BUILDING STAKE OUT.
- ALL DIMENSIONS ARE FROM FACE OF BUILDING, CURB, AND WALL UNLESS OTHERWISE SPECIFIED ON PLANS.
- CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMITS DUE TO CONSTRUCTION OPERATION.
- ALL STREET SURFACES, DRIVEWAYS, CULVERTS, CURB AND GUTTERS, ROADSIDE DRAINAGE DITCHES AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL ROAD WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STATE AND LOCAL GOVERNMENT AGENCY SPECIFICATIONS.

GENERAL GRADING/DRAINAGE NOTES:

- ALL GRADING AND SITE PREPARATION SHALL CONFORM WITH SPECIFICATIONS CONTAINED IN THE GEOTECHNICAL REPORT.
- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE TO THE CITY LATEST CONSTRUCTION SPECIFICATIONS AND DETAILS.
- PRIOR TO ANY EXCAVATION OF THE PROJECT SITE, THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, REFERENCE POINTS AND STAKES.
- ALL INDICATED ELEVATIONS ARE FINISHED ELEVATIONS.
- FIELD VERIFY LOCATIONS, SIZES AND IF APPLICABLE INVERTS OF EXISTING UTILITIES FOR PROPOSED CONNECTIONS PRIOR TO CONSTRUCTION.
- LOCATE AND PROTECT ALL UTILITIES ASSOCIATED WITH THE PROJECT PRIOR TO CONSTRUCTION.
- INSTALL SILT CONTROL MEASURES BEFORE BEGINNING SITE WORK. THESE MEASURES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- MAINTAIN PROPER SITE DRAINAGE AT ALL TIMES DURING CONSTRUCTION. PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
- INSTALL ALL APPROPRIATE TREE PROTECTION MEASURES PRIOR TO GRADING.
- CUT AND FILL SLOPES SHALL HAVE A MAXIMUM SLOPE OF 4:1.
- ALL EXCAVATION SHALL INCLUDE CLEARING, STRIPPING AND STOCKPILING TOPSOIL, REMOVING UNSUITABLE MATERIALS, THE CONSTRUCTION OF EMBANKMENTS, CONSTRUCTION FILLS, AND THE FINAL SHAPING AND TRIMMING TO THE THE LINES AND GRADES SHOWN ON THE PLANS.
- ALL TREES, BRUSH, AND ORGANIC TOPSOIL AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED, UNLESS OTHERWISE SPECIFIED, AND DISPOSED OF AT AN OFF-SITE LOCATION, WITH THE EXCEPTION THAT ENOUGH TOPSOIL SHALL BE RETAINED FOR RESPREAD AND GENERAL LANDSCAPING. AREAS WHICH ARE TO BE FILLED SHALL BE COMPACTED TO A MAXIMUM DENSITY OF 95% AS DETERMINED BY THE MODIFIED AASHTO COMPACTION TEST IN THE PAVED AREAS AND 85% IN THE OTHER AREAS.
- STRIP AND STOCKPILE TOPSOIL. SPREAD FOUR (4) INCHES MINIMUM OF TOPSOIL ON LANDSCAPE AREAS AND REMOVE EXCESS TOPSOIL FROM SITE. PREPARE SUB-GRADE FOR PAVEMENT AND CURBS AND BACKFILL CURBS AFTER CURB CONSTRUCTION.
- PROVIDE SUPPLY OF TOPSOIL FOR LANDSCAPE CONTRACTOR FOR INSTALLATION IN ALL LANDSCAPE ISLANDS.
- PROVIDE AND INSTALL TOPSOIL IN DISTURBED AREAS TO BE GRASSED, TO INCLUDE PAVEMENT SHOULDERS AND DETENTION AREAS.
- ALL EARTHWORK AND BASE COURSE FOR THE PARKING AREA SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED LABORATORY DENSITY. CERTIFICATION SAID COMPACTION SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER, OR HIS/HER REPRESENTATIVE, PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL. BOTH PROOF ROLLING AND COMPACTION TESTING MUST BE APPROVED AND WITNESSED BY THE ENGINEER OR OWNER REPRESENTATIVE.
- THE PAVEMENT SUBGRADE AND BASE COURSE MATERIAL SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR OWNER REPRESENTATIVE PRIOR TO CONSTRUCTING THE BASE AND SURFACE COURSES THEREON.
- CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE TO ALL INLETS AND CATCH BASINS. AREAS OF SURFACE PONDING SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- IF AREAS ARE DISTURBED BEYOND PROPOSED GRADES BY NEGLIGENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY REGRADING OR REPAIR TO MATCH ORIGINAL EXISTING CONDITIONS.
- SHORING SHALL BE DONE AS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR THE SAFETY OF PERSONNEL. SHORING SHALL BE IN ACCORDANCE WITH ALL O.S.H.A AND LOCAL REGULATIONS.
- STRUCTURES FOR STORM SEWERS SHALL BE IN ACCORDANCE WITH THESE IMPROVEMENT PLANS AND THE APPLICABLE STANDARD SPECIFICATIONS. WHERE GRANULAR TRENCH BACKFILL IS REQUIRED AROUND THESE STRUCTURES, THE COST SHALL BE CONSIDERED AS INCIDENTAL AND SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE STRUCTURE.
- CONFIRM INVERTS OF ALL EXISTING STORM INLETS AND SANITARY SEWER MANHOLES BEFORE COMMENCING CONSTRUCTION.
- ALL STORM SEWER LINES 18"-54" DIAMETER ARE TO BE REINFORCED CONCRETE PIPE ACCORDING TO ASTM C-76 TYPE III, UNLESS OTHERWISE SPECIFIED ON PLANS.
- A GEOTEXTILE MATTING (LANDLOCK TRM 450 OR EQUIVALENT) SHALL BE USED FOR EROSION CONTROL AN ALL SLOPES GREATER THAN 3H:1V.
- DRAINAGE STRUCTURES AND DETENTION POND SHALL BE MAINTAINED BY PROPERTY OWNERS.
- CONTRACTOR SHALL ADHERE TO PROPOSED GRADES ALONG CREEKS, ESPECIALLY IN THE AREA OF THE PROPOSED DETENTION POND. IF AREAS ARE DISTURBED BEYOND PROPOSED GRADES BY NEGLIGENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY PENALTIES INCURRED.
- ALL PROPOSED SPOT ELEVATIONS SHOWN INDICATE FINISHED GRADED ELEVATIONS AT EDGE OF PAVEMENT AND/OR GRADE BREAKS, UNLESS OTHERWISE NOTED.



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John Measels, PE
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TAKE FIVE CAR WASH
5150 NEW BERN AVE.
RALEIGH, NC 27610

PROJECT NO.	DATE	DESCRIPTION
JM-17023004	07/24/23	INITIAL SUBMITTAL
DRAWN BY: JMCE		
CHECKED BY: JMCE		
ISSUE DATE:	09/11/2023	

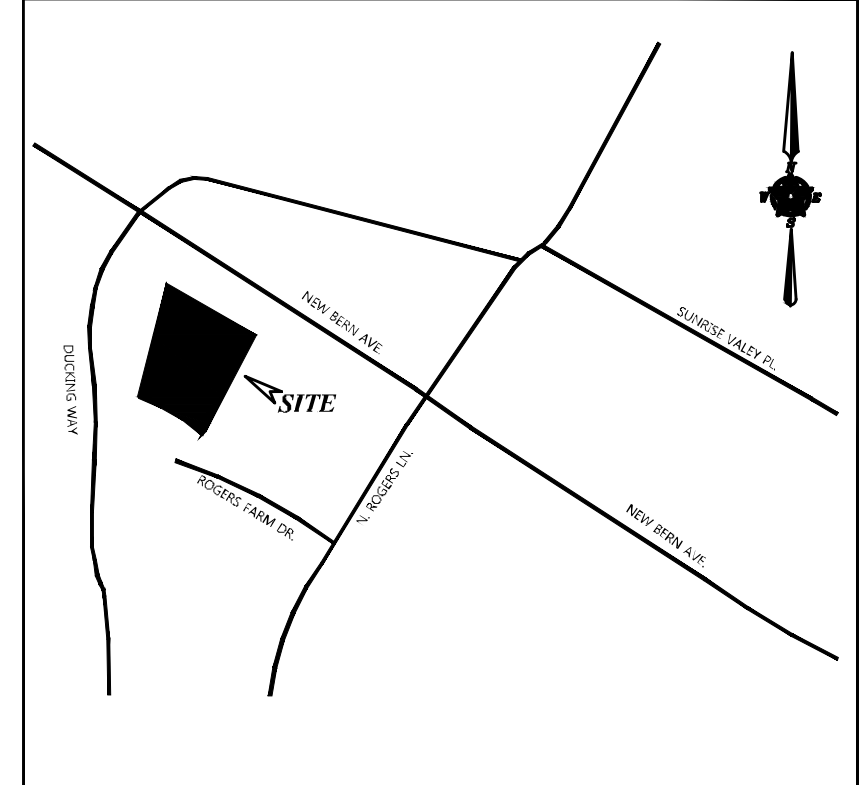
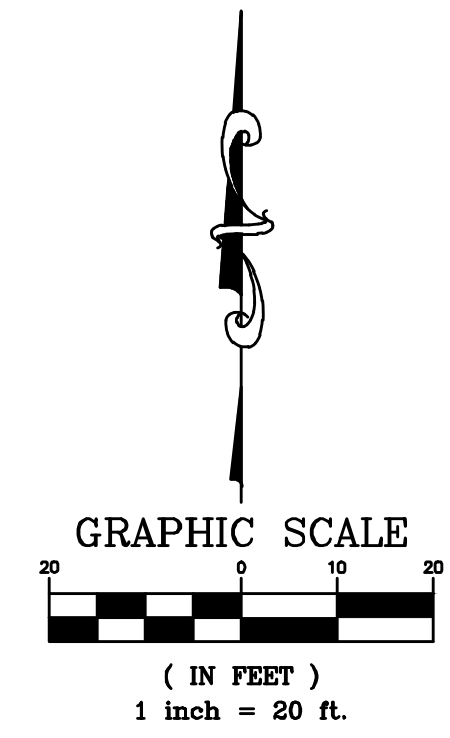
GENERAL NOTES

C 050

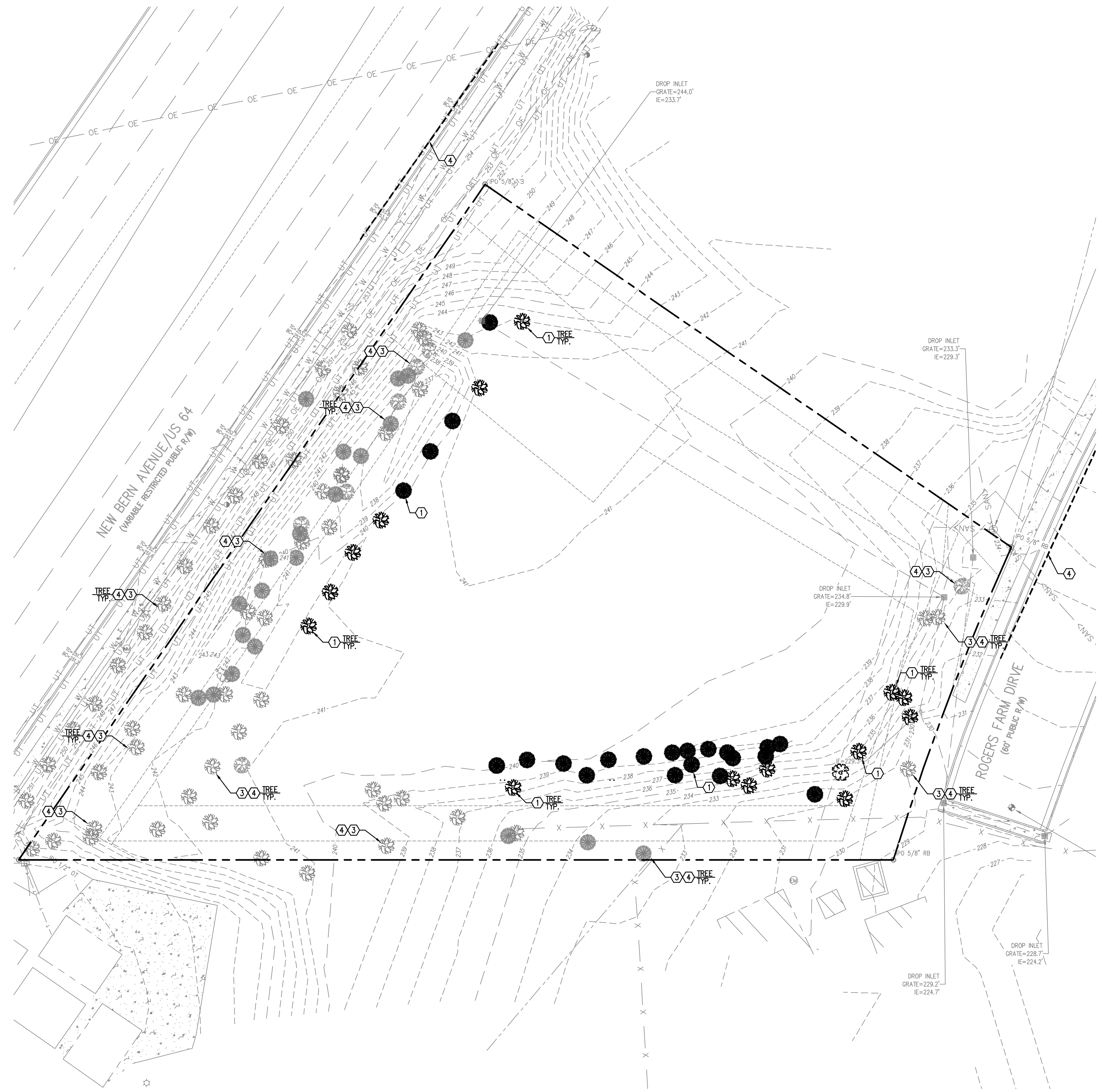
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BENCHMARKS

TBM;N=744,455.4397'	E=2,133,279.8521'	MAG NAIL FOUND	ELEV.=249.66 (NAD83/NAVD88)
TBM;N=744,070.0571'	E=2,133,322.3900'	MAG NAIL FOUND	ELEV.=229.70 (NAD83/NAVD88)
TBM;N=743,993.8481'	E=2,133,552.3210'	MAG NAIL FOUND	ELEV.=241.02 (NAD83/NAVD88)
TBM;N=744,128.0792'	E=2,133,806.6069'	MAG NAIL FOUND	ELEV.=256.69 (NAD83/NAVD88)



LOCATION MAP
NOT TO SCALE



- LEGEND:**
- — — — — PROPERTY LINE
 - — — — — EXISTING CURB & GUTTER
 - - - - - LIMITS OF FULL DEPTH SAWCUT
- DEMOLITION KEY NOTES:**
- ① EXISTING TO BE REMOVED.
 - ② EXISTING TO REMAIN.
 - ③ EXISTING TO BE PROTECTED.
 - ④ LIMITS OF FULL DEPTH SAWCUT AND PAVEMENT REMOVAL.

EXISTING SURVEY LEGEND

- | | | | | | |
|------|-------------------------|---------|-----------------------|---|--------------------------|
| IP/O | IRON PIN OLD | — X — | FENCE LINE | □ | CATCH BASIN |
| IP/S | IRON PIN SET | — CTY — | CABLE TV | ▣ | DROP INLET |
| CT | CRIMP TOP | — FOC — | FIBER OPTIC CABLE | ⊠ | ELEC TRANS |
| N&C | NAIL & CAP | — GAS — | GAS LINE | ⊠ | GAS VALVE |
| OT | OPEN TOP | — OHP — | OVERHEAD POWER | ⊠ | LIGHT POLE |
| RB | REBAR | — OHT — | OVERHEAD TELEPHONE | ⊠ | POWER POLE |
| △/PT | POINT | — SD — | STORM DRAIN | ⊠ | GUY ANCHOR |
| SD | STORM DRAIN | — SS — | SANITARY SEWER | ⊠ | HVAC UNIT |
| SS | SANITARY SEWER | — UGP — | UNDERGROUND POWER | ⊠ | TELEPHONE PEDESTAL |
| SSE | SS EASEMENT | — UGT — | UNDERGROUND TELEPHONE | ⊠ | TELEPHONE MANHOLE |
| DE | DRAINAGE EASEMENT | — W — | WATER LINE | ⊠ | CLEAN OUT |
| CMP | CORRUGATED METAL PIPE | — WM — | WATER METER | ⊠ | MONITORING WELL |
| RCP | REINFORCED CONC PIPE | — EM — | ELECTRIC METER | ⊠ | POST INDICATOR VALVE |
| VCP | VITRIFIED CLAY PIPE | — W — | WATER VALVE | ⊠ | WELL |
| CPP | CORRUGATED PLASTIC PIPE | — F — | FIRE HYDRANT | ⊠ | YARD LIGHT |
| EL | EDGE OF PAVEMENT | — TW — | TOP/BOTTOM CURB | ⊠ | BUILDING HEIGHT LOCATION |
| R/W | RIGHT OF WAY | — BW — | TOP/BOTTOM WALL | | |
| B/L | BUILDING LINE | — E — | ELEVATION | | |
| TC | TOP/BOTTOM CURB | | | | |
| EC | EDGE OF CURB | | | | |
| TW | TOP/BOTTOM WALL | | | | |
| BW | BOTTOM WALL | | | | |
| E | ELEVATION | | | | |

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TAKE FIVE CAR WASH
 5150 NEW BERN AVE.
 RALEIGH, NC 27610

NO.	DATE	DESCRIPTION
1	07/24/23	INITIAL SUBMITTAL

PROJECT NO: JM-F023004
 DRAWN BY: JMCE
 CHECKED BY: JMCE
 ISSUE DATE: 09/11/2023

DEMOLITION PLAN



C 060

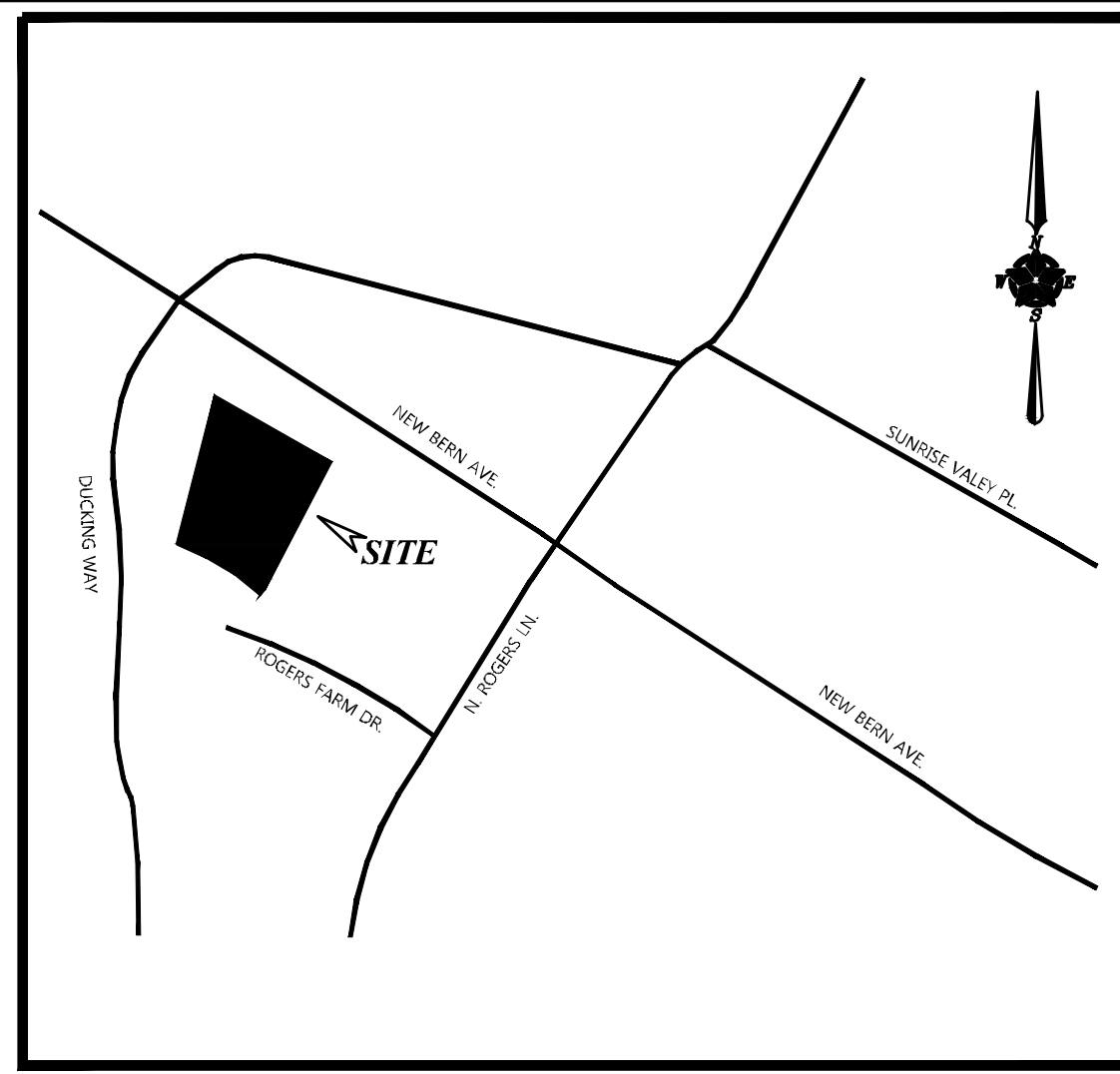
J:\TAKE FIVE CAR WASH\JM-F023004 MASTER DRAWINGS\JMCE IF023004.MXD 9/11/2023 3:56 PM SOPHIA CORONA

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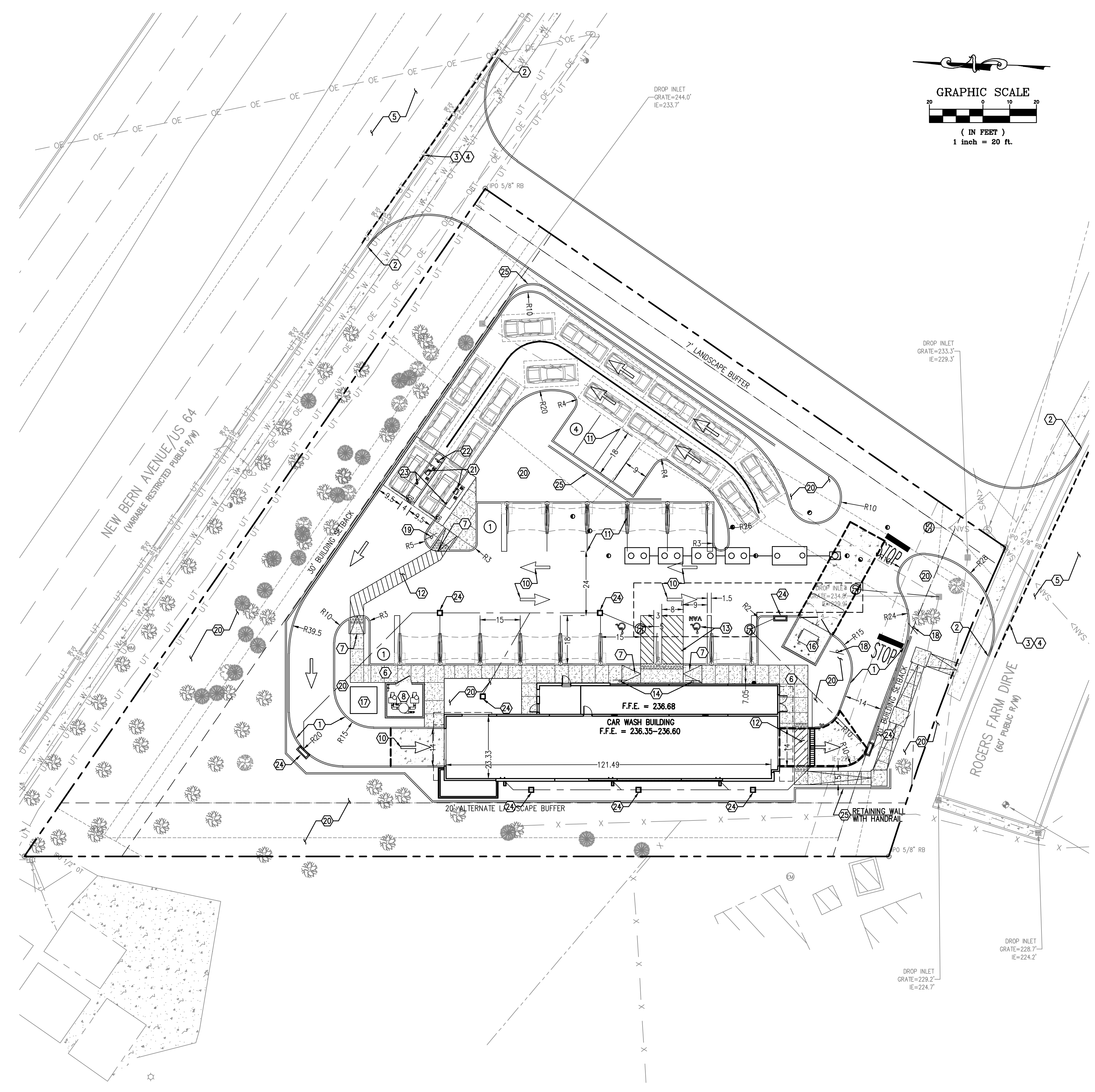
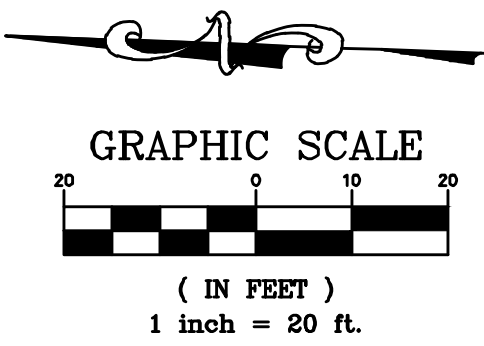
FLOODNOTE
 ACCORDING TO THE F.I.R.M. NO. 3720173400K, THE SUBJECT PROPERTY LIES IN ZONE X AND DOES NOT LIE WITHIN A FLOOD PRONE HAZARD AREA, PER MAP REVISION DATED JULY 19, 2022.



LOCATION MAP
 NOT TO SCALE

SITE DATA TABLE

LOCATION:	5150 NEW BERN AVE. RALEIGH, NC 27610	
LOT AREA:	1.247 AC. (54,302 S.F.)	
ZONING:	ZONING - PD CONDITIONAL USE OVERLAY	
CURRENT USE:	VACANT	
PROPOSED USE:	CAR WASH	
BUILDING DATA:		
BUILDING AREA:	4,308 S.F.	
BUILDING HEIGHT:	25'-0" (1 STORY)	
BUILDING COVERAGE:	7.93%	
F.A.R.:		
PARKING SUMMARY:		
	REQUIRED	PROVIDED
PARKING SPACES (9.5'x18')	5	6
ADA PARKING SPACES	1	1
TOTAL PARKING SPACES	6	7
VACUUM SPACES	12	12
LANDSCAPE:		
PERVIOUS:	24,204.29 S.F.	
IMPERVIOUS:	30,097.71 S.F.	



SITE LEGEND:

---	PROPERTY LINE	---	PROPOSED CURB & GUTTER
---	LIMITS OF FULL DEPTH SAWCUT	---	AREA DRAIN
⊙	PARKING COUNT	⊙	LIGHT POLE
⊙	FIRELANE	⊙	GREASE TRAP
♿	ACCESSIBLE SPACES	⊙	CLEAN-OUT
♿	ADA RAMP	⊙	DOUBLE CLEAN-OUT
⊙	BOLLARD	⊙	GAS METER
⊙	TRAFFIC SIGN	⊙	WATER METER
⊙	BOLLARD MOUNTED ACCESSIBLE SIGN	⊙	IRRIGATION METER
⊙	STOP BAR & SIGN	⊙	MANHOLE
		⊙	CURB INLET

EXISTING SURVEY LEGEND

⊙	IRON PIN OLD	---	FENCE LINE	⊙	CATCH BASIN
⊙	IRON PIN SET	---	CABLE TV	⊙	DROP INLET
⊙	CRIMP TOP	---	FIBER OPTIC CABLE	⊙	ELEC TRANS
⊙	NAIL & CAP	---	GAS LINE	⊙	GAS VALVE
⊙	OPEN TOP	---	OVERHEAD POWER	⊙	LIGHT POLE
⊙	REBAR	---	OVERHEAD TELEPHONE	⊙	POWER POLE
⊙	POINT	---	STORM DRAIN	⊙	GUY ANCHOR
⊙	STORM DRAIN	---	SANITARY SEWER	⊙	HVAC UNIT
⊙	SANITARY SEWER	---	UNDERGROUND POWER	⊙	TELEPHONE PEDESTAL
⊙	SSE EASEMENT	---	UNDERGROUND TELEPHONE	⊙	TELEPHONE MANHOLE
⊙	DRAINAGE EASEMENT	---	WATER LINE	⊙	CLEAN OUT
⊙	CORRUGATED METAL PIPE	---	SD MANHOLE	⊙	MONITORING WELL
⊙	REINFORCED CONC PIPE	---	SS MANHOLE	⊙	POST INDICATOR VALVE
⊙	VITRIFIED CLAY PIPE	---	GAS METER	⊙	WELL
⊙	CORRUGATED PLASTIC PIPE	---	ELECTRIC METER	⊙	YARD LIGHT
⊙	CENTERLINE	---	WATER METER	⊙	B.H.L. BUILDING HEIGHT LOCATION
⊙	EDGE OF PAVEMENT	---	WATER VALVE		
⊙	RIGHT OF WAY	---	FIRE HYDRANT		
⊙	R/W	---	CABLE TV PEDESTAL		
⊙	B/L	---			
⊙	TOP/BOTTOM CURB				
⊙	BC=				
⊙	TW=				
⊙	BW=				
⊙	X 90.0				
⊙	ELEVATION				

- SITE KEY NOTES:**
- 1 CONCRETE CURB AND GUTTER. (PER LOCAL CODES)
 - 2 TAPER CURB TO MATCH EXISTING.
 - 3 MATCH EXISTING PAVEMENT ELEVATION.
 - 4 LIMITS OF FULL DEPTH SAWCUT AND PAVEMENT REMOVAL.
 - 5 EXISTING PAVEMENT TO REMAIN.
 - 6 CONCRETE SIDEWALK. 2% MAX. CROSS SLOPE AND 5% MAX. STRAIGHT SLOPE (PER LOCAL CODES).
 - 7 SIDEWALK RAMP @ 8.33% MAX. (PER LOCAL CODES)
 - 8 VACUUM UNIT ENCLOSURE.
 - 9 STOP BAR. (PER LOCAL CODES)
 - 10 DIRECTIONAL TRAFFIC ARROW. (PER LOCAL CODES)
 - 11 PARKING STALL STRIPING. (PER LOCAL CODES)
 - 12 PEDESTRIAN/ACCESSIBLE CROSSWALK STRIPING.
 - 13 ACCESSIBLE STRIPING & SYMBOL. (TYPICAL-PER ADA AND LOCAL REQUIREMENTS)
 - 14 ACCESSIBLE SIGNS. (TYPICAL-PER ADA AND LOCAL REQUIREMENTS)
 - 15 BOLLARD.
 - 16 DUMPSTER ENCLOSURE. (PER ARCH. PLANS)
 - 17 PROPOSED PAD MOUNTED TRANSFORMER.
 - 18 "STOP" SIGN.
 - 19 "THANK YOU" AND "DO NOT ENTER" SIGN.
 - 20 LANDSCAPE AREA. (PER LANDSCAPE PLAN)
 - 21 MENU BOARD AND SPEAKER BOX.
 - 22 PREVIEW MENU BOARD.
 - 23 TRAFFIC SENSOR.
 - 24 INLET. (SEE PLAN FOR SIZE)
 - 25 RETAINING WALL.



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DESCRIPTION:	INITIAL SUBMITTAL
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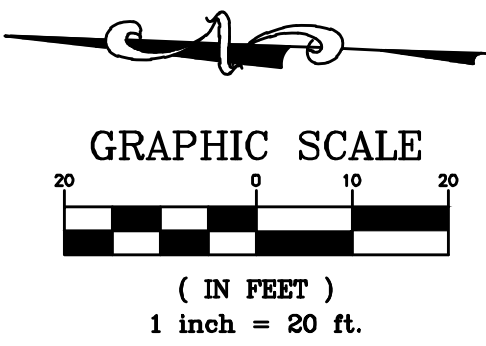
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J:\TAKE FIVE OIL\JM-F023004 MASTER DRAWINGS\JMCE-IF023004-RALEIGH, NC-CURRENT DRAWINGS\JMCE-IF023004-RALEIGH, NC 27610 SOPHIA CORONA

CAUTION NOTICE TO CONTRACTOR
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BENCHMARKS

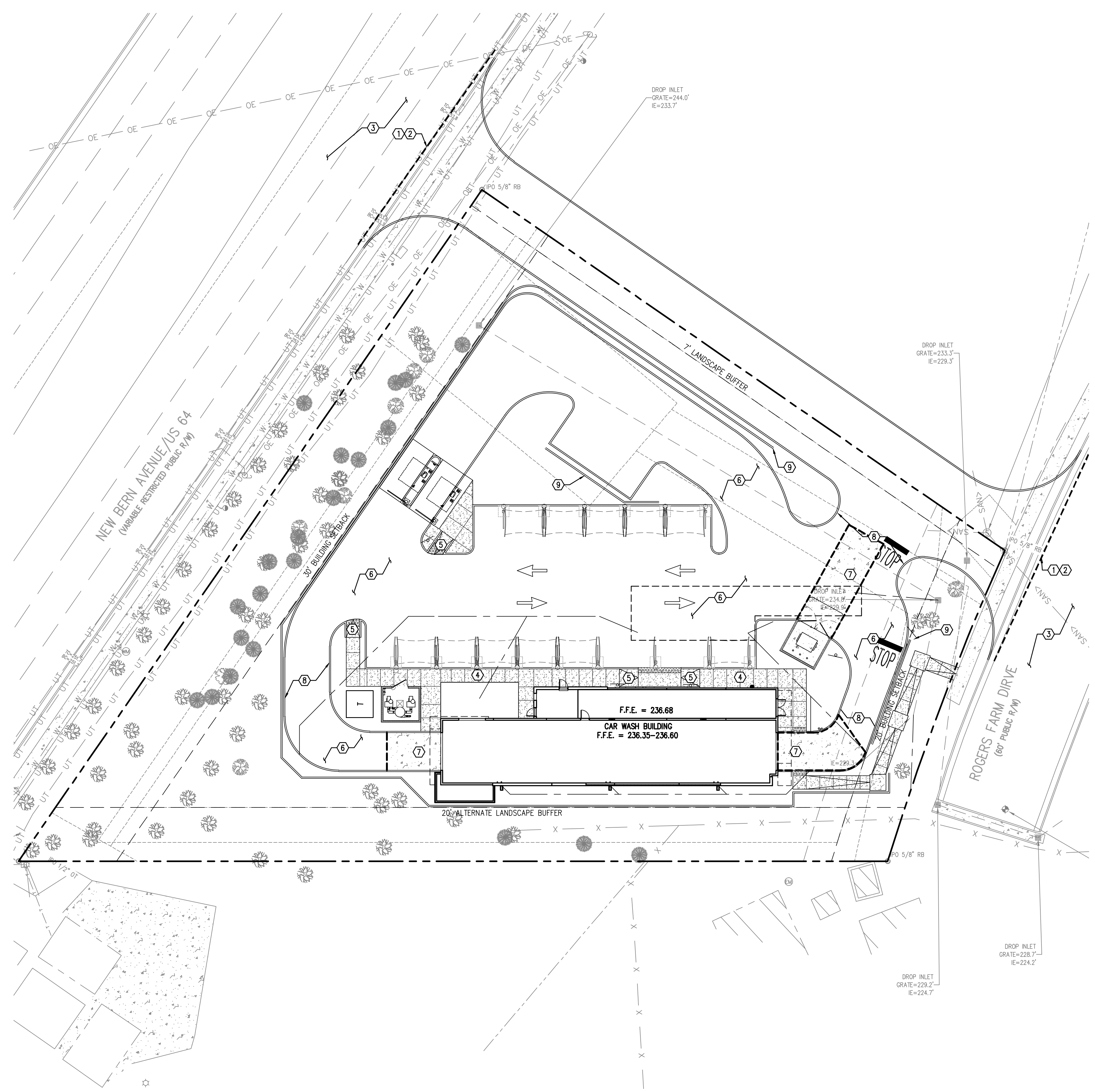
TBM; N=744,455.4397'	E=2,133,279.8521'	MAG NAIL FOUND
ELEV.=249.66	(NAD83/NAVD88)	
TBM; N=744,070.0571'	E=2,133,322.3900'	MAG NAIL FOUND
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TBM; N=743,993.8481'	E=2,133,552.3210'	MAG NAIL FOUND
ELEV.=241.02	(NAD83/NAVD88)	
TBM; N=744,128.0792'	E=2,133,806.6069'	MAG NAIL FOUND
ELEV.=256.69	(NAD83/NAVD88)	



- PROPOSED PAVING LEGEND:**
- CONCRETE SIDEWALK. 5' MINIMUM WIDTH WITH FIBER REINFORCEMENT, 5'x5' TOOLED JOINTS, AN FULL CONSTRUCTION JOINTS EVERY 50'.
 - 6" MEDIUM DUTY CONCRETE PAVEMENT. AT A MINIMUM 4,000 PSI AT 28 DAYS. REFER TO GEOTECH FOR SUBGRADE PREPARATION.
 - 8" HEAVY DUTY CONCRETE PAVEMENT. AT A MINIMUM 4,000 PSI AT 28 DAYS. REFER TO GEOTECH FOR SUBGRADE PREPARATION.
 - CONSTRUCTION JOINT

- PAVING KEY NOTES:**
- ① MATCH EXISTING PAVEMENT ELEVATION.
 - ② LIMITS OF FULL DEPTH SAWCUT AND PAVEMENT REMOVAL.
 - ③ EXISTING PAVEMENT TO REMAIN.
 - ④ CONCRETE SIDEWALK. 2% MAX. CROSS SLOPE AND 5% MAX. STRAIGHT SLOPE.
 - ⑤ SIDEWALK RAMP @ 8.33% MAX. (PER LOCAL CODES)
 - ⑥ MEDIUM DUTY CONCRETE PAVEMENT.
 - ⑦ HEAVY DUTY CONCRETE PAVEMENT.
 - ⑧ CONCRETE CURB AND GUTTER.
 - ⑨ RETAINING WALL.

- PAVING NOTES:**
1. PANELS WIDTH/LENGTH SHALL BE BETWEEN 12'-17'.
 2. PANELS SHALL HAVE A MAXIMUM LENGTH TO WIDTH RATIO OF 1.25:1
 3. ALL JOINTS SHALL CONTINUE THROUGH THE CURBING
 4. EXPANSION JOINTS SHALL BE PLACED NO MORE THAN 60' O.C.E.W.
 5. CONCRETE TO BE PLACE WITH A FIBER OR WOVEN WIRE OVER 6" OF COMPACTED ABC STONE WITH A DENSITY OF 95% OR BETTER.
 6. NEW CONCRETE SLAB REINFORCED WITH WWR 6X6 - W2.9XW2.9 DELIVERED IN SHEETS (NOT ROLLS) AND PLACED IN THE CENTER OF THE SLAB. SECURE LOCATION SO THAT LIFTING OF STEEL GRID IS NOT NECESSARY AFTER THE POUR. STAGGER JOINT LOCATIONS OF WWR RELATIVE TO THE CONTROL JOINTS.
 7. PLACE #5 DWEL BARS AT COLD JOINTS @ 12" O.C.



JM CIVIL
 1101 Central Expressway South
 Suite 215
 Allen, TX 75013
 Ph. 214-491-1830
 John Measels, PE
 CIVIL ENGINEER



TAKE FIVE CAR WASH
 5150 NEW BERN AVE.
 RALEIGH, NC 27610

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PAVING PLAN
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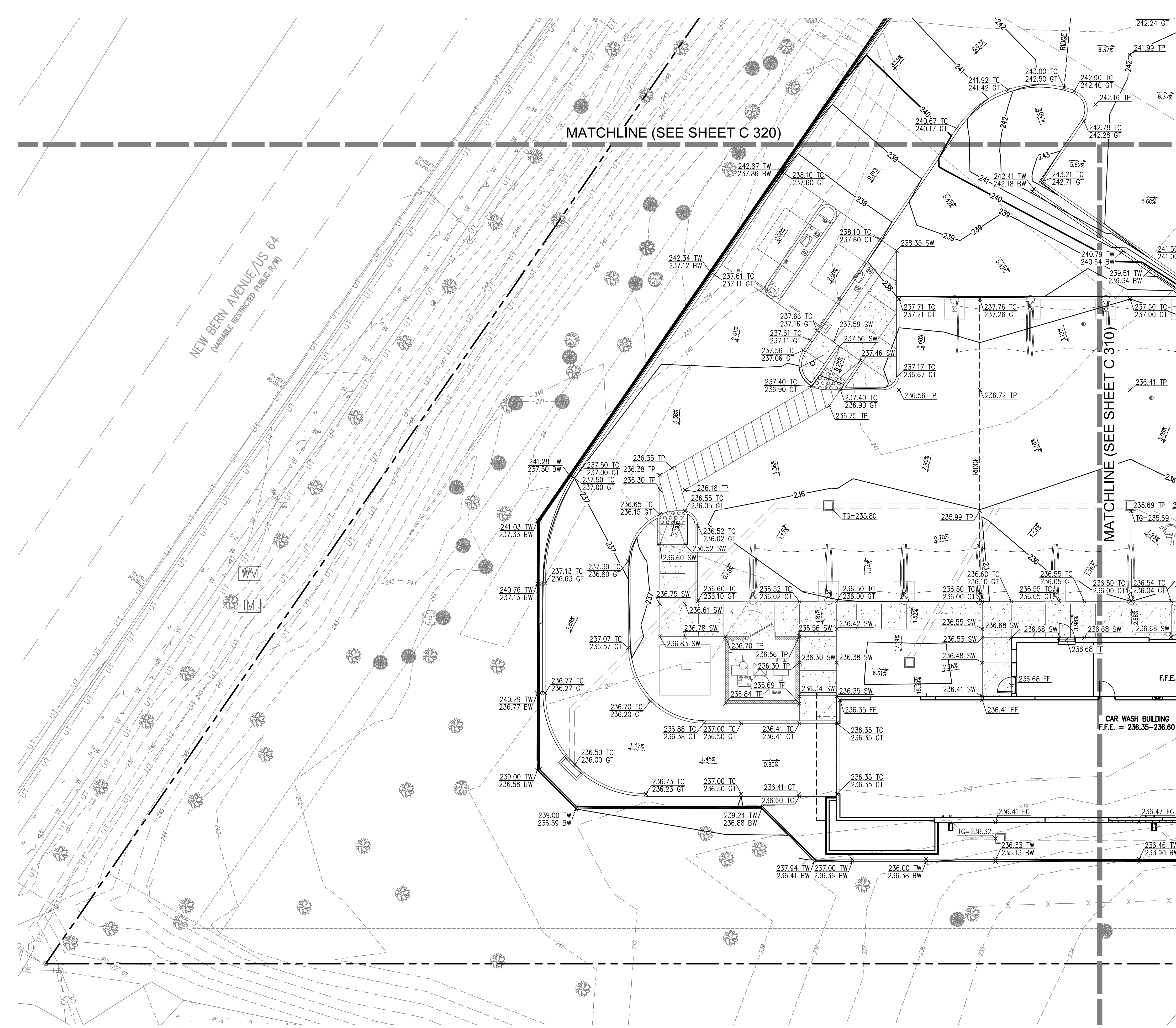
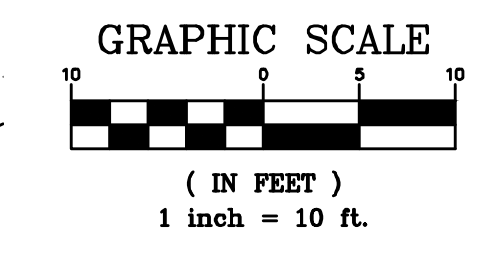
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FLOODNOTE
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GRADING LEGEND:

- PROPERTY LINE
- PROPOSED CURB & GUTTER
- LIMITS OF FULL DEPTH SAWCUT
- EXISTING CONTOUR
- PROPOSED CONTOUR
- LIGHT POLE
- AREA DRAIN
- ACCESSIBLE SPACES
- ADA RAMP
- BOLLARD
- TRAFFIC SIGN
- BOLLARD MOUNTED ACCESSIBLE SIGN
- GREASE TRAP
- CLEAN-OUT
- DOUBLE CLEAN-OUT
- GAS METER
- WATER METER
- IRRIGATION METER
- MANHOLE
- CURB INLET

- × EXISTING SPOT ELEVATION
- × TOP OF PAVEMENT ELEVATION
- × TOP OF CURB
- × GUTTER
- × GROUND
- × FINISH FLOOR
- × SIDEWALK
- × TOP OF GRATE



GRADING KEY NOTES:

- ① MATCH EXISTING PAVEMENT ELEVATION.
- ② STEEL PLATE SIDEWALK CROSSING.
- ③ 2' CURB OPENING.

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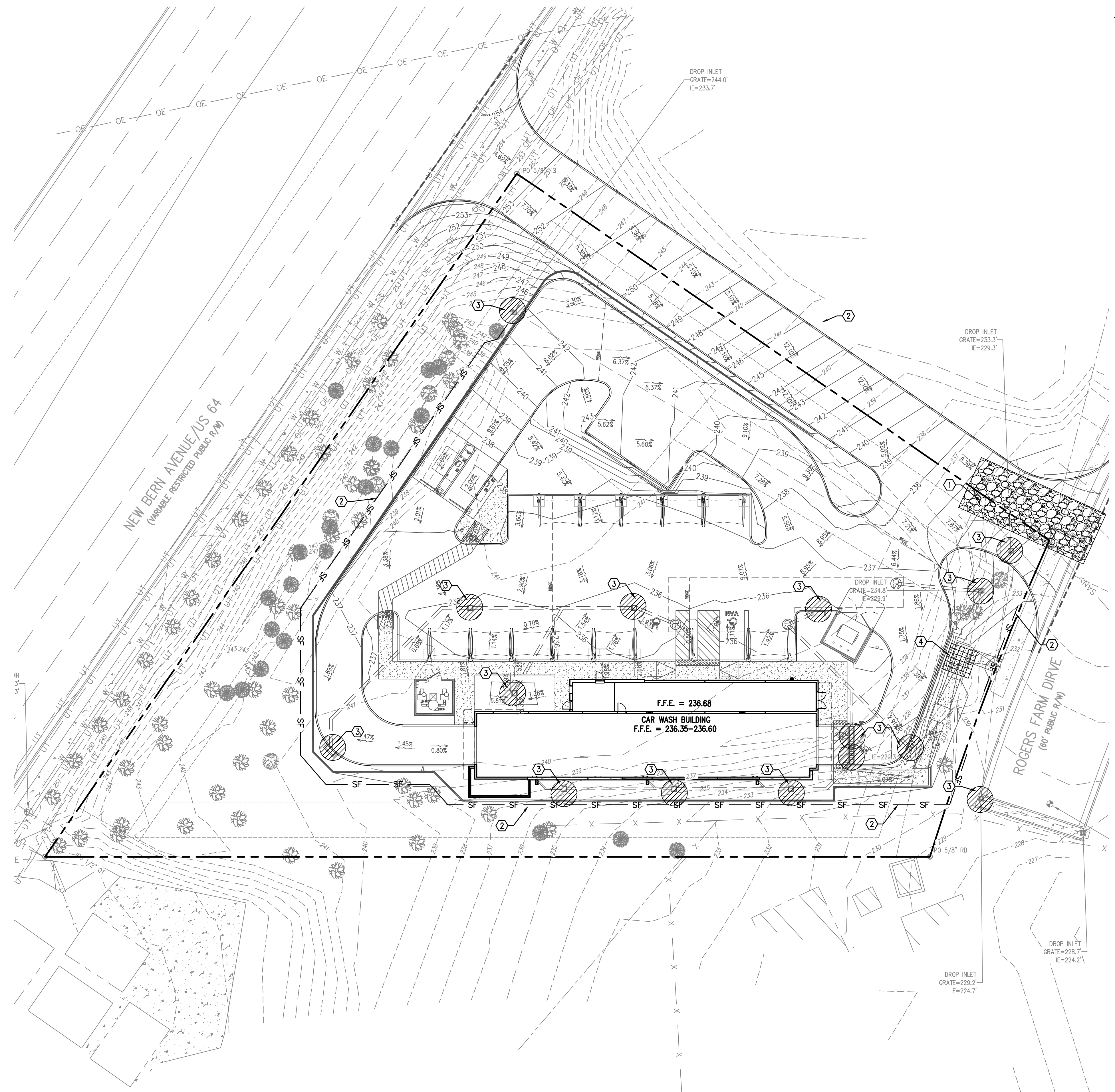
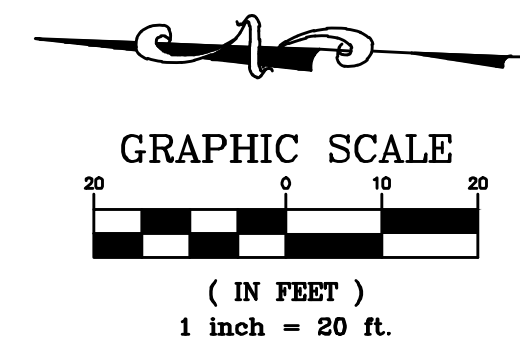
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EROSION CONTROL LEGEND:

- PROPERTY LINE
- PROPOSED CURB & GUTTER
- LIMITS OF FULL DEPTH SAWCUT
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SF SILT FENCE
- LOD APPROXIMATE LIMITS OF DISTURBANCE
- SB SAND BAG FILTER
- GB GRAVEL BAG FILTER
- FLOW LINE
- LIGHT POLE
- AREA DRAIN
- ACCESSIBLE SPACES
- ADA RAMP
- BOLLARD
- TRAFFIC SIGN
- BOLLARD MOUNTED ACCESSIBLE SIGN
- WATER METER
- IRRIGATION METER
- CURB INLET
- DRAINAGE SLOPE AND DIRECTION
- 10' X 10' CONCRETE WASH AREA
- TEMPORARY INLET PROTECTION
- TEMPORARY CONSTRUCTION ENTRANCE



EROSION CONTROL KEY NOTES:

- ① TEMPORARY CONSTRUCTION ENTRANCE.
- ② TEMPORARY SILT FENCE.
- ③ TEMPORARY INLET PROTECTION.
- ④ 10' X 10' CONCRETE WASH AREA.

SEQUENCE OF CONSTRUCTION ACTIVITIES:

- A. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE AND SILT FENCE ACCORDING TO THE APPROXIMATE LOCATION SHOWN ON THE EROSION CONTROL PLAN.
- B. CONSTRUCT TEMPORARY INLET TREATMENT AROUND OPEN STORM DRAIN INLETS ACCORDING TO THE EROSION CONTROL PLAN.
- C. KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE.
- D. BEGIN CLEARING AND GRADING OF SITE.
- E. INSTALL WATER, SANITARY SEWER AND STORM DRAIN AS SPECIFIED ON PLAN SHEETS.
- F. PAVE STREETS AND SIDEWALKS AS SPECIFIED ON PLAN SHEETS.
- G. RE-VEGETATE LOTS, PARKWAYS AND ALL DISTURBED AREAS.
- H. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES.

MAINTENANCE:

- A. CONTRACTOR TO KEEP ALL STORM WATER POLLUTION PREVENTION MEASURES IN PLACE DURING CONSTRUCTION.
- B. CONTRACTOR SHALL MAINTAIN ALONG WITH THE SIGNED EFFECTIVE COPY OF SWP3 DRAWINGS AN UPDATED LIST IDENTIFYING ALL POTENTIAL SOURCES OF POLLUTION INCLUDING PORTA-POTTYS, FUEL TANKS, STAGING AREAS, WASTE CONTAINERS, CHEMICAL STORAGE AREAS, CONCRETE CURE, PAINTS SOLVENTS, ETC., AND A DESCRIPTION OF THE LOCATION.
- C. CONTRACTOR TO REMOVE ALL STORM WATER POLLUTION PREVENTION MEASURES AFTER CONSTRUCTION IS COMPLETE AND INSPECTED FOR APPROVAL. LONG TERM MAINTENANCE TO BE PROVIDED BY OWNER.

NOTES:

1. CONTRACTOR SHALL POLICE SITE REGULARLY AND AND KEEP SITE FREE OF TRASH AND CONSTRUCTION DEBRIS.
2. ALL EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED IN COMPLIANCE WITH CITY STANDARD EROSION CONTROL DETAILS
3. TOTAL DISTURBED AREA=1.2 ACRES.
4. REFER TO LANDSCAPE PLAN FOR FINAL GROUND STABILIZATION

EROSION AND SEDIMENT CONTROL CONSTRUCTION PHASING:

CONSTRUCTION PHASING:	DURATION OF PHASE	APPROX. DATE FOR START OF EACH PHASE
1. TOP SOIL REMOVAL, CLEARING, GRUBBING AND PAVING REMOVAL	15 DAYS	TBD
2. GRADING.	30 DAYS	TBD
3. UTILITY INSTALLATION.	30 DAYS	TBD
4. PAVING.	30 DAYS	TBD
5. BUILDING CONSTRUCTION.	60 DAYS	TBD
6. FINE GRADING.	15 DAYS	TBD
7. LANDSCAPE AND VEGETATION.	15 DAYS	TBD
8. BMP REMOVAL.	5 DAYS	TBD



Know what's below.
 Call before you dig.

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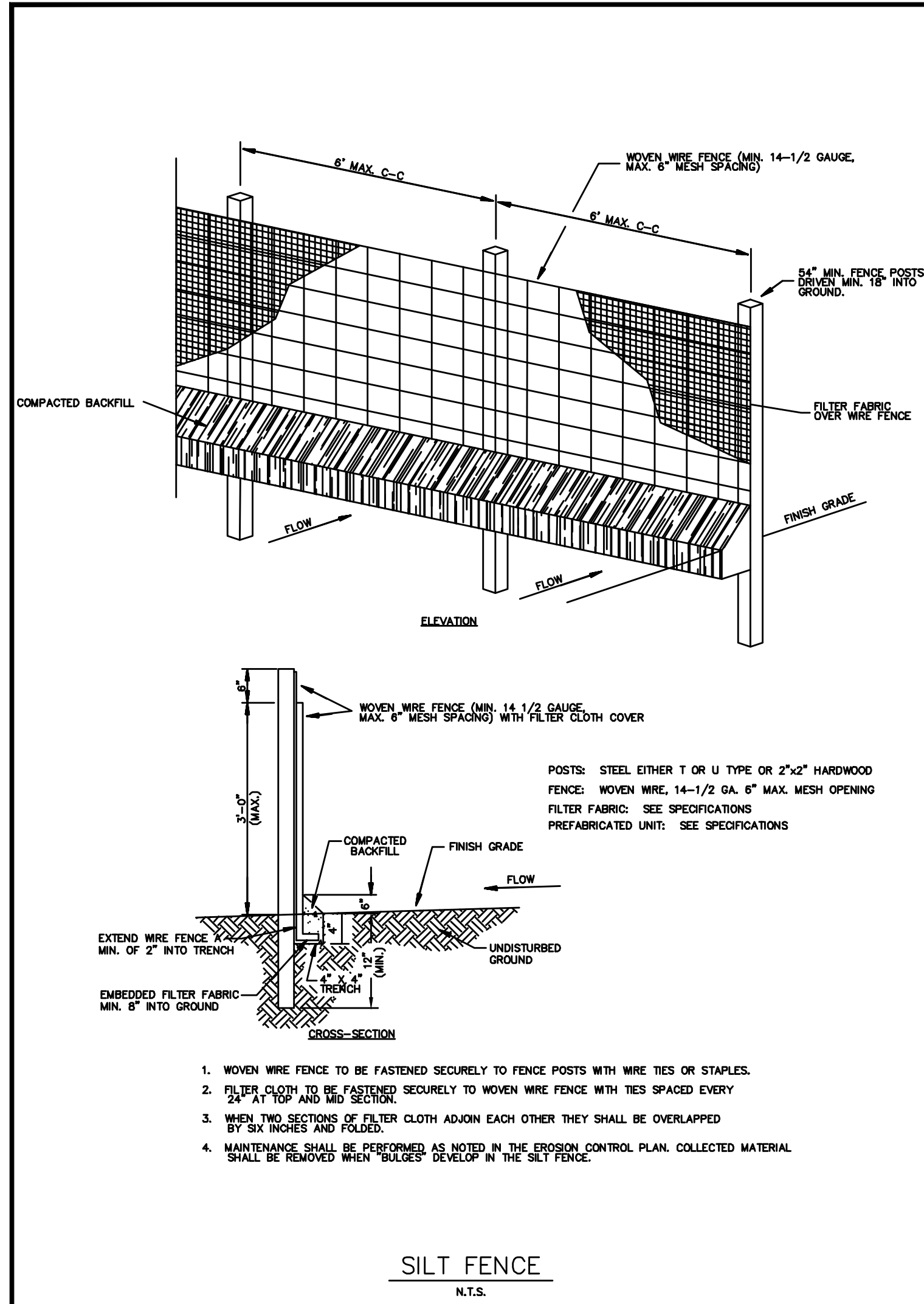
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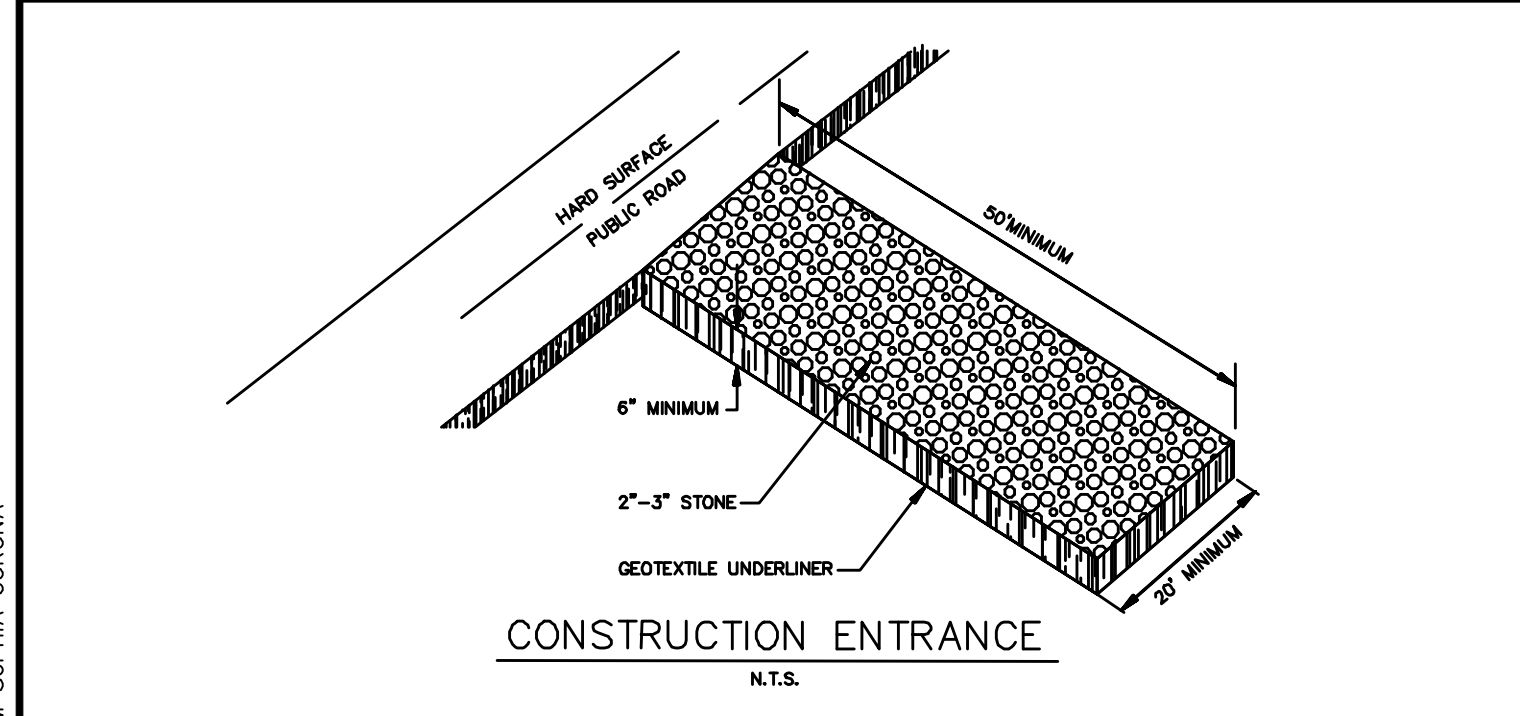
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SOIL EROSION AND SEDIMENT CONTROL PLAN

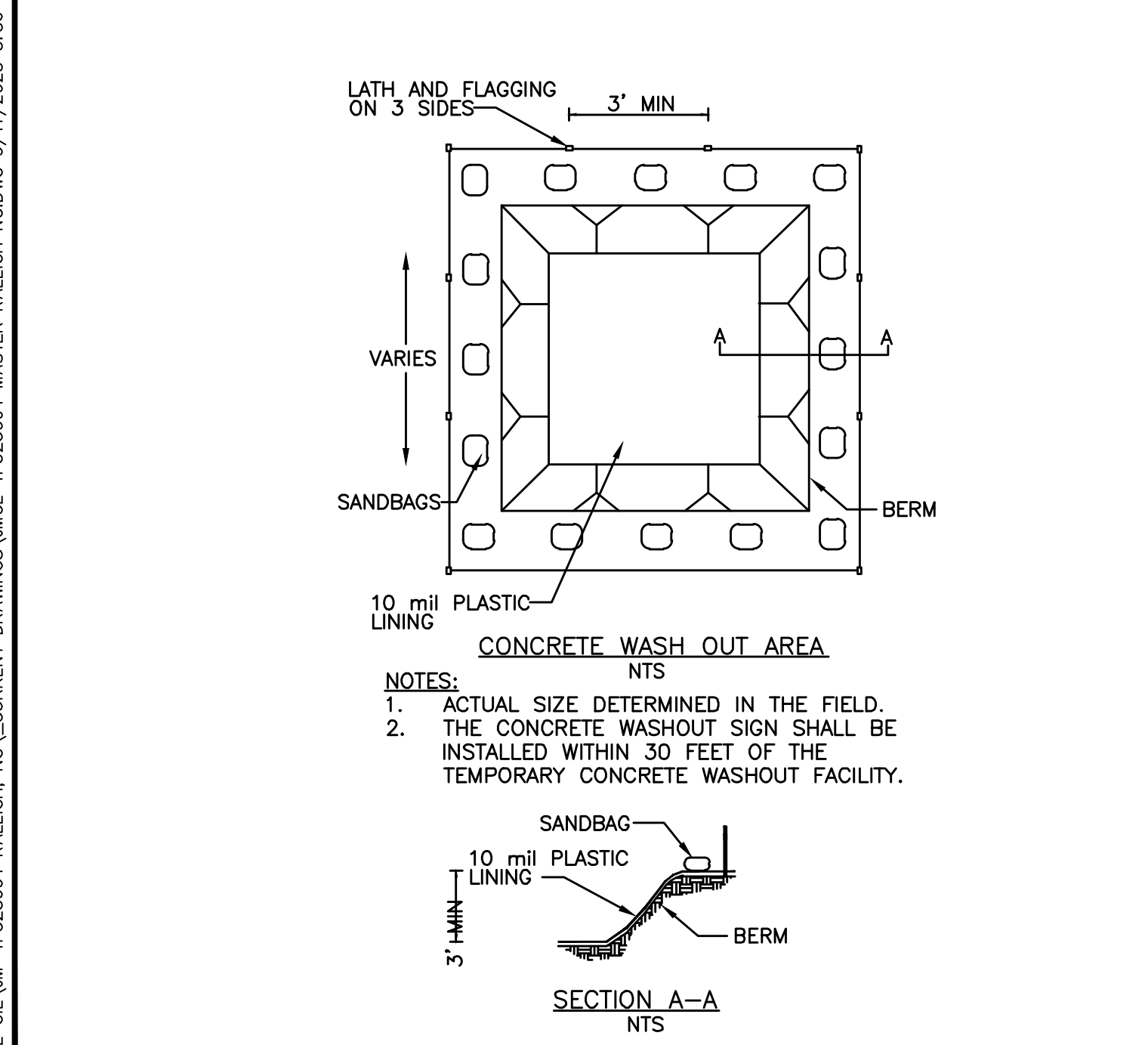
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SILT FENCE
N.T.S.

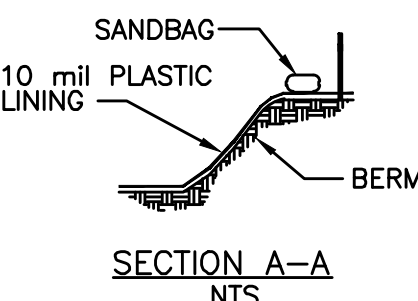


CONSTRUCTION ENTRANCE
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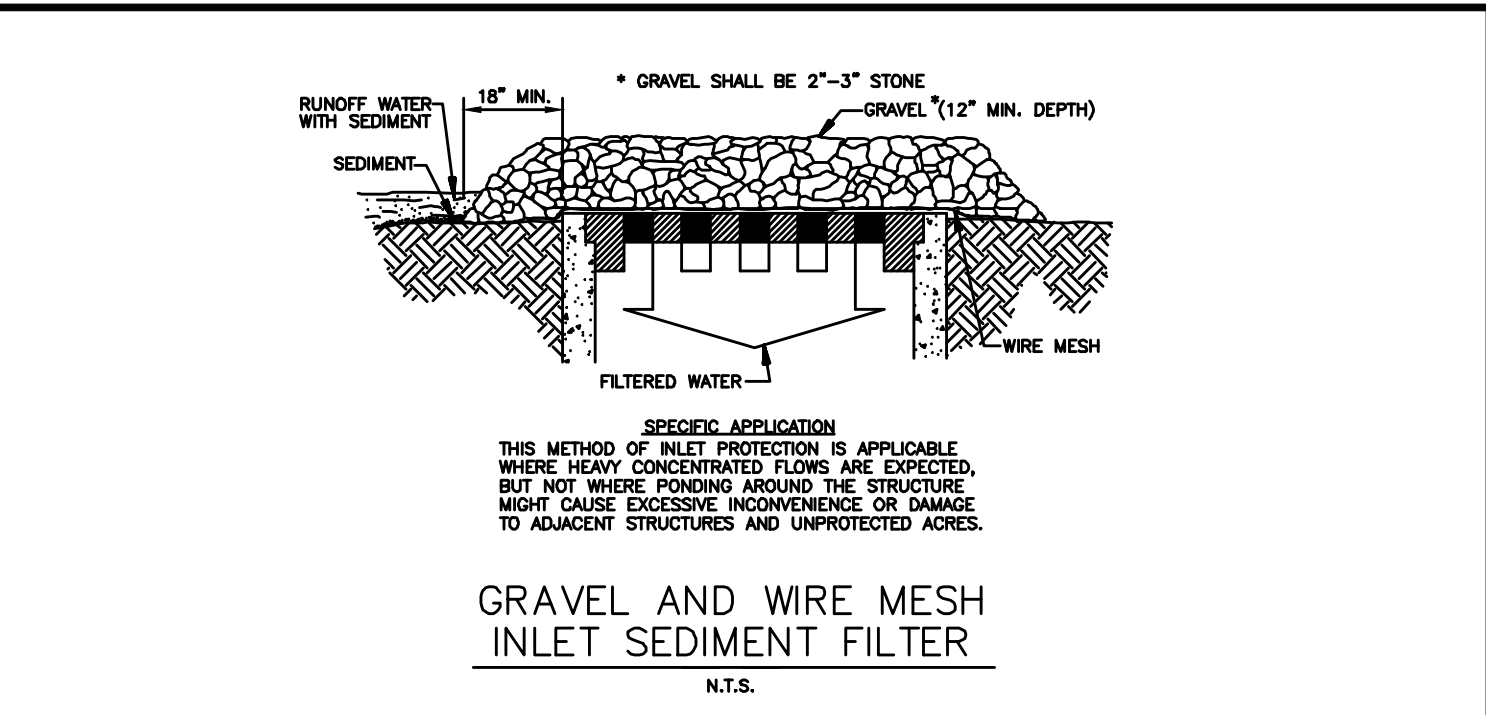


CONCRETE WASH OUT AREA
N.T.S.

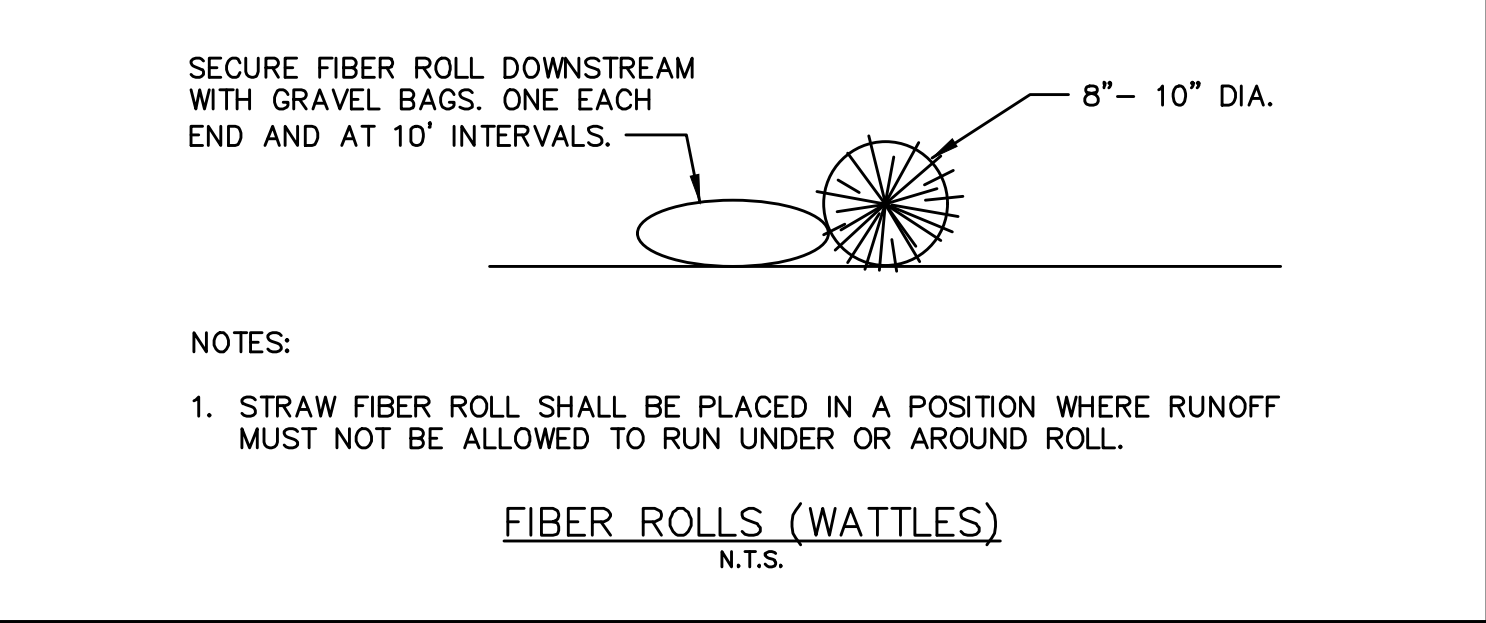
- NOTES:
1. ACTUAL SIZE DETERMINED IN THE FIELD.
 2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



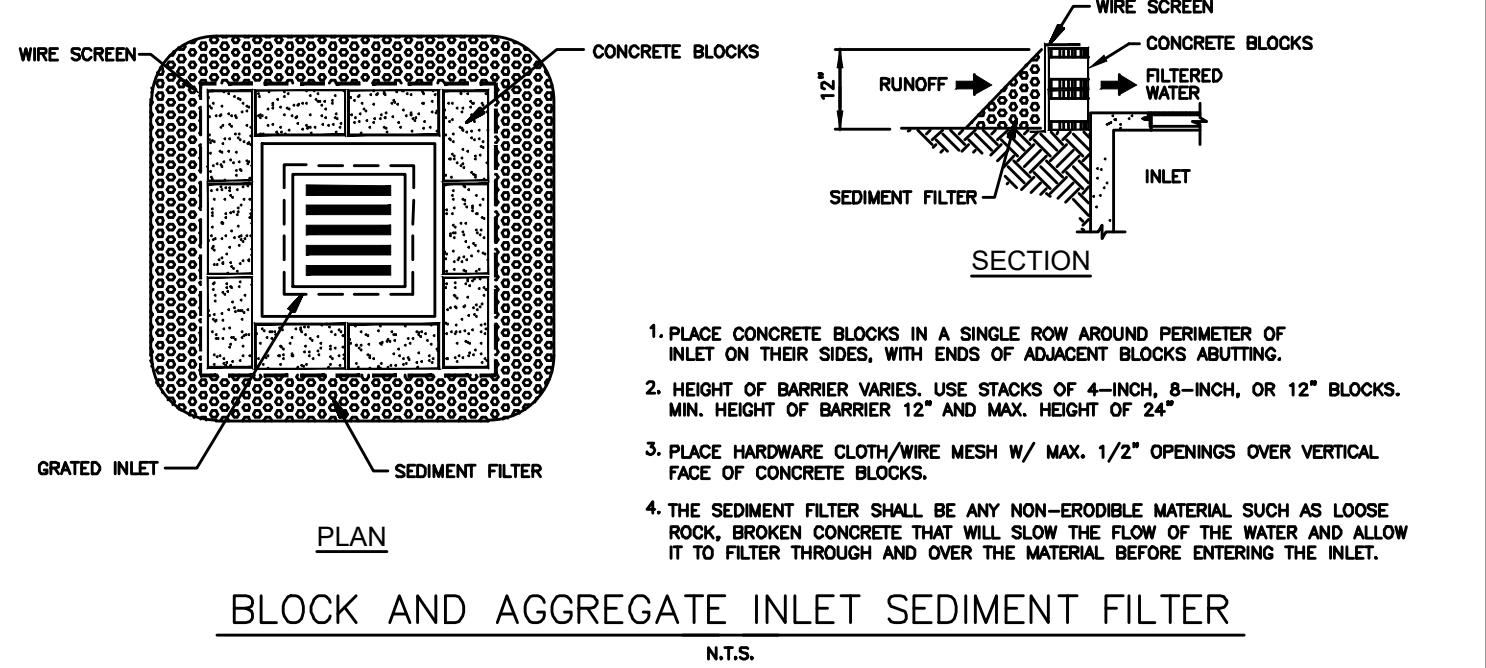
SECTION A-A
N.T.S.



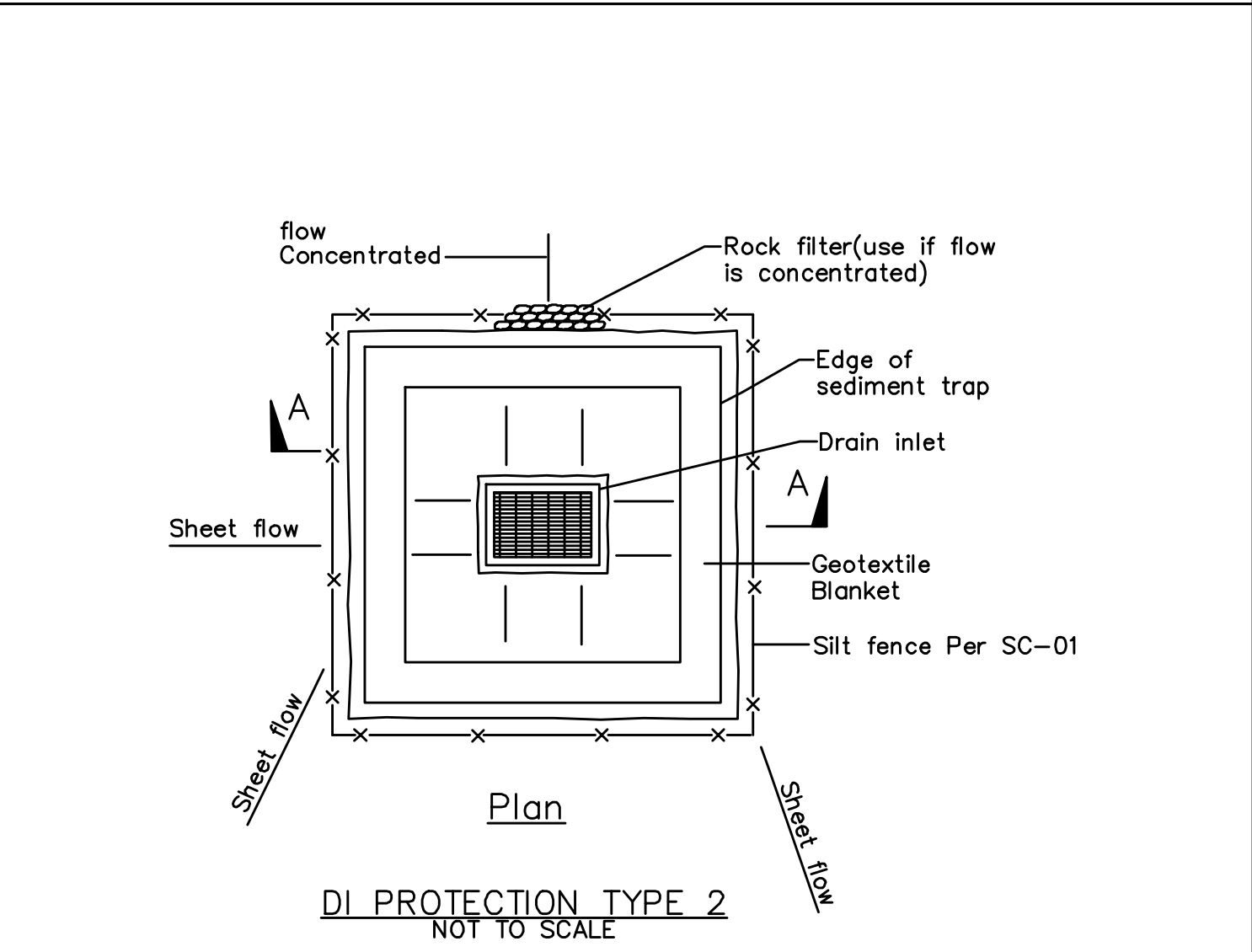
GRAVEL AND WIRE MESH INLET SEDIMENT FILTER
N.T.S.



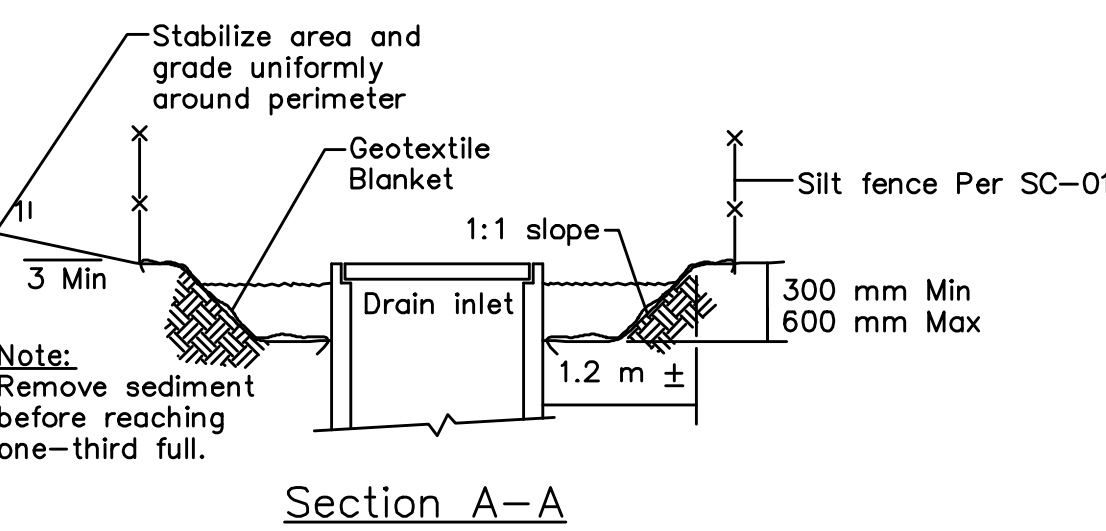
FIBER ROLLS (WATTLES)
N.T.S.



BLOCK AND AGGREGATE INLET SEDIMENT FILTER
N.T.S.



DI PROTECTION TYPE 2
NOT TO SCALE



- Notes
1. For use in cleared and grubbed and in graded areas.
 2. Shape basin so that longest inflow area faces longest length of trap.
 3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction flow.

CATCH BASIN INLET PROTECTION DETAIL
N.T.S.

BEST MANAGEMENT PRACTICES

1. STRUCTURAL MEASURES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN EFFECTIVE OPERATING CONDITION.
2. DOCUMENTATION OF MAINTENANCE ACTIVITIES INCLUDING FREQUENCY, LOT DESIGNATION, INSPECTION OF STRUCTURAL CONTROLS, MATERIAL STORAGE AREAS, VEHICLE ENTRANCES AND EXITS: ACTIONS TAKEN AND INSPECTORS NAME.
3. CONSTRUCTION SITE NOTICE WILL BE MAINTAINED ON SITE
4. COPY OF SWPPP SHALL BE KEPT ON SITE
5. PERIMETER MUST RETAIN THE SWPPP, NOI AND INSPECTION LOG FOR A MINIMUM OF 3 YEARS FROM THE TERMINATION AND FINAL STABILIZATION OF PROJECT

I. WASTE MATERIALS
ALL WASTE MATERIALS INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURED LIDDED METAL DUMPSTER. NO CONSTRUCTION MATERIALS SHALL BE BURIED ON SITE. THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY ORDINANCE 9.04 (SOLID WASTE MANAGEMENT) AND THE TRASH BE HAULED TO A LICENSED LANDFILL.

II. HAZARDOUS WASTE
AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, CURING COMPOUNDS AND ADDITIVES. IN EVENT OF SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPARTMENT AND NMED.

III. SANITARY WASTE
ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

IV. SPILL PREVENTION
THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

V. GOOD HOUSEKEEPING
A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
B. NEATLY STORE MATERIALS ON-SITE IN A SECURE MANNER
C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
D. DO NOT MIX SUBSTANCES WITH ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.
E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING OF THE CONTAINER
F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROP USE AND DISPOSAL

VI. HAZARDOUS CONDITIONS
PRACTICES TO REDUCE RISKS:
A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
C. DISPOSE SURPLUS PRODUCT IN ACCORDANCE WITH MANUFACTURERS

VII. PETROLEUM PRODUCTS
PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED, ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER RECOMMENDATION.

VIII. SPILL CONTROL PRACTICES:
A. MANUFACTURERS RECOMMENDED METHODS FOR SPILL CLEAN UP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURE
B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE
C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN
E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

IX. MAINTENANCE AND INSPECTION PROCEDURES
ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY 14 DAYS AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY. A RECORD OF THE RESULTS OF THE INSPECTIONS OF THE SITE SHALL BE KEPT ON-SITE

X. REMARKS
DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS, CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS



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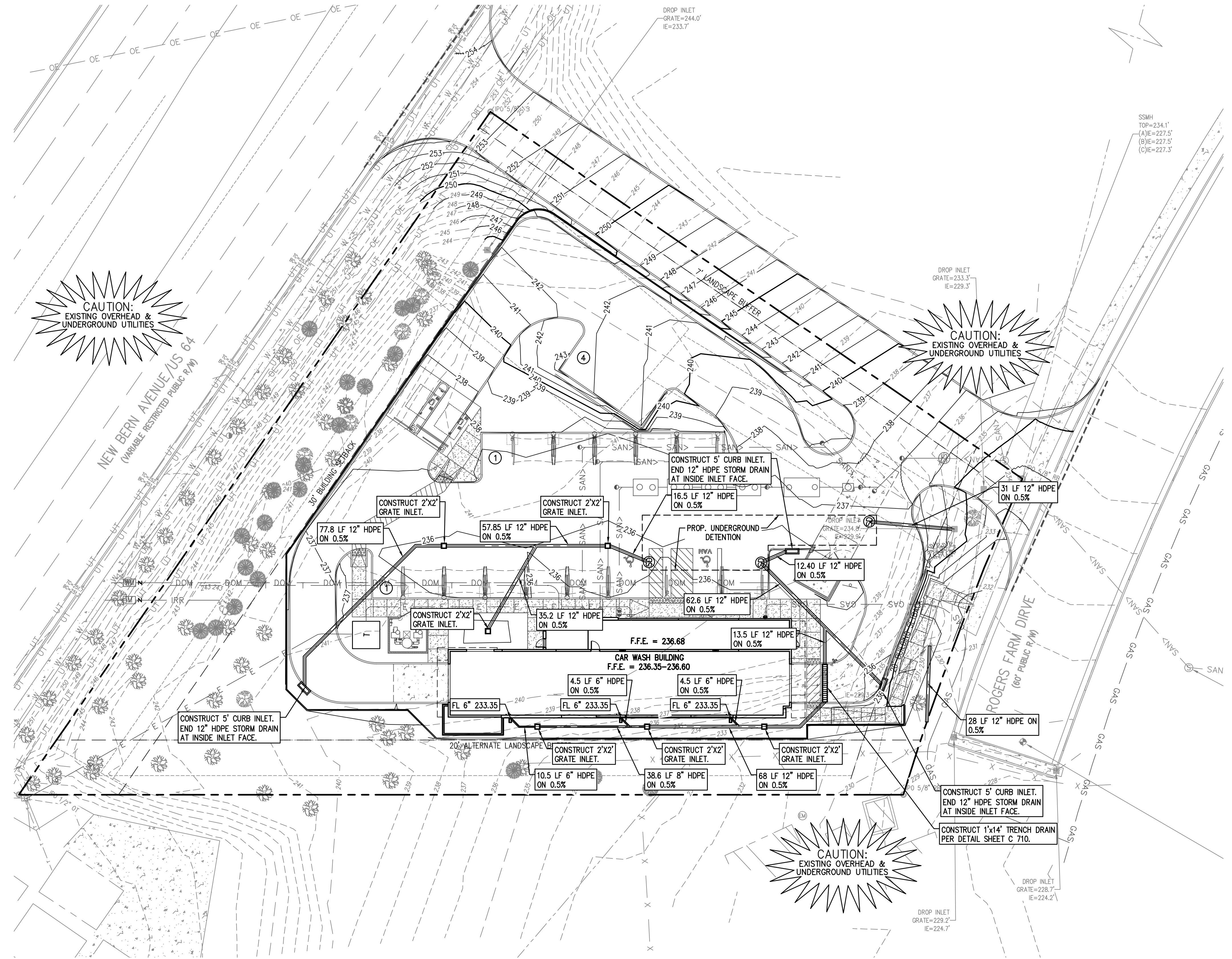
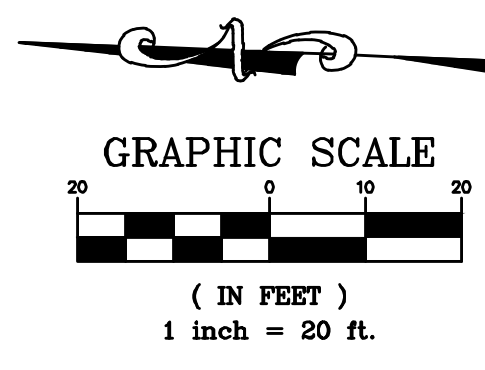
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 - LIMITS OF FULL DEPTH SAWCUT
 - EXISTING CONTOUR
 - STORM DRAIN PIPE
 - SAN> SANITARY SEWER LINE
 - W WATER LINE
 - GAS GAS LINE
 - E ELECTRIC SERVICE LINE
 - T TELEPHONE SERVICE LINE
 - ADA RAMP
 - BOLLARD
 - TRAFFIC SIGN
 - BOLLARD MOUNTED ACCESSIBLE SIGN
 - IRRIGATION METER
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 - GREASE TRAP
 - CLEAN-OUT
 - DOUBLE CLEAN-OUT
 - GAS METER
 - WATER METER



PIPING MATERIAL SCHEDULE

STORM SEWER SMALLER THAN 12"	SDR-35 PVC PER ATSM D3034
STORM SEWER - 12" OR LARGER (PRIVATE)	DUAL WALLED HDPE, AASHTO M252 &M294
STORM SEWER - WITHIN PUBLIC EASEMENT OR RIGHT-OF-WAY.	RCP, C-76, CLASS III



JM CIVIL
 1101 Central Expressway South
 Suite 215
 Allen, TX 75013
 Ph. 214-491-1830
 John Measels, PE
 CIVIL ENGINEER



TAKE FIVE CAR WASH
 5150 NEW BERN AVE.
 RALEIGH, NC 27610

REV#	DATE	DESCRIPTION
01	07/25/23	INITIAL SUBMITTAL

PROJECT NO:	JM-17023004
DRAWN BY:	JMCE
CHECKED BY:	JMCE
ISSUE DATE:	09/11/2023

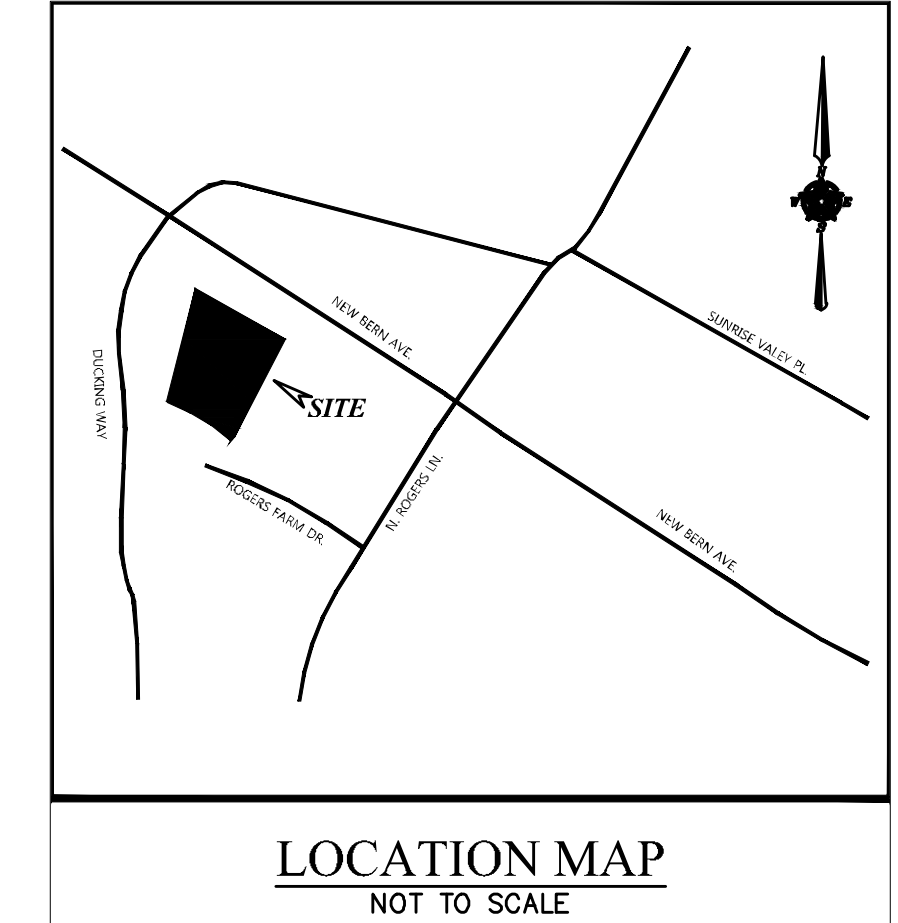
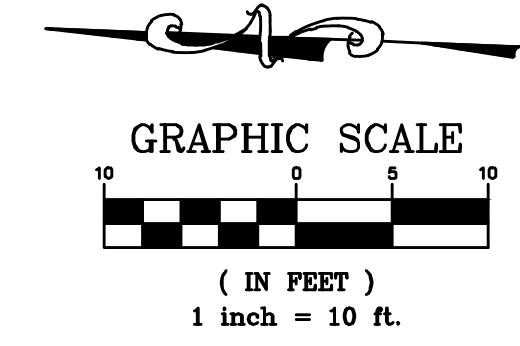
STORM DRAIN PLAN
C 520

J:\TAKE FIVE OIL\JM-17023004 MASTER DRAWINGS\JMCE_TF023004_MASTER_RALEIGH_NC\CURRENT DRAWINGS\JMCE_TF023004_MASTER_RALEIGH_NC\DWG 9/11/2023 3:57 PM SOPHIA CORONA

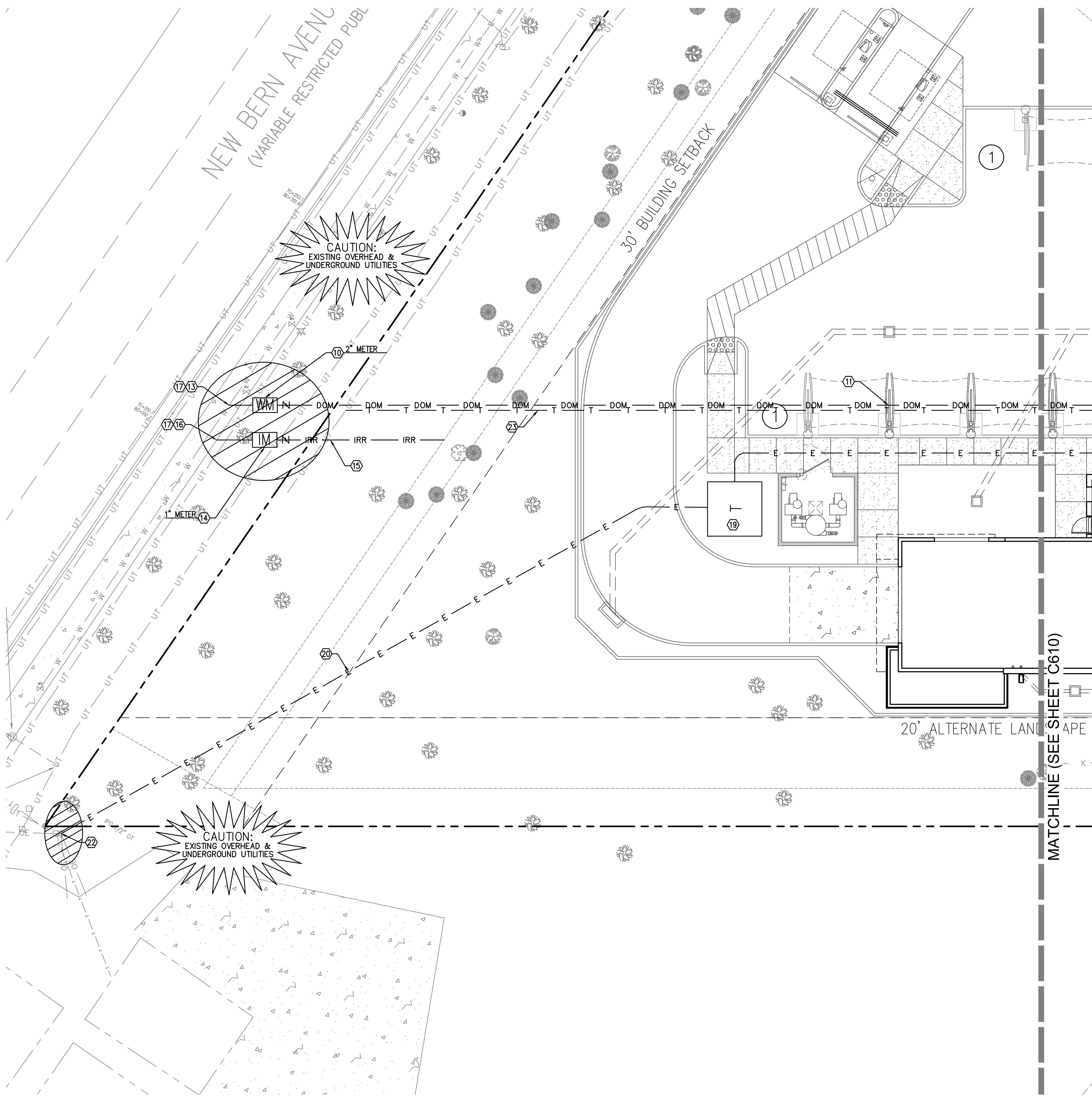
CAUTION NOTICE TO CONTRACTOR
 THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 7 DAYS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES HORIZONTALLY AND VERTICALLY WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

BENCHMARKS
 TBM;N=744,455.4397' E=2,133,279.8521;MAG NAIL FOUND
 ELEV.=249.66 (NAD83/NAVD88)
 TBM;N=744,070.0571' E=2,133,322.3900;MAG NAIL FOUND
 ELEV.=229.70 (NAD83/NAVD88)
 TBM;N=743,993.8481' E=2,133,552.3210;MAG NAIL FOUND
 ELEV.=241.02 (NAD83/NAVD88)
 TBM;N=744,128.0792' E=2,133,806.6069;MAG NAIL FOUND
 ELEV.=256.69 (NAD83/NAVD88)

FLOODNOTE
 ACCORDING TO THE F.I.R.M. NO. 3720173400K, THE SUBJECT PROPERTY LIES IN ZONE X AND DOES NOT LIE WITHIN A FLOOD PRONE HAZARD AREA, PER MAP REVISION DATED JULY 19, 2022.



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UTILITY KEY NOTES:

- ① SANITARY SEWER CLEAN-OUT.
- ② SANITARY SEWER DOUBLE CLEAN-OUT.
- ③ RECLAMATION TANKS. (UNIT SPECIFIC PER MEP)
- ④ SAND/OIL INTERCEPTOR (UNIT SPECIFIC PER MEP)
- ⑤ SANITARY SEWER LINE. (SEE NOTE FOR TYPE, SIZE AND SLOPE)
- ⑥ SANITARY SEWER POINT OF ENTRY. (PER MEP PLANS)
- ⑦ SANITARY SEWER POINT OF CONNECTION. (CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION)
- ⑧ SANITARY SEWER SAMPLE PORT
- ⑨ SANITARY SEWER WYE.
- ⑩ DOMESTIC WATER METER. (SEE NOTE FOR SIZE)
- ⑪ DOMESTIC WATER LINE. (SEE NOTE FOR SIZE)
- ⑫ DOMESTIC WATER LINE POINT OF ENTRY. (PER MEP PLANS)
- ⑬ DOMESTIC WATER LINE POINT OF CONNECTION.
- ⑭ IRRIGATION WATER METER. (SEE NOTE FOR SIZE)
- ⑮ IRRIGATION WATER LINE. (SEE NOTE FOR SIZE)
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- ⑰ CONTRACTOR SHALL COORDINATE WITH WATER UTILITY DEPARTMENT TO ENSURE THAT SERVICE IS NOT INTERRUPTED AT ANY TIME.
- ⑱ PROPOSED LIGHT POLE.
- ⑲ PAD MOUNTED TRANSFORMER.
- ⑳ UNDERGROUND ELECTRIC LINE. (COORDINATE WITH ELECTRIC COMPANY FOR CONDUIT SIZES)
- ㉑ METERING EQUIPMENT AND ELECTRIC LINE POINT OF ENTRY. (PER MEP PLANS)
- ㉒ ELECTRIC LINE POINT OF CONNECTION.
- ㉓ UNDERGROUND TELEPHONE LINE ~ 2-1" CONDUITS. (VERIFY SIZE WITH TELEPHONE COMPANY)
- ㉔ TELEPHONE LINE POINT OF ENTRY. (PER MEP PLANS)
- ㉕ TELEPHONE LINE POINT OF CONNECTION.
- ㉖ GAS METER.
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- ㉚ MAINTAIN 12" MIN VERTICAL SEPARATION, AND 18" AT ALL WATER CROSSINGS
- ㉛ STORM LINE .



TAKE FIVE CAR WASH
 5150 NEW BERN AVE.
 RALEIGH, NC 27610

SITE PIPING MATERIAL SCHEDULE

SANITARY SEWER - SMALLER THAN 4"	SCHEDULE 40 PVC
SANITARY SEWER - 4" AND LARGER	SDR-26 PVC. PER ASTM D-3034.
WATER LINE SMALLER THAN 4"	SCHEDULE 40 PVC AS PER ATSM D1785
WATER LINE 4" - 12"	PVC CLASS 150, DR-18, AWWA C-900



REV.	DATE	DESCRIPTION
01	07/24/23	INITIAL SUBMITTAL

PROJECT NO:	JM-TF023004
DRAWN BY:	JMCE
CHECKED BY:	JMCE
ISSUE DATE:	09/11/2023

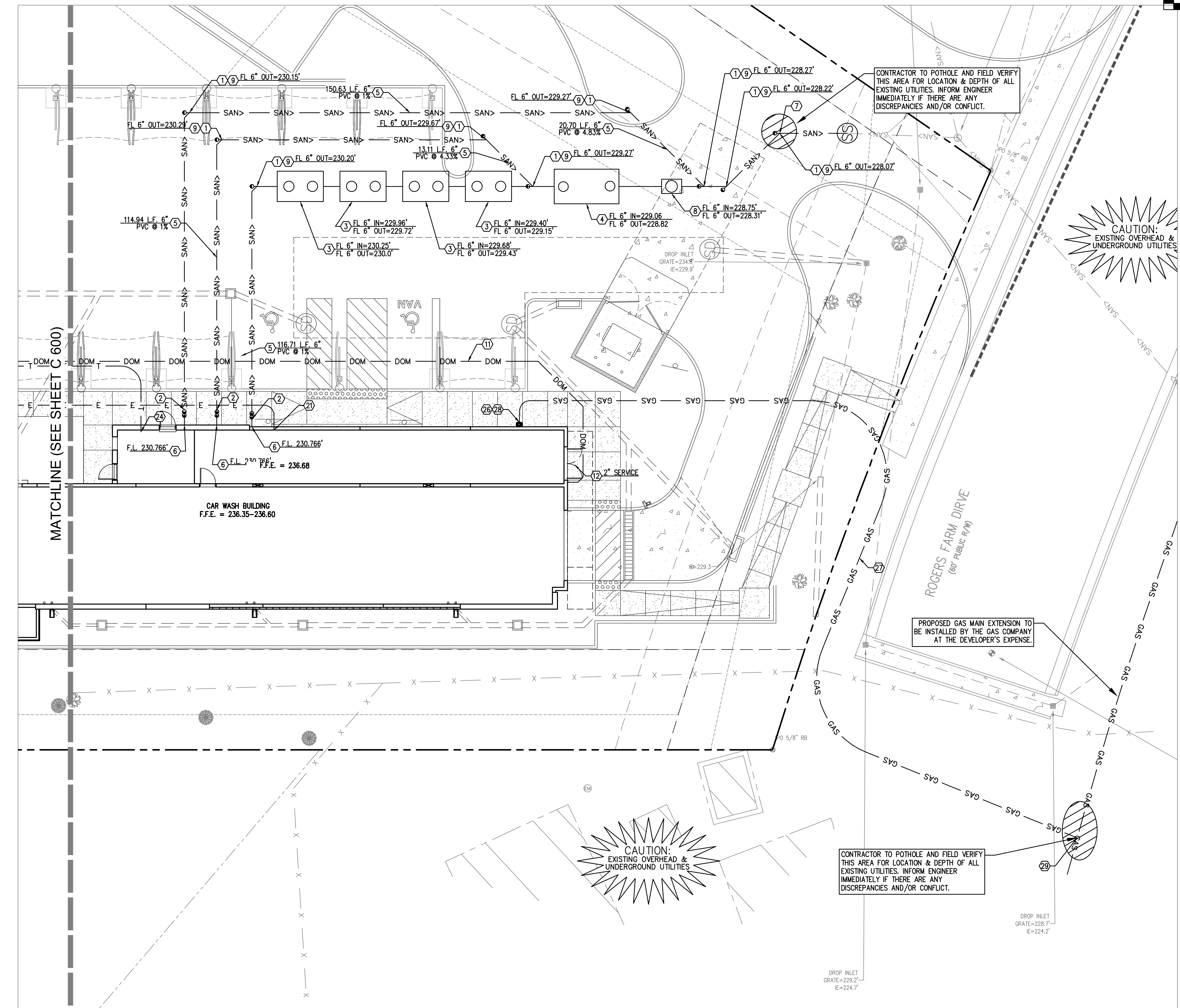
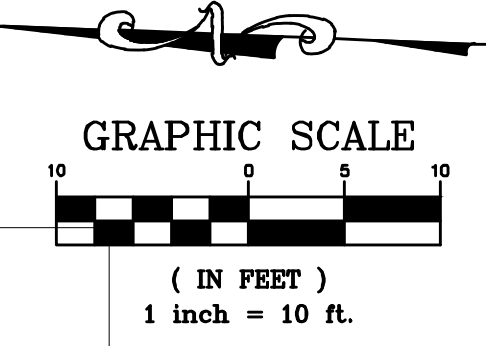
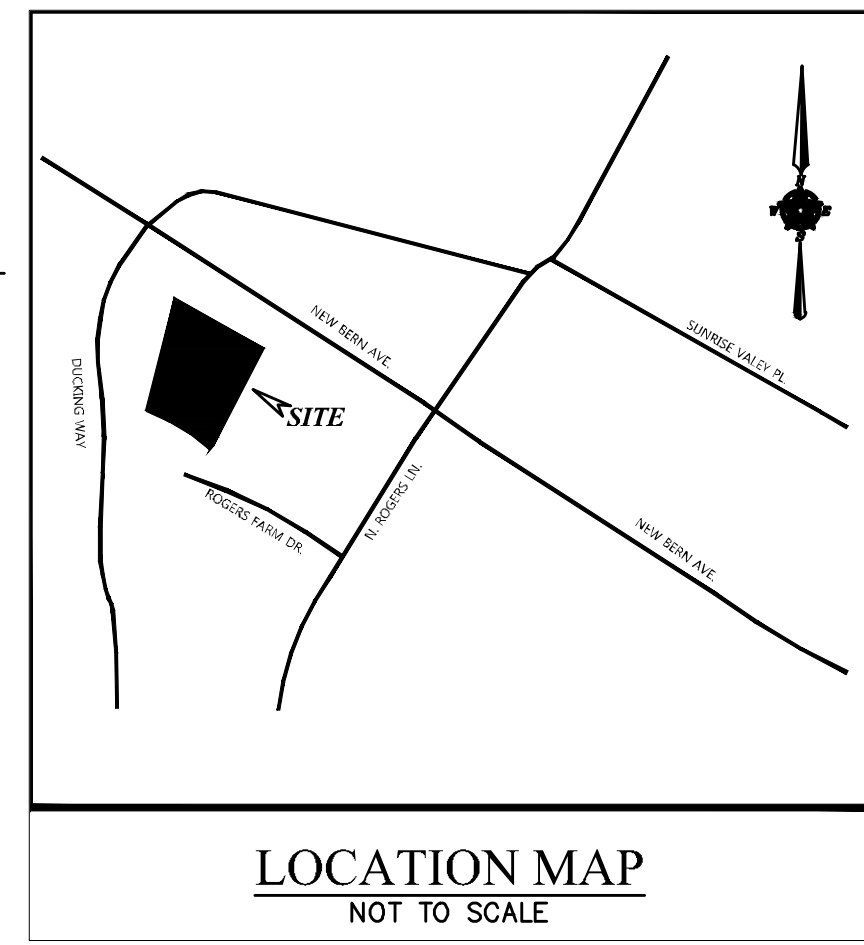
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J:\TAKE FIVE OIL\JM-TF023004 RALEIGH, NC\CURRENT DRAWINGS\JMCE TF023004 MASTER RALEIGH NCDWG 9/11/2023 3:57 PM SOPHIA CORONA

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CONTRACTOR TO POTHOLE AND FIELD VERIFY THIS AREA FOR LOCATION & DEPTH OF ALL EXISTING UTILITIES. INFORM ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES AND/OR CONFLICT.

CAUTION: EXISTING OVERHEAD & UNDERGROUND UTILITIES

PROPOSED GAS MAIN EXTENSION TO BE INSTALLED BY THE GAS COMPANY AT THE DEVELOPER'S EXPENSE.

CONTRACTOR TO POTHOLE AND FIELD VERIFY THIS AREA FOR LOCATION & DEPTH OF ALL EXISTING UTILITIES. INFORM ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES AND/OR CONFLICT.

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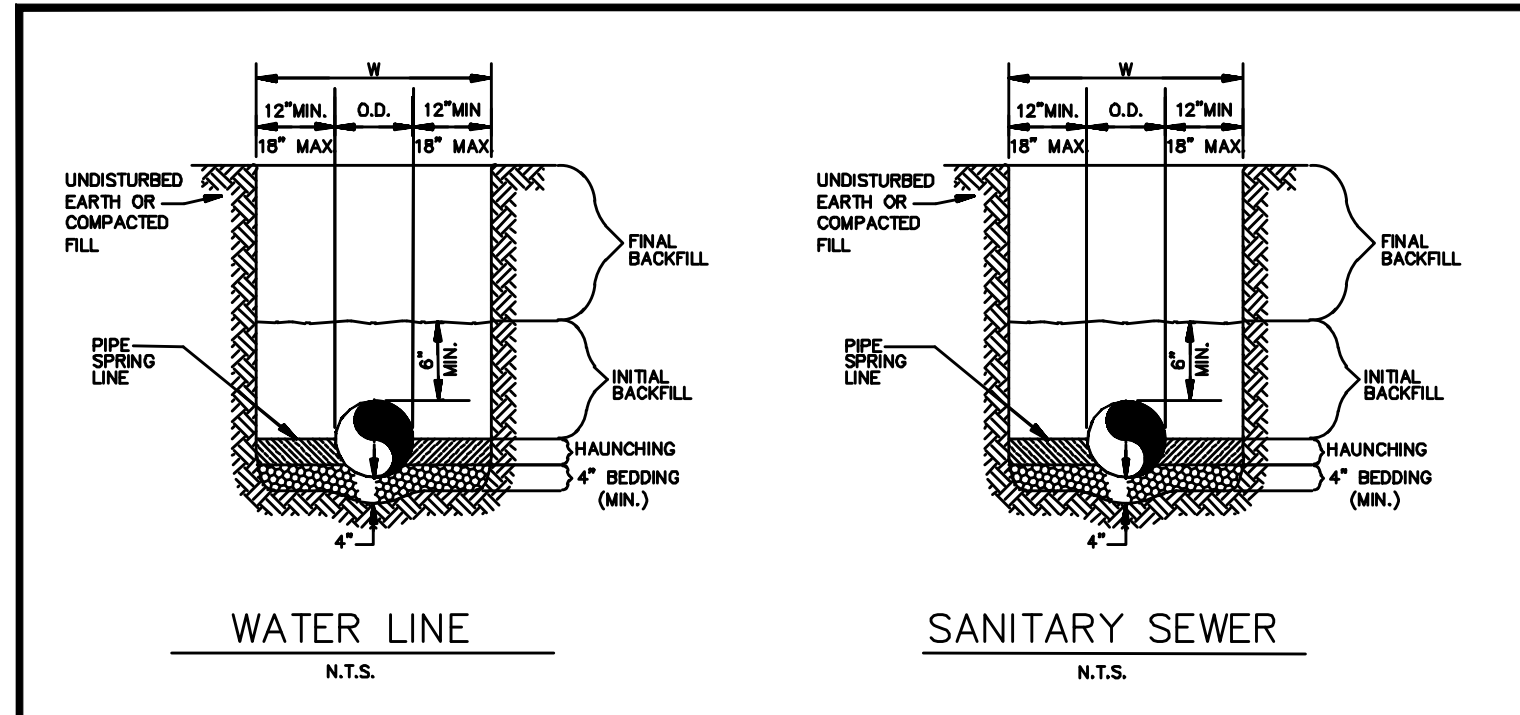
TAKE FIVE CAR WASH
 5150 NEW BERN AVE.
 RALEIGH, NC 27610

REV.	DATE	DESCRIPTION
01	07/24/23	INITIAL SUBMITTAL

PROJECT NO: JM-TF023004
 DRAWN BY: JMCE
 CHECKED BY: JMCE
 ISSUE DATE: 09/11/2023

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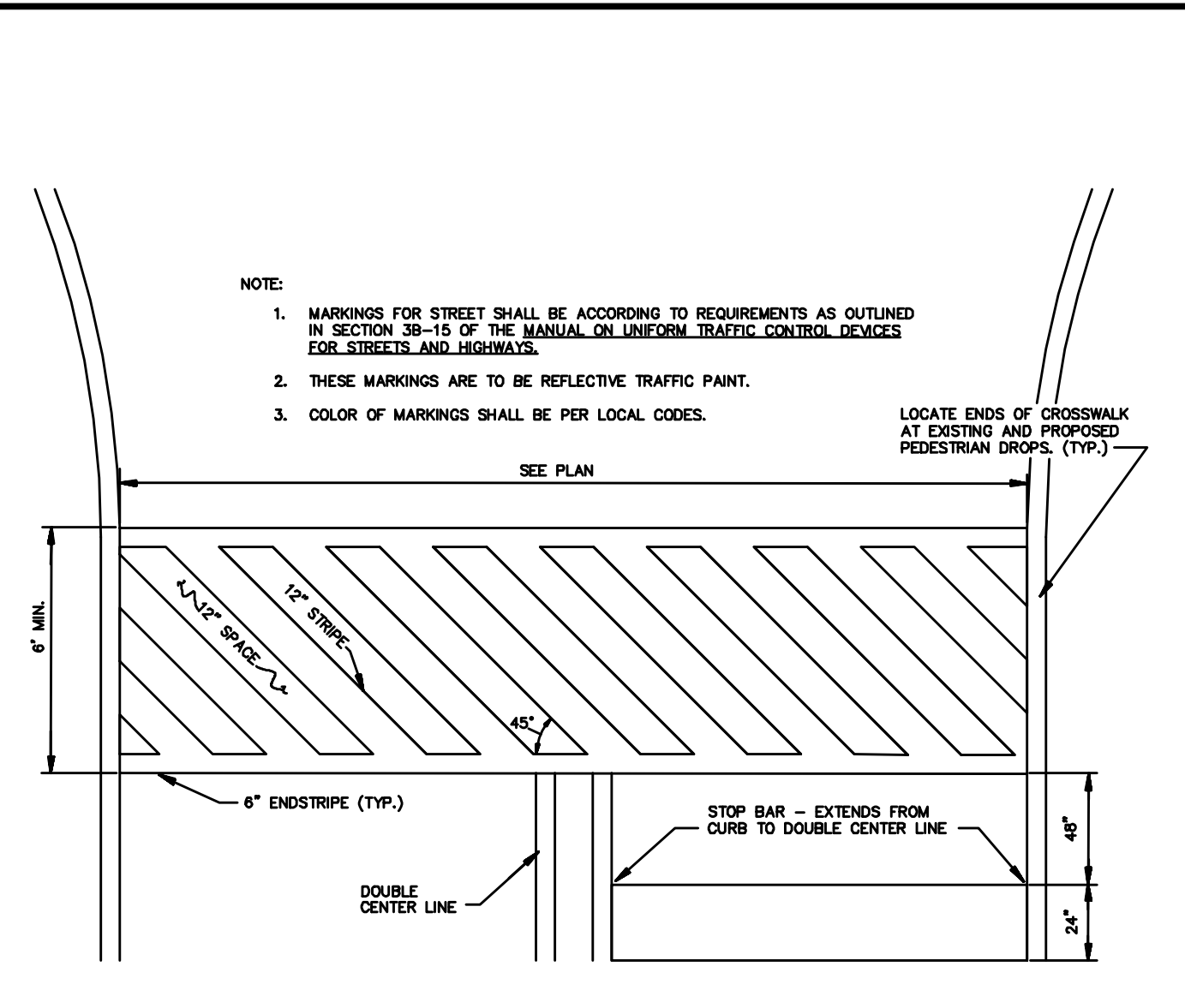


WATER LINE
N.T.S.

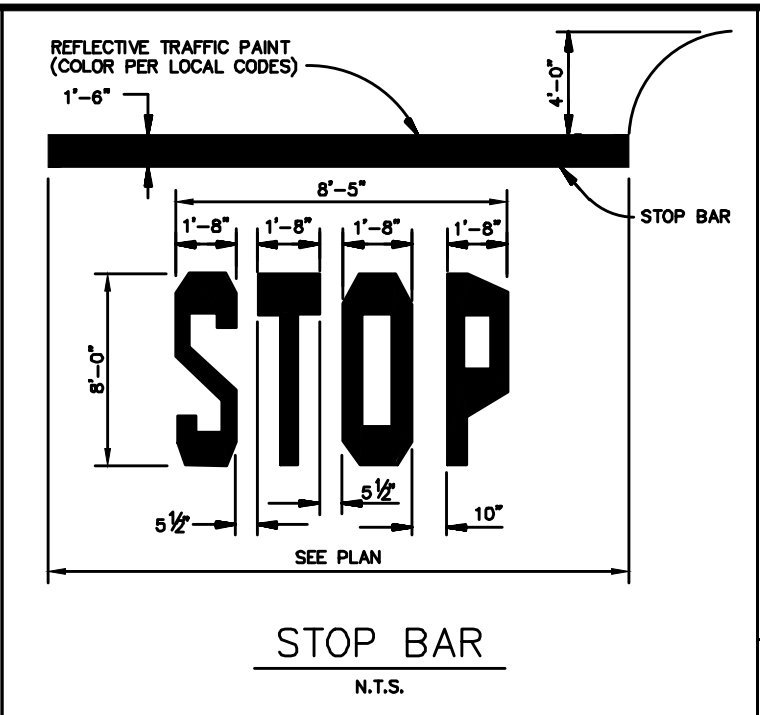
SANITARY SEWER
N.T.S.

- GENERAL NOTES**
- BEDDING SHALL BE CLASS I-A WORKED BY HAND IF GROUNDWATER IS ANTICIPATED. THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR. (SEE SPECIFICATIONS FOR GRADATION)
 - HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS A COMPACTED TO 85% PROCTOR.
 - INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
 - INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS II COMPACTED TO 90% STANDARD PROCTOR.
 - FINAL BACKFILL SHALL BE CLASS II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
 - FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS I-A COMPACTED TO 85% STANDARD PROCTOR.
 - ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-BB.
 - ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D 688. CLASS II AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
 - FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
 - ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHIELDED, BRACED, OR OTHERWISE SUPPORTED IN CONFORMANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

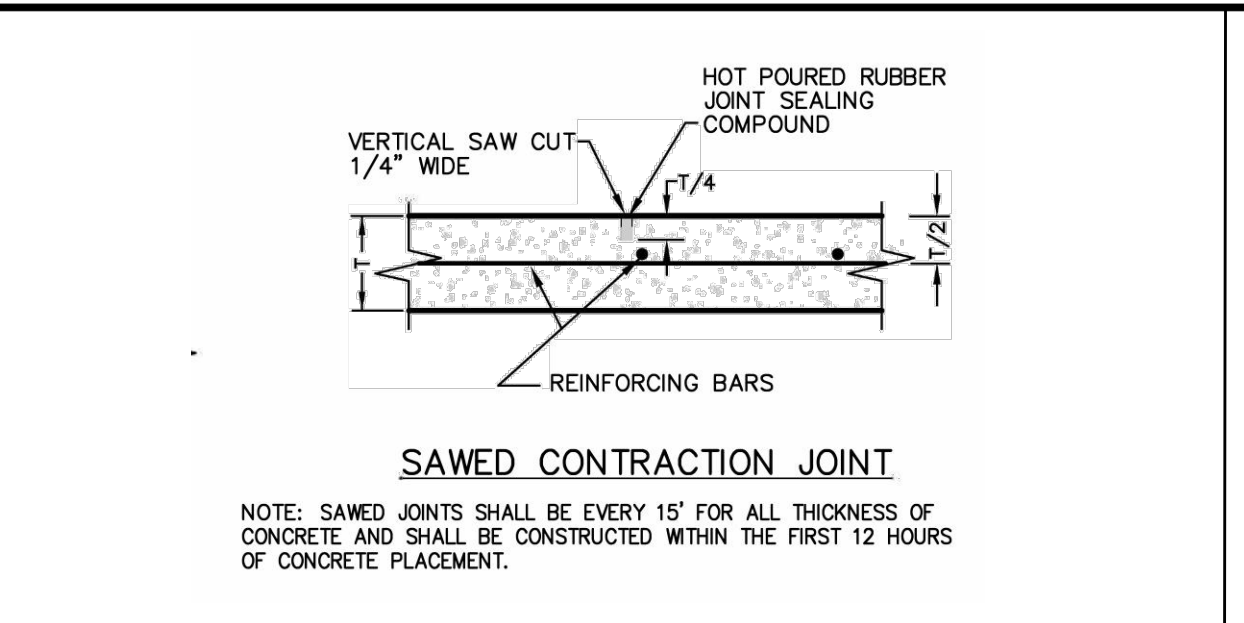
SANITARY SEWER AND WATER LINE TRENCH AND BEDDING
N.T.S.



CROSSWALK MARKINGS
N.T.S.

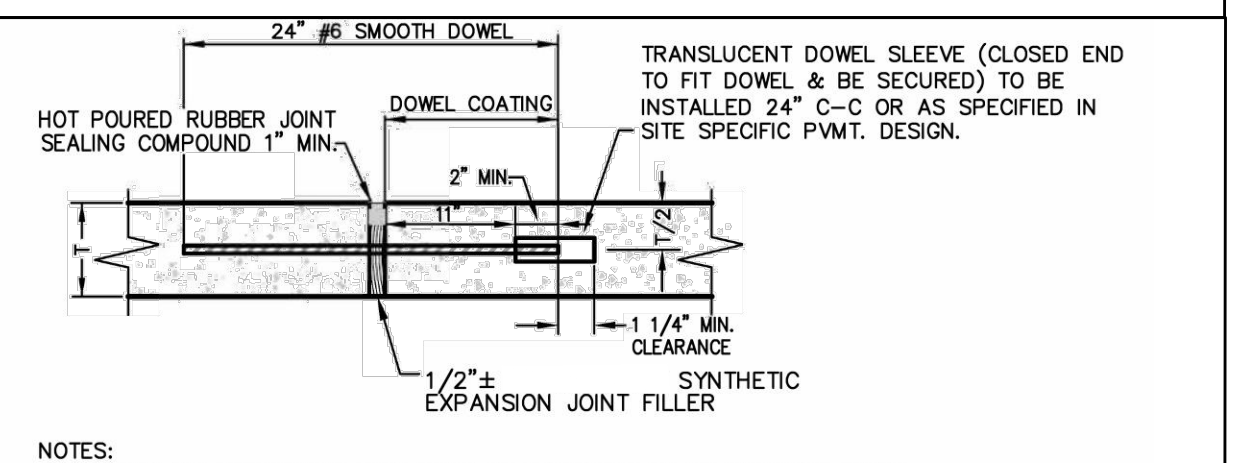


STOP BAR
N.T.S.



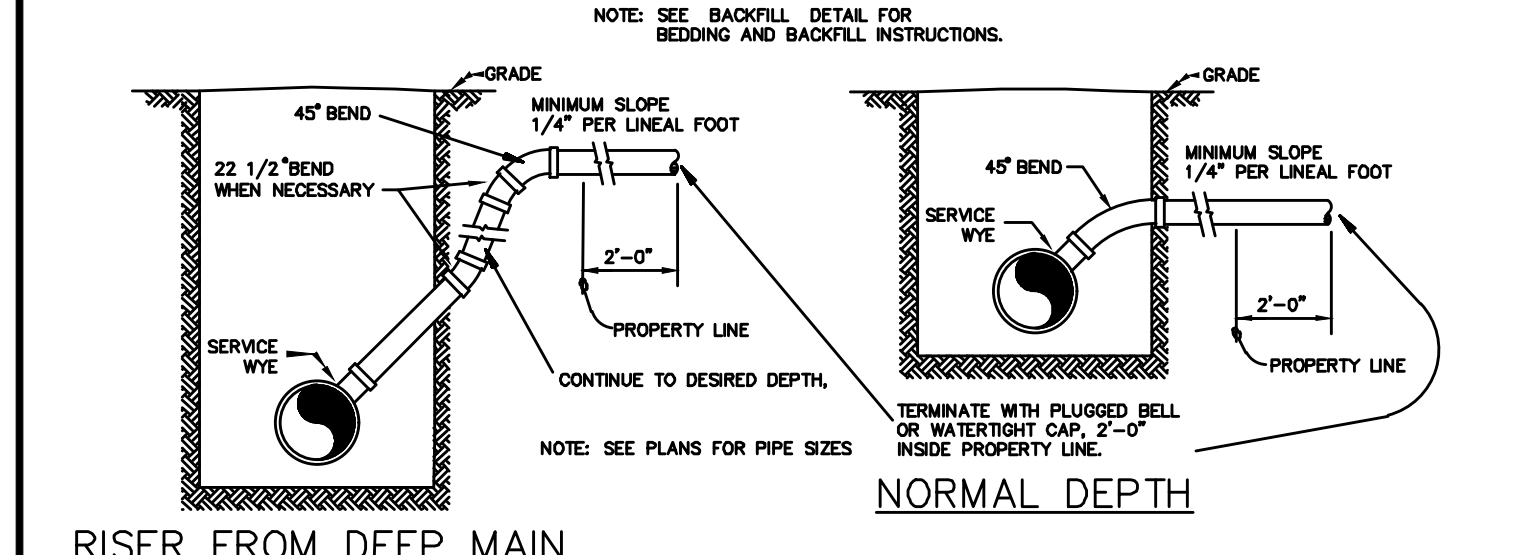
SAWED CONTRACTION JOINT

NOTE: SAWED JOINTS SHALL BE EVERY 15' FOR ALL THICKNESS OF CONCRETE AND SHALL BE CONSTRUCTED WITHIN THE FIRST 12 HOURS OF CONCRETE PLACEMENT.

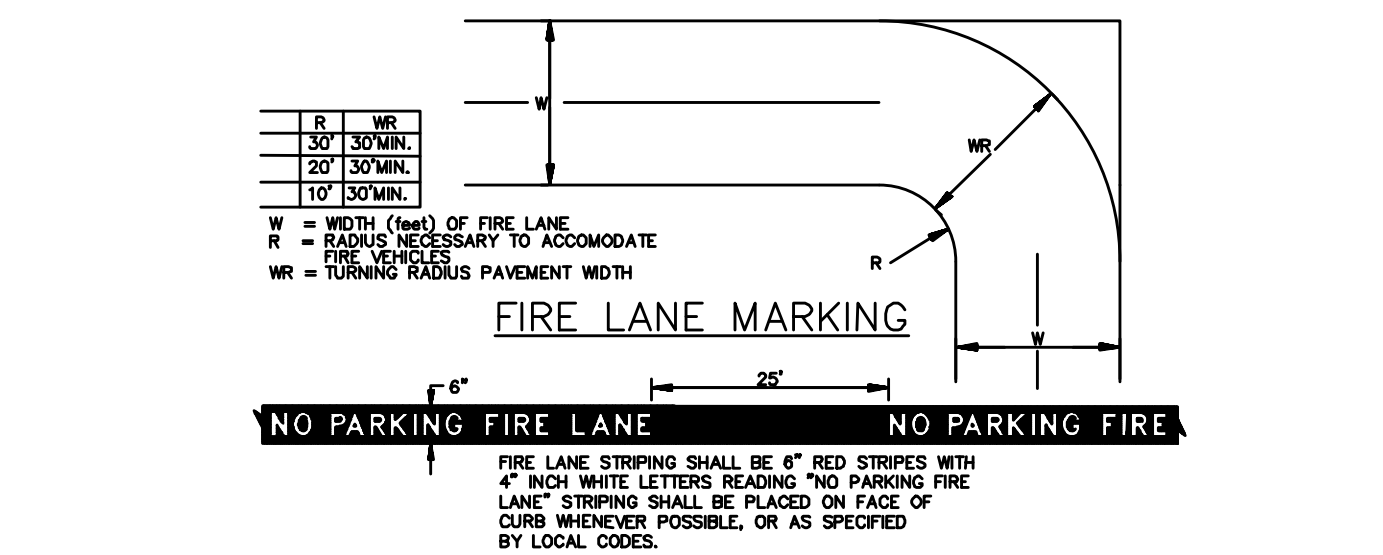


EXPANSION JOINT

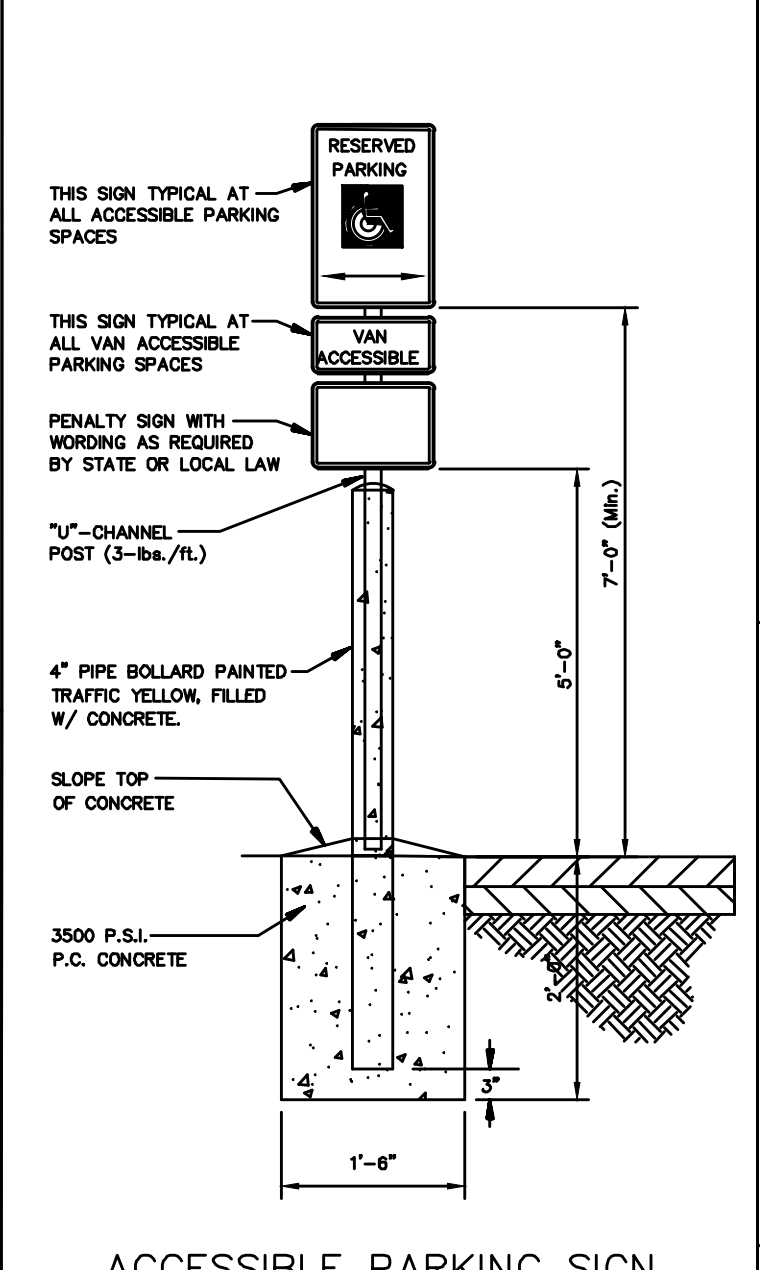
- NOTES:**
- DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.
 - SLEEVES FOR DOWELS SHALL HAVE AN INSIDE DIAMETER OF 1/16" GREATER THAN THE DIAMETER OF THE DOWELS AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.
 - EXPANSION JOINTS TO BE CONSTRUCTED A MAXIMUM OF 60" APART ON STRAIGHT PAVING, AS WELL AS INTERSECTION P.C.'S & P.T.'S UNLESS OTHERWISE SPECIFIED.
 - REBAR BASKET FOR EXPANSION JOINTS IS REQUIRED.



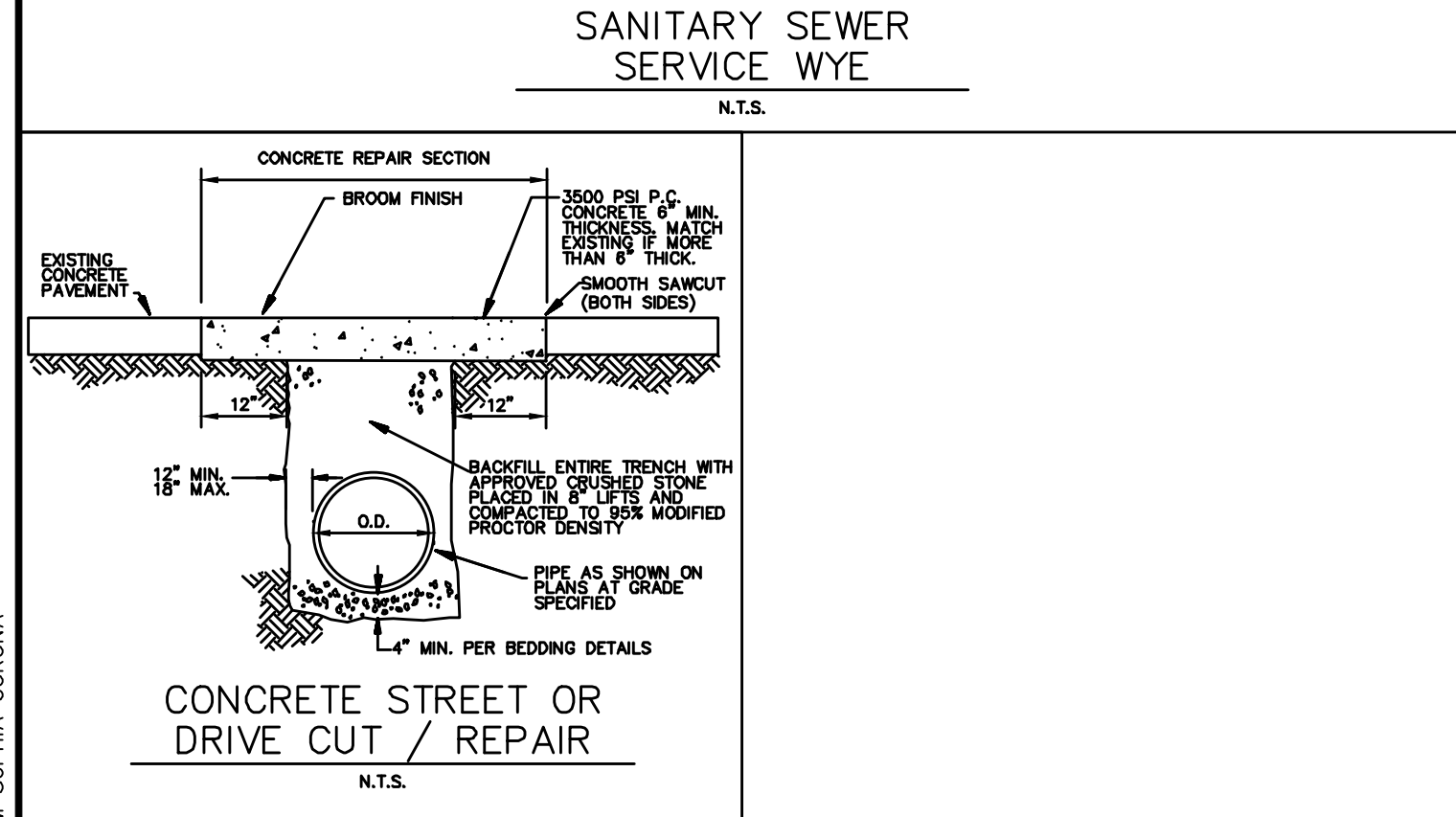
SANITARY SEWER SERVICE WYE
N.T.S.



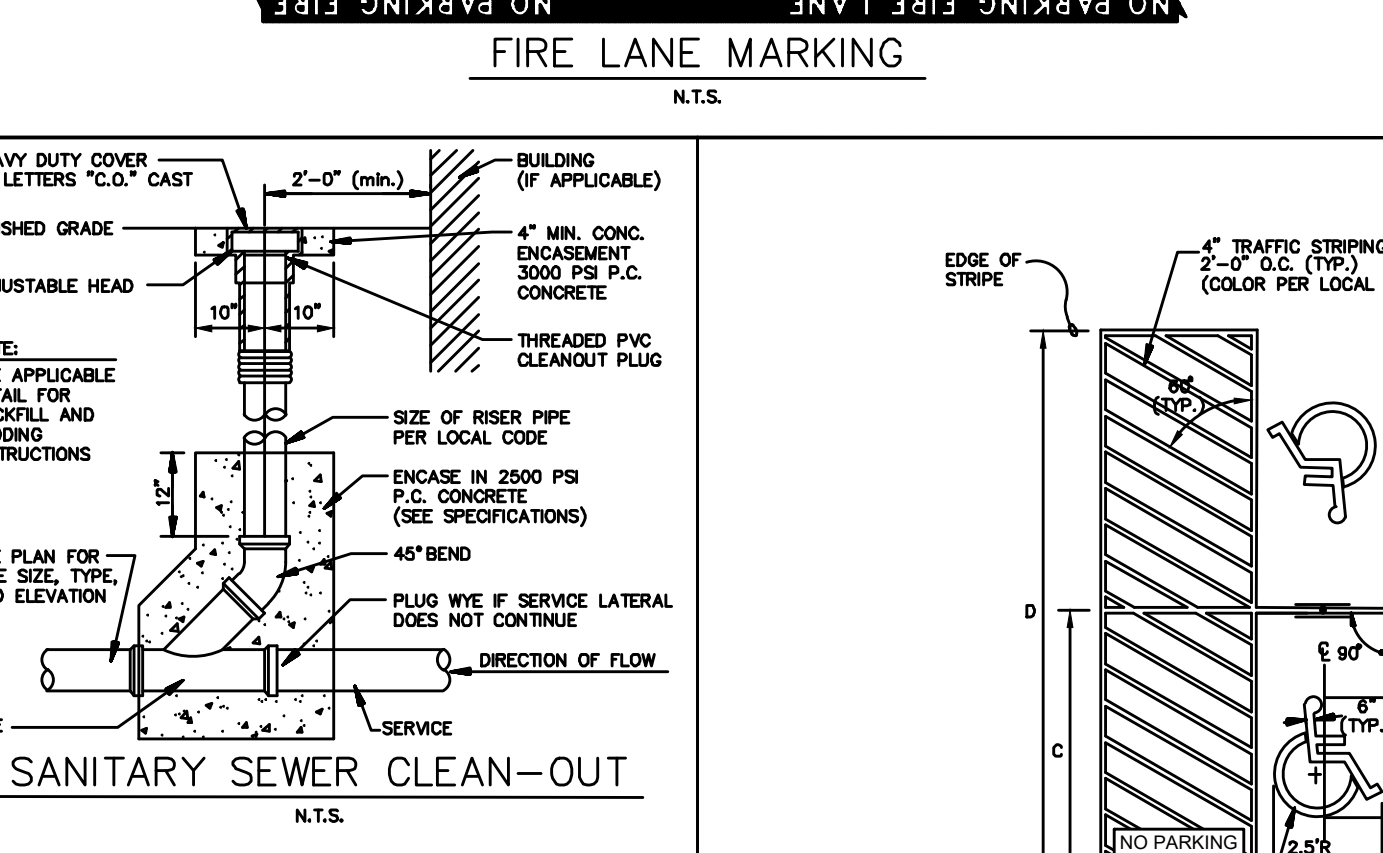
FIRE LANE MARKING
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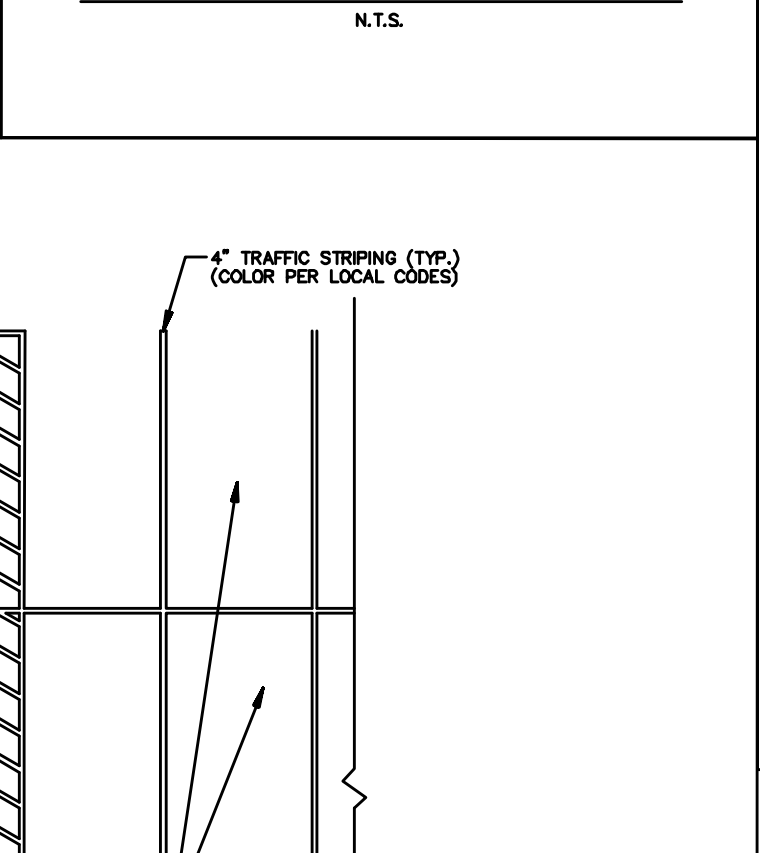
ACCESSIBLE PARKING SIGN
N.T.S.



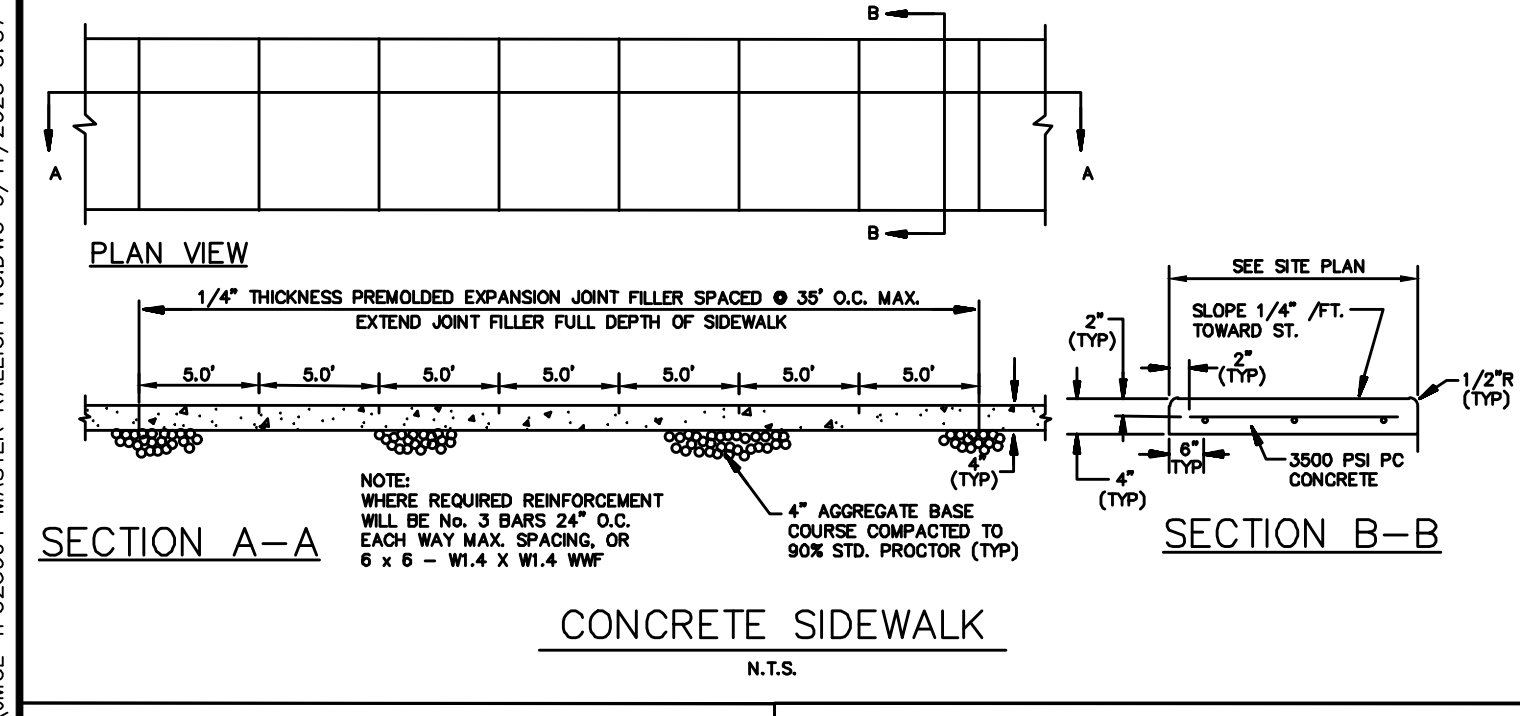
CONCRETE STREET OR DRIVE CUT / REPAIR
N.T.S.



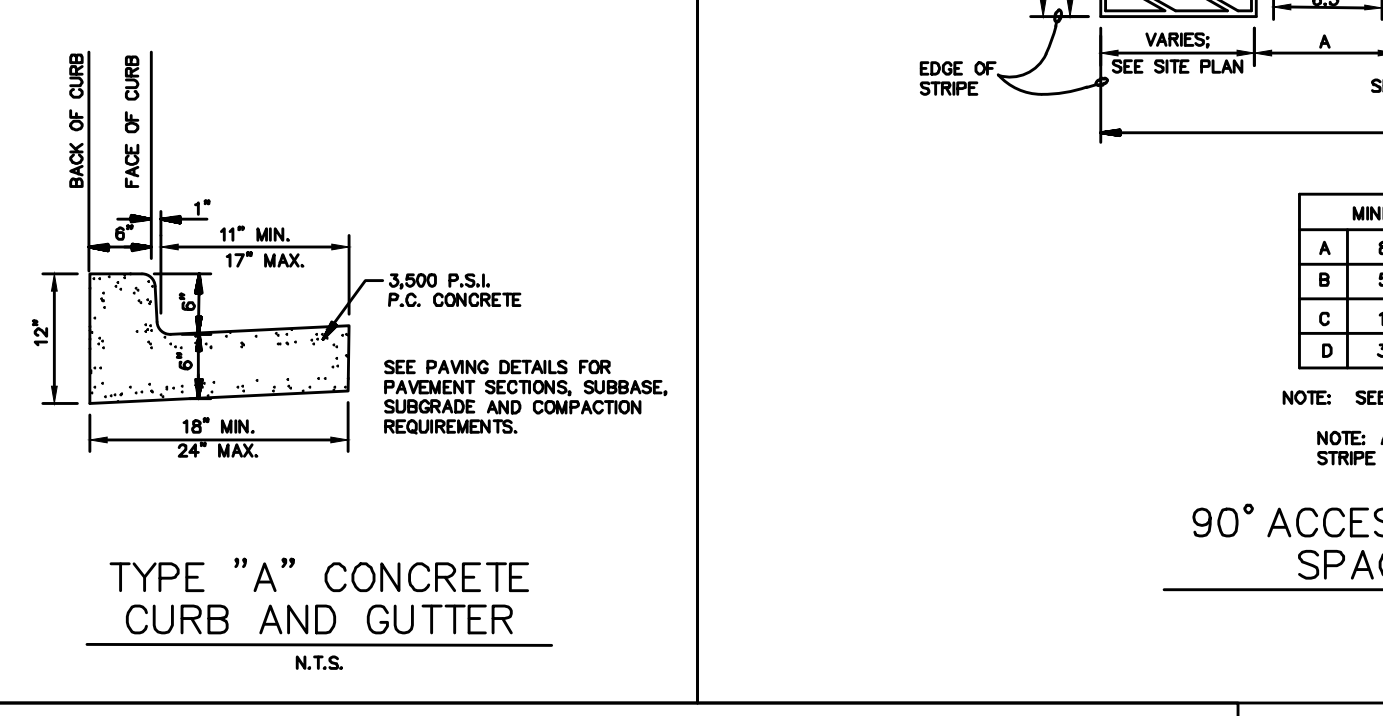
SANITARY SEWER CLEAN-OUT
N.T.S.



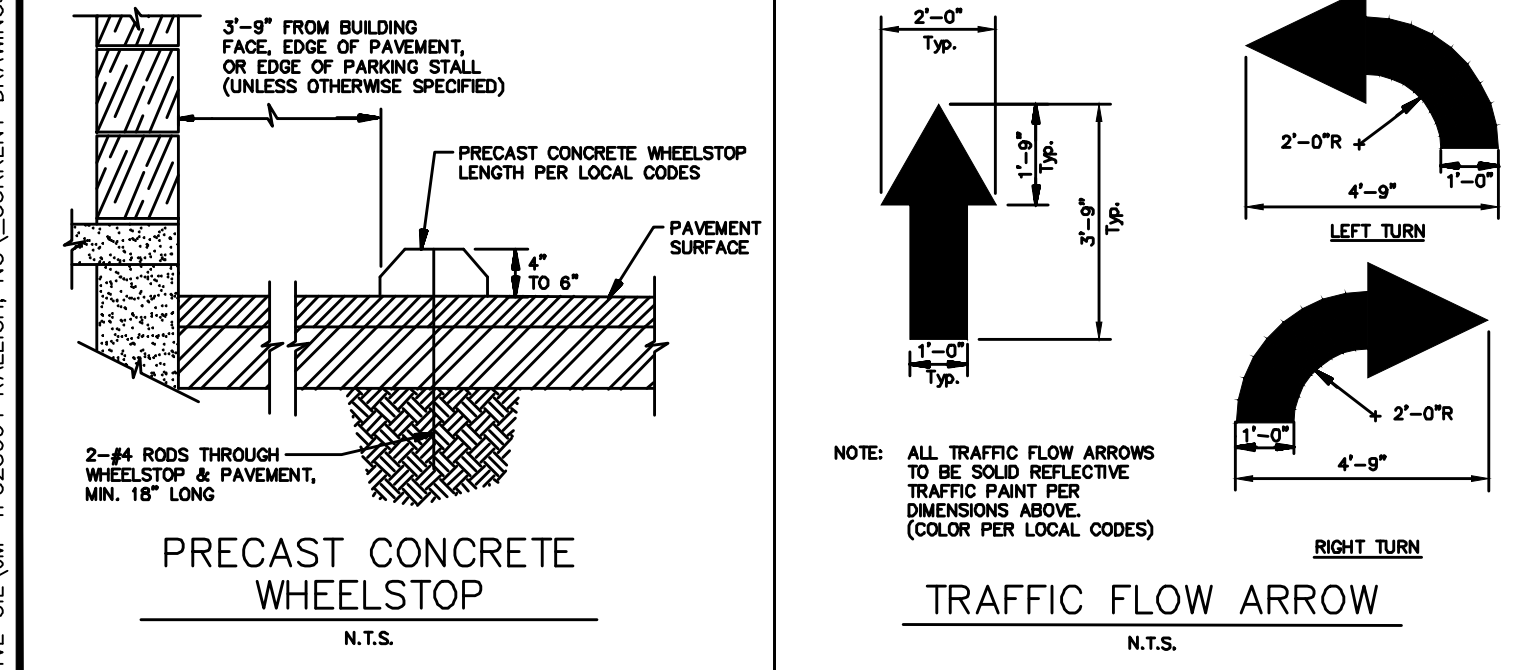
90° ACCESSIBLE PARKING SPACE STRIPING
N.T.S.



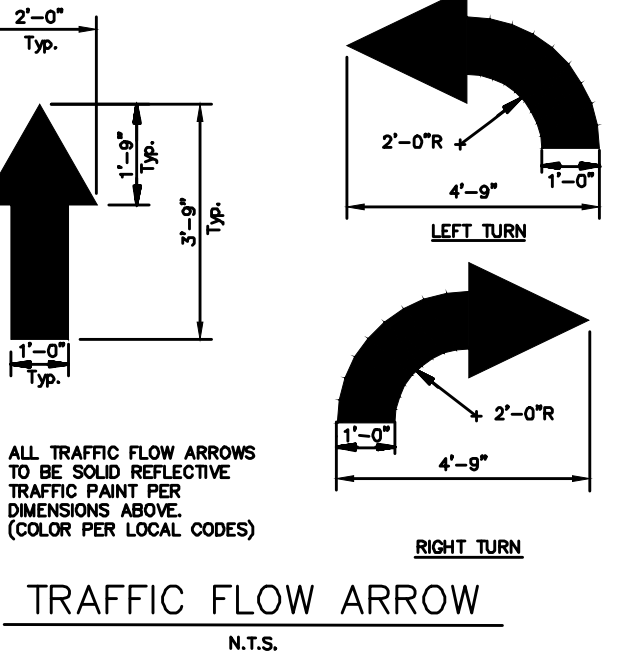
CONCRETE SIDEWALK
N.T.S.



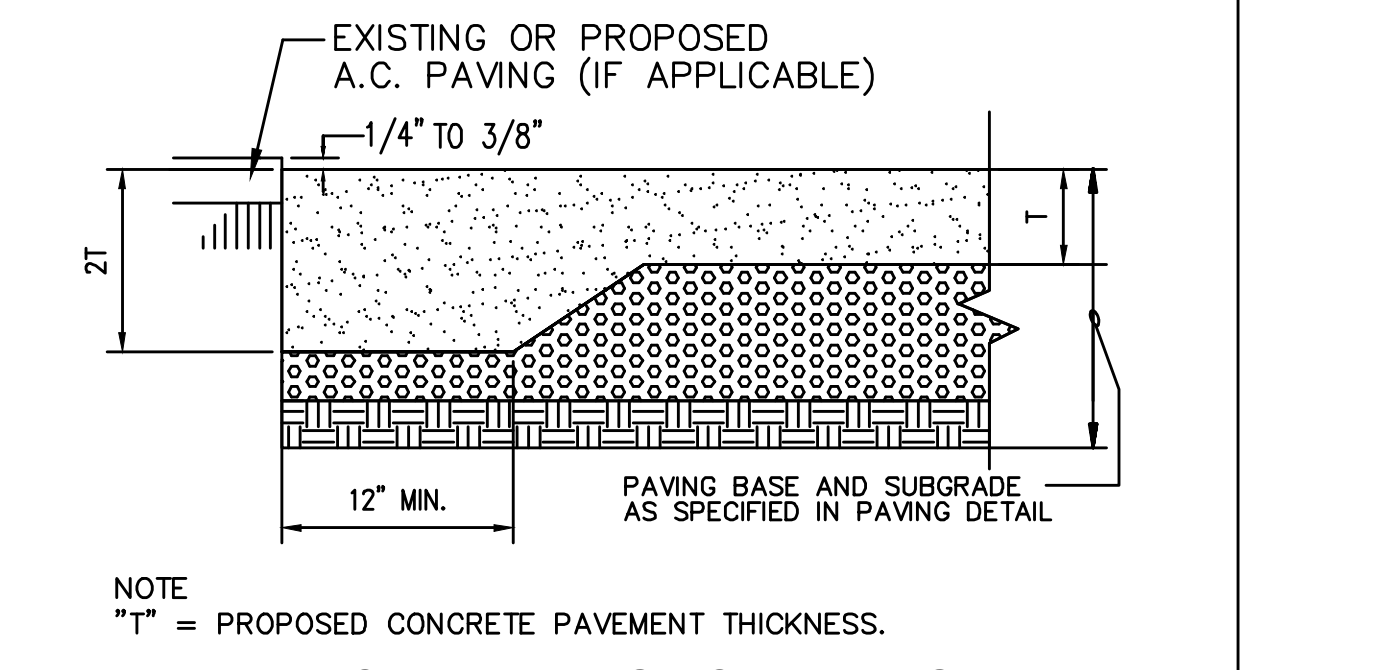
TYPE "A" CONCRETE CURB AND GUTTER
N.T.S.



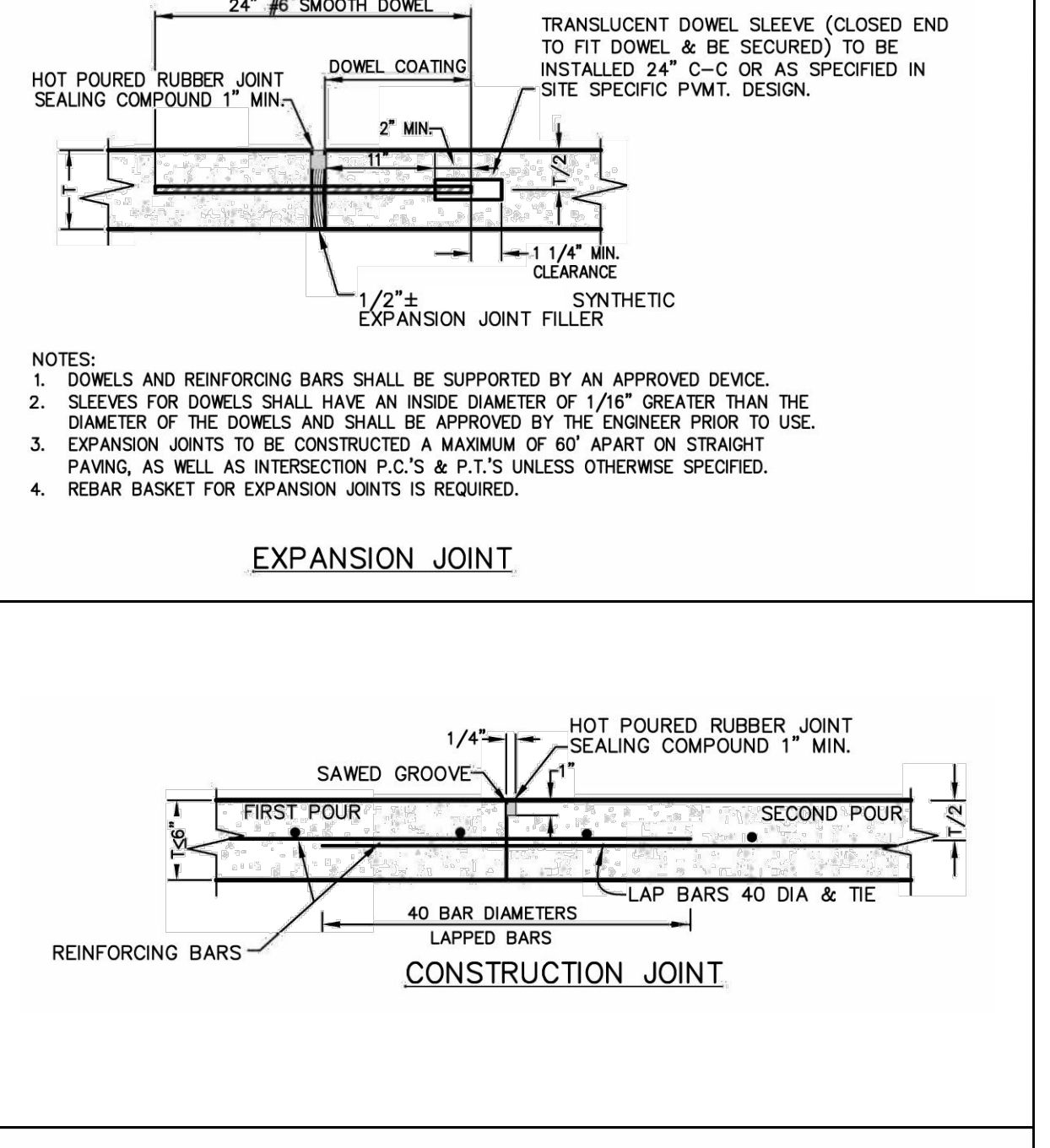
PRECAST CONCRETE WHEELSTOP
N.T.S.



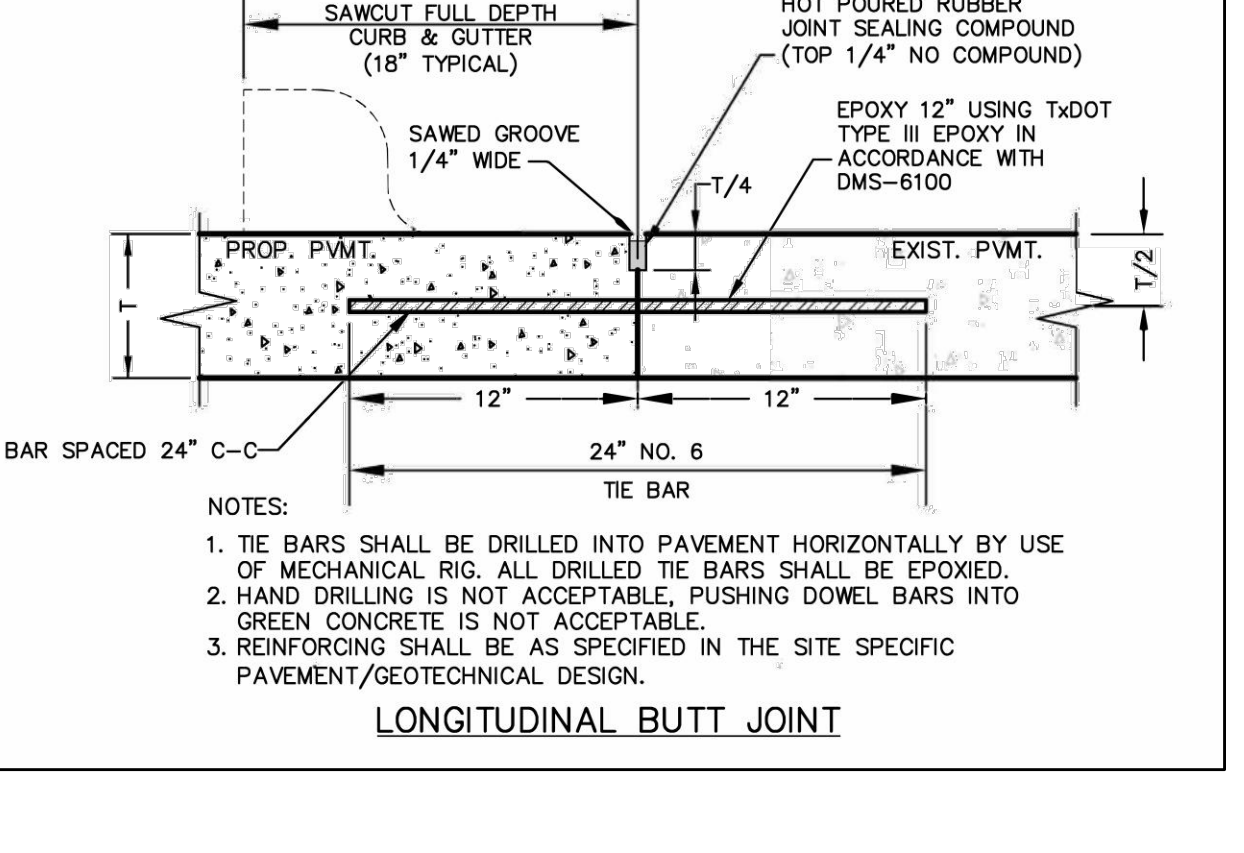
TRAFFIC FLOW ARROW
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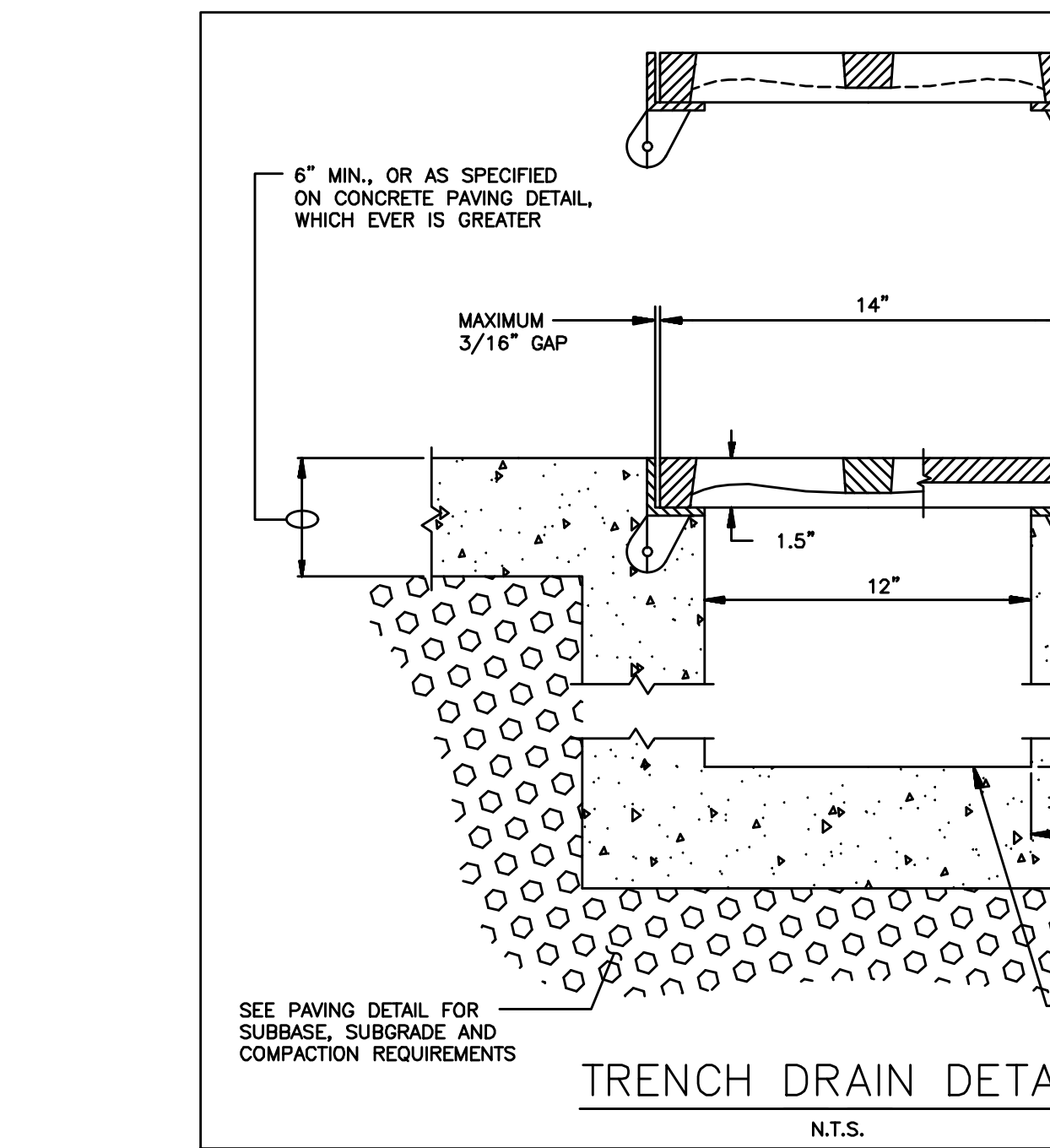
THICKENED EDGE OF PAVING
N.T.S.



CONSTRUCTION JOINT



LONGITUDINAL BUTT JOINT



TRENCH DRAIN DETAIL
N.T.S.



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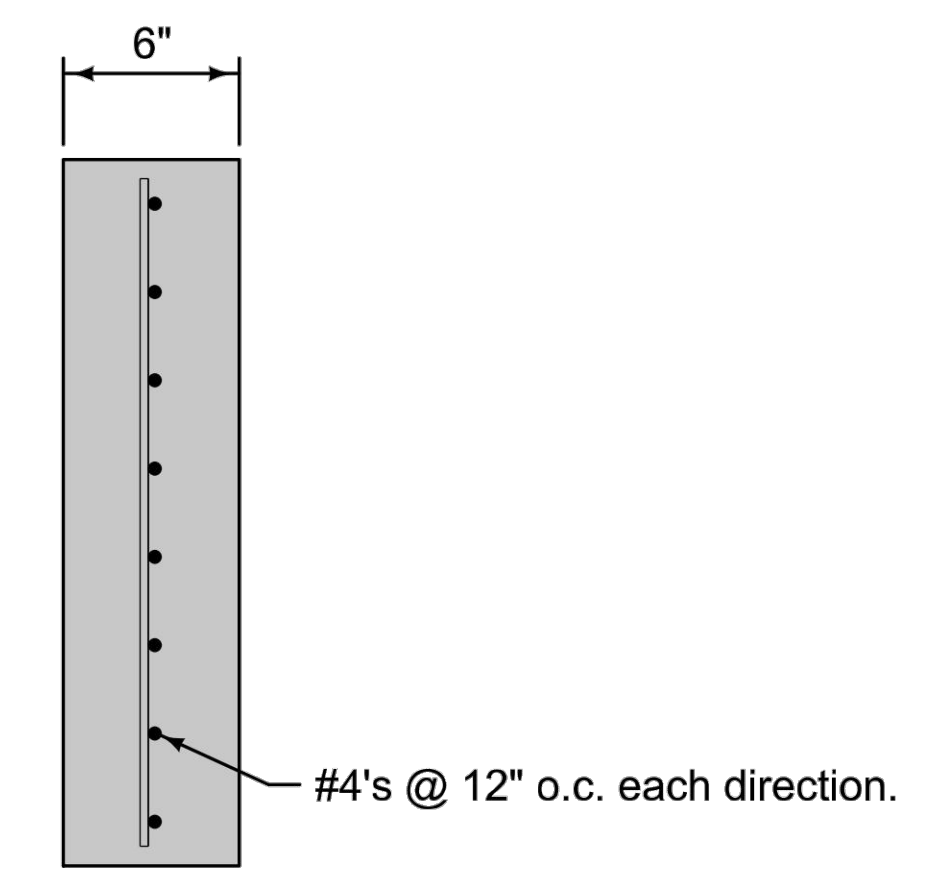
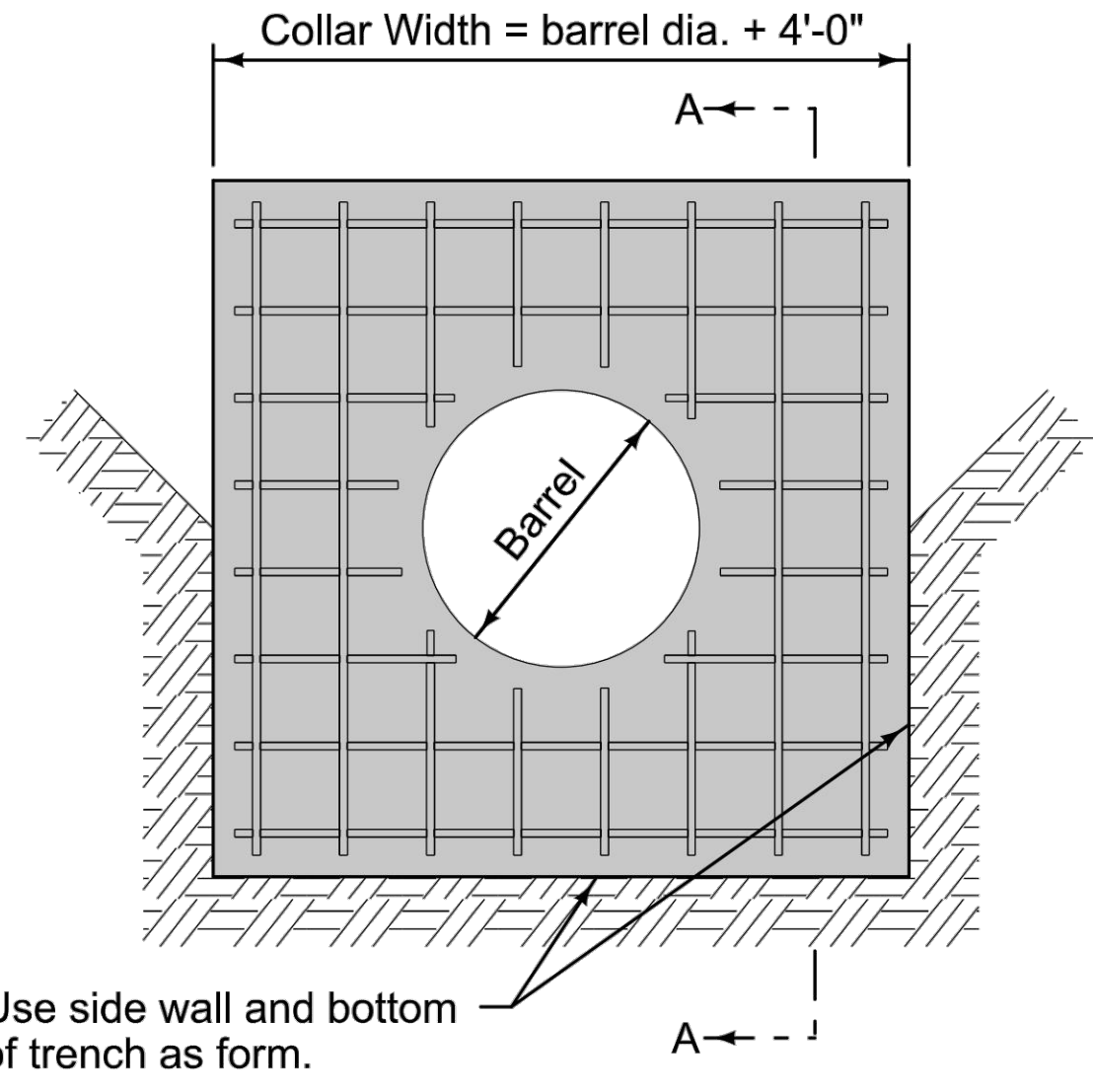


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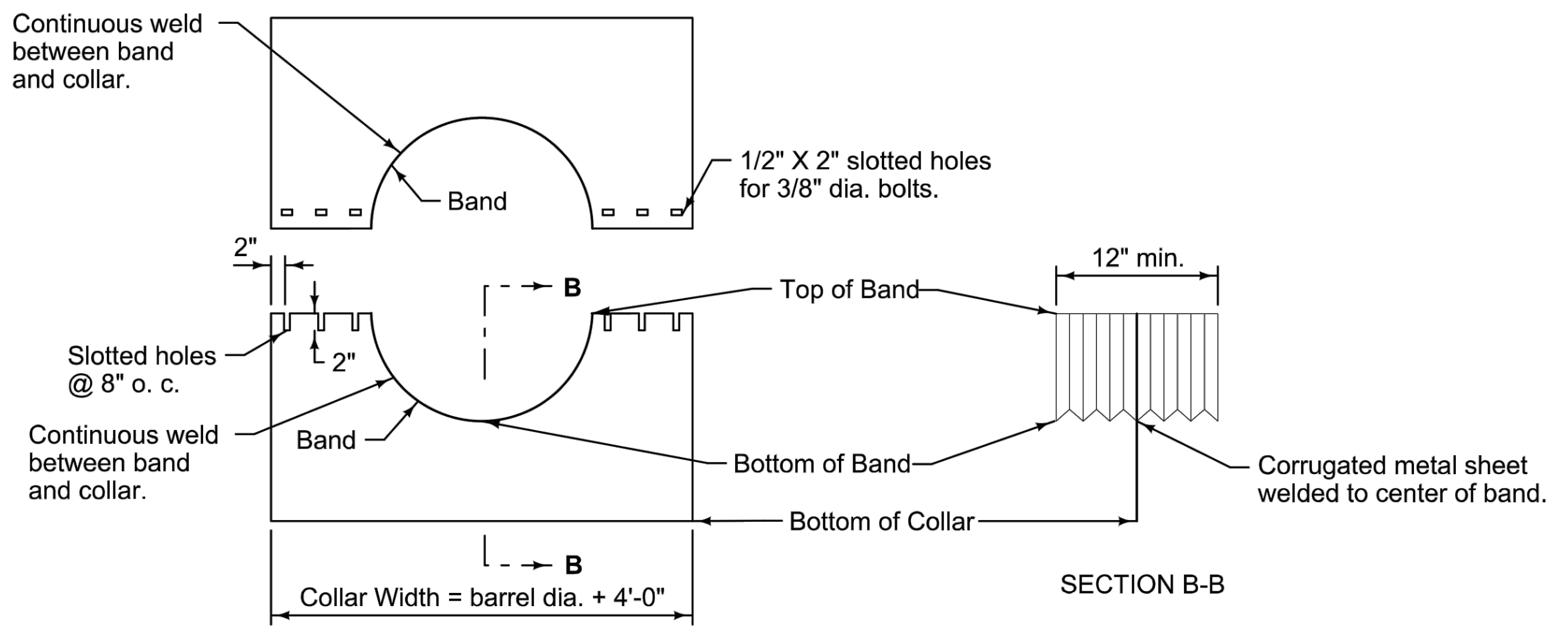
PROJECT NO: JM-17023004
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DETAILS

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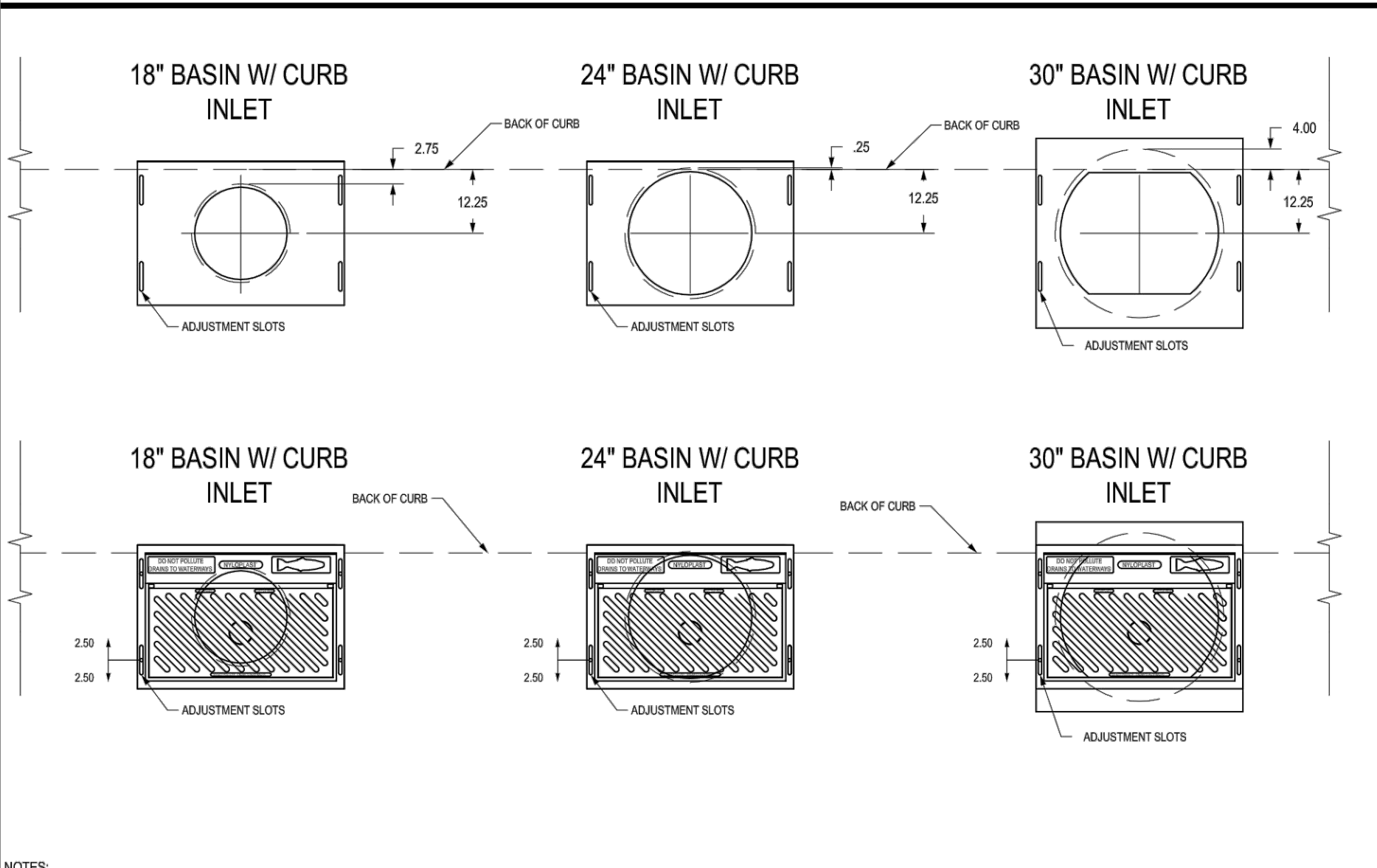
SECTION A-A

CONCRETE COLLAR

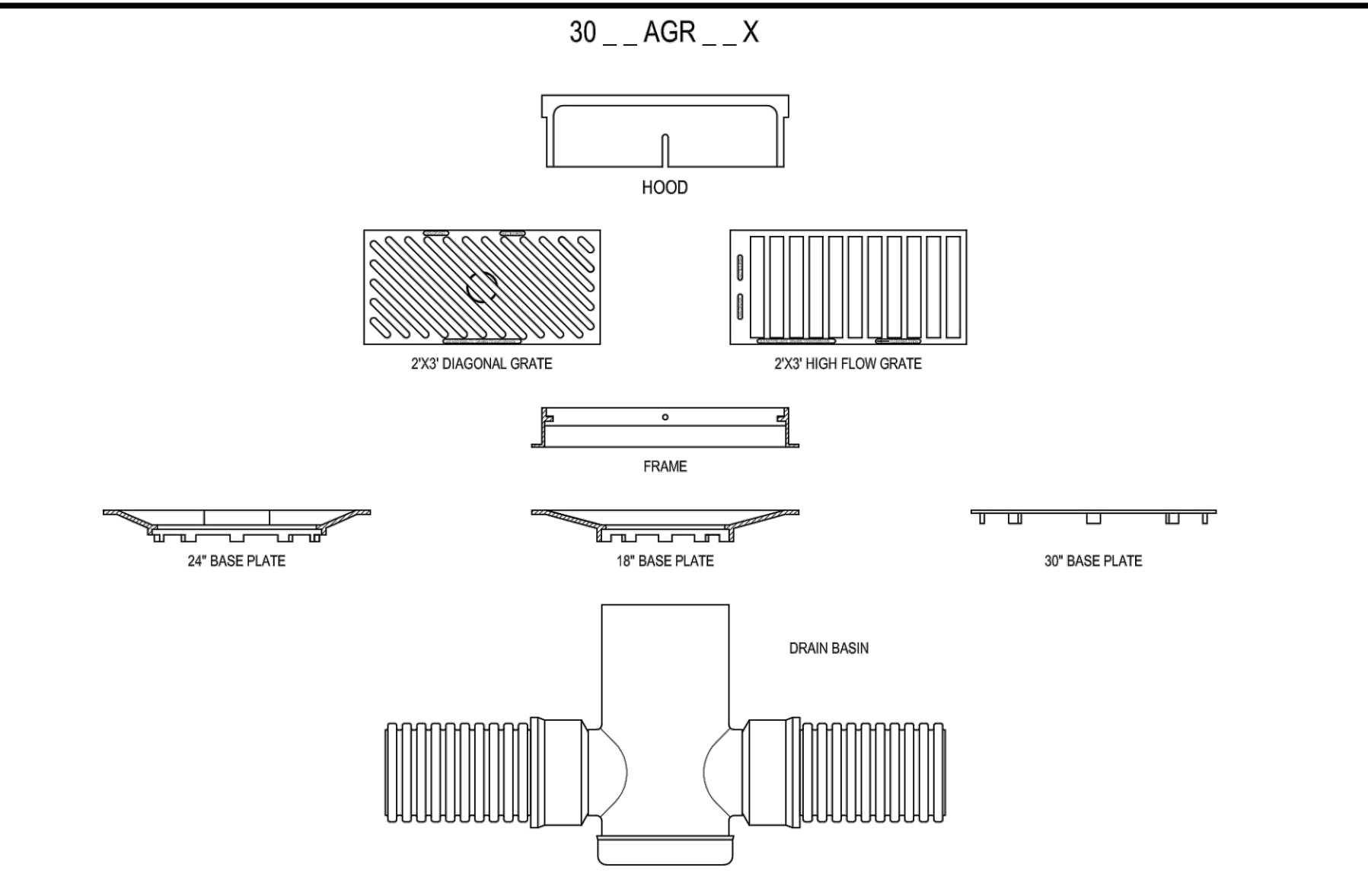


SECTION B-B

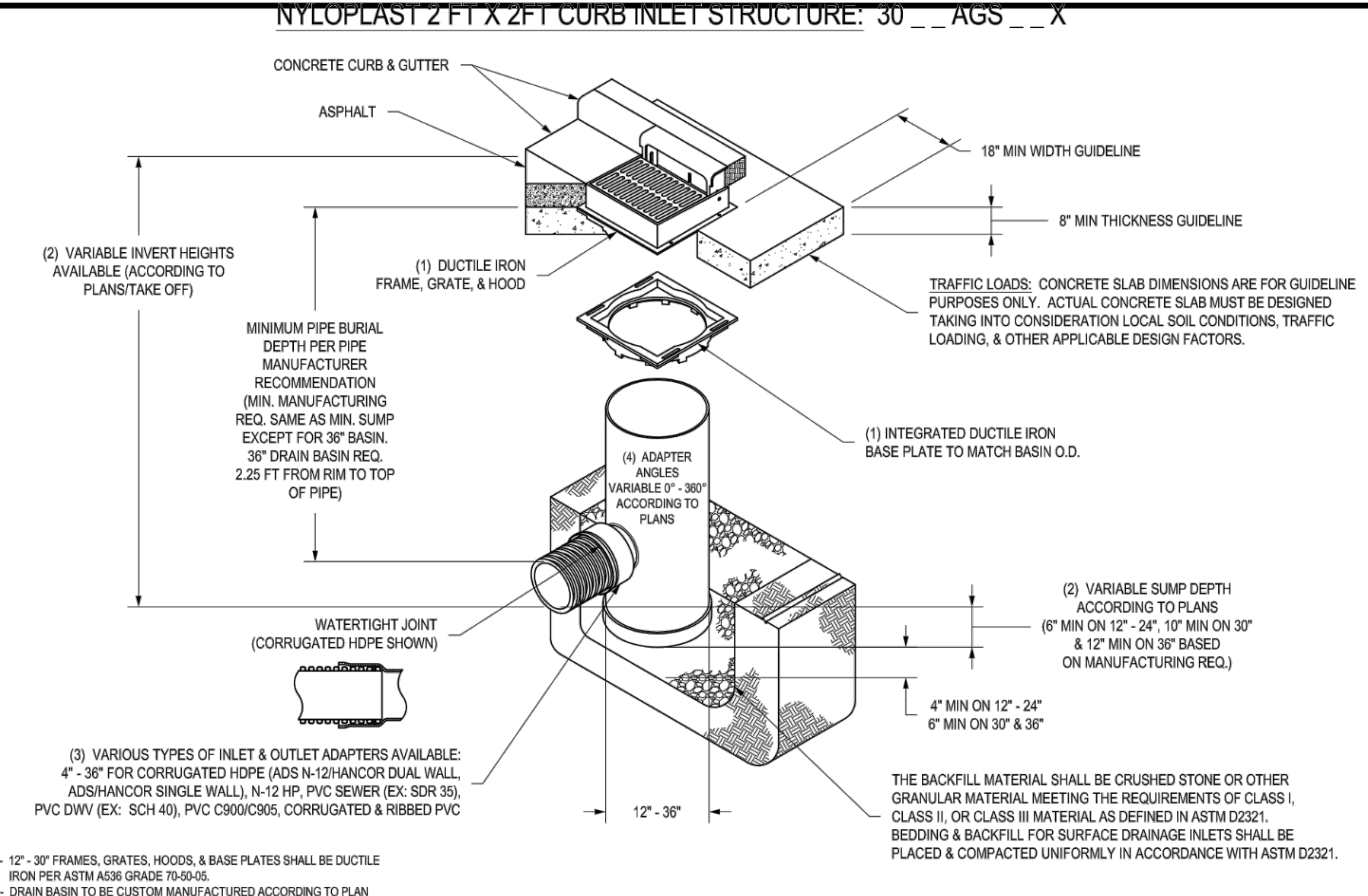
CMP COLLAR



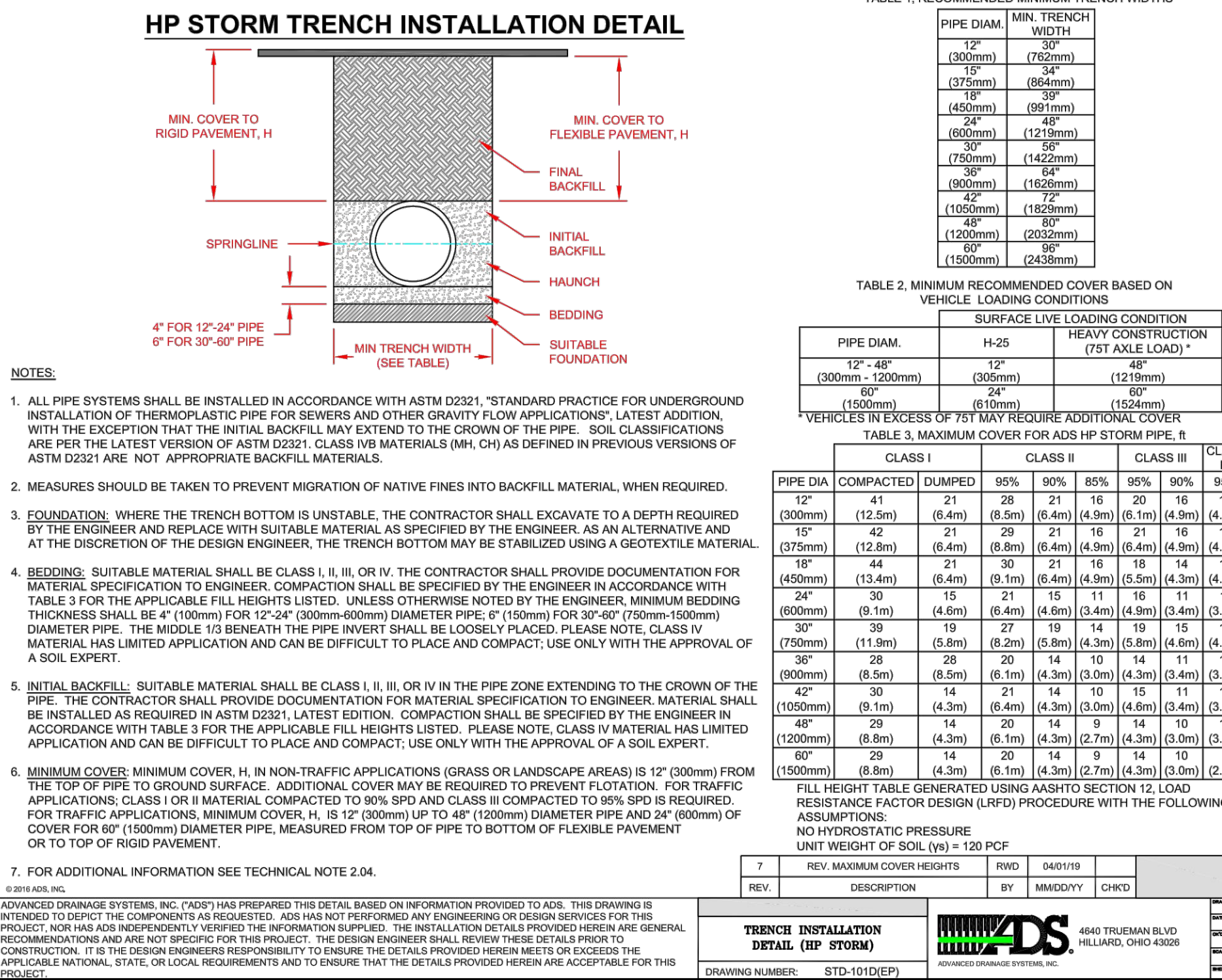
<p>NOTES:</p> <ol style="list-style-type: none"> CASTINGS SHALL BE DUCTILE IRON MEETING ASTM A536 70-50-05. CURB INLET FRAME IS ADJUSTABLE 2" BOTH WAYS FROM CENTER OF SLOTS. DIMENSIONS ARE TAKEN FROM BACK OF CURB TO O.D. OF BASIN. DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS ARE IN INCHES. 	<p>THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN.</p>	<p>3130 VERONA AVE BURFORD, GA 30818 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast.com</p>
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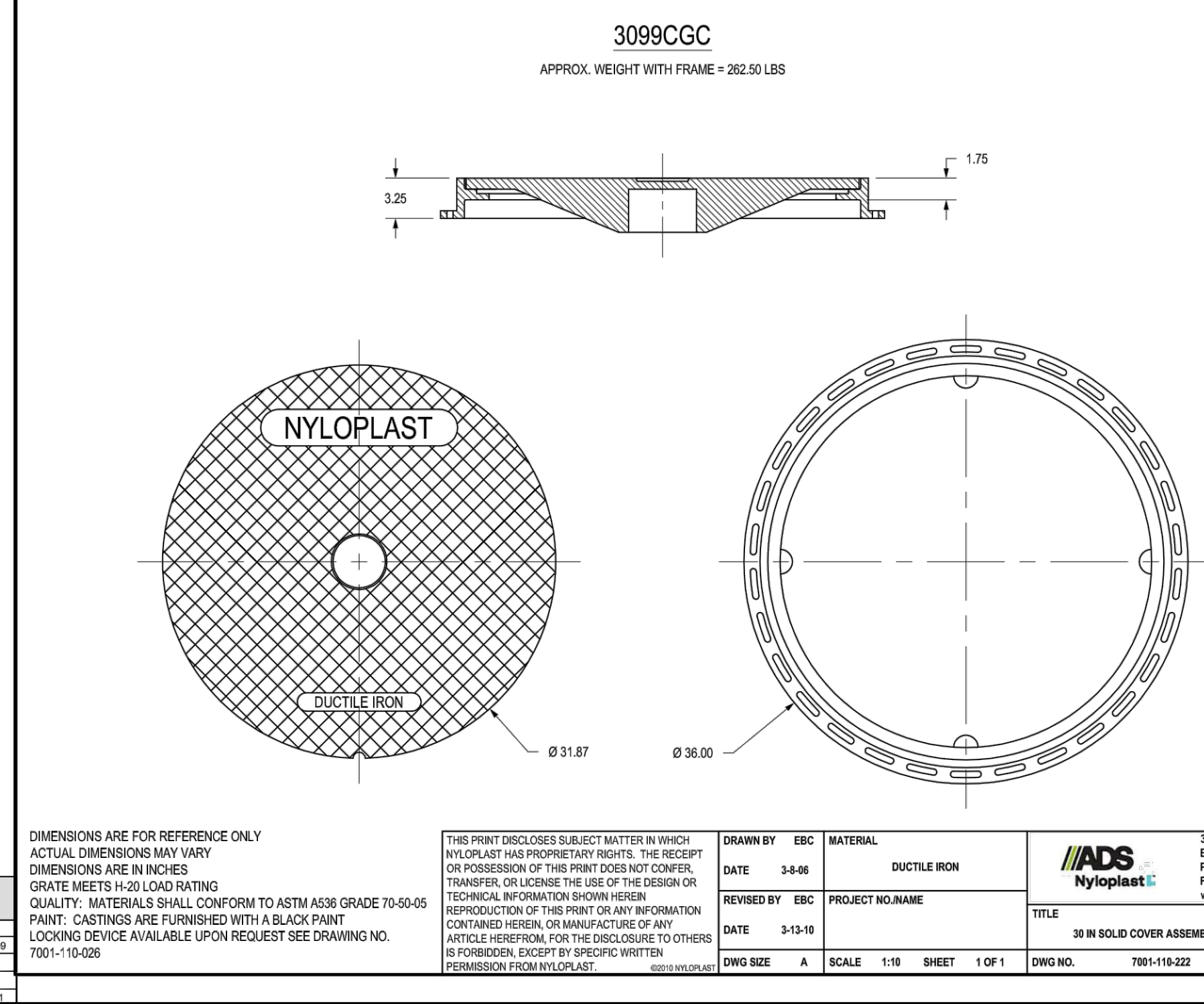
<p>NOTES:</p> <ol style="list-style-type: none"> 12" - 30" FRAMES, GRATES, HOODS, & BASE PLATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. DRAINAGE CONNECTION STEEL JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HOPE ADS-N-12/HANCOR DUAL WALL, N-12 HP, PVC SEWER (EX. SDR 35), PVC DWV (EX. SDR 40), PVC C900/C905, CORRUGATED & RIBBED PVC. ADAPTERS CAN BE MOUNTED ON ANY ANGLE UP TO 30°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012. ALL CURB INLET GRATE OPTIONS (STANDARD & DIAGRAM) SHALL MEET H-20 LOAD RATING. 	<p>THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN.</p>	<p>3130 VERONA AVE BURFORD, GA 30818 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast.com</p>
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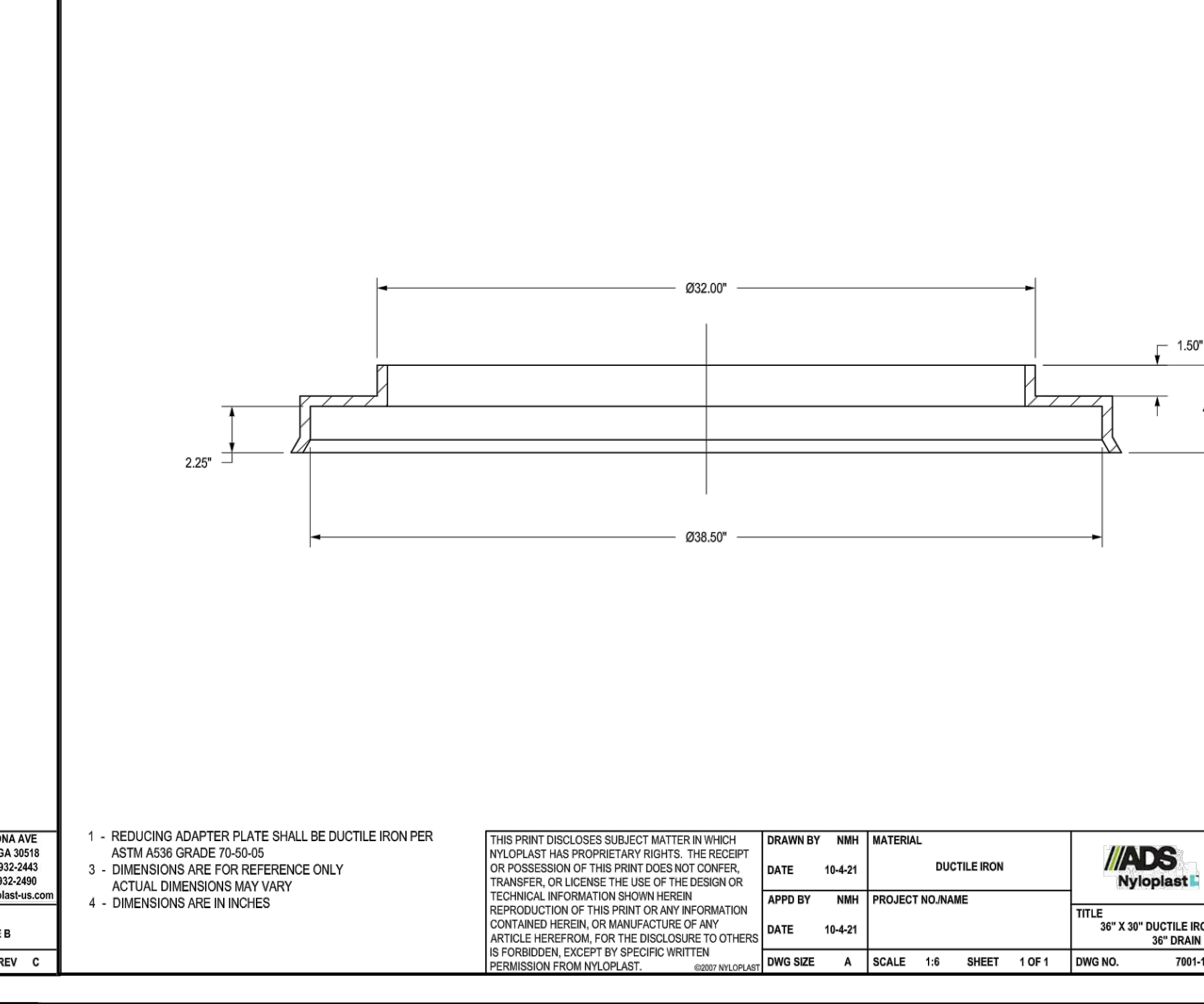
<p>NOTES:</p> <ol style="list-style-type: none"> REDUCING ADAPTER PLATE SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY. DIMENSIONS ARE IN INCHES. 	<p>THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN.</p>	<p>3130 VERONA AVE BURFORD, GA 30818 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast.com</p>
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<p>NOTES:</p> <ol style="list-style-type: none"> ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS". LATEST EDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321. CLASS IV MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL. BEDDING: SUITABLE MATERIAL SHALL BE CLASS II, III, OR IV. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO THE ENGINEER. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 12"-24" (300mm-600mm) DIAMETER PIPE; 6" (150mm) FOR 30"-60" (750mm-1500mm) DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF A SOIL EXPERT. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS II, III, OR IV IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO THE ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE SPECIFIED BY THE ENGINEER IN ACCORDANCE WITH TABLE 3 FOR THE APPLICABLE FILL HEIGHTS LISTED. PLEASE NOTE, CLASS IV MATERIAL HAS LIMITED APPLICATION AND CAN BE DIFFICULT TO PLACE AND COMPACT; USE ONLY WITH THE APPROVAL OF A SOIL EXPERT. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" (300mm) FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, CLASS I OR II MATERIAL COMPACTED TO 90% SPD AND CLASS III COMPACTED TO 80% SPD IS REQUIRED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" (300mm) UP TO 48" (1200mm) DIAMETER PIPE AND 24" (600mm) OF COVER FOR 60" (1500mm) DIAMETER PIPE. MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. 	<p>TABLE 1. RECOMMENDED MINIMUM TRENCH WIDTHS</p> <table border="1"> <thead> <tr> <th>PIPE DIA.</th> <th>MIN. TRENCH WIDTH</th> </tr> </thead> <tbody> <tr><td>12"</td><td>30"</td></tr> <tr><td>15"</td><td>34"</td></tr> <tr><td>18"</td><td>38"</td></tr> <tr><td>24"</td><td>42"</td></tr> <tr><td>30"</td><td>46"</td></tr> <tr><td>36"</td><td>50"</td></tr> <tr><td>42"</td><td>54"</td></tr> <tr><td>48"</td><td>58"</td></tr> <tr><td>60"</td><td>66"</td></tr> <tr><td>750mm</td><td>1929mm</td></tr> <tr><td>900mm</td><td>2286mm</td></tr> <tr><td>1000mm</td><td>2540mm</td></tr> <tr><td>1200mm</td><td>3048mm</td></tr> <tr><td>1500mm</td><td>3810mm</td></tr> </tbody> </table>	PIPE DIA.	MIN. TRENCH WIDTH	12"	30"	15"	34"	18"	38"	24"	42"	30"	46"	36"	50"	42"	54"	48"	58"	60"	66"	750mm	1929mm	900mm	2286mm	1000mm	2540mm	1200mm	3048mm	1500mm	3810mm	<p>TABLE 2. MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS</p> <table border="1"> <thead> <tr> <th>PIPE DIA.</th> <th>H-20</th> <th>HEAVY CONSTRUCTION (75T AXLE LOAD) *</th> </tr> </thead> <tbody> <tr><td>12" - 48" (300mm - 1200mm)</td><td>12" (305mm)</td><td>12" (305mm)</td></tr> <tr><td>60" (1500mm)</td><td>24" (610mm)</td><td>60" (1524mm)</td></tr> </tbody> </table>	PIPE DIA.	H-20	HEAVY CONSTRUCTION (75T AXLE LOAD) *	12" - 48" (300mm - 1200mm)	12" (305mm)	12" (305mm)	60" (1500mm)	24" (610mm)	60" (1524mm)	<p>TABLE 3. MAXIMUM COVER FOR ADS HP STORM PIPE. IF VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER</p> <table border="1"> <thead> <tr> <th rowspan="2">PIPE DIA.</th> <th colspan="3">CLASS I</th> <th colspan="3">CLASS II</th> <th colspan="3">CLASS III</th> <th colspan="3">CLASS IV</th> </tr> <tr> <th>COMPACTED</th> <th>DUMPED</th> <th>95% 90%</th> <th>90% 85%</th> <th>85% 80%</th> <th>80% 75%</th> <th>95% 90%</th> <th>90% 85%</th> <th>85% 80%</th> <th>80% 75%</th> <th>75% 70%</th> </tr> </thead> <tbody> <tr><td>12"</td><td>41</td><td>21</td><td>28</td><td>21</td><td>16</td><td>20</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td></tr> <tr><td>15"</td><td>42</td><td>21</td><td>29</td><td>21</td><td>16</td><td>21</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td></tr> <tr><td>18"</td><td>44</td><td>21</td><td>30</td><td>21</td><td>16</td><td>18</td><td>14</td><td>14</td><td>14</td><td>14</td><td>14</td></tr> <tr><td>24"</td><td>50</td><td>15</td><td>21</td><td>15</td><td>11</td><td>11</td><td>11</td><td>11</td><td>11</td><td>11</td><td>11</td></tr> <tr><td>30"</td><td>59</td><td>19</td><td>27</td><td>19</td><td>14</td><td>19</td><td>15</td><td>14</td><td>14</td><td>14</td><td>14</td></tr> <tr><td>36"</td><td>64</td><td>22</td><td>30</td><td>22</td><td>16</td><td>22</td><td>16</td><td>16</td><td>16</td><td>16</td><td>16</td></tr> <tr><td>42"</td><td>70</td><td>25</td><td>33</td><td>25</td><td>18</td><td>24</td><td>18</td><td>18</td><td>18</td><td>18</td><td>18</td></tr> <tr><td>48"</td><td>76</td><td>28</td><td>36</td><td>28</td><td>20</td><td>27</td><td>20</td><td>20</td><td>20</td><td>20</td><td>20</td></tr> <tr><td>60"</td><td>92</td><td>34</td><td>43</td><td>34</td><td>24</td><td>33</td><td>24</td><td>24</td><td>24</td><td>24</td><td>24</td></tr> <tr><td>750mm</td><td>111</td><td>38</td><td>51</td><td>38</td><td>28</td><td>38</td><td>28</td><td>28</td><td>28</td><td>28</td><td>28</td></tr> <tr><td>900mm</td><td>131</td><td>44</td><td>59</td><td>44</td><td>33</td><td>44</td><td>33</td><td>33</td><td>33</td><td>33</td><td>33</td></tr> <tr><td>1000mm</td><td>141</td><td>47</td><td>63</td><td>47</td><td>35</td><td>47</td><td>35</td><td>35</td><td>35</td><td>35</td><td>35</td></tr> <tr><td>1200mm</td><td>161</td><td>53</td><td>71</td><td>53</td><td>40</td><td>53</td><td>40</td><td>40</td><td>40</td><td>40</td><td>40</td></tr> <tr><td>1500mm</td><td>191</td><td>61</td><td>81</td><td>61</td><td>46</td><td>61</td><td>46</td><td>46</td><td>46</td><td>46</td><td>46</td></tr> </tbody> </table>	PIPE DIA.	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MAXIMUM COVER HEIGHTS RWD: 0401190 BY: MMD0019 CHKD: NTS 	<p>3130 VERONA AVE BURFORD, GA 30818 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast.com</p>
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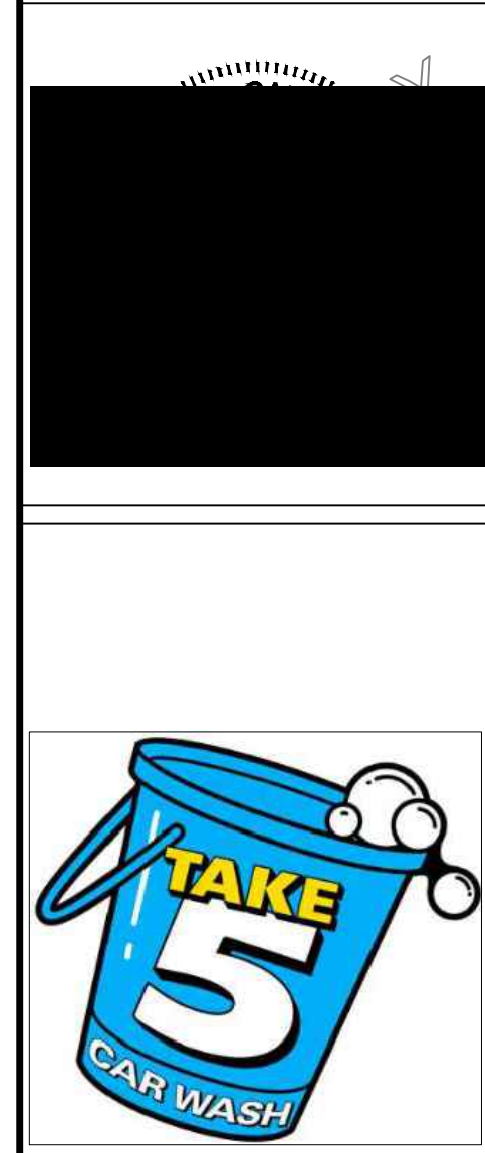


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<p>NOTES:</p> <ol style="list-style-type: none"> GRATESOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. FRAMES & REDUCING TOP SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY. DRAINAGE CONNECTION STEEL JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HOPE ADS-N-12/HANCOR DUAL WALL, N-12 HP, PVC SEWER (EX. SDR 35), PVC DWV (EX. SDR 40), PVC C900/C905, CORRUGATED & RIBBED PVC. ADAPTERS CAN BE MOUNTED ON ANY ANGLE UP TO 30°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012. 	<p>THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN.</p>	<p>3130 VERONA AVE BURFORD, GA 30818 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast.com</p>
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1101 Central Expressway South
Suite 215
Allen, TX 75013
Ph. 214-491-1830
John Measles, PE
CIVIL ENGINEER



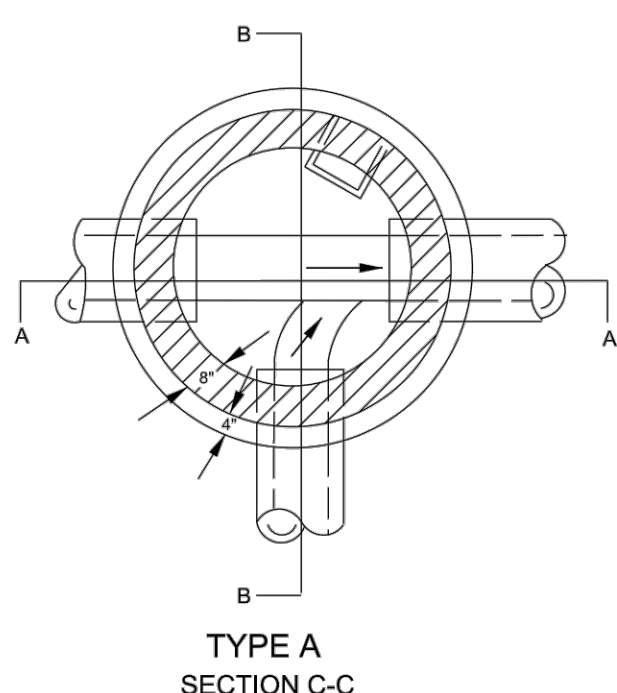
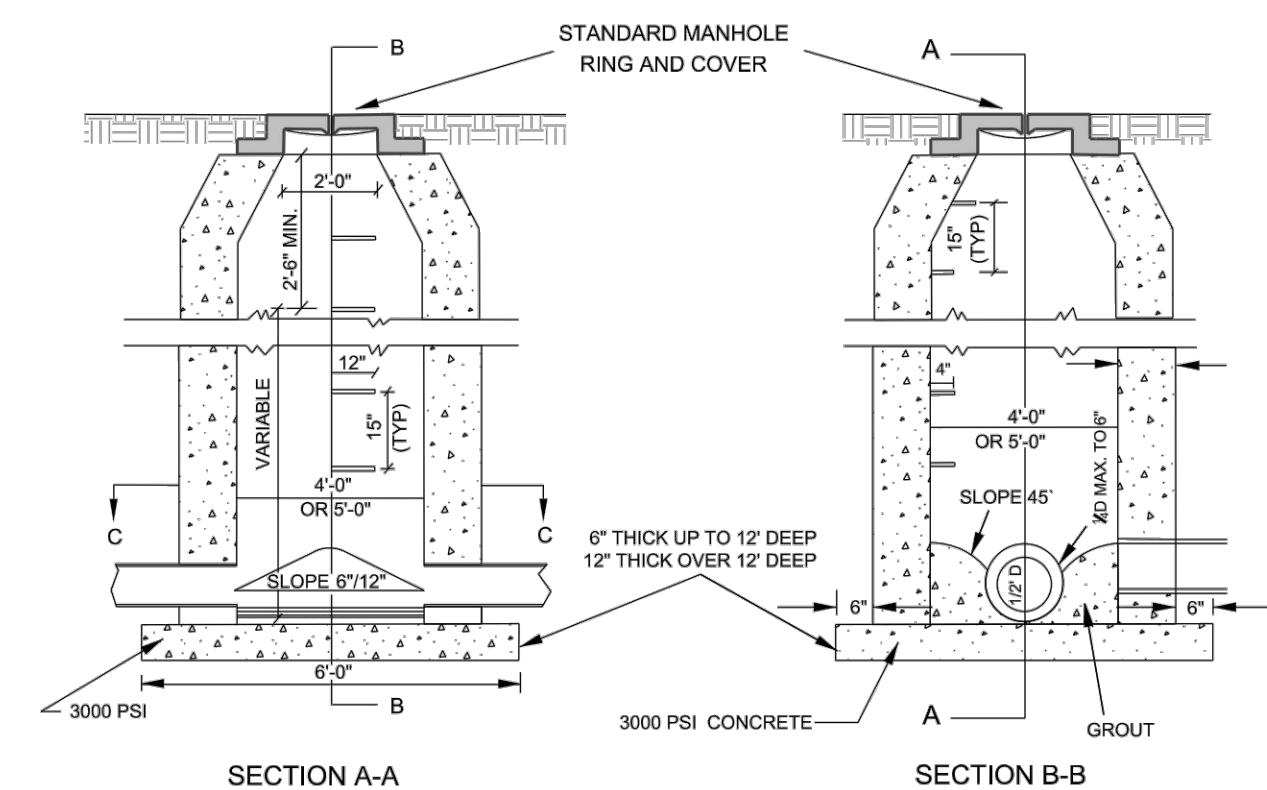
TAKE FIVE CAR WASH
5150 NEW BERN AVE.
RALEIGH, NC 27610

PROJECT NO:	JM-17023004	DRAWN BY:	JMCE	CHECKED BY:	JMCE	ISSUE DATE:	09/11/2023
DATE:	07/24/23	DESCRIPTION:	INITIAL SUBMITTAL				
ADS DETAILS							

C 720

TYPICAL MH FOR STORM SEWER

PIPE SIZE	MH DIAMETER
12-24"	4'-0"
30-42"	5'-0"
48"	6'-0"
54"	8'-0"



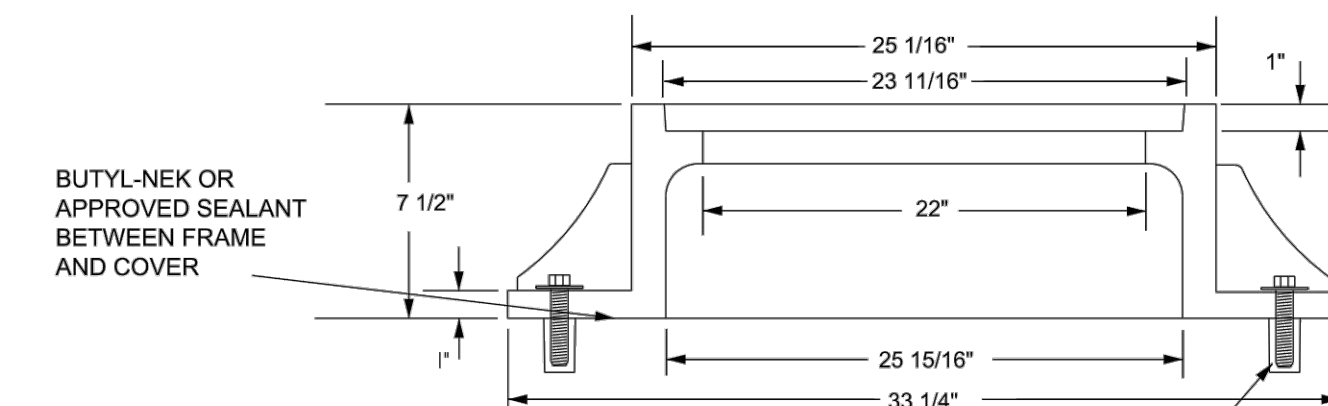
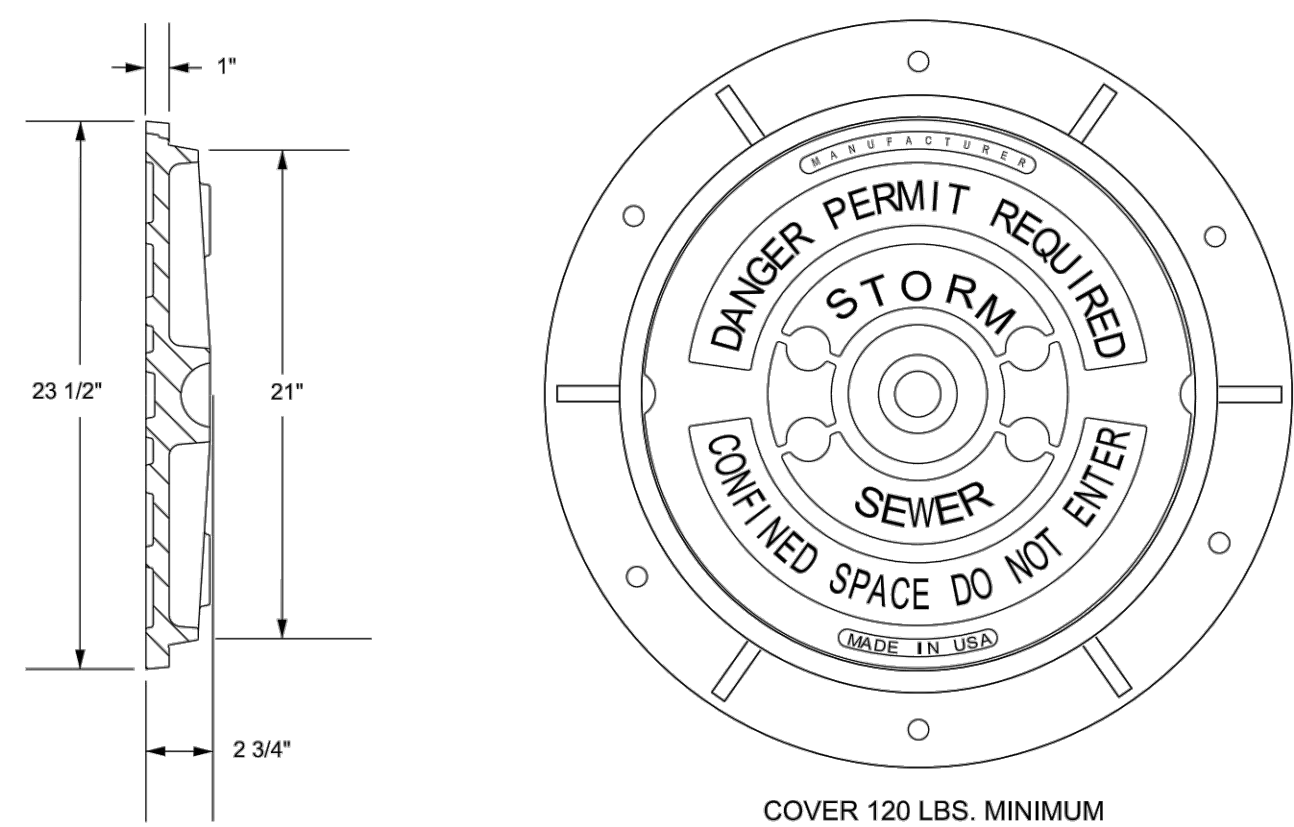
- NOTES:
- DEPTH MEASURED FROM TOP OF CASTING TO INVERT OF MANHOLE.
 - PRECAST MANHOLE COMPONENTS SHALL MEET ASTM-C-478 REQUIREMENTS.
 - SEE STANDARD, SW-10.10 FOR MANHOLE COVER DETAIL.
 - DOMESTIC CASTINGS REQUIRED WITHIN STREET RIGHT-OF-WAY.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE	BY	NOT TO SCALE

STANDARD CLASS "A" MANHOLE

SW-10.05



- NOTES:
- ALL MANHOLE FRAMES SHALL BE DOMESTICALLY CAST.
 - FRAME SHALL BE A MINIMUM WEIGHT OF 182 LBS. WITHIN PUBLIC ROW AND 160 LBS. WITHIN EASEMENTS.
 - COVER SHALL WEIGH A MINIMUM OF 120 LBS.
 - ALL MANHOLE FRAMES OUTSIDE OF PAVED SURFACE SHALL BE BOLTED TO THE CONE SECTION OR RING WITH A MINIMUM OF 4 BOLTS PER FRAME.

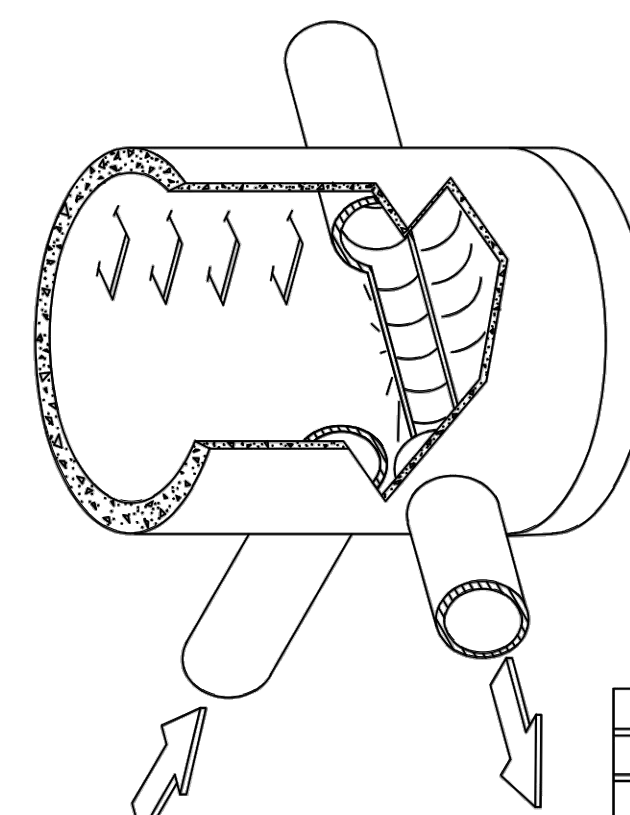
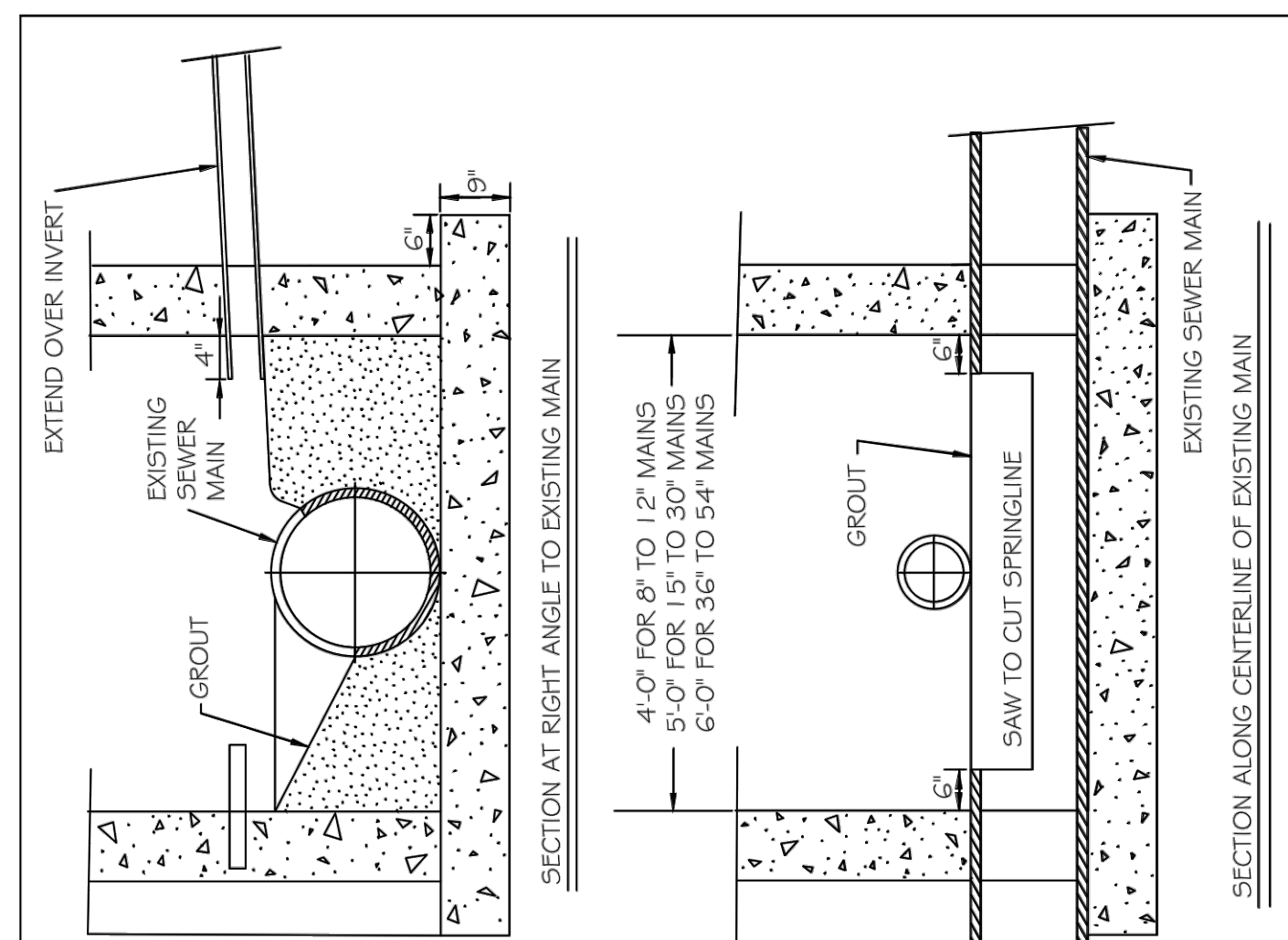
5/8"x3" LAGSHIELD IN HOLE DRILLED INTO CONE OR RING WITH ANCHOR SUNK TO DESIGN DEPTH AND 5/8"x3" HOT DIPPED GALVANIZED LAG BOLT AND WASHER.

CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE	BY	NOT TO SCALE

STANDARD STORM MANHOLE COVER

SW-10.10

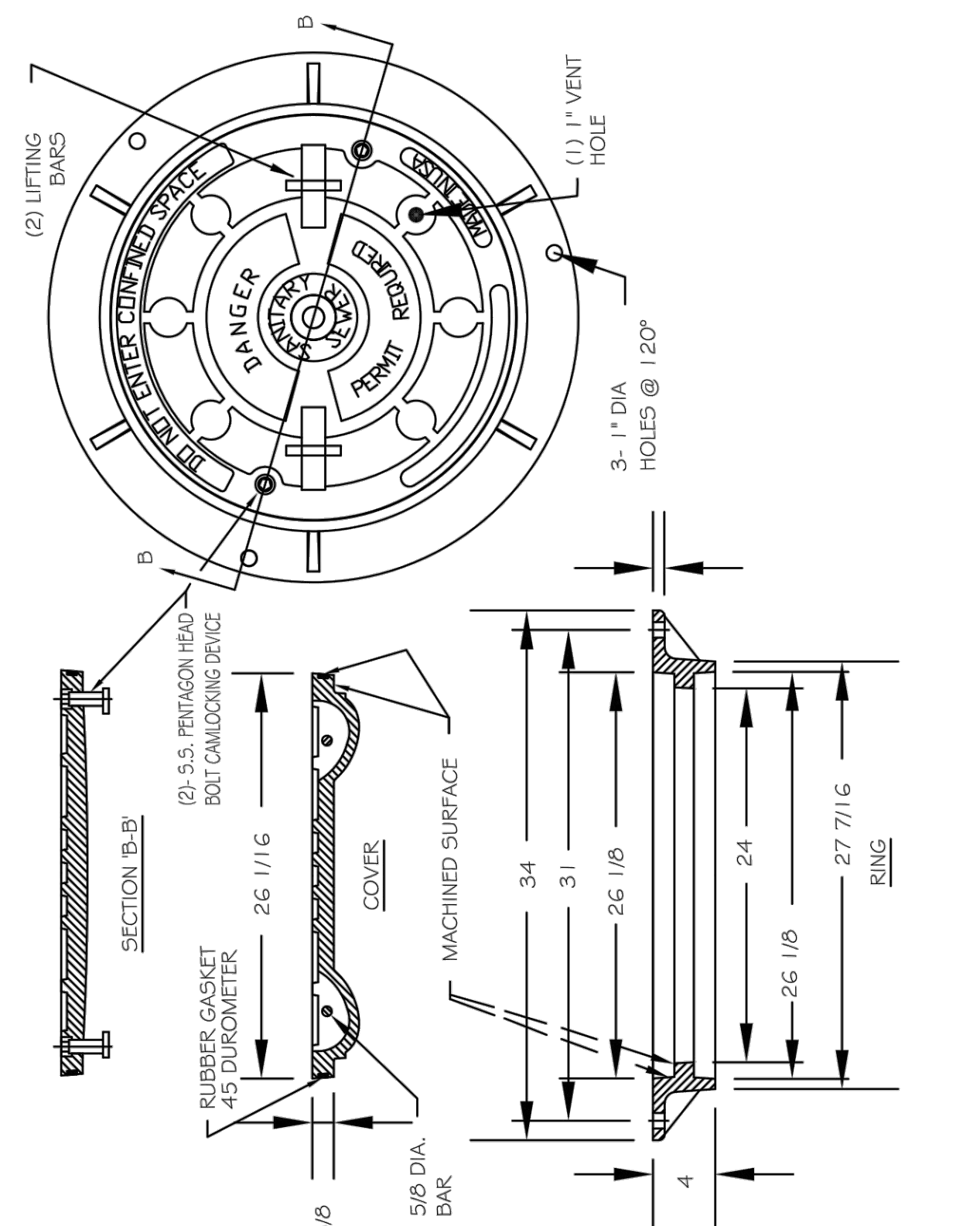


- NOTES:
- FLOW SHALL BE MAINTAINED DURING CONSTRUCTION.
 - THIS DETAIL TO BE USED WHEN A 6" OR LARGER LATERAL NECESSTATES CONSTRUCTION OF A NEW MANHOLE.
 - SEE STANDARD DETAIL 5-20, FOR PRECAST MANHOLES.
 - THE CONTRACTOR SHALL PROVIDE A MINIMUM 9" COMPACTED #67 STONE BASE FOR USE ON DIP, CONCRETE, AND PVC ONLY.
 - SEE DETAIL 5-21 FOR REINFORCING OF POURED IN-FACE BASE.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

STANDARD MANHOLE INSTALLATION OVER EXISTING SEWER MAIN

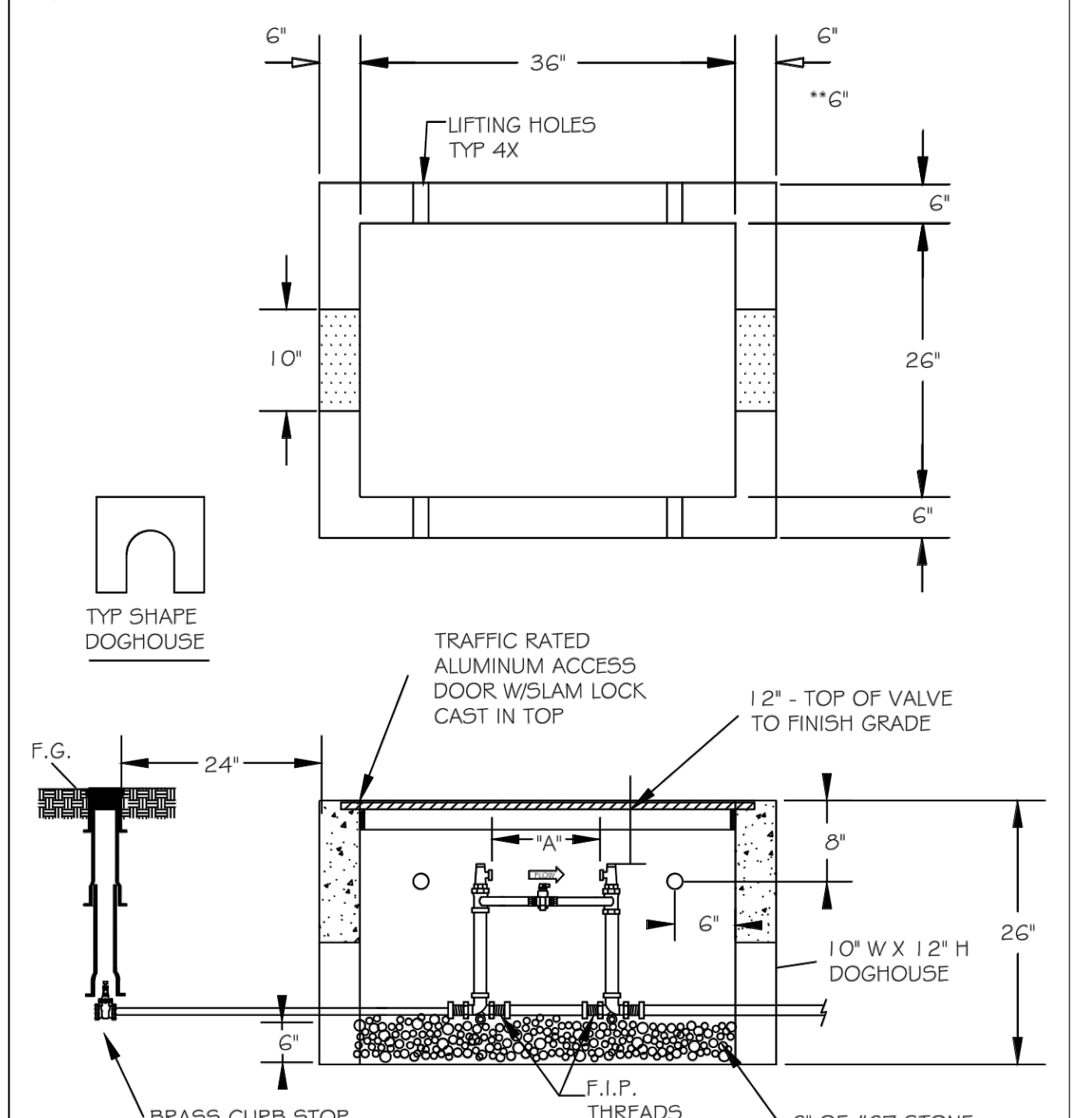
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
5-22	Y.C.A.	12-31-91	A.B.B.	1-19-05
	RRH	3-30-00	D.H.L.	6/16/08



CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

FLAT TOP MANHOLE COVER

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
S-25a	3-1-87	3-1-87	A.B.B.	2-9-05
	RRH	3-30-00	D.H.L.	6-18-08



- NOTES:
- METER AS MANUFACTURED BY SENSUS OR NEPTUNE.
 - BACKFILL TAMPED IN 6" LIFTS.
 - REINFORCEMENT: #4 @ 6" OCEV
 - CONCRETE: 4,000 PSI @ 28 DAYS
 - ALL RPZ BACKFLOW PREVENTION DEVICES MUST BE INSTALLED PRIOR TO METER BEING SET.
 - ALL COPPER SETTERS ARE TO HAVE A BALL TYPE SHUT OFF VALVE ON BOTH SIDES OF COPPER SETTER WITH HIGH RISE BYPASS THAT IS MANUFACTURED BY FORD, MUELLER, OR AY McDONALD. (NO EXCEPTIONS)

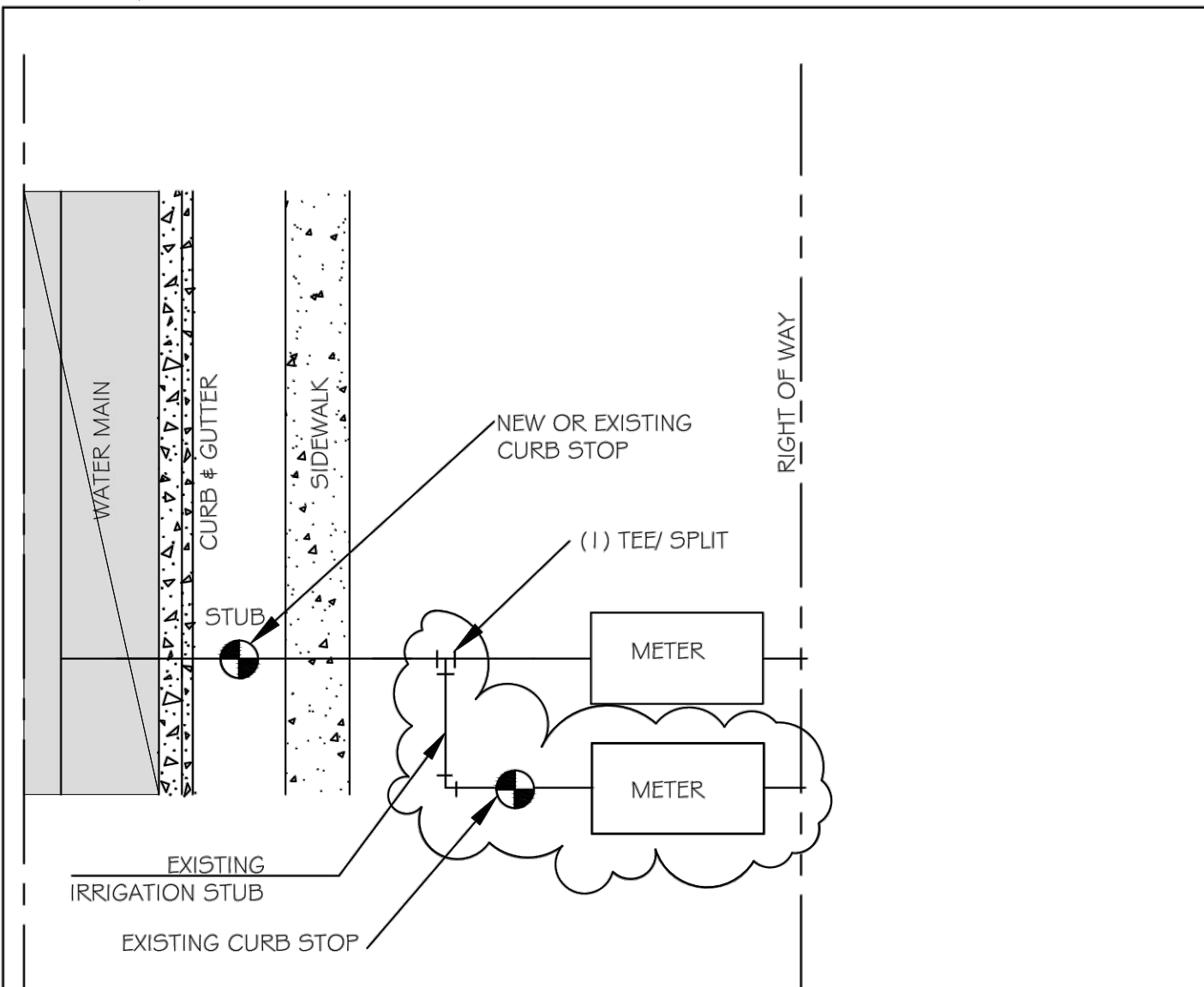
DIMENSION "A"	
1/2" METER	13 7/8"
2" METER	17 7/8"

** TRAFFIC RATED VAULT WALL THICKNESS

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

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

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-31	A.B.B.	8-17-04	J.P.S.	11-4-10
	D.H.L.	6-18-08		

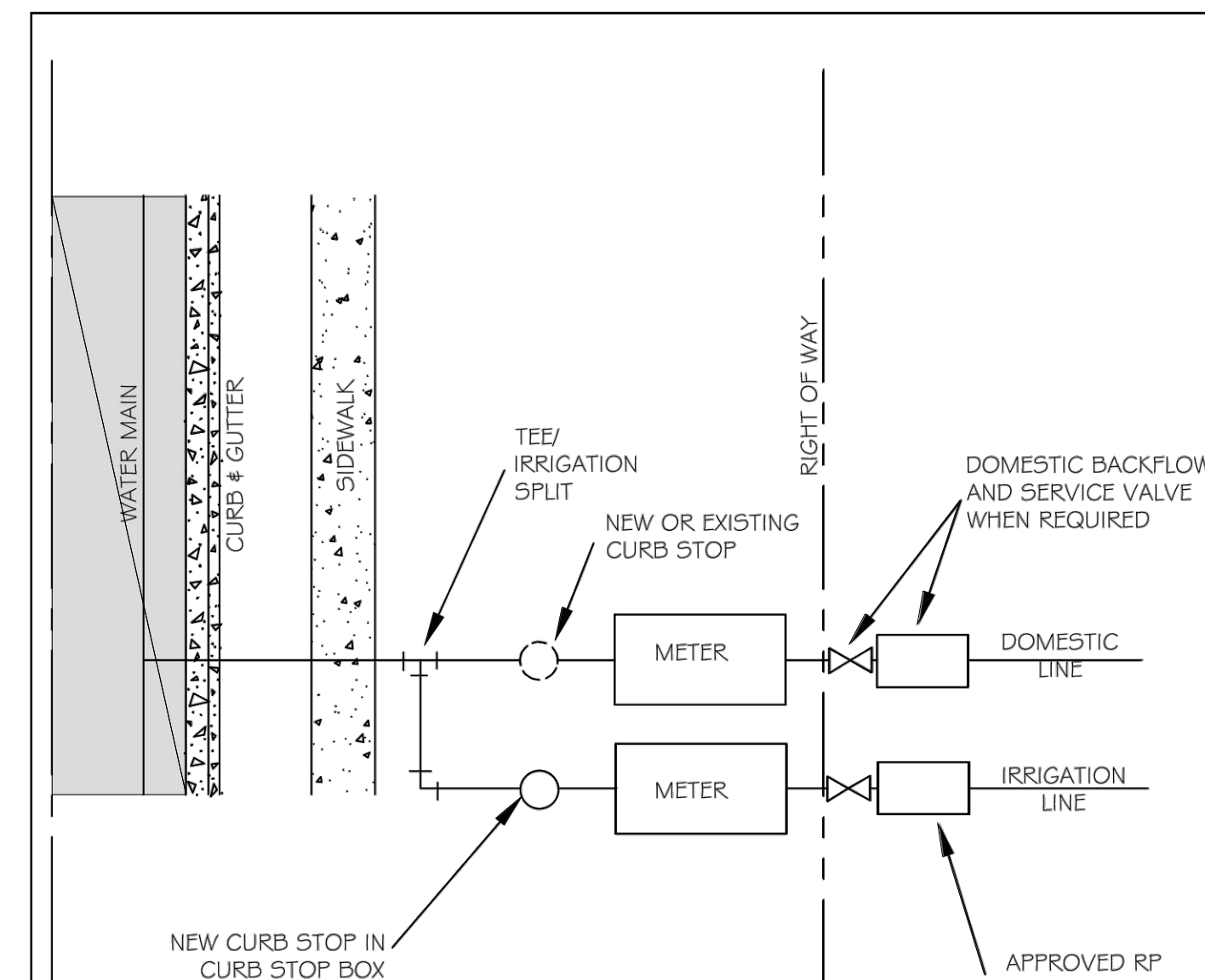


- NOTES:
- Remove tee fitting, repair stub with curb stop & valve box if not existing.
 - Work to be performed by licensed utility contractor, stub permit inspection required.
 - For repair of existing services, one brass compression coupling and type K copper as needed to be used for repair.
 - Remove meter box and piping. (Prior to termination the meter division / utility billing must be contacted for meter removal & account closure).

CITY OF RALEIGH
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Irrigation Meter Termination

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-35T			R.K.V.	6/24/13



- NOTES:
- IRRIGATION METER SHALL BE LOCATED ON THE SIDE OF DOMESTIC METER WITH INCREASING ADDRESSES.
 - THE BACKFLOW SHALL BE INSTALLED NO MORE THAN 10' FROM THE METER IN A VISIBLE LOCATION.
 - BACKFLOW RISER/STANDPIPE SHALL BE OF COPPER OR BRASS.
 - THE RP RELIEF VALVE SHALL BE A MINIMUM OF 12" ABOVE ANY MATERIAL (MULCH INCLUDED) OR GRADE.
 - A SERVICE VALVE IS REQUIRED AFTER THE METER BUT BEFORE THE BACKFLOW ASSEMBLY FOR MAINTENANCE AND REPLACEMENT PURPOSES.
 - THE INSTALLATION MUST ALSO MEET ALL CODE REQUIREMENTS PER THE NC PLUMBING CODE.

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES

IRRIGATION TAP ON NEW AND EXISTING SERVICES

DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-35	RRH	3-31-00	D.H.L.	6-18-08
	ABB	7-10-04	J.P.S.	10/25/10



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Suite 215
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Ph. 214-491-1830
John Measles, PE
CIVIL ENGINEER



TAKE FIVE CAR WASH
5150 NEW BERN AVE.
RALEIGH, NC 27610

PROJECT NO.	DRAWN BY	CHECKED BY	ISSUE DATE
JM-F023004	JMCE	JMCE	09/11/2023
REV.	DATE	DESCRIPTION	INITIAL
07/24/23		INITIAL SUBMITTAL	JMCE

C 730

CITY DETAILS