

PROPERTY DESCRIPTION:

DESCRIPTION OF PARCEL #4714-23-400-013 PER FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT EXHIBIT "A", AS SUPPLIED BY CLIENT:

LAND SITUATED IN THE COUNTY OF LIVINGSTON, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

THE FOLLOWING DESCRIBED LAND SITUATED IN THE VILLAGE OF PINCKNEY, COUNTY OF LIVINGSTON, AND STATE OF MICHIGAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PART OF THE SOUTHEAST 1/4 OF SECTION 23, TOWN 1 NORTH, RANGE 4 EAST, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 23; THENCE ALONG THE CENTERLINE OF DEXTER-PINCKNEY ROAD (66 FOOT RIGHT OF WAY) AND THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 23, NORTH 00 DEGREES 53 MINUTES 42 SECONDS EAST 1314.85 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 23; THENCE ALONG THE POINT OF BEGINNING AND THE PARCEL TO BE DESCRIBED, THENCE ALONG THE CENTERLINE OF M-36 HIGHWAY (100 FOOT RIGHT OF WAY) NORTH 88 DEGREES 02 MINUTES 58 SECONDS EAST 288.92 FEET; THENCE CONTINUING ALONG THE CENTERLINE OF M-36 (100 FOOT RIGHT OF WAY) NORTH 86 DEGREES 10 MINUTES 16 SECONDS EAST 69.94 FEET; THENCE SOUTH 01 DEGREES 31 MINUTES 07 SECONDS WEST (PREVIOUSLY DESCRIBED AS SOUTH 00 DEGREES 49 MINUTES WEST), 243.14 FEET; THENCE SOUTH 89 DEGREES 17 MINUTES 31 SECONDS EAST 61.41 FEET (PREVIOUSLY DESCRIBED AS EAST 66.00 FEET); THENCE ALONG THE WEST LINE OF LANDS FORMERLY OWNED BY WORDEN C. HENRY, AS RECORDED IN LIBER 136, PAGE 294, LIVINGSTON COUNTY RECORDS, SOUTH 00 DEGREES 20 MINUTES 49 SECONDS WEST (PREVIOUSLY DESCRIBED AS SOUTH 03 DEGREES 47 MINUTES 12 SECONDS WEST), 210.26 FEET; THENCE ALONG THE NORTHERLY LINE OF LAND OWNED BY ELIJAH BURISON, AS RECORDED IN LIBER 136, PAGE 444, LIVINGSTON COUNTY RECORDS, SOUTH 63 DEGREES 43 MINUTES 37 SECONDS WEST 470.38 FEET (PREVIOUSLY DESCRIBED AS SOUTHWESTERLY, ABOUT 26 RODS); THENCE ALONG THE CENTERLINE OF DEXTER-PINCKNEY ROAD (66 FOOT RIGHT OF WAY) AND THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 23, NORTH 00 DEGREES 53 MINUTES 42 SECONDS EAST, 647.86 FEET TO THE POINT OF BEGINNING.

GROSS ACREAGE: 4.95 AC
NET ACREAGE: 4.08 AC

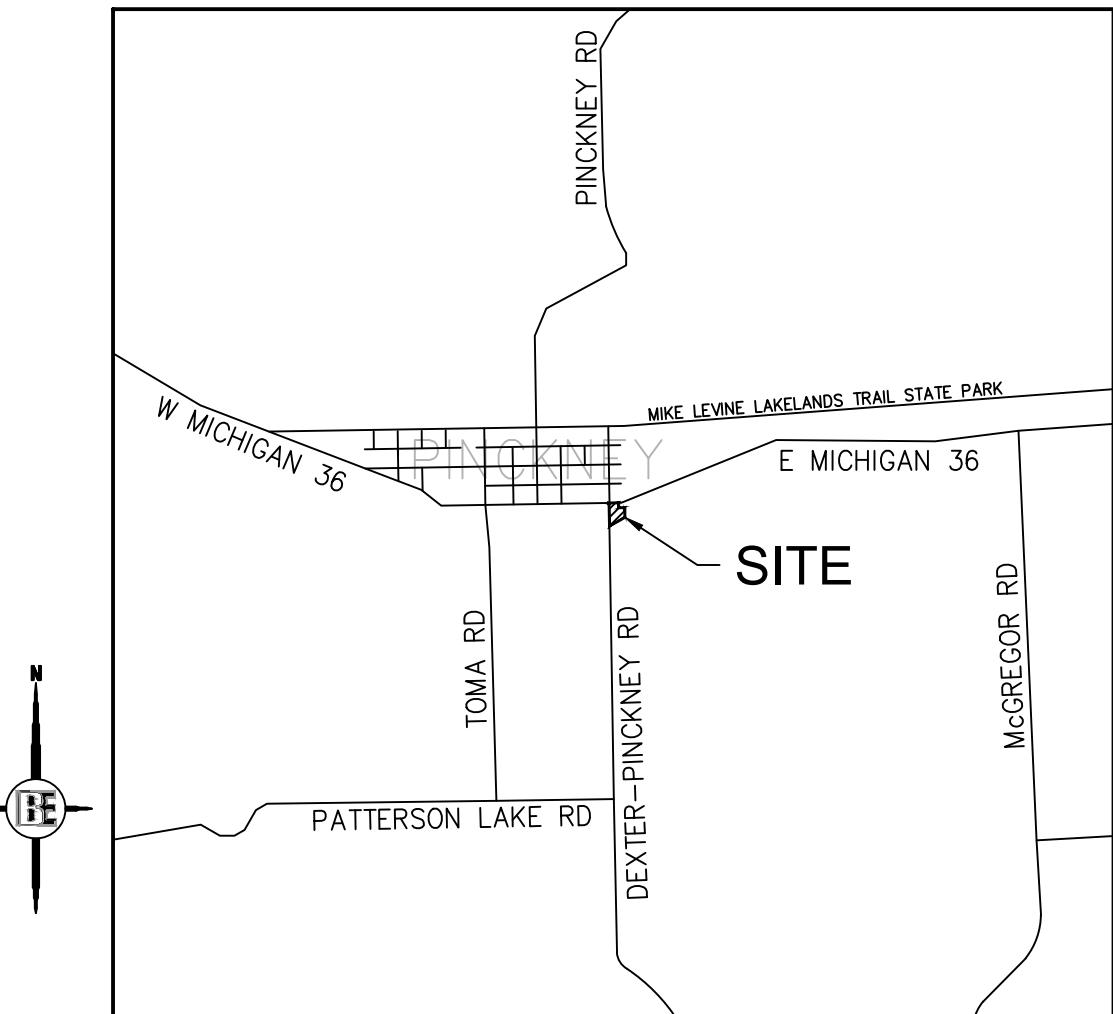
FINAL SITE PLAN / CONSTRUCTION PLANS

FOR

MUGG AND BOPPS PINCKNEY GAS STATION

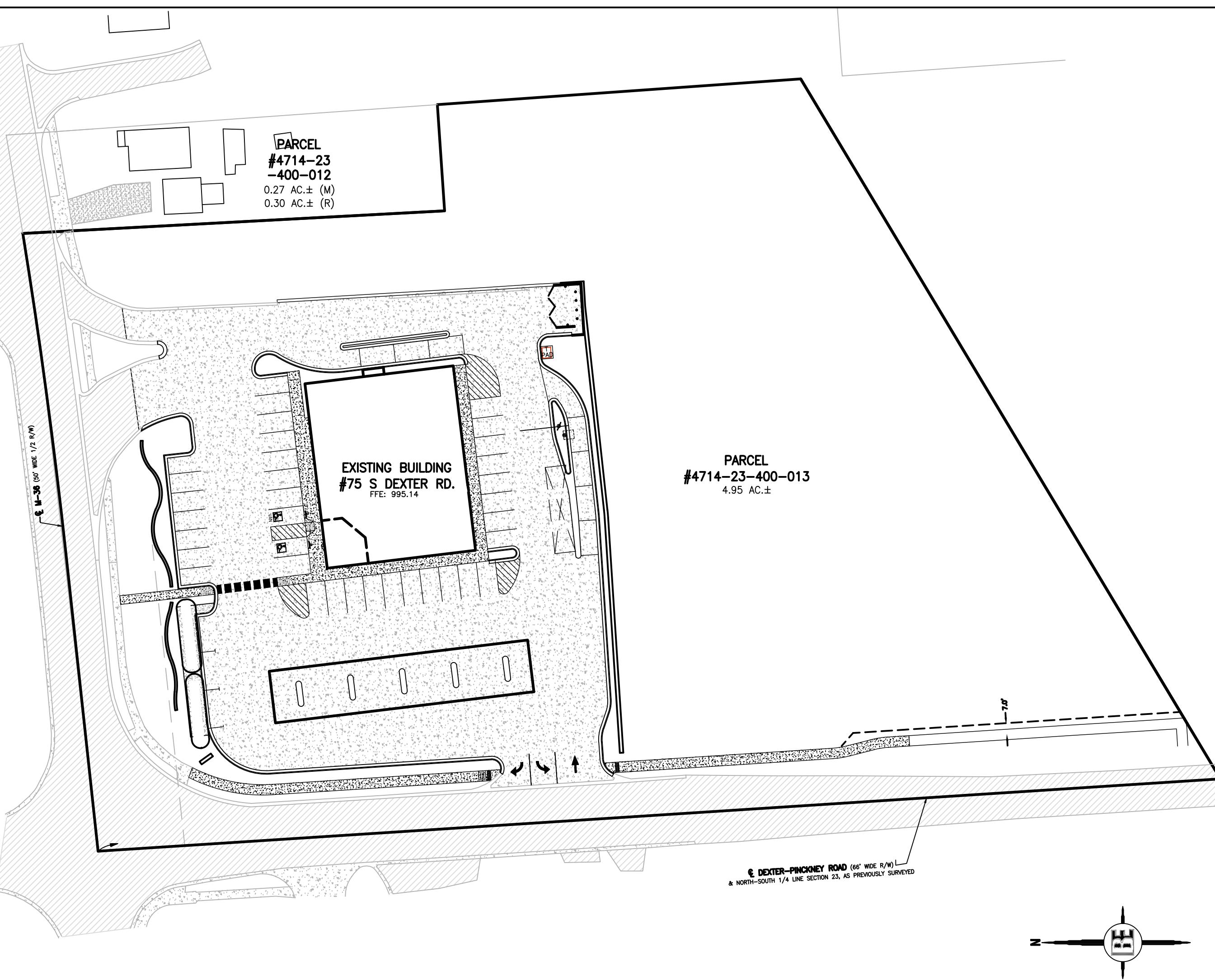
PART OF SE QUARTER, SECTION 23

VILLAGE OF PINCKNEY, LIVINGSTON COUNTY, MICHIGAN 48169



LOCATION MAP

NO SCALE



OVERALL SITE MAP

NO SCALE

PERMITS & APPROVALS

AGENCY	DATE SUBMITTED	DATE APPROVED
• VILLAGE ENGINEERING APPROVAL	10/16/2025	10/22/2025
• LCDC	10/16/2025	11/4/2025
• LRC	10/16/2025	—
• SESC	10/16/2025	10/21/2025

INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

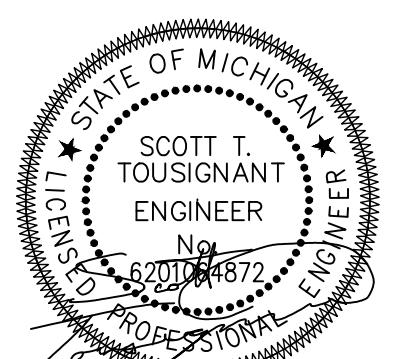
PREPARED FOR:

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PREPARED BY:

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Engineering
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4 ST	PER VILLAGE REVIEW	12/18/25
3 ST	PER VILLAGE DPW REVIEW	11/14/25
2 ST	ADDED STORM SNOUT TRAPS PER LCDC	10/24/25
1 ST	VILLAGE, LCDC, LRC, LCDC-SESC	10/16/25
NO BY CK	REVISION	ISSUE DATE: 09/09/25
		DATE
		JOB NO: 25-06

GENERAL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
- A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
- IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
- PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
- ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS; WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET ADA REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER PRIOR TO WORK COMMENCING.
- ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
- THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
- THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
- NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
- DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
- IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
- NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBRY.
- TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
- ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS.
- ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MDOT MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT ARE INCLUDED IN THE CONTRACT, ANY ITEMS NOT SPECIFICALLY DESIGNATED IN THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF APPROVED CONSTRUCTION PLANS, WITH THE LATEST REVISION DATE, ON SITE PRIOR TO THE START OF CONSTRUCTION. IN THE EVENT OF ANY QUESTIONS PERTAINING TO THE INTENT OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER FOR A FINAL DETERMINATION FROM THE DESIGN ENGINEER.
- THE CONTRACTOR, NOT THE OWNER OR THE ENGINEER, ARE RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SAFE EXECUTION OF THE PROJECT SCOPE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR PRESERVING CONSTRUCTION STAKING AS NECESSARY. CONTRACTOR TO NOTIFY CONSTRUCTION SURVEYOR OF REPLACEMENT STAKES NEEDED WHICH SHALL BE AT THE CONTRACTORS EXPENSE.
- THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FRANCHISE UTILITY SERVICES (CABLE, ELECTRIC, GAS, ETC.) OWNER AND/OR CONTRACTOR SHALL WORK WITH UTILITY COMPANIES ON FURNISHING SITE UTILITY LAYOUTS AND PROVIDING CONDUIT CROSSINGS AS REQUIRED.
- DAMAGE TO ANY EXISTING UTILITIES OR INFRASTRUCTURE (INCLUDING PAVEMENT, CURB, SIDEWALK, ETC.) SHALL PROMPTLY BE REPLACED IN KIND AND SHALL BE AT THE CONTRACTORS EXPENSE.
- COORDINATION OF TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND PER ALL CITY/TOWNSHIP/COUNTY REQUIREMENTS. COPIES OF ALL TEST REPORTS SHALL BE FURNISHED TO THE DESIGN ENGINEER.
- PRIOR TO THE START OF CONSTRUCTION, PROTECTION FENCING SHALL BE ERECTED AROUND THE TREE DRIPLINE OF ANY TREES INDICATED TO BE SAVED WITHIN THE LIMITS OF DISTURBANCE.
- THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE IMPACTED/DISTURBED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY DRAINAGE PROVISIONS.
- SOIL BORING LOGS ARE REPRESENTATIVE OF SPECIFIC POINTS ON THE PROJECT SITE, AND IF PROVIDED TO THE CONTRACTOR ARE FOR INFORMATIONAL PURPOSES ONLY.
- WHERE CITY/TOWNSHIP STANDARD CONSTRUCTION DETAILS/SPECIFICATIONS ARE PROVIDED AND ARE IN CONFLICT WITH NOTES AND SPECIFICATIONS HEREIN, THE CITY/TOWNSHIP STANDARD SHALL GOVERN.

INDEMNIFICATION STATEMENT

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CONTRACTOR TO FOLLOW MANUFACTURER SPECS/RECOMMENDATIONS THAT SUPERCEDE PLANS

GENERAL GRADING & SESc NOTES

- THE CONTRACTOR SHALL HAVE IN PLACE ALL REQUIRED EROSION CONTROL METHODS AS INDICATED ON THE CONSTRUCTION PLANS AND AS REQUIRED BY GENERAL PRACTICE, SPECIFIC MEANS, METHODS AND SEQUENCES OF CONSTRUCTION MAY DICTATE ADDITIONAL SOIL EROSION CONTROL MEASURES BE NEEDED, THE CONTRACTOR SHALL COORDINATE WITH THE DESIGN ENGINEER ON THESE ANTICIPATED METHODS. ADDITIONAL SOIL EROSION CONTROL METHODS SHALL BE INCIDENTAL TO THE SCOPE OF WORK.
- ACTUAL FIELD CONDITIONS MAY DICTATE ADDITIONAL OR ALTERNATE SOIL EROSION CONTROL MEASURES BE UTILIZED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR FIELD CONDITIONS THAT WARRANT ADDITIONAL AND/OR ALTERNATE SESc MEASURES BE UTILIZED.
- AT THE CLOSE OF EACH DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION OPERATIONS, MATERIALS, DEBRIS, ETC ARE CONTAINED ON-SITE.
- AT THE CLOSE OF EACH WORKING DAY, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS AT THE FLOW LINE.
- ALL SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE PER MDOT REGULATIONS AND BEST PRACTICES, ALL SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR.
- THE SOIL EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE UNTIL SUCH A TIME THAT THE SITE IS DETERMINED TO BE ESTABLISHED WITH ACCEPTABLE AMOUNT OF VEGETATIVE GROUND COVER.
- ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEADED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
- AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTION TO 95% OF ITS UNIT WEIGHT.
- ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTION.
- ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
- ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTION WITH SAND (MDOT CLASS II).

GENERAL LANDSCAPE NOTES

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY. ALL STOCK SHALL BE NURSERY GROWN, CONFORMING TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK", AND IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. STOCK SHALL EXHIBIT NORMAL GROWTH HABIT AND BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, & DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT, AND SECURELY WRAPPED AND BOUND.
- ALL PLANT BED MATERIALS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS, OTHER EXTRANEous OBJECTS, AND POOR SOILS TO A MINIMUM DEPTH OF 12-INCHES AND BACKFILLED TO GRADE WITH SPECIFIED PLANTING MIX (SEE BELOW).
- PLANTING MIXTURE SHALL CONSIST OF 5 PARTS TOPSOIL FROM ON-SITE (AS APPROVED), 4 PARTS COARSE SAND, 1 PART SPHAGNUM PEAT MOSS (OR APPROVED COMPOST), AND 5 LBS OF SUPERPHOSPHATE FERTILIZER PER CU. YD. OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED FOR UNIFORM CONSISTENCY.
- ALL PLANT BEDS AND INDIVIDUAL PLANTS, NOT OTHERWISE NOTED SHALL BE MULCHED WITH A 4-INCH LAYER OF SHREDDED BARK MULCH. EDGE OF MULCH BEDS AS SHOWN. DECIDUOUS TREES IN LAWN AREAS SHALL RECEIVE A 5-FT DIAMETER CIRCLE OF MULCH AND CONIFER TREES 8-FT (PLANTED CROWN OF TREE) UNLESS OTHERWISE NOTED.
- LANDSCAPE STONE SHALL BE INSTALLED WHERE NOTED OR INDICATED (HATCHED). STONE SHALL BE 3/4"-1-1/4" WASHED RIVER GRAVEL OR AS SELECTED AND SHALL BE INSTALLED TO A MINIMUM DEPTH OF 3-INCHES.
- ALL LANDSCAPE BEDS, UNLESS OTHERWISE NOTED SHALL BE INSTALLED OVER WEED BARRIER FABRIC - WATER PERMEABLE FILTRATION FABRIC OF NON-WOVEN POLYPROPYLENE OR POLYESTER FABRIC. FABRIC SHALL BE OF SUITABLE THICKNESS FOR APPLICATION.
- ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACTED UPON. IF THE LANDSCAPE ARCHITECT DETERMINES THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD OF TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT, DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL SPECIFICATIONS.
- EDGING SHALL BE PROVIDED FOR ALL LANDSCAPE BEDS NOT ADJACENT TO CONCRETE PAVEMENT. EDGING SHALL BE BLACK ALUMINUM EDGING, 3/16-INCH X 4-INCH. INSTALL PER MANUFACTURER'S INSTRUCTIONS, ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRRREGULARITIES.
- SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUEGRASS AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4-INCH AT TIME OF PLANTING, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10-INCHES BY 18-INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36-HOURS AFTER CUTTING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN-OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF 1 MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.
- ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED OR SODDED SHALL BE SEDED AND MULCHED.
- SEED MIXTURE SHALL BE AS FOLLOWS:
KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES - ADELPHI, RUGBY, GLADE, OR PARADE) 30%
RUBY RED OR DAWSON RED FINE FESCUE 30%
ATLANTA RED FESCUE 20%
PENNINE PERENNIAL RYE 20%
- THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 LBS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:
- 10% NITROGEN - MIN 25% FROM A UREA FORMALDEHYDE SOURCE
0% PHOSPHATE
10% POTASH - SOURCE POTASSIUM SULFATE OR POTASSIUM NITRATE
- THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 LBS PER 1000 SQ FT OF BULK FERTILIZER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RE-SEEDED AND SUCH RE-SEEDED SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
- ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 6-INCH LAYER OF CLEAN, FRIMBLE TOPSOIL. THE SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.

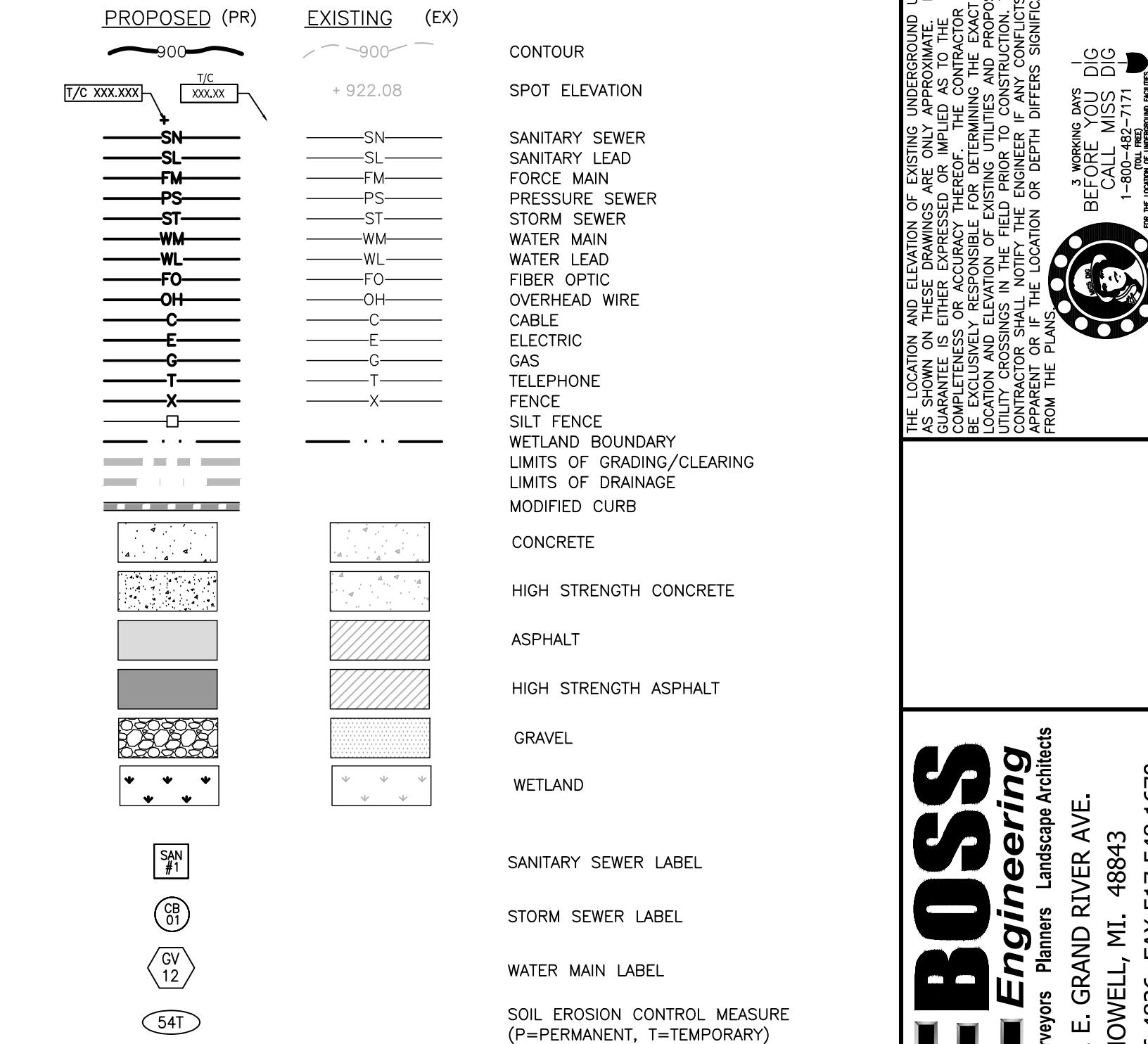
GENERAL UTILITY NOTES

- BEDDING SHALL EXTEND A MINIMUM OF 4" BELOW THE PIPE, UNLESS OTHERWISE NOTED ON THE PLANS. BEDDING SHALL BE OF UNIFORM GRADATION MDOT 6AA STONE OR MDOT CLASS II GRANULAR MATERIAL FOR SANITARY AND STORM PIPE AND MDOT CLASS II GRANULAR MATERIAL ONLY FOR WATERMAIN.
- WHERE UNSTABLE GROUND CONDITIONS ARE ENCOUNTERED, STONE BEDDING SHALL BE USED AS DIRECTED BY THE ENGINEER.
- BACKFILL SHALL BE OF A SUITABLE MATERIAL AND SHALL BE FREE OF ANY ORGANIC MATERIALS AND ROCKS.
- BACKFILL ABOVE THE PIPE SHALL BE OF GRANULAR MATERIAL MDOT CLASS II TO A POINT 12" ABOVE THE TOP OF THE PIPE, WHERE THE TRENCH IS NOT WITHIN THE INFLUENCE OF THE ROAD, SUITABLE SITE MATERIAL MAY BE COMPACTION AND UTILIZED FROM A POINT 12" ABOVE THE PIPE TO GRADE, WHERE THE TRENCH IS WITHIN A 1:1 INFLUENCE OF THE ROAD, GRANULAR MATERIAL, MDOT CLASS II OR III, IS TO BE PLACED AND COMPACTION IN LAYERS NOT EXCEEDING 12" IN THICKNESS. COMPACTION SHALL BE 95% AS DETERMINED BY AASHTO T99.
- 18" MINIMUM VERTICAL SEPARATION AND 10' HORIZONTAL SEPARATION IS TO BE MAINTAINED BETWEEN WATERMAIN AND SANITARY/STORM SEWER TO THE MAXIMUM EXTENT POSSIBLE.

GENERAL STORM NOTES

- ALL STORM PIPE LENGTHS ARE SHOWN FROM C/L TO C/L OF STRUCTURE OR FROM C/L OF STRUCTURE TO DISCHARGE END OF FLARED END SECTION.
- STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
1. RCP/REINFORCED CONCRETE PIPE: SHALL MEET THE REQUIREMENTS OF ASTM C76 WITH MODIFIED GROoved TONGUE AND RUBBER GASKETS MEETING THE REQUIREMENTS OF ASTM C443. RCP TO BE EITHER CLASS IV OR V AS CALLED OUT ON THE PLANS.
- STORM PIPE JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212. HDPE AND PP PIPE GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477.
- ALL STORM PIPE TO HAVE WATERTIGHT PREMIUM JOINTS, UNLESS OTHERWISE NOTED ON THE PLANS.
- STORM DRAINAGE STRUCTURES SHALL BE FURNISHED WITH STEPS WHICH SHALL BE STEEL ENCASED WITH POLYPROPYLENE PLASTIC OR EQUIVALENT. STEPS SHALL BE SET AT 16" CENTER TO CENTER.
- ALL FLARED END SECTIONS 15" AND LARGER SHALL BE FURNISHED WITH AN ANIMAL GRATE.
- FLARED END SECTIONS DISCHARGING STORM WATER SHALL RECEIVE A MINIMUM OF 10 SQ YDS OF PLAIN COBBLESTONE RIP RAP WITH A MINIMUM STONE SIZE OF 6" AND SHALL BE PLACED ON A GEOTEXTILE FABRIC WRAP.
- STORM DRAINAGE STRUCTURE COVERS SHALL BE OF THE FOLLOWING (OR APPROVED EQUAL):
COVER USE FRAME GRATE/BACK
"A" MANHOLE 1040 TYPE 'B'
"B" TYPE B CURB 7085 TYPE 'M1'
"C" VALLEY CURB 7065 7045 TYPE 'M1' GRATE/7060 TYPE 'T1' BACK
"D" PARKING LOTS 1040 TYPE 'M2' GRATE
"E" LAWN 1040 TYPE 'N' OVAL GRATE
"K" TYPE C & F CURB 7045 TYPE 'M1' GRATE/7050 TYPE 'T1' BACK
- THE PROPOSED DRAINAGE SYSTEM IS TO BE OWNED AND PROPERLY MAINTAINED BY THE PROPERTY OWNER (LIVINGSTON COUNTY ONLY)

LINES & HATCHES LEGEND

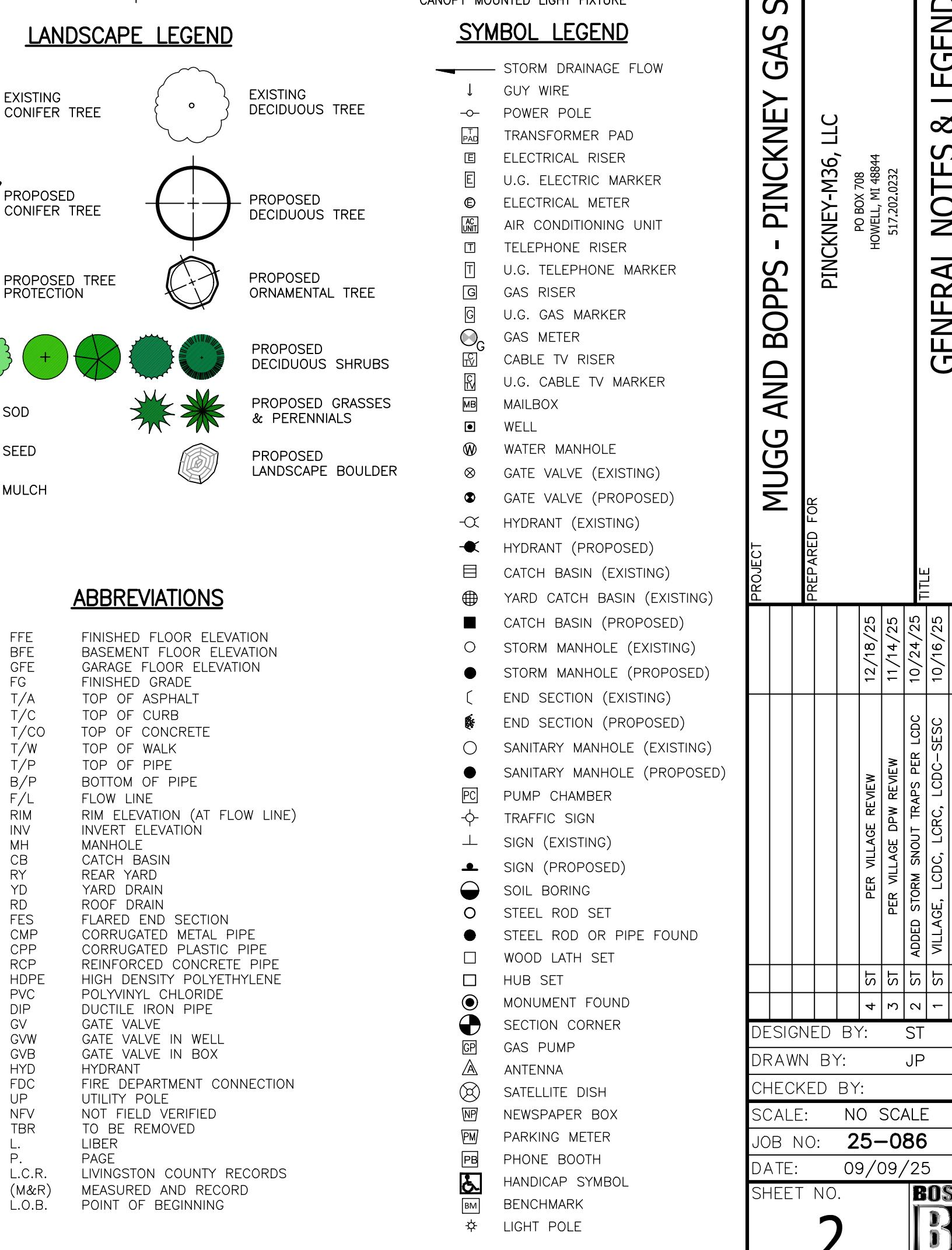


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THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES, NO CONFLICTS OR CONFLICTS ARE NOTED. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF EXISTING UTILITIES AND FOR CALLING OUT ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE CONTRACTOR SHALL CALL MISS DIG 1-800-462-7711 BEFORE CALLING OUT ON THE PLANS.

PROJECT: MUGG AND BOPPS - PINCKNEY GAS STATION
PREPARED FOR: PINCKNEY-M26, LLC
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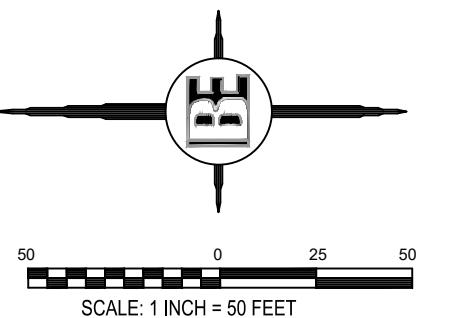
GENERAL NOTES & LEGEND



DESIGNED BY: ST
DRAWN BY: JP
CHECKED BY:
SCALE: NO SCALE
JOB NO: 25-086
DATE: 09/09/25
SHEET NO. 2
BOSS
Engineering



SEE SHEET 2 FOR GENERAL
NOTES AND LEGEND



Soil Conservation Service in cooperation
Agricultural Experiment Station (1977)
Survey of Livingston County, Michigan

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

3 WORKING DAYS
BEFORE YOU
DIG
CALL MISS
DIG
1-800-482-7171
FOR THE LOCATION OF UNDERGROUND FACILITIES



CULTURAL FEATURES NARRATIVE:

E IDENTIFIED DURING AN ON-SITE VISIT TO THE PROPERTY ON
DELINEATION WAS PERFORMED BY PATRICK CLEARY OF BOSS
6, 2025. THE PROPERTY IS ALREADY MOSTLY DEVELOPED THAT
AID COMMERCIAL BUILDING & PARKING LOT ON THE APPROXIMATE
LAND / FLOOD FRINGE TO LIVINGSTON DRAIN NO. 13, WITH THE
N BORDERING THE SOUTH PROPERTY LINE. ON-SITE EXISTING
TURES NARRATIVES ARE LABELED AREAS 'A' AND 'B'.

D PORTION OF THE PROPERTY THAT ENCOMPASSES THE
LF OF THE SITE. THE PROPERTY IS CURRENTLY VACANT BUT IS
EEN ORIGINALLY CONSTRUCTED AS A RITE-AID PHARMACY. IT
TELY 11,400 SQFT BUILDING, PAVED PARKING WITH DRIVE-THRU,
APE WITH LAWN, TREES AND SHRUBS INSTALLED IN 2006.
OOD TO BE MANAGED BY AN UNDERGROUND DETENTION SYSTEM
A SWALE AT THE NORTHEAST END OF THE SITE AND ULTIMATELY
TLAND AND COUNTY DRAIN . SOIL IS A MIX OF BOYER LOAMY SAND
AMY SAND IN BANDS EAST-WEST ACROSS THE SITE AS SHOWN IN

THE DEVELOPED NORTH PORTION OF THE SITE IS BUILT-UP WITH THE DISTINCT WETLAND BOUNDARY THAT APPROXIMATELY BISECTS ST. THIS AREA IS ALSO DEPRESSED FROM THE ADJACENT TO THE WEST AND IT CONTINUES OFFSITE TO THE EAST. THE THE APPROXIMATE CENTERLINE OF THE COUNTY DRAIN. SOIL IS LAND IS DOMINATED BY PHRAGMITES WITH SOME REED CANARY THE DRAIN. THERE ARE SCATTERED TREES AND SHRUBS AROUND NG COTTONWOOD, SILVER MAPLE, JAPANESE HONEY SUCKLE, WOOD

SHEET LEGEND

Soil Type Boundary: A thick black line with a vertical tick mark in the center.

Natural Features Zone Boundary: A wavy black line.

Existing Drainage Flow: A wavy black line with a black arrowhead pointing downstream.

SITE BENCHMARKS (NAVD88 DATUM):

- BM #200 = BM BNT E/S P. POLE
ELEV.=881.53
- BM #201 = BM BNT S/S P. POLE
ELEV.=890.40
- BM #202 = BM BNT NW/S P. POLE
ELEV.=887.04

AND BOPPS - PINCKNEY GAS STATION

PINCKNEY-M36, LLC

PO BOX 708
HOWELL, MI 48844
517.202.0232

NATURAL FEATURES AREA PLAN

PROJECT	PREPARED FOR		
			TITLE
DESIGNED BY:	PC		
DRAWN BY:	PC		
CHECKED BY:			
SCALE:	1" = 50'		
JOB NO:	25-086		
DATE:	09/09/25		
SHEET NO.	3 		

SEE SHEET 2 FOR GENERAL
NOTES AND LEGEND

CEL INFORMATION:
CEL ID: #4714-23-400-013
ACREAGE: 4.95 AC. ±
ING: SECONDARY BUSINESS DISTRICT (SBD)
RESS: 75 S DEXTER ST, PINCKNEY, MI 48169
NER: PINCKNEY-M36, LLC

DESINE SURVEY
JOB NO. 2160
(2-15-1994)
L. 1858, P. 860)

BENCHMARKS (NAVD88 DATUM):

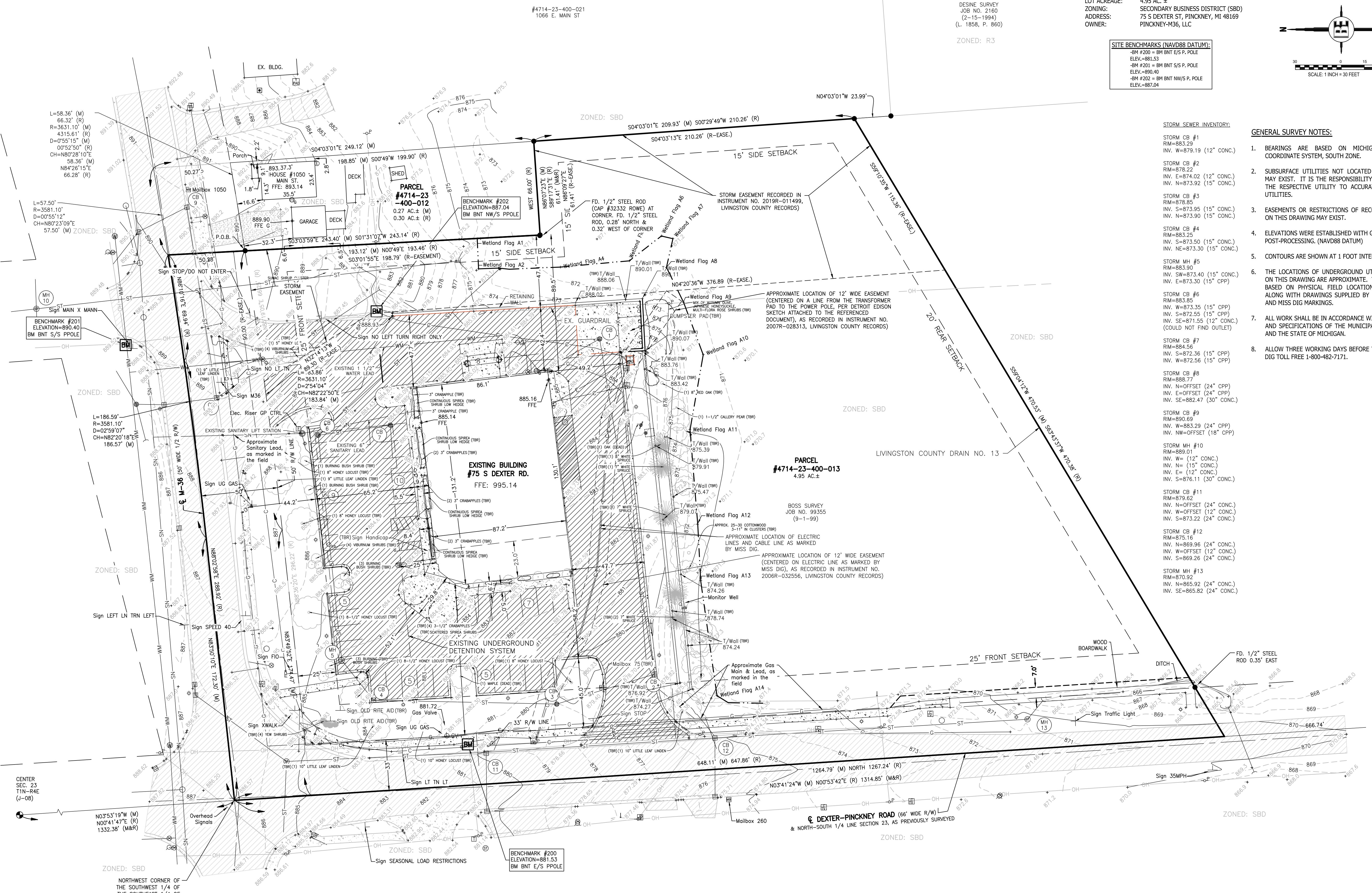
- BM #200 = BM BNT E/S P. POLE
ELEV.=881.53
- BM #201 = BM BNT S/S P. POLE
ELEV.=890.40
- BM #202 = BM BNT NW/S P. POLE
ELEV.=887.04

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A circular seal for a Michigan professional surveyor. The outer ring contains the text "STATE OF MICHIGAN" at the top and "LICENSED PROFESSIONAL SURVEYOR" at the bottom, separated by a decorative dotted line. The inner circle contains the name "CHRISTOPHER S. FERGUS" in the center, with "License No. 4001047055" written below it.

ND BOPPS - PINCKNEY GAS STATION

EXISTING CONDITIONS PLAN



- APPROXIMATE WELL

SEE SHEET 2 FOR GENERAL
NOTES AND LEGEND

DESINE SURVEY
JOB NO. 2160
(2-15-1994)
L. 1858, P. 860)

ZONED: R3

CONFIDENTIAL OR ACCORDING THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

OPPS - PINCKNEY GAS STATION

PROJECT	PREPARED FOR	DATE
DESIGNED BY:	ST	
DRAWN BY:	JP	
CHECKED BY:		
SCALE: 1" = 30'		
JOB NO: 25-086		
DATE: 09/09/25		
SHEET NO.	B Eng	

APPROXIMATE WELL

SEE SHEET 2 FOR GENERAL
NOTES AND LEGEND

SANITARY LEAD ELEVATIONS TABLE		
	LOCATION/DESCRIPTION	ELEVATION
1	SANITARY WYE	877.24
2	SANITARY CLEANOUT	877.53
3	GREASE TRAP OUT	877.55
4	GREASE TRAP IN	877.72
5	DOMESTIC STUB LOCATION	878.11

CONTRACTOR TO VERIFY DEPTH AND LOCATION OF EXISTING
UNDERGROUND UTILITIES BEFORE CONSTRUCTION

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TES: THE EXISTING UNDERGROUND DETENTION SYSTEM, INCLUDING ITS OUTLET PIPE, SHOULD BE THOROUGHLY CLEANED OUT. PROPOSED INLET STRUCTURES CB 105, CB 106, AND CB 107 SHALL BE EQUIPPED WITH A BMP SNOUT. SEE DETAIL ON SHEET 15.

4" HDPE FIRE SUPPRESSION LINE TO INCLUDE TRACER WIRE. TRACER WIRE TO BE #12AWG COPPER CLAD STEEL, HIGH STRENGTH WITH MINIMUM 450 LB BREAK LOAD, AND MINIMUM 30 MIL HDPE INSULATION THICKNESS.

FROM	TO	DRAIN	ACRES	RUNOFF	EQUIV.	TIME OF	ADD'L	RUNOFF	PIPE	VELOCITY	HYDRAULIC	ACTUAL	MANNING	MANNING'S	HG ELEV	HG ELEV	RIM ELEV	RIM ELEV	INVERT	INVERT			
		AREA	A	COEFF	AREA	INTEN-SITY	CONC.	RUNOFF	(CFS)	LENGTH	DIA.	FLOWING	GRADIENT	SLOPE USED	COEFFICIENT	FLOW	VELOCITY	TIME	UPPER	UPPER	LOWER	UPPER	LOWER
105	2	105	0.31	0.84	0.26	4.38	15.00	1.14	19	12	2.68	0.35%	0.50%	0.013	2.53	3.22	0.10	874.91	874.82	877.60	879.71	874.11	874.02
106	3	106	0.37	0.90	0.33	4.38	15.00	1.45	18	12	2.86	0.40%	0.50%	0.013	2.53	3.22	0.09	874.89	874.80	878.45	878.75	874.09	874.00
107	4	107	0.17	0.75	0.13	4.38	15.00	0.57	22	12	2.15	0.22%	0.50%	0.013	2.53	3.22	0.11	878.41	878.30	882.70	883.00	877.61	877.50

BEBOSS Engineering

Engineers Surveyors Planners Landscape Architects

3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843

517 546 1926 FAX 517 548 1670

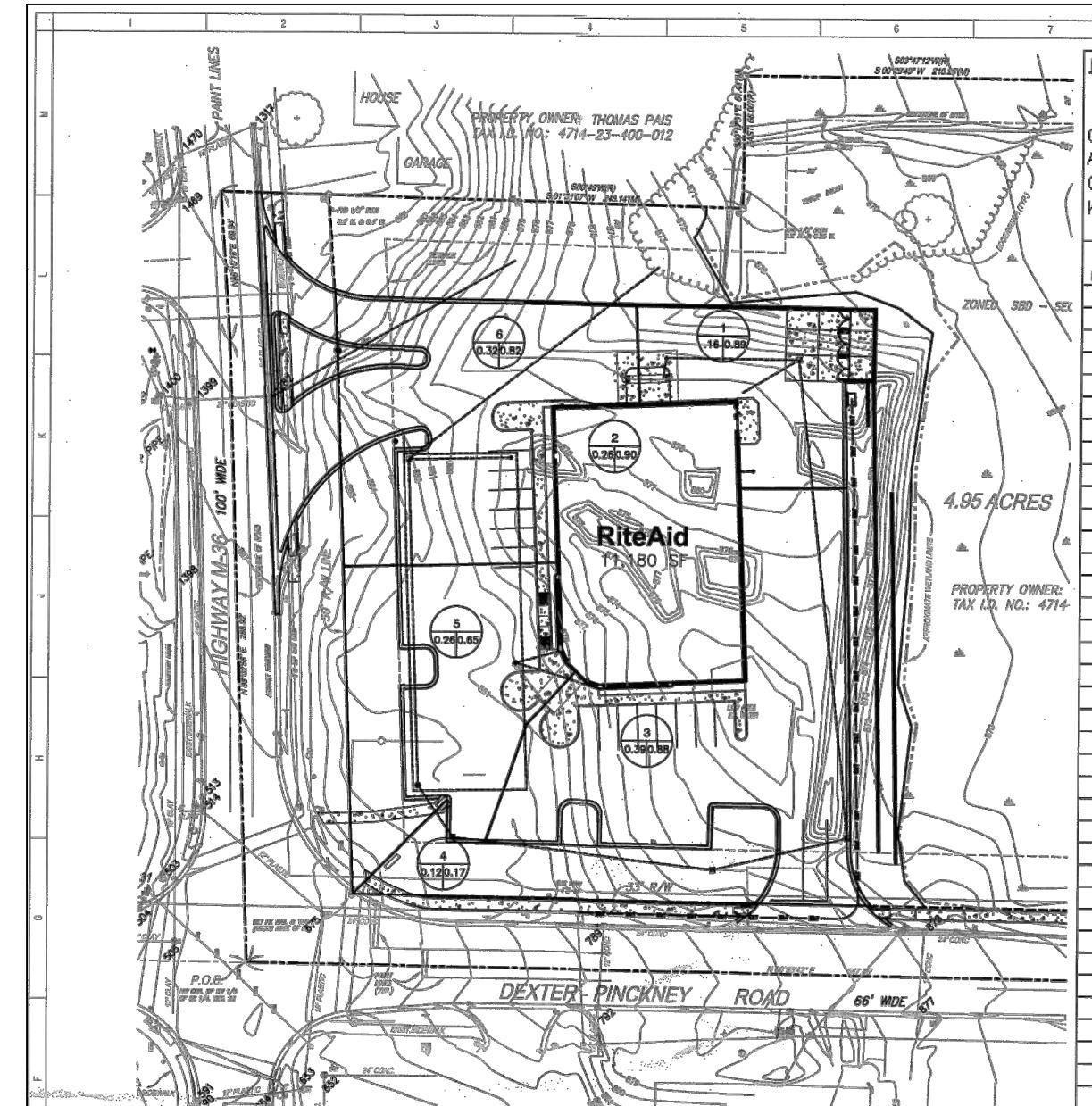
PPS - PINCKNEY GAS STATION

PINCKNEY-M36, LLC

PO BOX 708
HOWELL, MI 48844
517.202.0232

UTILITY PLAN

MUGG AND BOF	
PROJECT	PREPARED FOR
DESIGNED BY:	ST
DRAWN BY:	JP
CHECKED BY:	
SCALE:	1" = 30'
JOB NO: 25-086	
DATE: 09/09/25	
SHEET NO.	
8	
 BOS Engineers	



100 YEAR DETENTION STORAGE - LIVINGSTON COUNTY METHOD

1.6 Surface
0.75
1.611 acres
A
22 cfs
K1
1.15

Allowable Release Rate
Weighted C value
Total site acreage
Total allowable release rate

Duration	Duration	Intensity	Duration x	Inflow x K1	Outflow	Storage Volume
100	100	9.17	2,760	62.01	5,278.74	
10	600	7.98	4,714.29	5,414.75	136.02	5,278.74
15	900	6.88	6,187.50	7,036.06	204.02	6,902.84
20	1200	5.87	7,459.75	8,406.96	347.20	9,155.78
30	1800	5.00	9,000.00	10,326.26	426.05	9,000.00
35	2100	4.58	11,655.12	12,655.12	476.06	10,579.06
40	2400	4.23	10,163.85	11,655.12	544.07	11,118.48
45	2700	3.93	10,481.14	12,483.19	612.07	11,671.12
50	3000	3.67	10,808.47	13,208.47	680.07	12,245.40
55	3300	3.44	11,343.75	13,023.25	748.07	12,816.16
60	3600	3.24	11,847.06	13,377.83	816.10	12,561.03
65	3900	3.06	11,916.67	13,867.29	884.11	12,803.19
70	4200	2.89	12,157.89	14,854.35	952.12	13,012.25
75	4500	2.75	12,492.50	15,845.00	1020.12	13,222.50
80	4800	2.62	12,571.43	14,644.45	1,089.13	13,561.21
85	5100	2.50	12,790.29	14,644.45	1,169.14	13,488.31
90	5400	2.39	12,913.04	14,831.72	1,224.16	13,807.67
95	5700	2.28	13,035.80	15,903.37	1,282.18	13,711.22
100	6000	2.19	13,158.56	16,980.00	1,340.20	13,625.56
105	6300	2.12	13,326.92	15,307.09	1,426.17	13,678.92
110	6600	2.05	13,444.44	15,442.27	1,496.18	13,945.09
115	6900	1.98	13,563.57	15,567.42	1,564.19	14,003.23
120	7200	1.93	13,682.71	15,682.71	1,632.27	14,051.91
125	7500	1.88	13,801.85	15,801.85	1,700.35	14,100.59
130	7800	1.77	13,938.71	15,934.92	1,768.21	14,126.71
135	8100	1.72	13,921.68	15,930.44	1,836.22	14,154.22
140	8400	1.67	14,045.00	16,030.23	1,904.23	14,175.94
145	8700	1.62	14,168.33	16,136.33	1,972.23	14,207.56
150	9000	1.57	14,291.66	16,242.26	2,040.25	14,211.34
155	9300	1.53	14,208.33	16,319.26	2,108.26	14,211.21
160	9600	1.49	14,283.95	16,390.69	2,147.27	14,213.73
165	9900	1.45	14,308.44	16,459.00	2,206.36	14,223.20
170	10200	1.41	14,332.91	16,527.31	2,265.41	14,232.67
175	10500	1.38	14,357.50	16,592.68	2,330.29	14,202.39
180	10800	1.34	14,487.90	16,640.40	2,448.30	14,192.16
185	11100	1.30	14,613.71	16,689.49	2,616.31	14,179.18
190	11400	1.26	14,739.00	16,754.31	2,694.31	14,153.64
195	11700	1.25	14,865.00	16,792.34	2,762.31	14,133.64
200	12000	1.22	14,668.57	16,851.68	2,789.34	14,103.34
205	12300	1.20	14,706.52	16,881.68	2,857.34	14,125.57
210	12600	1.17	14,744.88	16,925.50	2,730.33	14,095.16
215	12900	1.15	14,780.50	16,955.50	2,695.35	14,075.32
220	13200	1.12	14,816.33	17,017.80	2,662.35	14,053.12
225	13500	1.10	14,850.00	17,058.47	3,060.37	13,998.10
230	13800	1.08	14,882.33	17,093.63	3,128.38	13,965.26
235	14100	1.05	14,913.46	17,129.36	3,198.39	13,932.98
240	14400	1.02	14,947.22	17,168.86	3,332.40	13,884.45
245	14700	1.02	14,972.22	17,198.86	3,332.40	13,884.45
250	15000	1.00	15,000.00	17,228.76	3,400.41	13,828.35
						Detention Required 14,214.34

SSOE, INC. ARCHITECTS • ENGINEERS

1550 WILSHIRE DRIVE, SUITE 200

TROY, MICHIGAN 48064

10-YEAR STORM SEWER DESIGN SHEET

VILLAGE OF PINCKNEY

PINCKNEY, MI

RITE AID #7877

LIVINGSTON COUNTY

Design by: A. Colvin

Checked by: D. Johnson

Approved by: S. Soss

Project No.: 22515-050

Telephone: (248) 643-6222

Fax: (248) 643-6225

Printed on: 10/22/2004

Page No.: 1

Sheet No.: 1

Scale: 1" = 40'

North arrow: Yes

Drainage Area Key:

Area in Acres - Runoff Coefficient

Drainage Area:

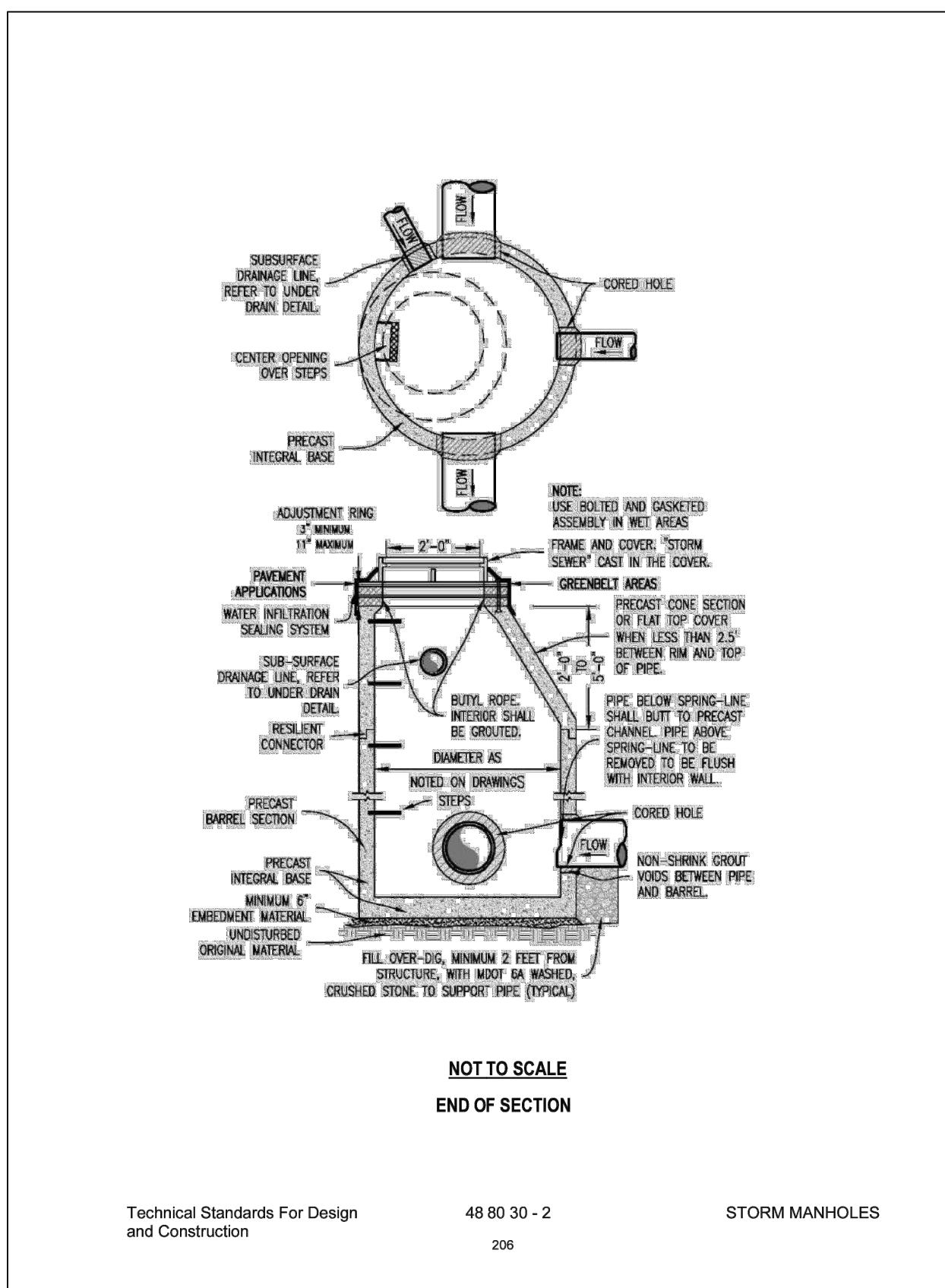
Runoff Rate by National Method Formula = Qa

Impact Rate of Runoff in CFS = Qa

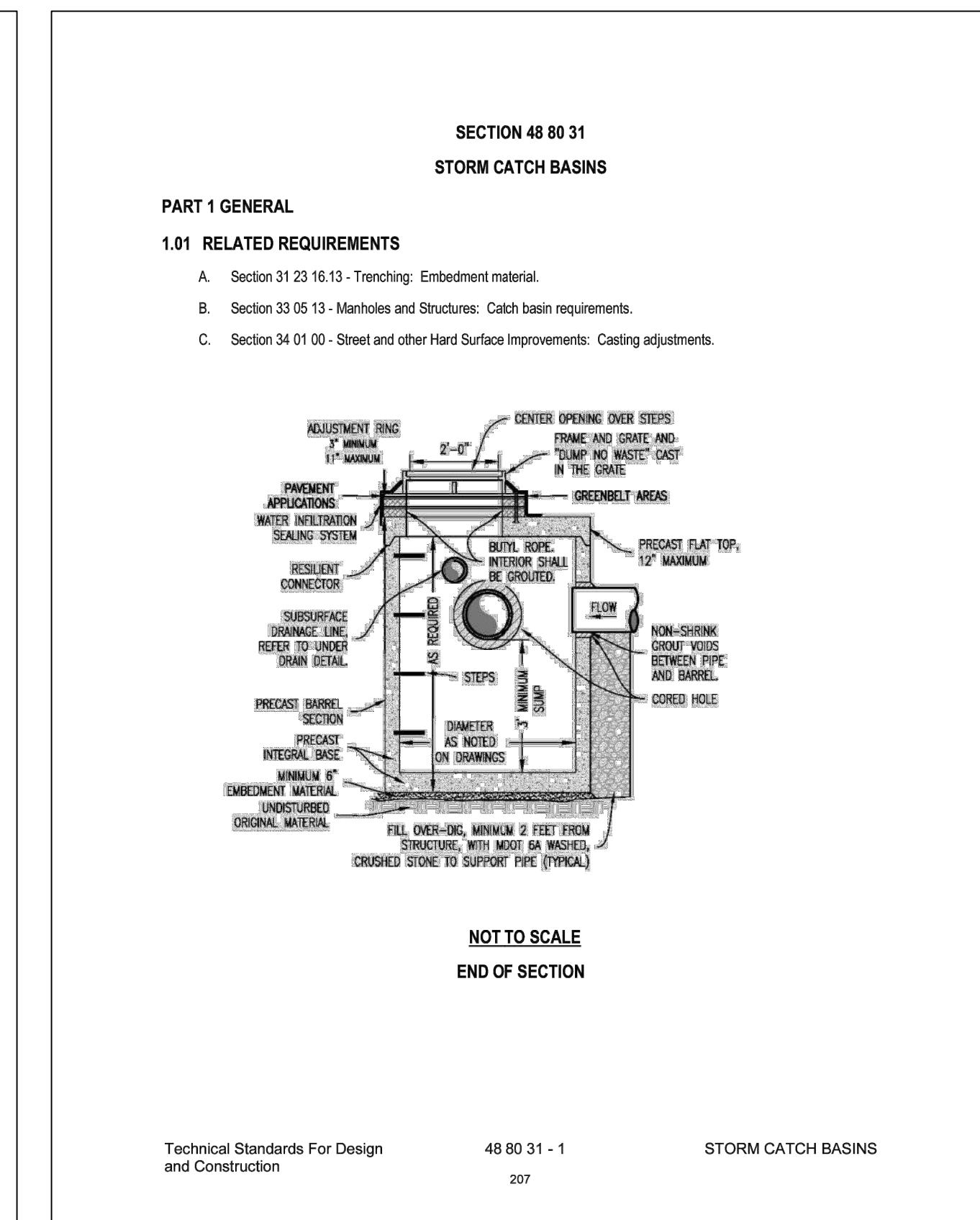
Coefficient of Runoff = C

10-YR HYDRAULIC GRADE LINE

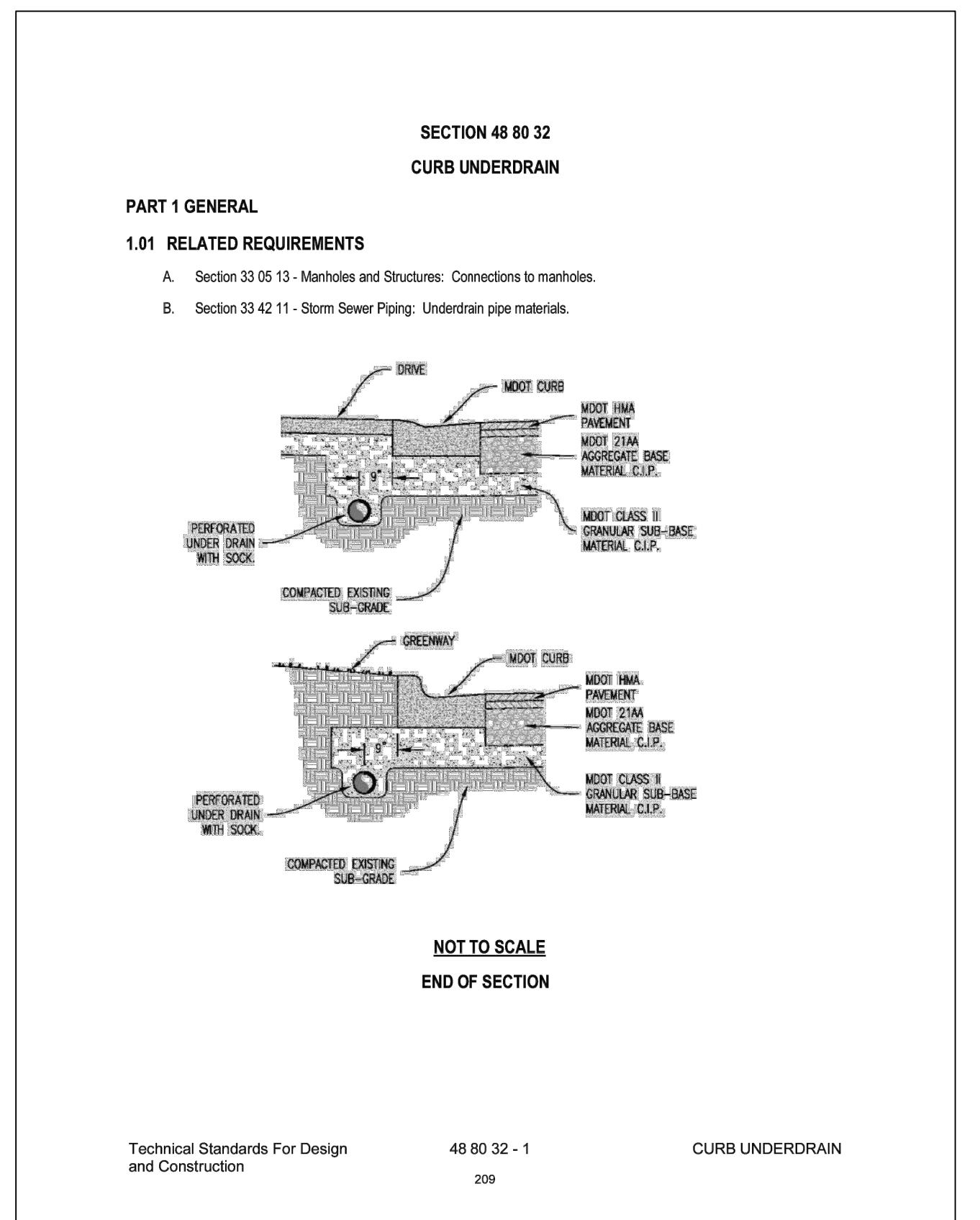
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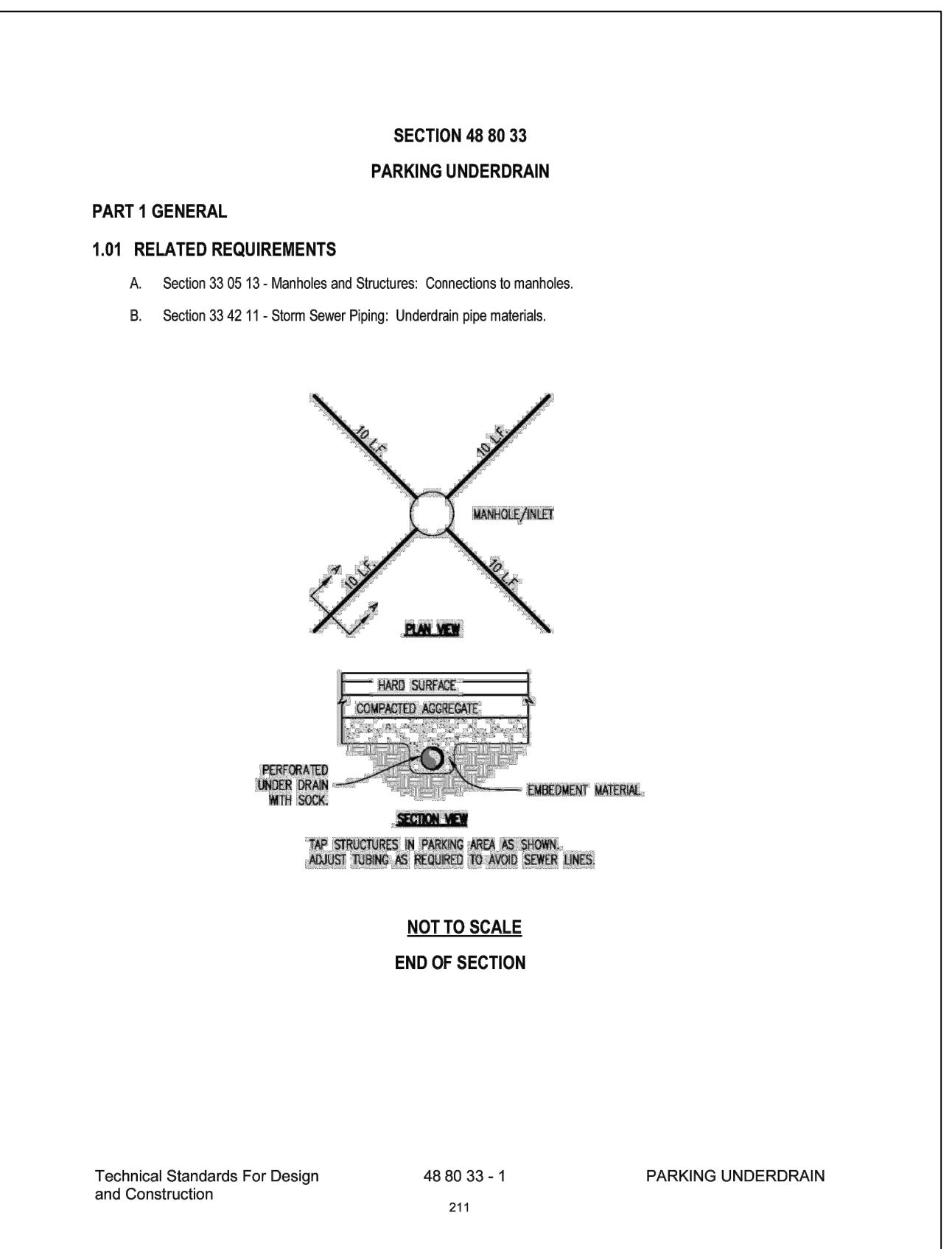
Technical Standards For Design 48 80 30 - 2 STORM MANHOLE
and Construction 206



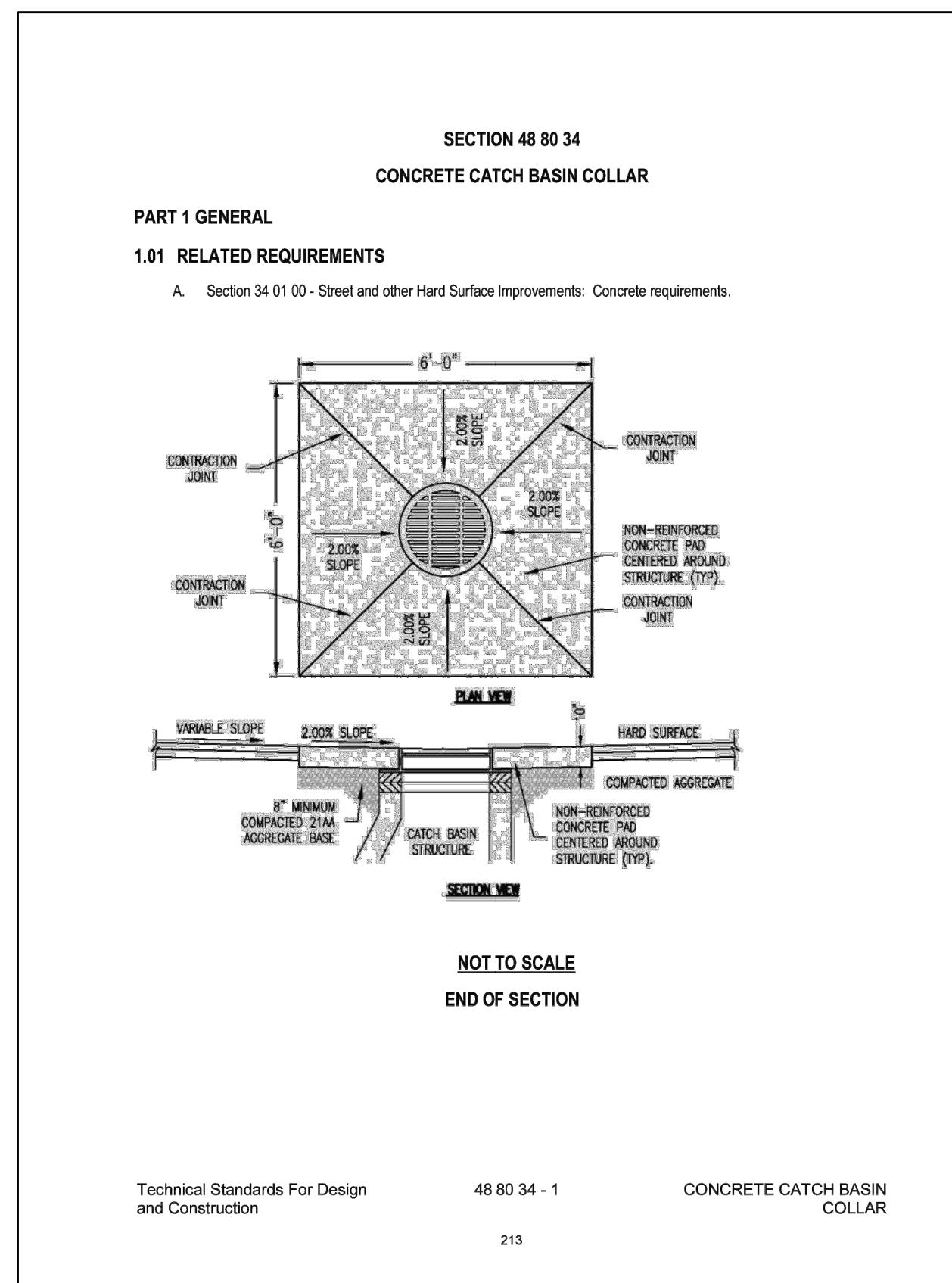
Technical Standards For Design
and Construction 48 80 31 - 1 STORM CATCH BASINS
207



Technical Standards For Design
and Construction 48 80 32 - 1 CURB UNDERDRAIN
209

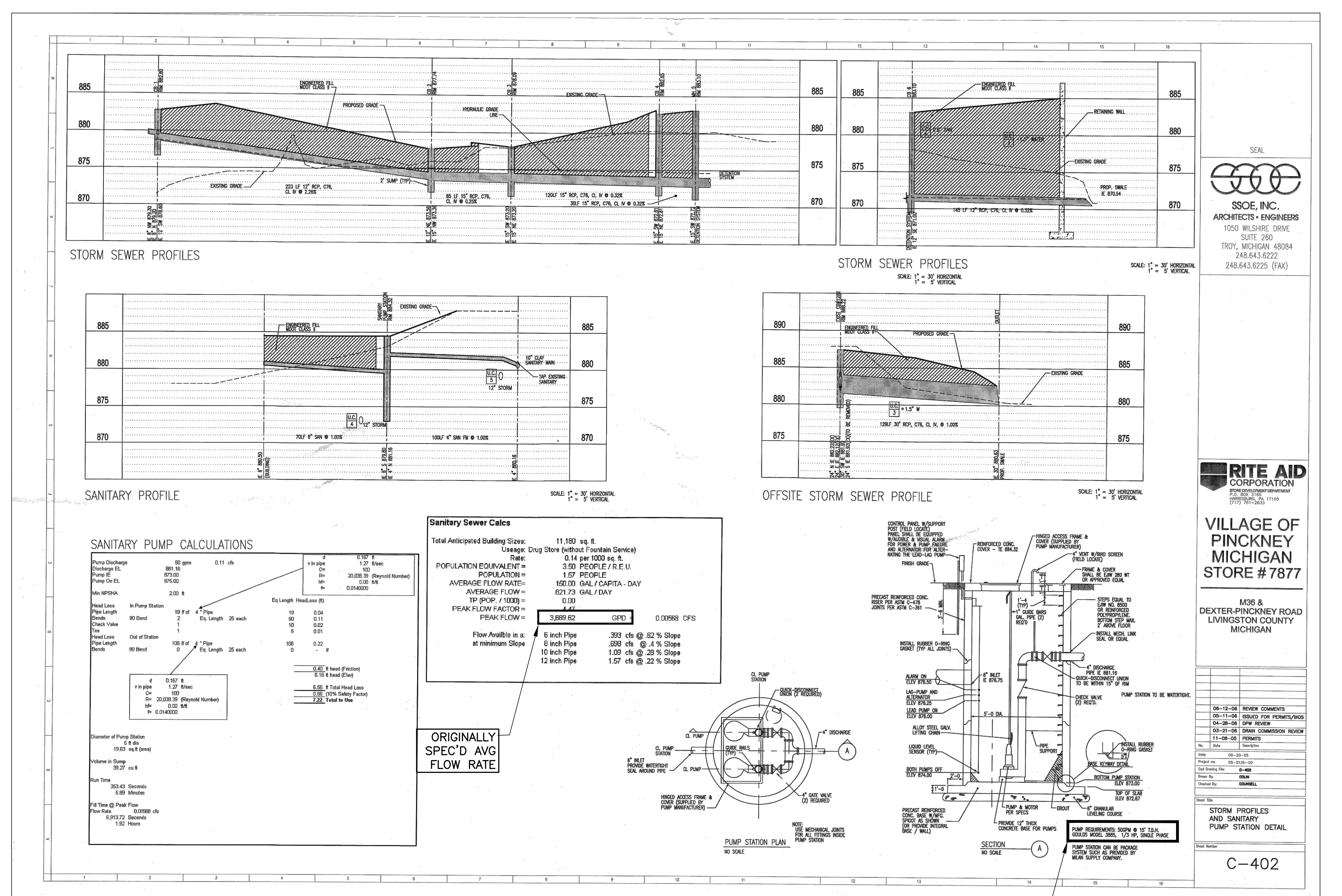


Technical Standards For Design
and Construction 48 80 33 - 1 PARKING UNDERDRAIN
211



Technical Standards For Design and Construction	48 80 34 - 1	CONCRETE CATCH BASINS COLLAR
	213	

PROJECT		MUGG AND BOPPS - PINCKNEY GAS STATION		
		PREPARED FOR		
		PINCKNEY-M36, LLC PO BOX 708 HOWELL, MI 48844 517.202.0232		
		VILLAGE DETAILS		
DESIGNED BY:		ST	DATE	
DRAWN BY:		JP		
CHECKED BY:				
SCALE:		NO SCALE		
JOB NO:		25-086		
DATE:		09/09/25		
SHEET NO.		16		



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

Flow Data Analysis

Boss Engineering
11/14/2025

Recording Quarter	Time Period (Days)	Dunkin Doughnuts / Gas Station 1600 Pinckney Road (Gallons)	Average Daily Flow (GPD)
1	85	47000	553
2	94	55000	585
3	86	54000	628
4	103	64000	621
Totals =	368	220000	
Average Daily Flow		598 GPD	
Peak quarter		3	
Average Daily Flow		628 GPD	

Subway/Gas Station 211 E Main

Recording Quarter	Time Period (Days)	Subway/ Store 211 E Main (Gallons)	Average Daily Flow (GPD)
1	194	44700	230
2	93	32000	344
3	96	30600	319
4	77	24300	316
Totals =	460	131600	
Average Daily Flow		286 GPD	
Peak quarter		2	
Average Daily Flow		344 GPD	

Gas Station 1900 N. Latson / Bigby Coffee 1275 Lawson Dr.

Recording Quarter	Time Period (Days)	Gas Station 1900 N. Latson (Gallons)	Time Period (Days)	Bigby Coffee 1275 Lawson Dr. (Gallons)	Average Daily Flow (GPD)
1	83	23000	89	31000	625
2	96	31000	92	34000	692
3	88	28000	92	33000	677
4	108	30000	108	33000	583
Totals =	375	112000	381	131000	
Average Daily Flow		642 GPD			
Peak quarter		2			
Average Daily Flow		692 GPD			

Average Flow

$Q_{avg} = 692 \text{ GPD}$

$Q_{avg} = \frac{x}{60 \text{ min}} \frac{0.48 \text{ gpm}}{\text{sec}}$

Peak Flow

$Peaking Factor = 18 + \sqrt{\frac{population}{1000}}$

$4 + \sqrt{\frac{population}{1000}}$

In order to determine the population to use in this equation
Convert the Avg. Daily Flow of 692 GPD to equivalent population

Assume: 150 GPCD

Equivalent Population = $692 \text{ GPD} / 100 \text{ GPCD} = 4.61333333 \text{ persons}$

Peaking Factor = $18 + \sqrt{\frac{4.61333333}{1000}} = 4.44$

$Q_{peak} = Q_{avg} \times Peaking Factor$

$Q_{peak} = 2.13 \text{ gpm}$

MUGG AND BOPPS - PINCKNEY GAS STATION

PREPARED FOR PINCKNEY-M26, LLC

Project No. 05-5136-00

Prepared By: CDR

Checked By: COUNSELL

Sheet Title: STORM PROFILES AND SANITARY PUMP STATION DETAIL

Sheet Number: C-402

LIFT STATION DETAILS

Project No. 05-5136-00

Prepared For PINCKNEY-M26, LLC

Prepared By: CDR

Checked By: COUNSELL

Sheet Title: STORM PROFILES AND SANITARY PUMP STATION DETAIL

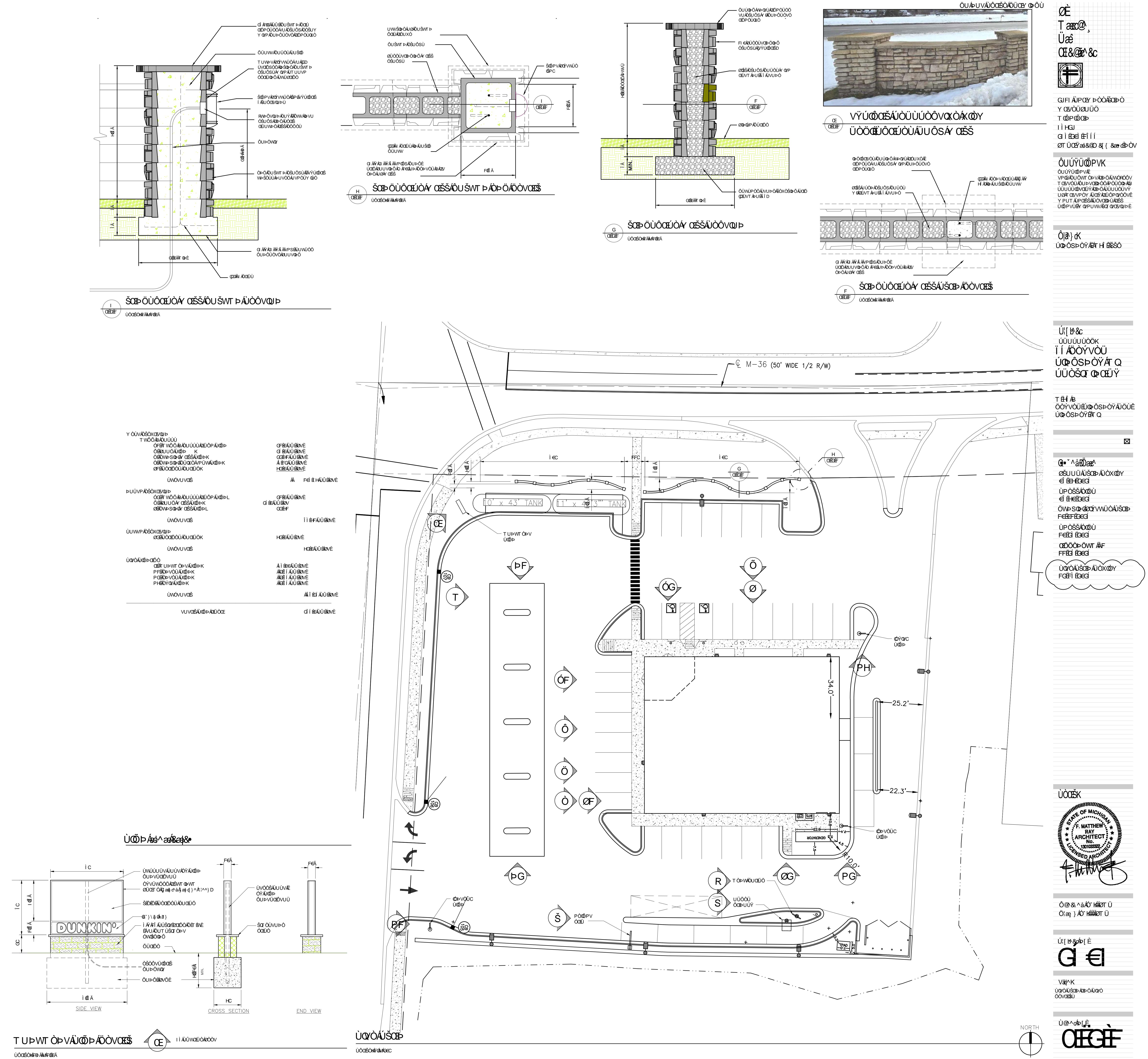
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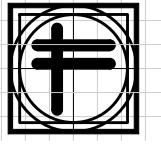
THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES, NO COMPLETION OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND IN THE FIELD. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND IN THE PLANS.

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BEFORE YOU DIG
1-800-422-7111
www.digbeforeyoudig.com

BEBOSS
Engineering

Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670





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Client:
PINCKNEY - M36, LLC

Project
PROPOSED:
75 DEXTER
PINCKNEY MI
PRELIMINARY

M-36
DEXTER-PINCKNEY RDS,
PINCKNEY, MI

PRELIMINARY

Issued Date
FLOOR PLAN REVIEW
06-03-2025
SHELL BIDS
06-30-2025
DUNKIN FIXTURE PLAN
10-01-2025
SHELL BIDS
10-2 -2025
ADDENDUM 1
11-25-2025
SITE PLAN REVIEW
12-1 -2025

SEAL:



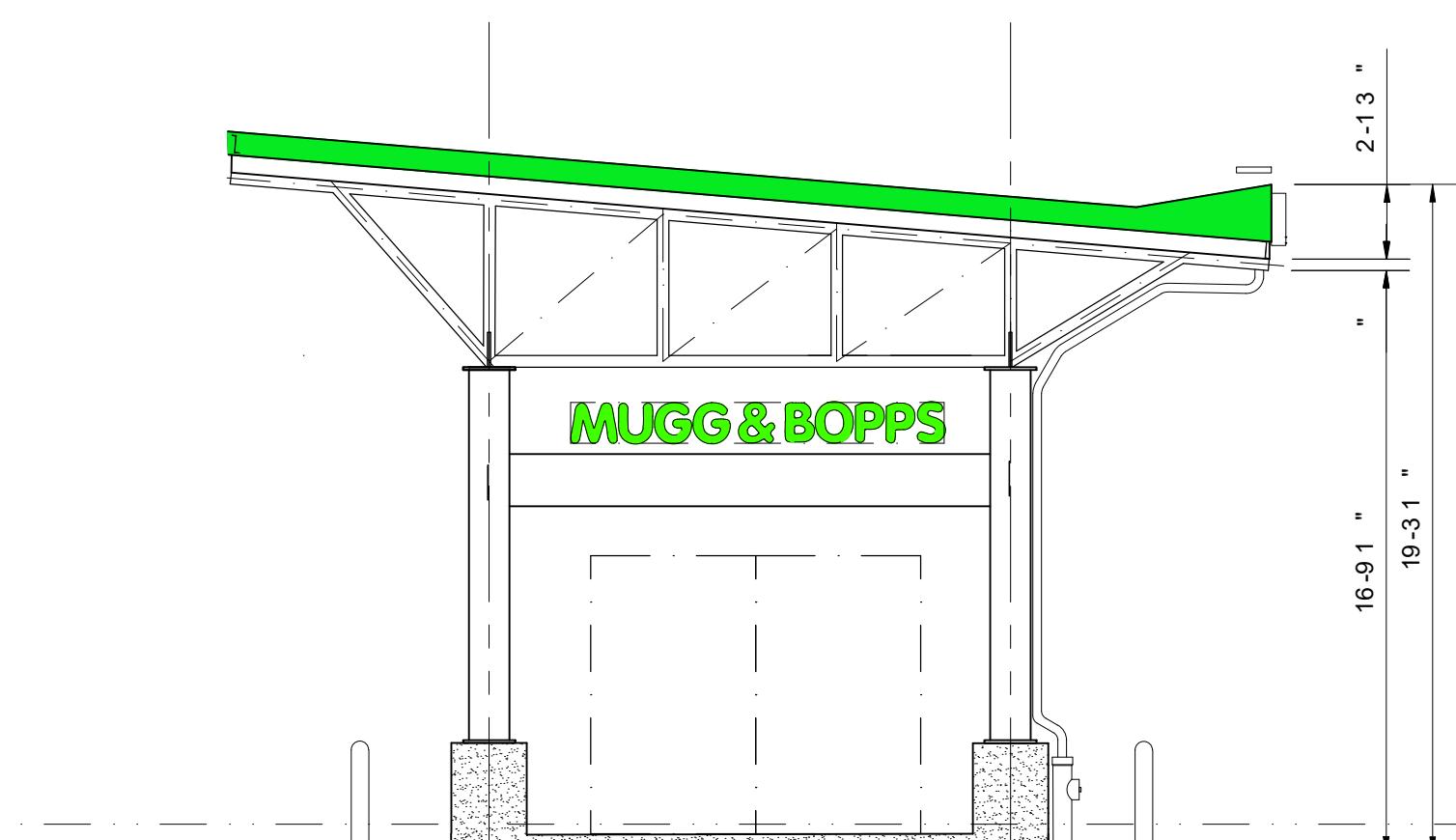
Checked By: FMR
Drawn By: FMR

Project No
250

Title:
GAS CANOPY PLAN
ELEVATIONS

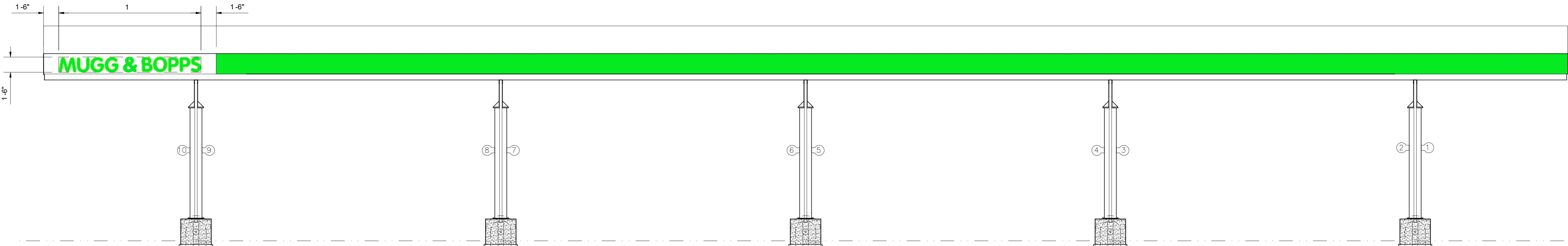
Sheet No

A-2 2



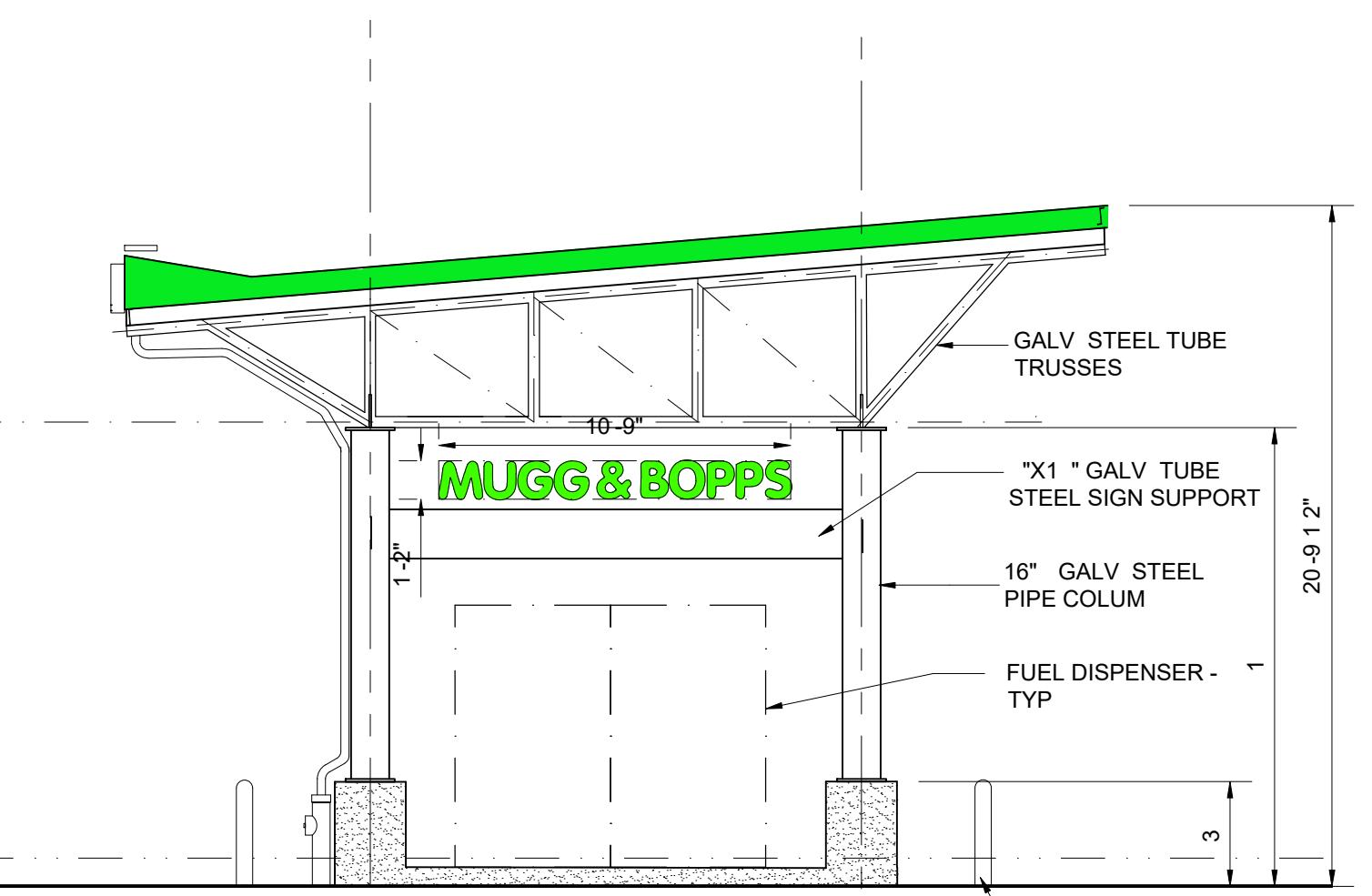
GAS CANOPY NORTH ELEVATION

SCALE: 3 16" = 1'-0"



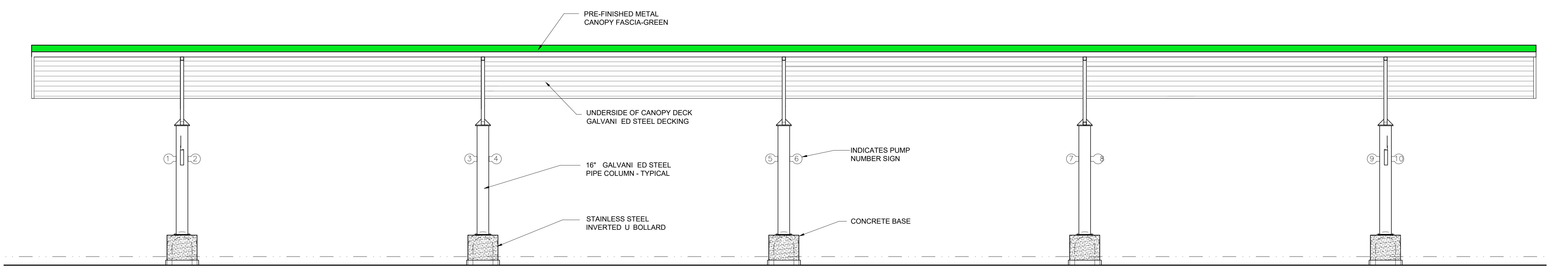
GAS CANOPY WEST ELEVATION

SCALE: 3 16" = 1'-0"



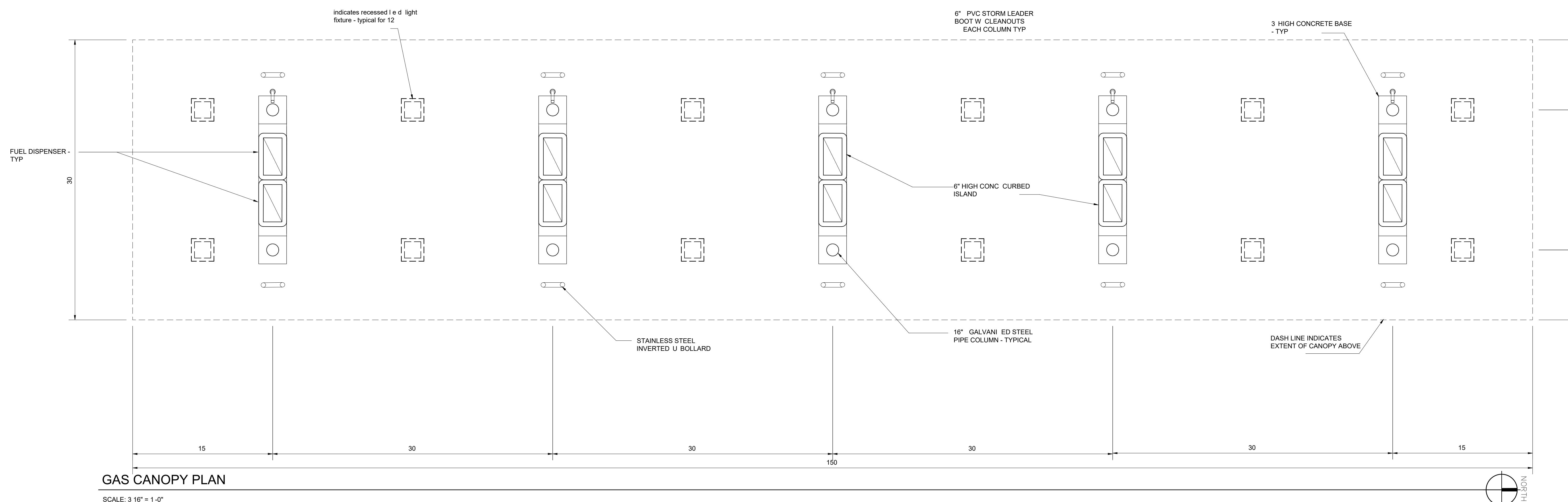
GAS CANOPY SOUTH ELEVATION

SCALE: 3 16" = 1'-0"



GAS CANOPY EAST ELEVATION

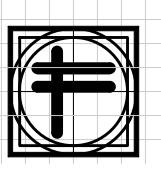
SCALE: 3 16" = 1'-0"



GAS CANOPY PLAN

SCALE: 3 16" = 1'-0"

NORTH



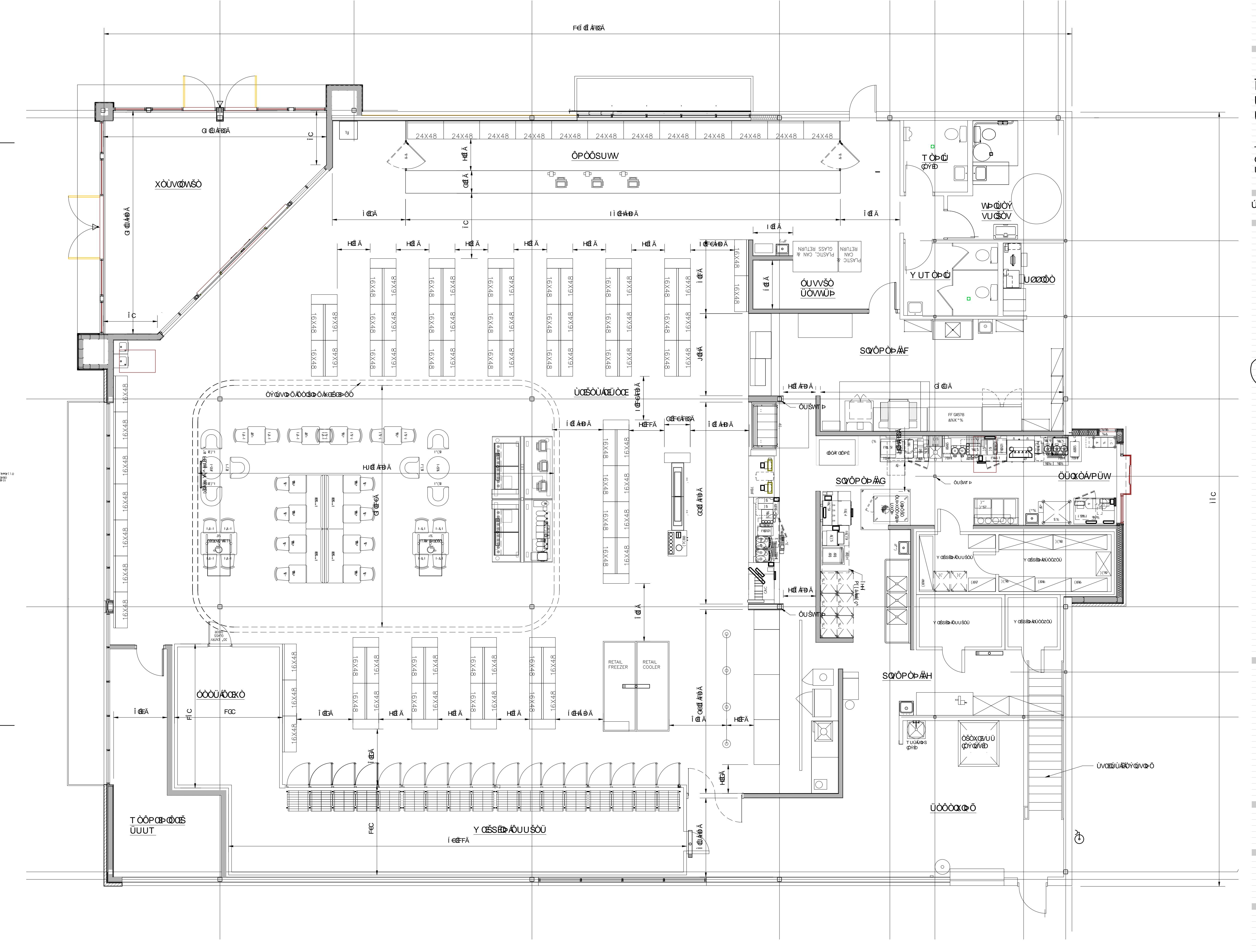
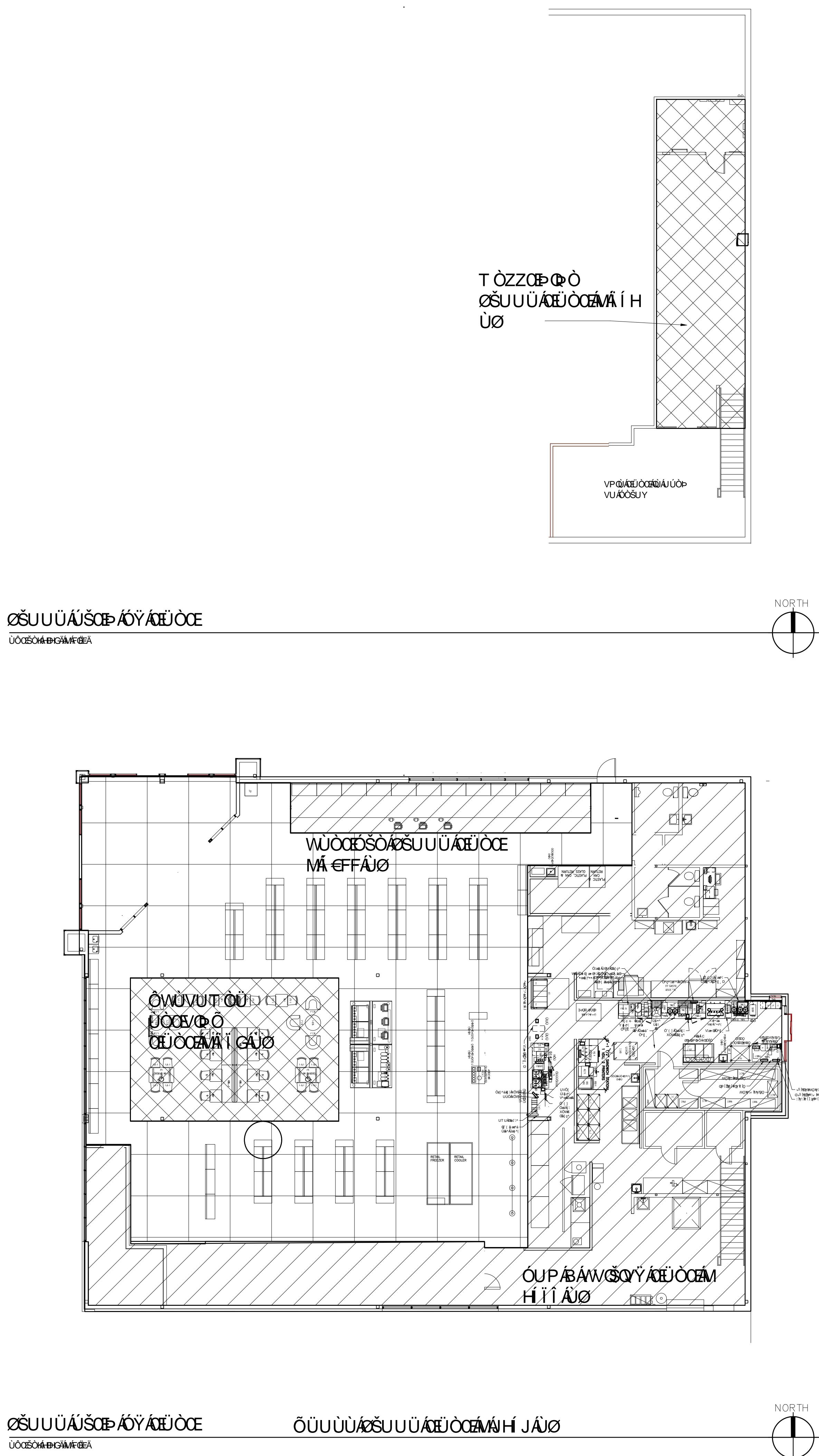
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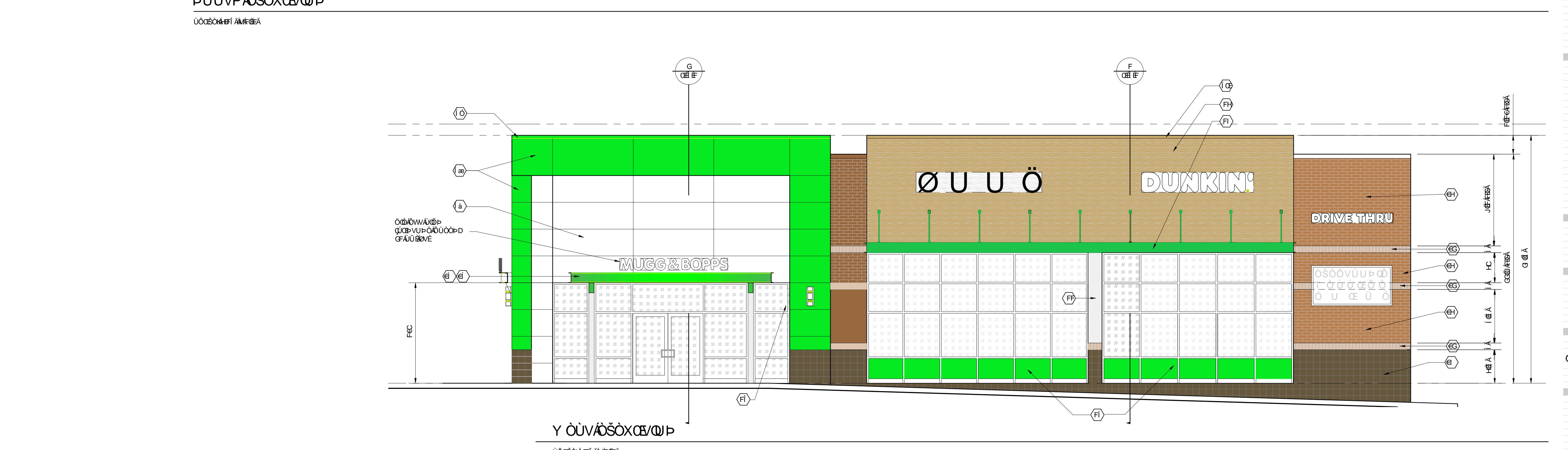
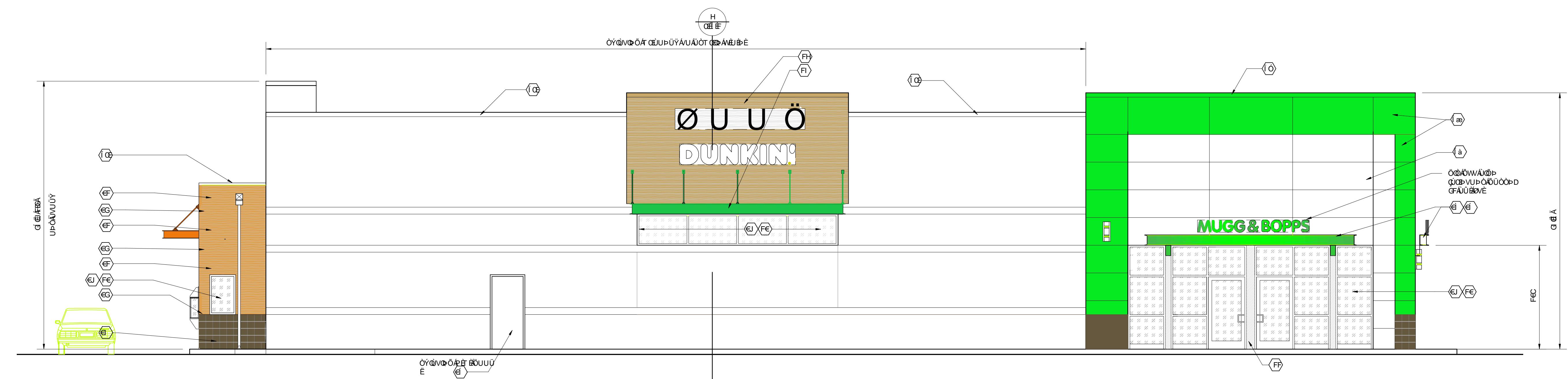
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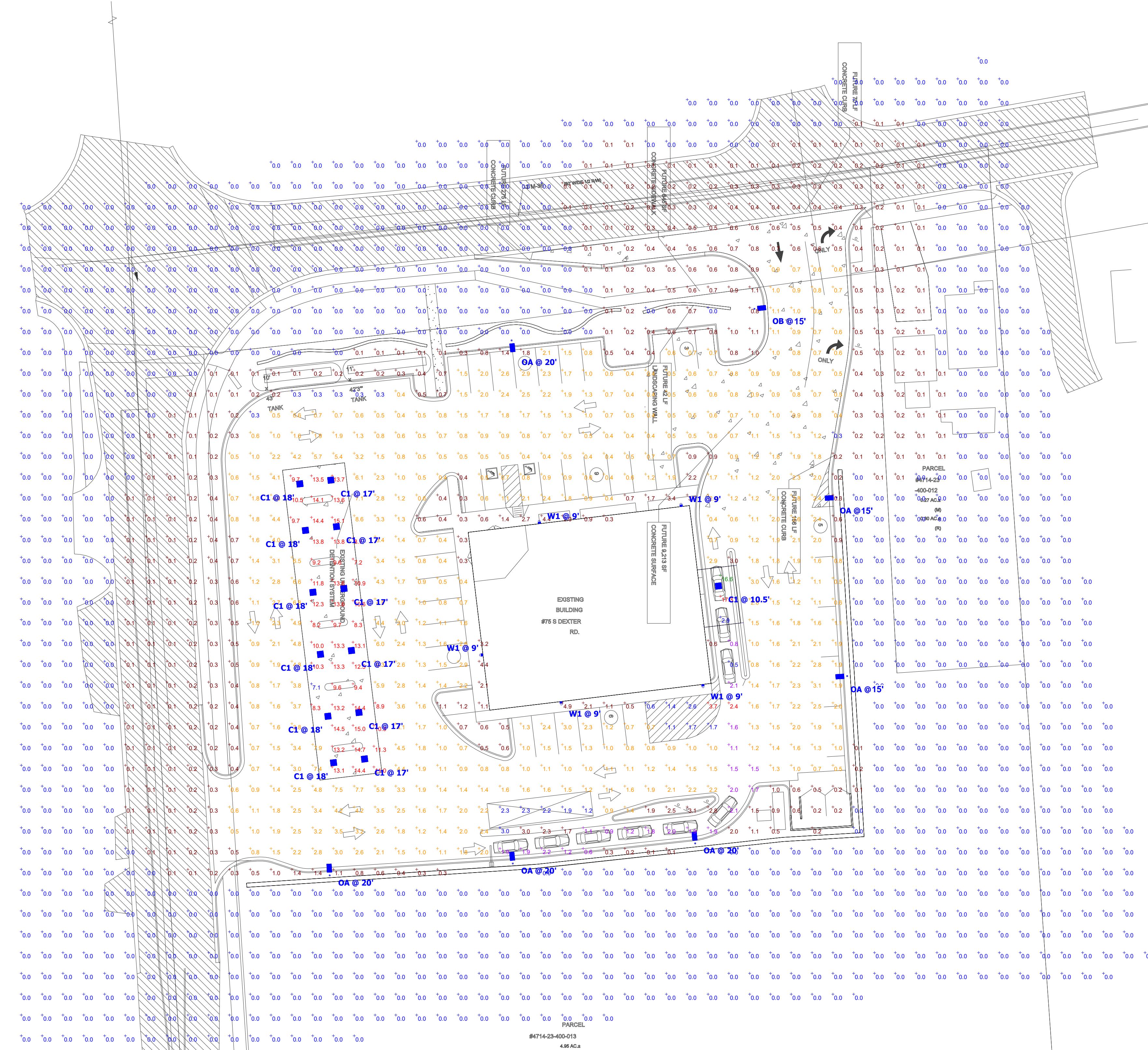
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A circular seal for a Michigan licensed architect. The outer ring contains the text "STATE OF MICHIGAN" at the top and "LICENSED ARCHITECT" at the bottom, both in a stylized font. The inner circle contains "F. MATTHEW" at the top, "RAY" in the center, and "No." below it. At the bottom of the inner circle is the number "1301033322". The entire seal is framed by a decorative border of small stars and a wavy line pattern.

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Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
DRIVE-THRU CANOPY	+	12.3 fc	17.3 fc	2.9 fc	6.0:1	4.2:1	0.7:1
DRIVE-THRU LINE	+	1.6 fc	2.4 fc	0.5 fc	4.8:1	3.2:1	0.7:1
FUEL CANOPY	+	11.7 fc	15.1 fc	7.1 fc	2.1:1	1.6:1	0.8:1
LOADING/UNLOADING	+	2.0 fc	3.7 fc	0.6 fc	6.2:1	3.3:1	0.5:1
PARKING AND DRIVE LANES	+	1.7 fc	8.9 fc	0.3 fc	29.7:1	5.7:1	0.2:1
Calc Zone #3	+	0.5 fc	8.9 fc	0.0 fc	N/A	N/A	0.1:1

Schedule								
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp
						LLF	Wattage	Mounting Height
	C1	13	Lithonia Lighting	SCN LED AL02-10L SWW2-40K PFL MVOLT DWHXD M3	SCN LED AL02-10L SWW2-40K PFL MVOLT DWHXD M3	LED	1	8785
	OA	6	Lithonia Lighting	DSXO LED P4 40K 80CRI BLC3	D-Series Size 0 Area Luminaire P4 Performance Package 4000K CCT 80 CRI Type 3 Extreme Backlight Control	LED	1	7428
	OB	1	Lithonia Lighting	DSXO LED P4 40K 80CRI TSW	D-Series Size 0 Area Luminaire P4 Performance Package 4000K CCT 80 CRI Type 5 Wide	LED	1	10837
	W1	5	Uthonia Lighting	WDEG2 LED P3 40K 80CRI T4M	WDEG2 LED WITH P3 - PERFORMANCE PACKAGE, 4000K, 80CRI, TYPE 4 MEDIUM OPTIC	LED	1	3147

Ordering Note

FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Drawing Note

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

General Note

1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.



Plan View
Scale - 1" = 30ft





SCNY LED
LED Canopy/Soffit Luminaire

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to view all interactive elements.

Introduction
The all-new SCNY LED (Soffit Canopy) luminaire is designed to provide exceptional energy savings and versatility in multiple lumen packages. Features such as Adjustable Lumen Output (ALO1) and replaceable decorative cover make SCNY LED suitable for a wide variety of applications.

With over 150 LPW the SCNY LED delivers up to 80% in energy savings when replacing metal halide luminaires. With over 100,000-hour expectancy (12+ years of 24/7 continuous operation), the SCNY LED luminaire provides significant maintenance savings over traditional luminaires.

Specifications

SCNY LED	15.2"
Width:	5.6"
Height:	15.2"
Length:	10.9lbs

Ordering Information

EXAMPLE: SCNY LED ALO1 40K FPCL MVOLT DWHXD M3

SCNY LED	Series	Package	Color Temperature	Lens	Voltage	Finish	Packaging
SCNY LED	ALO1	13,000/10,000/7500 Lumens ¹	30K 3000K	FPCL: Flat Polycarbonate, Clear Lens	MVOLT: 120-277V	DWHXD: White	M3: Master Pack of 3
	P1	4000 Lumens	40K 4000K	FPCL: Flat Polycarbonate, Frosted Lens	RVOLT: 247-480V		
	50K 5000K	DPCL: Drop Polycarbonate, Clear Lens					
	PFL: Polycarbonate, Frosted Lens ²						

Accessories
Ordered and shipped separately

PCNY1 DWHXD P2: White Decorative Trim (12 Pack) (standard w/fixture)
PCNY1 DWHXD P2: Black Decorative Trim (12 Pack)
DPCY1 36: 16.4 x 16.4 mounting plate (if needed), pack of 6

FEATURES & SPECIFICATIONS

INTENDED USE
The SCNY LED is a great choice for both new and retrofit canopy applications. High efficacy, clear lens, and a sleek design make it suitable for a wide range of applications: convenience store entrances, banks, and pharmacy drive through canopies.

CONSTRUCTION
Die-cast aluminum housing for the light engine is optimized for thermal management without the need for external fins. The east location rated LED driver box is separated from the heat-generating light engine and raised above the canopy surface to promote long life and prevent water entry. The light engine is designed for high efficiency and long life in a sealed, moisture- and environmental-contaminant-free and is suitable for down-dose application.

ELECTRICAL
Light engine consists of high-efficiency 70CRI LEDs mounted to metal-core circuit boards to minimize heat dissipation and promote long life (up to 177,000,000 hours at 25°C). The electronic driver has a power factor of 0.95 and a THD of 10%. A metal driver box is included, which meets a minimum Category 1C over operation (per ANSI/IEEE C62.41.2). The fixture is supplied with a 40/10 driver and is dimmable by 0.10% control.

INSTALLATION
With its light weight, the product can be installed by one person in a 12" or 16" deep panel. Requires only 2.5" hole in the deck panel for new installations but can accommodate up to a 4" hole for retrofit applications. The fixture is designed to be surface mounted. The snap-in-decorative trim covers all mounting hardware. The Adjustable Lumen Output (ALO) module in the driver box allows the controller to customize the lumens (3 levels) based on application needs.

NOTES
1. PFL is not available with ALO1.
2. See ordering tree for details.

LITHONIA
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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SCNY LED
Rev. 01/25/24



D-Series Size 0
LED Area Luminaire

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to view all interactive elements.

Introduction
The modern styling of the D-Series features a refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefit of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power demands. Series options including pole symmetry aid in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Specifications

EPa:	0.44 ft ² (0.04 m ²)
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED	Series	LEDs	Color Temperature ¹	Color Rendering Index ²	Distribution	Voltage	Mounting
DSX0 LED	Forward optics	(this section 70CR only)	70KRI		AFR: Automotive front	MVOLT: 120V-277V ³	Spaced included
	P1	30K 3000K			T5M: Type V medium	SPX: Square pole mounting (8) drilling, 3.5" min. 50" pole	
	P2	40K 4000K			T1S: Type V low glare	SPY: Square pole mounting (8) drilling, 3.5" min. 50" pole	
	P3	50K 5000K			T2M: Type II medium	SPZ: Square pole mounting (8) drilling, 3.5" min. 50" pole	
	P4				T3M: Type II medium	SPR: Round pole mounting (8) drilling, 3" min. 80" pole ⁴	
	Rotated optics				T4LG: Type IV low glare ⁵	SPRAS: Round pole mounting (8) drilling, 3" min. 80" pole ⁴	
	P10 ⁶	27K 2700K			T4M: Type IV medium	SPRBN: Square pole mounting (8) drilling, 3" min. 50" pole	
	P12 ⁶	30K 3000K			T4LG: Type IV low glare ⁵	SPRBN: Square pole mounting (8) drilling, 3" min. 50" pole	
	P13 ⁶	35K 3500K			IFPM: Forward throw	WBA: Wall bracket ⁷	
	P14 ⁶	40K 4000K			RCO: Right corner cutoff ⁸	MA: Mast arm adapter (mounts on 2 3/8" OD horizontal bents)	
		50K 5000K					

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED	Series	LEDs	Color Temperature ¹	Color Rendering Index ²	Distribution	Voltage	Mounting
DSX0 LED	Forward optics	(this section 70CR only)	70KRI		AFR: Automotive front	MVOLT: 120V-277V ³	Spaced included
	P1	30K 3000K			T5M: Type V medium	SPX: Square pole mounting (8) drilling, 3.5" min. 50" pole	
	P2	40K 4000K			T1S: Type V low glare	SPY: Square pole mounting (8) drilling, 3.5" min. 50" pole	
	P3	50K 5000K			T2M: Type II medium	SPZ: Square pole mounting (8) drilling, 3.5" min. 50" pole	
	P4				T3M: Type II medium	SPR: Round pole mounting (8) drilling, 3" min. 80" pole ⁴	
	Rotated optics				T4LG: Type IV low glare ⁵	SPRAS: Round pole mounting (8) drilling, 3" min. 80" pole ⁴	
	P10 ⁶	27K 2700K			T4M: Type IV medium	SPRBN: Square pole mounting (8) drilling, 3" min. 50" pole	
	P12 ⁶	30K 3000K			T4LG: Type IV low glare ⁵	SPRBN: Square pole mounting (8) drilling, 3" min. 50" pole	
	P13 ⁶	35K 3500K			IFPM: Forward throw	WBA: Wall bracket ⁷	
	P14 ⁶	40K 4000K			RCO: Right corner cutoff ⁸	MA: Mast arm adapter (mounts on 2 3/8" OD horizontal bents)	
		50K 5000K					

Control options

Shipped installed

- NLTAIR2 PIRHN: Light 16 pin 2, mounted with 3-wire motor + ambient sensor, 8-40" mounting height, ambient sensor sealed at 26°, 30°, 35°, 40°, 45°, 50°, 55°, 60°, 65°, 70°, 75°, 80°, 85°, 90°, 95°, 100°, 105°, 110°, 115°, 120°, 125°, 130°, 135°, 140°, 145°, 150°, 155°, 160°, 165°, 170°, 175°, 180°, 185°, 190°, 195°, 200°, 205°, 210°, 215°, 220°, 225°, 230°, 235°, 240°, 245°, 250°, 255°, 260°, 265°, 270°, 275°, 280°, 285°, 290°, 295°, 300°, 305°, 310°, 315°, 320°, 325°, 330°, 335°, 340°, 345°, 350°, 355°, 360°, 365°, 370°, 375°, 380°, 385°, 390°, 395°, 400°, 405°, 410°, 415°, 420°, 425°, 430°, 435°, 440°, 445°, 450°, 455°, 460°, 465°, 470°, 475°, 480°, 485°, 490°, 495°, 500°, 505°, 510°, 515°, 520°, 525°, 530°, 535°, 540°, 545°, 550°, 555°, 560°, 565°, 570°, 575°, 580°, 585°, 590°, 595°, 600°, 605°, 610°, 615°, 620°, 625°, 630°, 635°, 640°, 645°, 650°, 655°, 660°, 665°, 670°, 675°, 680°, 685°, 690°, 695°, 700°, 705°, 710°, 715°, 720°, 725°, 730°, 735°, 740°, 745°, 750°, 755°, 760°, 765°, 770°, 775°, 780°, 785°, 790°, 795°, 800°, 805°, 810°, 815°, 820°, 825°, 830°, 835°, 840°, 845°, 850°, 855°, 860°, 865°, 870°, 875°, 880°, 885°, 890°, 895°, 900°, 905°, 910°, 915°, 920°, 925°, 930°, 935°, 940°, 945°, 950°, 955°, 960°, 965°, 970°, 975°, 980°, 985°, 990°, 995°, 1000°, 1005°, 1010°, 1015°, 1020°, 1025°, 1030°, 1035°, 1040°, 1045°, 1050°, 1055°, 1060°, 1065°, 1070°, 1075°, 1080°, 1085°, 1090°, 1095°, 1100°, 1105°, 1110°, 1115°, 1120°, 1125°, 1130°, 1135°, 1140°, 1145°, 1150°, 1155°, 1160°, 1165°, 1170°, 1175°, 1180°, 1185°, 1190°, 1195°, 1200°, 1205°, 1210°, 1215°, 1220°, 1225°, 1230°, 1235°, 1240°, 1245°, 1250°, 1255°, 1260°, 1265°, 1270°, 1275°, 1280°, 1285°, 1290°, 1295°, 1300°, 1305°, 1310°, 1315°, 1320°, 1325°, 1330°, 1335°, 1340°, 1345°, 1350°, 1355°, 1360°, 1365°, 1370°, 1375°, 1380°, 1385°, 1390°, 1395°, 1400°, 1405°, 1410°, 1415°, 1420°, 1425°, 1430°, 1435°, 1440°, 1445°, 1450°, 1455°, 1460°, 1465°, 1470°, 1475°, 1480°, 1485°, 1490°, 1495°, 1500°, 1505°, 1510°, 1515°, 1520°, 1525°, 1530°, 1535°, 1540°, 1545°, 1550°, 1555°, 1560°, 1565°, 1570°, 1575°, 1580°, 1585°, 1590°, 1595°, 1600°, 1605°, 1610°, 1615°, 1620°, 1625°, 1630°, 1635°, 1640°, 1645°, 1650°, 1655°, 1660°, 1665°, 1670°, 1675°, 1680°, 1685°, 1690°, 1695°, 1700°, 1705°, 1710°, 1715°, 1720°, 1725°, 1730°, 1735°, 1740°, 1745°, 1750°, 1755°, 1760°, 1765°, 1770°, 1775°, 1780°, 1785°, 1790°, 1795°, 1800°, 1805°, 1810°, 1815°, 1820°, 1825°, 1830°, 1835°, 1840°, 1845°, 1850°, 1855°, 1860°, 1865°, 1870°, 1875°, 1880°, 1885°, 1890°, 1895°, 1900°, 1905°, 1910°, 1915°, 1920°, 1925°, 1930°, 1935°, 1940°, 1945°, 1950°, 1955°, 1960°, 1965°, 1970°, 1975°, 1980°, 1985°, 1990°, 1995°, 2000°, 2005°, 2010°, 2015°, 2020°, 2025°, 2030°, 2035°, 2040°, 2045°, 2050°, 2055°, 2060°, 2065°, 2070°, 2075°, 2080°, 2085°, 2090°, 2095°, 2100°, 2105°, 2110°, 2115°, 2120°, 2125°, 2130°, 2135°, 2140°, 2145°, 2150°, 2155°, 2160°, 2165°, 2170°, 2175°, 2180°, 2185°, 2190°, 2195°, 2200°, 2205°, 2210°, 2215°, 2220°, 2225°, 2230°, 2235°, 2240°, 2245°, 2250°, 2255°, 2260°, 2265°, 2270°, 2275°, 2280°, 2285°, 2290°, 2295°, 2300°, 2305°, 2310°, 2315°, 2320°, 2325°, 2330°, 2335°, 2340°, 2345°, 2350°, 2355°, 2360°, 2365°, 2370°, 2375°, 2380°, 2385°, 2390°, 2395°, 2400°, 2405°, 2410°, 2415°, 2420°, 2425°, 2430°, 2435°, 2440°, 2445°, 2450°, 2455°, 2460°, 2465°, 2470°, 2475°, 2480°, 2485°, 2490°, 2495°, 2500°, 2505°, 2510°, 2515°, 2520°, 2525°, 2530°, 2535°, 2540°, 2545°, 2550°, 2555°, 2560°, 2565°, 2570°, 2575°, 2580°, 2585°, 2590°, 2595°, 2600°, 2605°, 2610°, 2615°, 2620°, 2625°, 2630°, 2635°, 2640°, 2645°, 2650°, 2655°, 2660°, 2665°, 2670°, 2675°, 2680°, 2685°, 2690°, 2695°, 2700°, 2705°, 2710°, 2715°, 2720°, 2725°, 2730°, 2735°, 27