Revision Schedule		
Number	Description	Date

OZ
architects
531 N. Higgins Avenue
Missoula, Montana 59802
ph: 406.728.3013
www.oza.com

NORTHGATE SIGNAGE

at

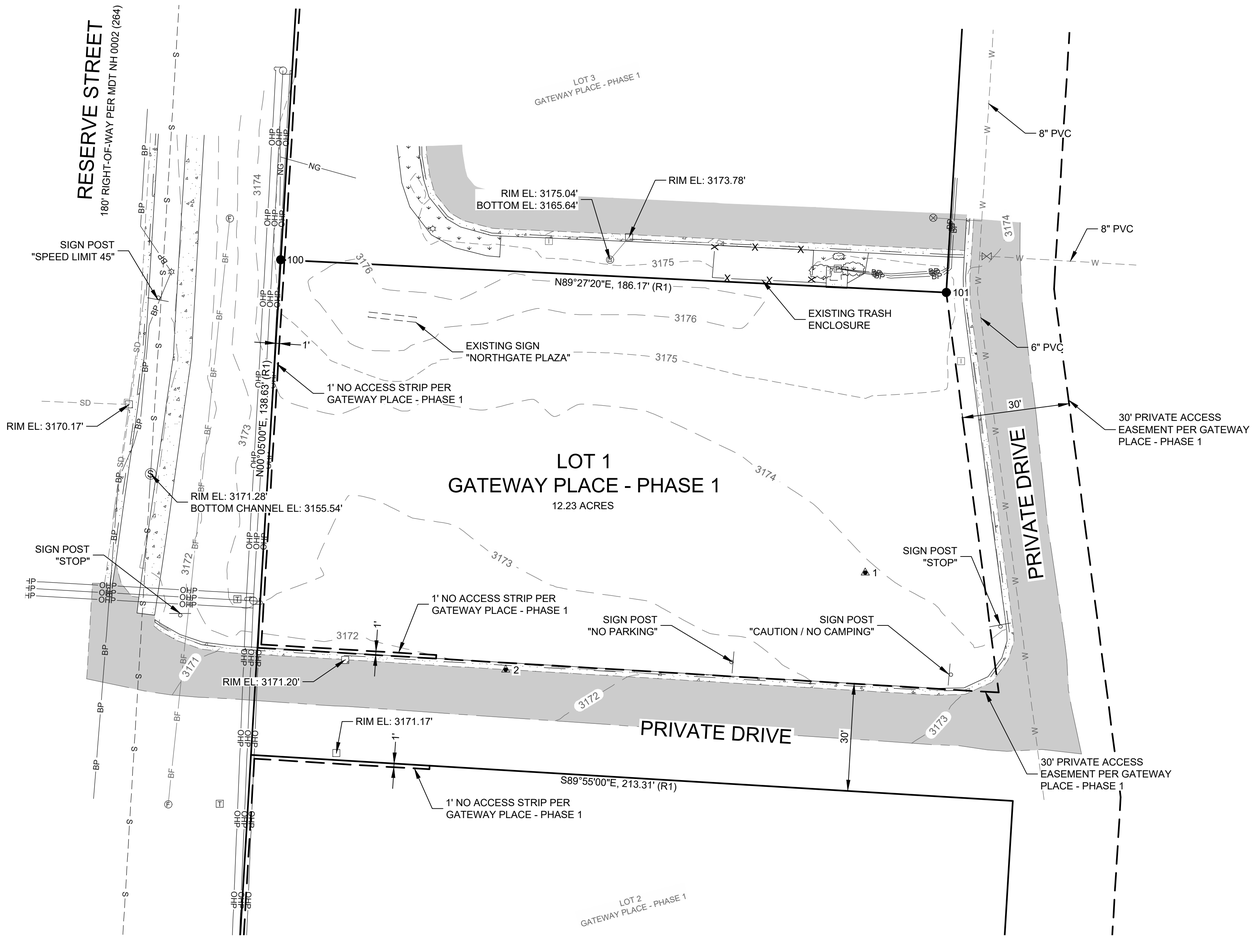
NORHTGATE SHOPPING CENTER

REVIEWER STAMPS

Date: 2026.04.10 Project No: 25.041

G-000

4/13/2026 8:19:15 AM



VICINITY MAP
(NOT TO SCALE)

LEGEND

EXISTING CONCRETE	EXISTING CURB STOP
EXISTING ASPHALT ROAD	EXISTING WATER VALVE
EXISTING CURB AND GUTTER	EXISTING IRRIGATION CONTROL VALVE
EXISTING LANDSCAPING	EXISTING DRY WELL
EXISTING PARCEL BOUNDARY	EXISTING DECIDUOUS BUSH
BP BP EXISTING BURIED POWER	EXISTING LIGHT POLE
BF BF EXISTING BURIED FIBER	EXISTING ELECTRICAL TRANSFORMER
OHP EXISTING OVERHEAD POWER	EXISTING POWER POLE
EXISTING PLANTER EDGE	EXISTING SIGN POST
NG EXISTING NATURAL GAS	EXISTING STORM DRAIN INLET
S EXISTING SANITARY SEWER MAIN	EXISTING BURIED FIBER VAULT
W EXISTING WATER MAIN	EXISTING TELEPHONE PEDESTAL
SD EXISTING STORM DRAIN PIPE	FOUND MONUMENT
EXISTING SANITARY SEWER MANHOLE	EXISTING CONTROL POINT
	(R1) RECORD - GATEWAY PLACE - PHASE 1 (McCARTHY, 1993)

CONTROL POINT TABLE

POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	RPC	20000.00	40000.00	3173.997
2	PK	19972.86	39899.51	3171.686
100	RB 5/8	20087.46	39836.61	3175.139
101	YPC MKD WGM GROUP MCCARTHY 4468S	20078.27	40022.62	3175.256

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SCALE IN FEET

SURVEYORS NOTES:

1. PROJECT LOCATION LIES IN THE NORTHWEST ONE-QUARTER (NW1/4) OF SECTION 17, TOWNSHIP 13N, RANGE 19W, P.M.M., MISSOULA COUNTY, MT.
2. BURIED UTILITIES ARE SHOWN AS INDICATED BY FIELD LOCATES AND RECORD MAPS FURNISHED AND VERIFIED WHERE POSSIBLE BY FEATURES LOCATED IN THE FIELD. MORRISON-MAIERLE ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THOSE RECORDS. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY.
3. FIELD SURVEY COMPLETED BY MORRISON-MAIERLE ON 10/14/2025.

BASIS OF BEARING

BEARINGS ARE STATE PLANE GRID, DERIVED FROM GPS OBSERVATIONS WITH SURVEY-GRADE RECEIVERS AND REFERENCED TO THE MONTANA COORDINATE SYSTEM, SINGLE ZONE, NAD 83 (OPUS). COORDINATES AND DISTANCES ARE TRANSFORMED TO GROUND AT CONTROL POINT # 1. HORIZONTAL UNITS ARE INTERNATIONAL FEET. COMBINED SCALE FACTOR FOR THIS PROJECT IS 0.999245672

VERTICAL DATUM

ELEVATIONS ARE NAVD88, BASED ON OPUS AND COMPUTED USING GEOID 18.

PRELIMINARY
04/10/2026

MONTANA
WYATT E. HATCH
No. 72236PE
LICENSED PROFESSIONAL ENGINEER

Revision Schedule		
Number	Description	Date

Morrison Maierle
engineers ▪ surveyors ▪ planners ▪ scientists
1055 Mount Avenue, Missoula, MT 59801
406.542.8880 ● www.m-m.net

OZ architects
531 N. Higgins Avenue
Missoula, Montana 59802
ph: 406.728.3013
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WA CORP NORTHGATE SIGN RELOCATION

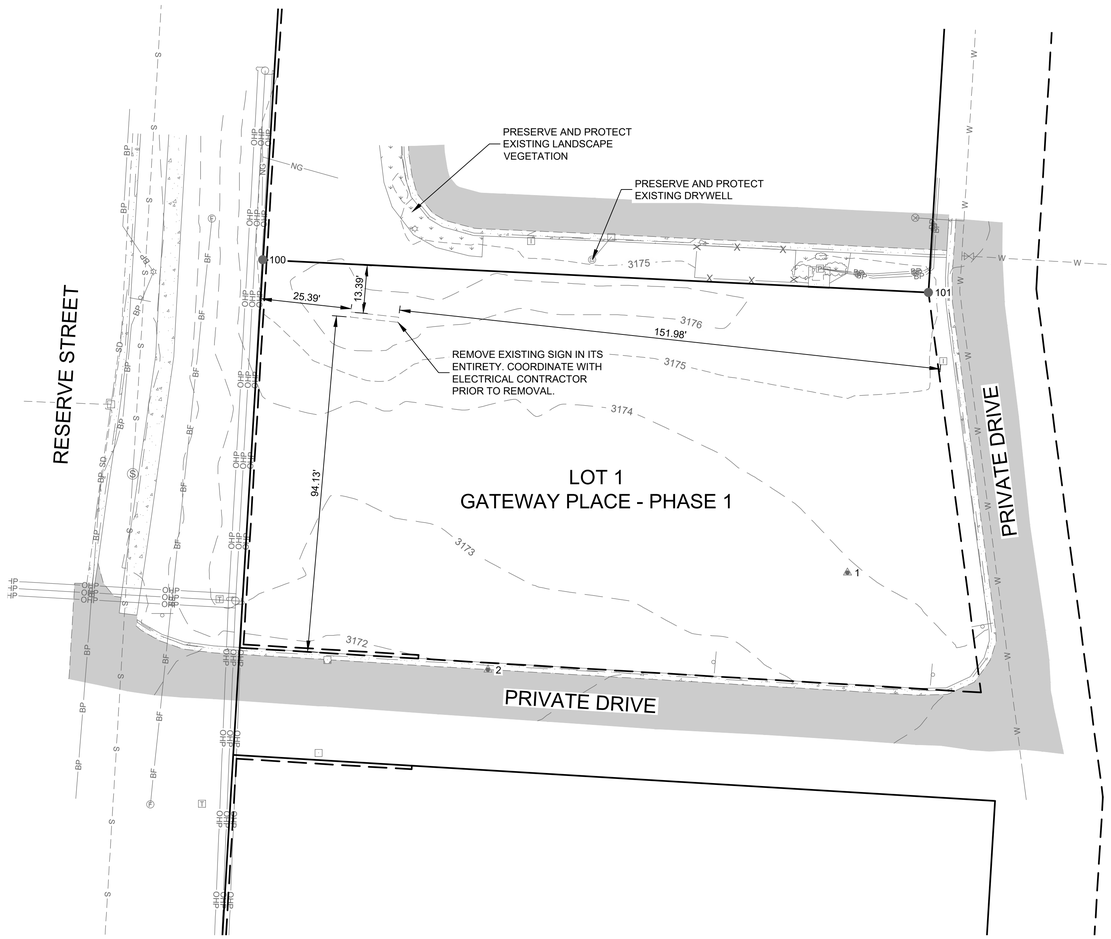
at

3201 PALMER ST
MISSOULA, MT 59808

EXISTING SITE PLAN

Date: 04/10/2026 Project No: 3875.061

C1.0



GENERAL DEMOLITION NOTES:

1. DEMOLITION SHALL NOT PROCEED UNTIL EROSION & SEDIMENTATION CONTROL MEASURES HAVE BEEN INSTALLED.
2. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL MATERIALS IN ACCORDANCE WITH CITY OF MISSOULA STANDARDS AND MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS.
3. ALL DISTURBANCE OF EXISTING UTILITIES SHALL BE COORDINATED WITH OWNING UTILITY COMPANY PRIOR TO DISTURBANCE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO CONCRETE SIDEWALK, CURB & GUTTER, GRAVEL, AND ASPHALT THAT IS DAMAGED DURING CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING AND PROTECTING EXISTING UTILITIES TO REMAIN AND WITHIN THE RIGHT OF WAY NOT INDICATED FOR REMOVAL OR RELOCATION. ANY DAMAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RECONCILE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING UTILITY LOCATES PRIOR TO ANY EXCAVATION AND SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS AS SOON AS POSSIBLE.
7. MAINTAIN ALL SERVICES TO NEARBY BUILDINGS AT ALL TIMES, COORDINATE WITH OWNING UTILITY COMPANIES PRIOR TO CONSTRUCTION.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING AND PROTECTING EXISTING IRRIGATION LINES AND APPURTENANCES. ANY DAMAGE SHALL BE THE RESPONSIBILITY OF CONTRACTOR TO RECONCILE.
9. CONTRACTOR SHALL BACKFILL AND COMPACT HOLES CREATED FROM REMOVAL OF SIGN, FOUNDATION, AND UTILITIES WITH PIT RUN MATERIAL.
10. EXISTING SIGN FOUNDATION SHALL BE REMOVED IN ITS ENTIRETY, OR TO A MINIMUM DEPTH OF 4 FEET, WHICHEVER IS LESS.

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WA CORP NORTHGATE SIGN RELOCATION

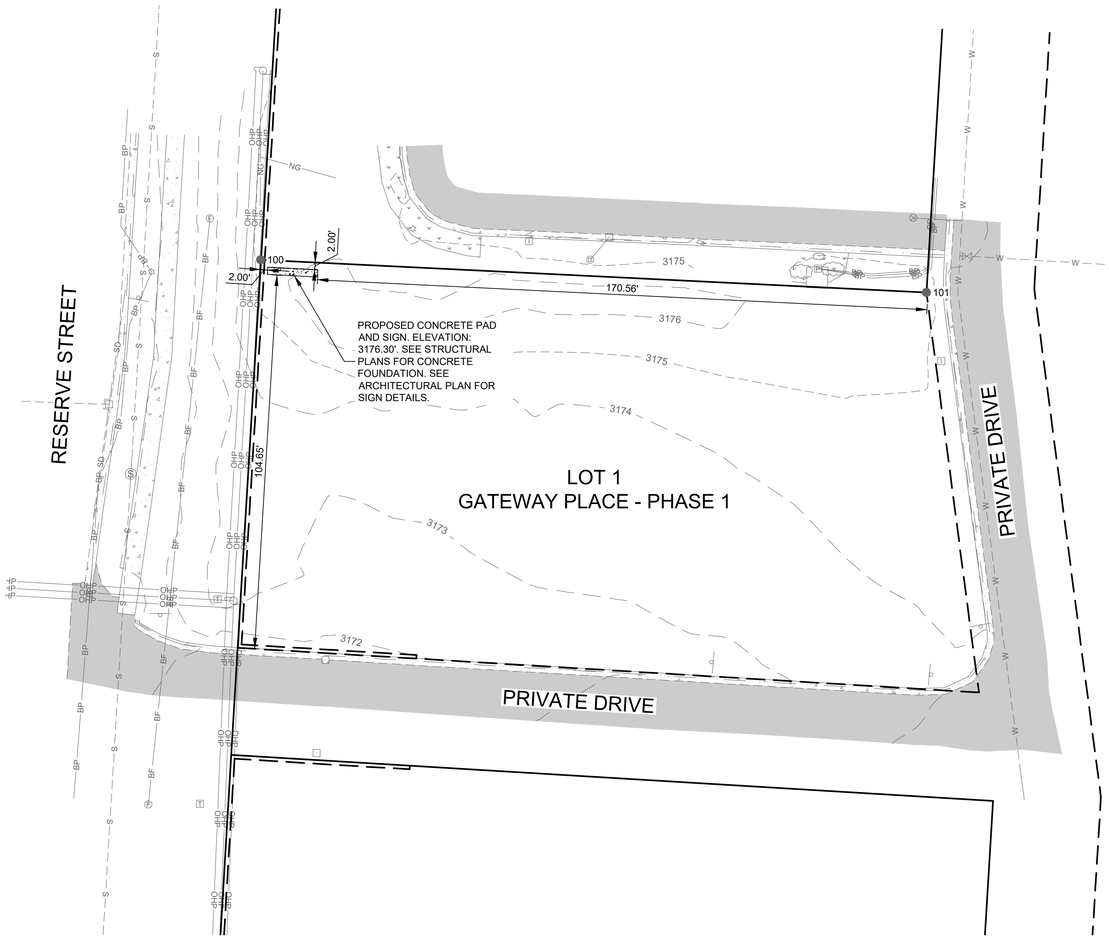
at

3201 PALMER ST MISSOULA, MT 59808

DEMOLITION PLAN

Date: 04/10/2026 Project No: 3875.061

C2.0



GENERAL NOTES:

1. IN GENERAL EXISTING STRUCTURES AND FACILITIES ARE NOTED AS "EXISTING" AND ARE SHOWN IN LIGHT LINE WEIGHTS OR AS SCREENED BACKGROUND. NEW STRUCTURES OR FACILITIES ARE SHOWN IN HEAVY LINE WEIGHTS.
2. UTILITY LOCATIONS AND EFFECTS ON WORK ARE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL CALL FOR UNDERGROUND UTILITY LOCATES PRIOR TO CONSTRUCTION ACTIVITIES. PHONE # 800-551-8344.
3. THE LOCATION, DEPTH, AND SIZE OF EXISTING UTILITIES SHOWN ON THESE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTENCE. LOCATION, DEPTH, SIZE, LINE AND GRADE OF EXISTING UTILITIES CONNECTIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING FACILITIES DUE TO FAILURE TO LOCATE OR PROVIDE PROPER PROTECTION WHEN LOCATION IS KNOWN.
4. THE CONTRACTOR SHALL MAINTAIN SERVICE OF ALL EXISTING UTILITIES. IF SAID SERVICE IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY REPAIR THE DAMAGE AT THE CONTRACTORS EXPENSE.
5. ALL IMPROVEMENTS ON THIS PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH CITY OF MISSOULA PUBLIC WORKS STANDARDS, THE MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS 7TH EDITION DATED APRIL 2021 (MPWSS), THESE PLANS, AND THE PROJECT SPECIFICATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS REQUIRED FOR CONSTRUCTION AND COMPLYING WITH ALL THE TERMS OF THE PERMITS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
7. ANY CHANGES IN PUBLIC RIGHT-OF-WAY SHALL REQUIRE APPROVAL FROM THE CITY OF MISSOULA AND THE MONTANA DEPARTMENT OF TRANSPORTATION (MDT), AS APPLICABLE.
8. LANDSCAPE PLAN BY OTHERS, SEE LANDSCAPE PLANS.

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND ARE TO BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO COMMENCEMENT OR CONTINUATION OF CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (OSHA) SAFETY STANDARDS. IF REQUESTED BY THE INSPECTOR, THE CONTRACTOR SHALL PROVIDE PROOF OF A PERMIT FROM SAID DIVISION.
3. THE CONTRACTOR'S OPERATIONS SHALL BE CONFINED WITHIN THE PROJECT LIMITS. MATERIALS AND EQUIPMENT SHALL BE STORED ON THE PROJECT SITE WHERE APPROVED BY THE OWNER. IT SHALL BE UNDERSTOOD THAT THE RESPONSIBILITY FOR PROTECTION AND SAFEKEEPING OF EQUIPMENT AND MATERIALS ON OR NEAR THE SITE WILL BE ENTIRELY THAT OF THE CONTRACTOR AND THAT NO CLAIM SHALL BE MADE AGAINST THE OWNER BY REASON OF ANY ACT OF EMPLOYEE OR TRESPASSER.
4. DURING CONSTRUCTION IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING BURIED AND OVERHEAD UTILITIES WHILE EXCAVATING NEAR THEM TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL MAINTAIN SERVICE OF ALL EXISTING UTILITIES. IF SAID SERVICE IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY REPAIR THE DAMAGE AT CONTRACTORS EXPENSE.
5. REFERENCE ALL SURVEY MONUMENTS, SECTION CORNERS, 1/4 CORNERS AND PROPERTY CORNERS PRIOR TO BEING DISTURBED BY CONSTRUCTION. ANY MONUMENTS AND CORNERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF MONTANA.
6. THE CONTRACTOR SHALL RESTORE ALL ROADWAY SURFACE TO EQUAL, OR BETTER CONDITION THAN EXISTED PRIOR TO EXCAVATION AND CONSTRUCTION.
7. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST AND EROSION DURING CONSTRUCTION AT THEIR EXPENSE. STREETS AND DISTURBED AREAS SHALL BE WATERED TO CONTROL DUST WHEN REQUIRED TO MEET SWPPP PERMIT REQUIREMENTS.
8. ALL DISTURBED AREAS SHALL BE RESTORED BY THE CONTRACTOR IN ACCORDANCE WITH THE LANDSCAPING PLANS. CONTRACTOR SHALL PROVIDE TOPSOIL AND SEED AS NEEDED TO PROPERLY PROVIDE SURFACE RESTORATION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY INSOFAR AS IT MAY BE AFFECTED BY THESE OPERATIONS. ALL COSTS FOR PROTECTING, REMOVING, AND RESTORING EXISTING IMPROVEMENTS SHALL BE BORN SOLELY BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL UTILIZE COMPACTION EQUIPMENT SUITABLE FOR THE SOIL TYPES AND AND SURFACE MATERIALS ENCOUNTERED ON THE PROJECT.
11. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL FOR DURATION OF THE PROJECT.
12. IF THE CONTRACTOR UTILIZES A COMPUTERIZED GRADE CONTROL SYSTEM WHEN GRADING/FINISHING SUBGRADE, SUB-BASE AND BASE COURSE, UTILITIES, ETC., THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING THEIR OWN MACHINE CONTROL FILES. THE CONTRACTOR MAY CREATE THIS DATA FROM SUPPLEMENTAL CAD INFORMATION AND THE INFORMATION PROVIDED ON THE PLANS IN THE CONTRACT DOCUMENTS. THE ENGINEER MAY PROVIDE THE CONTRACTOR SUPPLEMENTAL CAD INFORMATION IN THE FORM OF AN XML SURFACE AND/OR CAD LINE WORK (DERIVED FROM AUTOCAD CIVIL 3D). THE CONTRACTOR SHALL SIGN AN ELECTRONIC RELEASE.
13. SITE WORK SHALL NOT PROCEED UNTIL EROSION & SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
14. WHERE ASPHALT PATCHING IS REQUIRED, CONTRACTOR SHALL ENSURE GRAVEL SECTION IS CONSISTENT WITH EXISTING GRAVEL SECTION.

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SCALE IN FEET

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WA CORP NORTHGATE SIGN RELOCATION

at

3201 PALMER ST MISSOULA, MT 59808

SITE PLAN

Date: 04/10/2026 Project No: 3875.061

C3.0

GENERAL STRUCTURAL NOTES:

GENERAL:

1. THESE DRAWINGS HAVE BEEN PREPARED SOLELY FOR USE IN THE CONSTRUCTION OF NORTHGATE PLAZA SIGN AT THE LOCATION OF MISSOULA, MONTANA. POSSESSION OF THESE DRAWINGS DOES NOT GRANT A LICENSE TO CONSTRUCT OR FABRICATE THE WHOLE, OR PARTS OF THIS PROJECT IN OTHER LOCATIONS.

2. STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND SITE CIVIL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INCLUDING BUT NOT LIMITED TO DIMENSIONS, BLOCKOUTS, OPENINGS, SLEEVES, EMBEDDED ITEMS, ETC. INTO THEIR SHOP DRAWINGS AND WORK. NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES OR IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN OR NOTED.

3. DO NOT SCALE OR RESIZE THE DRAWINGS IN ANY MANNER. ANY ADJUSTMENTS TO THE SIZE OR SCALE OF THE DRAWINGS MAY RESULT IN MISINTERPRETATION OF CRITICAL DIMENSIONS AND DETAILS.

4. THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT INTENDED TO SHOW ALL DETAILS OF WORK. USE ENTIRE DETAIL SHEETS AND SPECIFIC DETAILS REFERENCED IN THE PLANS AS "TYPICAL" WHEREVER THEY APPLY. USE DETAILS ON ENTIRE SHEETS WITH "TYPICAL" IN THE NAME WHEREVER THEY APPLY.

5. THE REMOVAL/DEMOLITION NOTES/AREAS LISTED/SHOWN WITHIN ARE INTENDED TO CONVEY A GENERAL DESCRIPTION OF THE REMOVAL/DEMOLITION WORK THROUGHOUT THE PROJECT. HOWEVER, THESE NOTES/AREAS THAT ARE LISTED/SHOWN MAY NOT ADDRESS EVERY REMOVAL/DEMOLITION CONDITION NECESSARY FOR A SUCCESSFUL COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE TO REMOVE AND/OR DEMOLISH ANY EXISTING CONDITIONS REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE PROJECT/ERECTION OF ANY NEW CONDITION IDENTIFIED IN THESE DOCUMENTS REGARDLESS IF THEY ARE SHOWN OR NOT. CONTRACTOR SHALL REVIEW THE DRAWINGS AND DETERMINE EXACT EXTENTS OF REMOVAL/DEMOLITION REQUIRED TO SUCCESSFULLY COMPLETE THE PROJECT. IF AREAS OF NEW REMOVAL/DEMOLITION ARISE DURING CONSTRUCTION FROM THE CONTRACTOR NOT ANTICIPATING THE FULL REMOVAL/DEMOLITION REQUIRED TO COMPLETE THE PROJECT IT SHALL NOT BE A BASIS FOR ADJUSTMENT IN CONTRACT PRICE.

6. WHERE DESCREPANCIES OCCUR BETWEEN THE GENERAL STRUCTURAL NOTES, SPECIFICATIONS, PLANS/DETAILS OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL INCLUDE IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. CONFLICTS BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN CONTRACT PRICE.

7. THE CONTRACTOR SHALL FURNISH THE PRODUCTS SPECIFIED ON THE DRAWINGS. SUBSTITUTIONS WILL BE CONSIDERED ONLY IF THE CONTRACTOR PROVIDES DOCUMENTATION TO PROVE THE ALTERNATIVE EQUALS OR EXCEEDS THE STRUCTURAL PERFORMANCE CHARACTERISTICS OF THE SPECIFIED PRODUCT.

8. **CODE REQUIREMENTS:**
   A. ALL WORK SHALL BE IN STRICT COMPLIANCE WITH:
      a. 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF MONTANA (INTERNATIONAL BUILDING CODE, 2021 EDITION, EFFECTIVE JUNE 11, 2022)
      b. ALL OTHER STATE AND LOCAL BUILDING REQUIREMENTS THAT APPLY.

9. **TEMPORARY CONDITIONS:**
   A. THE STRUCTURAL DRAWINGS REPRESENT THE STRUCTURE IN THE FINAL CONSTRUCTED CONDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SUPPORT PRIOR TO COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS. MORRISON-MAIERLE HAS NOT BEEN RETAINED TO PROVIDE ANY SERVICES RELATED TO JOB SITE SAFETY PRECAUTIONS, OR TO REVIEW THE MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES FOR THE CONTRACTOR TO PERFORM WORK. UNLESS WE ARE SPECIFICALLY RETAINED AND COMPENSATED TO DO OTHERWISE, OUR WORK IS LIMITED TO THE FINAL DESIGN OF THE WORK DESCRIBED ON OUR DRAWINGS FOR THIS PROJECT.
   B. CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
   C. BASEMENT WALLS WHICH TIE TO UPPER SLABS SHALL NOT BE BACKFILLED UNTIL THE UPPER SLABS REACH FULL STRENGTH UNLESS ADEQUATE BRACING IS PROVIDED AT THE TOP OF THE WALL.

10. **EXISTING CONDITIONS:**
    A. EXISTING SITE DIMENSIONS AND ASSUMED CONDITIONS ARE TO BE VERIFIED IN THE FIELD AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ALL DISCREPANCIES WHICH REQUIRE A SIGNIFICANT CHANGE IN THE DESIGN AND/OR CONSTRUCTION FROM THAT SHOWN ON THE DRAWINGS.

11. **ASSUMED FUTURE CONSTRUCTION:**
    A. VERTICAL: NONE
    B. HORIZONTAL: NONE

DESIGN CRITERIA:

1. DESIGN IS BASED ON THE FOLLOWING LOADING FOR THE BASIS OF STRENGTH, PERFORMANCE, AND SERVICEABILITY OF THE STRUCTURE:

DESIGN CRITERIA		
SNOW LOAD CRITERIA (IBC 1603.1.3)		
GROUND SNOW LOAD	Pg = 10 PSF (REF. 2007 SNOW LOAD ANALYSIS FOR OREGON)	
WIND LOAD CRITERIA (IBC 1603.1.4)		
BASIC DESIGN WIND SPEED	V = 99 MPH	
RISK CATEGORY	I	
WIND EXPOSURE	C	
SEISMIC LOAD CRITERIA (IBC 1603.1.5)		
RISK CATEGORY	I	
SEISMIC IMPORTANCE FACTOR	Ie = 1.0	
MAPPED SPECTRAL RESPONSE	Ss = 0.426	S1 = 0.142
SITE CLASS	D (ASSUMED)	
DESIGN SPECTRAL RESPONSE	Sds = 0.414	Sd1 = 0.220
SEISMIC DESIGN CATEGORY	D	
GEOTECHNICAL CRITERIA (IBC 1603.1.6)		
DESIGN BASIS	PRESUMPTIVE VALUES OF SOILS (IBC 1806)	
DESIGN SOIL BEARING PRESSURE	1500 PSF (DL + LL)	2000 PSF (EL / WL INCLUDED)
RETAINING WALLS EQ. FLUID PRESSURE	35 PCF (ACTIVE)	55 PCF (AT REST)
PASSIVE BEARING PRESSURE	250 PSF/FT	
COEFFICIENT OF SLIDING FRICTION	0.3	

STRUCTURAL OBSERVATIONS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER OF RECORD A MINIMUM OF 24 HOURS IN ADVANCE OF LISTED OBSERVATION STAGES BELOW. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE OBSERVER. APPROVAL BY THE MUNICIPAL INSPECTOR DOES NOT PRECLUDE OBSERVATIONS BY THE ENGINEER OF RECORD AND APPROVAL BY THE ENGINEER OF RECORD DOES NOT PRECLUDE THE INSPECTION PROCESS BY THE MUNICIPAL INSPECTOR AND ANY OTHER CODE REQUIREMENTS FOR INSPECTION.

2. UPON COMPLETION OF WORK THE STRUCTURAL OBSERVER SHALL SUBMIT A REPORT TO THE OWNER AND BUILDING OFFICIAL ATTESTING TO THE VISUAL OBSERVATION MADE. THE REPORT SHALL IDENTIFY ANY REPORTED DEFICIENCIES WHICH HAVE NOT BEEN RESOLVED.

STRUCTURAL OBSERVATIONS	
STAGE	**COMMENTS**
AS REQUIRED TO ADDRESS STRUCTURAL ISSUES	

SUBMITTALS:

1. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION OF ALL STRUCTURAL PRODUCTS, INCLUDING THE FOLLOWING:

SUBMITTALS		
ITEM	**SUBMITTAL**	**DEFERRED SUBMITTAL**
CONCRETE MIX DESIGNS	X	
CONCRETE REINFORCEMENT	X	
STRUCTURAL STEEL	X	

2. SHOP DRAWINGS SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION FOR ALL STRUCTURAL PRODUCTS DELIVERED TO THE PROJECT. IF THE SHOP DRAWINGS DEVIATE FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND ACCEPTANCE OF THE STRUCTURAL ENGINEER OF RECORD.

3. FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DEVIATE FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

4. THE USE OF REPRODUCTIONS OR PHOTOCOPIES OF THE CONTRACT DOCUMENTS SHALL NOT BE PERMITTED. WHEN CAD OR REVIT FILES ARE PROVIDED TO THE CONTRACTOR OR SUBCONTRACTORS, IT IS THE RESPONSIBILITY OF THE DETAILERS TO REMOVE ALL INFORMATION NOT DIRECTLY RELEVANT TO THE CREATION OF THE PLACING DRAWINGS AS WELL AS ALL REFERENCES TO THE OUTSIDE SOURCE FILES.

5. SUBMITTAL DOCUMENTS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO BEING SUBMITTED TO THE ARCHITECT FOR REVIEW.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE REVIEWED SUBMITTAL TO THE BUILDING DEPARTMENT FOR DEFERRED PERMIT APPLICATION. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

EARTHWORK:

1. **GENERAL:**
   A. STABILITY OF CONSTRUCTION EXCAVATION AND WORKER SAFETY ARE THE RESPONSIBILITY OF THE CONTRACTOR. BASED UPON THE GEOTECHNICAL REPORT, TEMPORARY CONSTRUCTION EXCAVATIONS, ABOVE GROUNDWATER, TO BE PLANNED IN ACCORDANCE WITH OSHA PROVISIONS SHOULD ASSUME TYPE B MATERIAL FOR STIFF CLAY, AND TYPE C MATERIAL FOR SAND.

   B. DO NOT EXCAVATE CLOSER THAN 2:1 SLOPE BELOW FOOTING EXCAVATIONS.

2. **PRESCRIPTIVE EARTHWORK:**
   A. AT THE OWNERS DIRECTION, A GEOTECHNICAL INVESTIGATION HAS NOT BEEN PERFORMED. IF ANY OF THE FOLLOWING CONDITIONS ARE DISCOVERED DURING CONSTRUCTION AT THE BUILDING SITE, A GEOTECHNICAL INVESTIGATION SHALL BE COMMISSIONED IN ACCORDANCE WITH CHAPTER 18 OF THE INTERNATIONAL BUILDING CODE:
      a. QUESTIONABLE SOIL
      b. EXPANSIVE SOIL
      c. GROUND-WATER TABLE IS ABOVE OR WITHIN 5 FEET BELOW THE ELEVATION OF THE LOWEST FLOOR LEVEL WHERE SUCH FLOOR IS LOCATED BELOW THE FINISHED GROUND LEVEL ADJACENT TO THE FOUNDATION.
      d. ROCK STRATA OF VARIABLE OR DOUBTFUL CHARACTERISTICS
      e. EXCAVATIONS THAT WILL REMOVE THE LATERAL SUPPORT OF AN ADJACENT, EXISTING FOUNDATION
      f. USE OF COMPACTED FILL MATERIAL BELOW SHALLOW FOUNDATIONS IN EXCESS OF 12 INCHES IN DEPTH
      g. USE OF CONTROLLED LOW-STRENGTH MATERIAL (CLSM)

CAST-IN-PLACE CONCRETE:

1. CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301, *SPECIFICATION FOR STRUCTURAL CONCRETE*, AND ACI 117, *SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS*, UNLESS NOTED OTHERWISE.

2. AVERAGE CONCRETE STRENGTH DETERMINED BY JOB CAST LAB CURED CYLINDER PER ASTM C39 TO BE AS INDICATED BELOW PLUS INCREASE DEPENDING ON THE PLANT'S STANDARD DEVIATION AS SPECIFIED IN ACI 318. MINIMUM CONCRETE PROPERTIES SHALL BE AS FOLLOWS:

CONCRETE PROPERTIES						
USE	**FREEZE & THAW EXPOSURE**	**MIN COMPRESSIVE STRENGTH**	**TEST AGE DAYS**	**AIR CONTENT**	**MAX WATER TO CEMENT RATIO**	**MAX AGGERGATE SIZE**
EXTERIOR FOOTINGS	F2	4,500 PSI	28	6% +/- 1.5%	0.45	1"

3. CONCRETE IS EXPOSURE CLASS W1, CLASS C1 AND CLASS S0 UNLESS OTHERWISE NOTED.

4. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS ALONG WITH TEST DATA A MINIMUM OF TWO WEEKS PRIOR TO PLACING CONCRETE. ADDITIONAL WATER SHALL NOT BE ADDED TO THE CONCRETE MIX AT THE JOBSITE UNLESS SPECIFICALLY NOTED IN THE MIX DESIGN.

5. CURING OF CONCRETE SHALL COMPLY WITH ACI 308, UNLESS NOTED OTHERWISE.

6. WHERE CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE CLEANED AND ROUGHENED TO A MINIMUM 1/4" AMPLITUDE.

REINFORCING STEEL:

1. REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING PROPERTIES:

REINFORCEMENT STEEL PROPERTIES		
USE	**REINFORCEMENT SIZE**	**SPECIFICATION**
GENERAL USE	ALL	ASTM A615, GRADE 60

2. REINFORCING STEEL TO BE WELDED SHALL USE ONLY LOW HYDROGEN ELECTRODES. ALL WELDING TO BE IN COMPLIANCE WITH AWS D1.4. WELD REINFORCING STEEL ONLY WHERE INDICATED ON THE DRAWINGS. WELDING OR TACK WELDING OF REINFORCEMENT BARS TO OTHER BARS OR STEEL COMPONENTS IS PROHIBITED.

3. REINFORCING STEEL IN BEAMS AND SLABS SHALL BE SUPPORTED ON CONCRETE DOBBIES, OR APPROVED CHAIRS IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT. FABRICATE AND INSTALL REINFORCING STEEL ACCORDING TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES - ACI STANDARD 315.

4. CONTACT LAP ALL REINFORCING BARS PER THE TYPICAL LAP SPLICE LENGTH SCHEDULE, EXCEPT AS NOTED ON DRAWINGS. MECHANICAL SPLICES NOTED ON THE DRAWINGS SHALL BE DAYTON SUPERIOR BAR-LOCK OR APPROVED WITH A CURRENT ICC-ES OR IAPMO-ES EVALUATION REPORT.

GRADE 60 REINFORCING STEEL LAP SPLICE LENGTH AND DEVELOPMENT LENGTH

BAR SIZE	f'c = 3,000 PSI					f'c = 4,000 PSI					f'c = 5,000 PSI				
	MISC BARS		TOP BARS (SEE NOTE 3)		HOOK BARS	MISC BARS		TOP BARS (SEE NOTE 3)		HOOK BARS	MISC BARS		TOP BARS (SEE NOTE 3)		HOOK BARS
	Ld	LAP	Ld	LAP	Ldh	Ld	LAP	Ld	LAP	Ldh	Ld	LAP	Ld	LAP	Ldh
#3	17	22	22	28	9	15	19	29	25	8	13	17	17	22	7
#4	22	29	29	38	11	19	25	25	33	10	17	23	23	29	9
#5	28	36	36	47	14	24	31	31	41	12	22	28	28	36	11
#6	33	43	43	56	17	29	37	37	49	15	26	34	34	44	13

   A. ALL TABULATED VALUES ARE IN INCHES, FOR GRADE 60, UNCOATED REINFORING, NORMAL WEIGHT CONCRETE WITH CLEAR SPACING AND CLEAR COVER GREATER THAN THE BAR DIAMETER.
   B. IT SHALL BE PERMITTED TO INTERPOLATE BETWEEN CONCRETE STRENGTHS OR USE THE NEXT LOWER CONCRETE STRENGTH.
   C. TOP BARS ARE ANY HORIZ BAR PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR IN ANY SINGLE POUR. HORIZ WALL BARS ARE CONSIDERED TOP BARS.
   D. LAP SPLICES ARE FOR NON-LATERAL LOAD RESISTING ELEMENTS. FOR REBAR LAPS SPLICES AT LATERAL LOAD RESISTING ELEMENTS, REFERENCE PLANS AND ELEVATIONS.
   E. Ld = DEVELOPMENT LENGTH IN TENSION OF DEFORMED BAR
      Ldh = DEVELOPMENT LENGTH IN TENSION OF DEFORMED BAR OR DEFORMED WIRE WITH A STANDARD HOOK
      LAP = LAP SPLICE LENGTH OF DEFORMED BAR OR DEFORMED WIRE

5. REINFORCING STEEL SHALL BE PROTECTED BY PLACING BARS WITH A MINIMUM COVER, UNLESS NOTED OTHERWISE.

REINFORCING STEEL CONCRETE COVER	
USE	**CLEAR COVER**
BEAMS AND COLUMNS	1-1/2" (TO STIRRUPS OR TIES)
WALLS (INTERIOR FACES)	3/4"
CONCRETE CAST AGAINST EARTH	3"
CONCRETE EXPOSED TO WEATHER OR EARTH	1-1/2" (FOR #5 OR SMALLER), 2" (FOR #6 AND LARGER)

6. PROVIDE DOWELS FROM FOOTINGS TO MATCH ALL VERTICAL WALL, PILASTER AND COLUMN REINFORCING. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCING IN WALLS AND FOOTINGS AT ALL CORNERS AND INTERSECTIONS. CONTINUE HORIZONTAL WALL BARS THROUGH PILASTERS COLUMNS AND INTERSECTING WALLS.

MASONRY VENEER:

1. MASONRY VENEER SHALL BE ANCHORED TO MEET THE REQUIREMENTS OF ACI 530 SECTION 6.2. VENEER SHALL BE ANCHORED DIRECTLY TO COLUMNS OR OTHER STRUCTURAL ELEMENTS. MASONRY VENEER HORIZONTAL JOINT REINFORCING SHALL BE LADDER TYPE GALVANIZED WIRE CONTINUOUS OR A SINGLE # 9 GALVANIZED WIRE CONTINUOUS. ANCHORS SHALL BE SPACED NO MORE THAN 16" O.C. HORIZONTALLY AND 18" O.C. VERTICALLY. IN NO CASE SHALL THE AREA OF VENEER SUPPORTED BY A SINGLE ANCHOR EXCEED 2.0 SQUARE FEET. EMBED ANCHORS INTO THE MORTAR JOINT A MINIMUM DISTANCE OF 1-1/2" WITH AT LEAST 5/8" MORTAR COVER TO THE OUTSIDE FACE. SEE ARCHITECTURAL FOR ALL JOINTING, FLASHING, WATER PROOFING AND OTHER RELATED DETAILING OF MASONRY VENEER.

2. ISOLATE THE SIDES AND TOP OF ANCHORED VENEER FROM THE STRUCTURE SO THAT THE VERTICAL AND LATERAL FORCES RESISTED BY THE STRUCTURE ARE NOT IMPARTED TO THE VENEER.

STRUCTURAL STEEL

1. DESIGN, FABRICATION AND ERECTION OF STEEL MEMBERS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF *AISC 360 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS* AND AISC 303 *CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES*.. STRUCTURAL STEEL SHALL BE:

STRUCTURAL STEEL	
SHAPE	**MATERIAL SPECIFICATION AND GRADE**
CHANNELS (C-SHAPES)	ASTM A36, GRADE 36
ANGLES (L-SHAPES)	ASTM A36, GRADE 36
PLATES	ASTM A36, GRADE 36

2. BOLTS SHALL CONFORM TO THE ASTM AND RCSC SPECIFICATIONS FOR JOINTS USING GROUP A OR GROUP B HIGH STRENGTH BOLTS. BOLTS SHALL BE INSTALLED SNUG-TIGHT UNLESS NOTED OTHERWISE. WHERE SLIP CRITICAL IS SPECIFIED ON PLANS, ALL FAYING SURFACES SHALL BE PREPARED AS REQUIRED FOR CLASS A OR BETTER SLIP CRITICAL JOINTS. ALL BOLTS SPECIFIED AS SLIP CRICIAL AND UTILIZED IN SEISMIC FORCE RESISTING ELEMENTS SHALL BE FULLY TENSIONED.

3. WELDING SHALL CONFORM TO AWS D1.1, *STRUCTURAL WELDING CODE - STEEL* WITH PREQUALIFIED WELDING PROCESSES EXCEPT AS MODIFIED BY AISC 360 SECTION J2. WELDING SHALL BE COMPLETED BY AWS-CERTIFIED WELDERS.

4. WELDS SHALL BE MADE USING E70XX ELECTRODES FOR SHIELDED METAL ARC WELDING (SMAW) AND E71TX WIRE FOR FLUX-CORED ARC WELDING (FCAW) PROCESSES. FOR COMPLETE JOINT PENETRATION WELDS ASSOCIATED WITH MEMBER SPLICES AND CONNECTIONS NOT PART OF THE SEISMIC FORCE RESISTING SYSTEM, WELDS SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT 40°F.

5. FIELD WELDING SYMBOLS HAVE NOT NECESSARILY BEEN INDICATED ON THE DRAWING. WHERE SHOWN, PROPER FIELD WELDING PER AWS SHALL BE USED. WHERE NO FIELD WELDING SYMBOLS ARE SHOWN, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE USE OF SHOP AND FIELD WELDS.

6. ERECTION AIDS ARE TO BE DETERMINED AND PROVIDED BY THE CONTRACTOR. THE CONTRACTOR'S ERECTOR AND FABRICATOR SHALL COORDINATE THE TYPE AND QUANTITY OF ERECTION AIDS. THE CONTRACTOR IS SOLELY REPONSIBLE FOR ERECTION SEQUENCING, TEMPORARY BRACING, SAFETY OF WORKERS, AND OVERALL COMPLIANCE WITH APPLICABLE OSHA REQUIREMENTS.

7. PROVIDE WEEP HOLES AT EXTERIOR CLOSED SECTIONS WHERE MOISTURE MAY ACCUMULATE.

COLD-FORMED STEEL FRAMING:

1. FRAMING MEMBERS SHALL BE CERTIFIED ACCORDING TO THE PRODUCT CERTIFICATION PROGRAM OF THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA), THE STEEL FRAMING INDUSTRY ASSOCIATION, OR THE STEEL STUD MANUFACTURERS ASSOCIATION. FRAMING SHALL COMPLY WITH ANSI S100, S200, S211, AND S212.

2. 18 GAUGE (43 MIL) AND THINNER STEEL SHALL BE FORMED FROM ASTM A1003 ST33H (Fy = 33 KSI). 16 GAUGE (54MIL) AND THICKER STEEL SHALL BE FORMED FROM ASTM A1003 ST50H (Fy = 50 KSI).

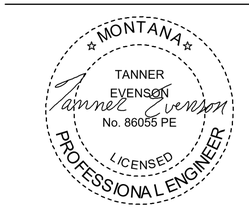
3. ALL COLD-FORMED METAL FRAMING COMPONENTS SHALL BE GALVANIZED WITH A G-60 COATING PER ASTM A653.

4. ALL FIELD CUTTING OF FRAMING SHALL BE DONE BY SAWING, SHEARING, OR PLASMA CUTTING. SPLICES IN FRAMING MEMBERS NOT SPECIFICALLY DETAILED IN THE DRAWINGS ARE NOT ALLOWED. AXIAL LOADED BEARING MEMBERS, INCLUDING WALL STUDS AND BUILT-UP POSTS, SHALL HAVE SQUARE END CUTS AND BE SEATED TIGHT AGAINST TOP AND BOTTOM TRACKS WITH A MAXIMUM GAP TOLERANCE OF 1/16" BETWEEN STUD AND TRACK.

5. UNLESS OTHERWISE NOTED, TRACK FRAMING SHALL MATCH STUD/JOIST SIZE AND GAUGE. ATTACH TO STUD AND JOIST FRAMING WITH (1) SCREW AT EACH FLANGE.

6. DO NOT NOTCH, OR COPE FRAMING MEMBERS. STUDS SHALL BE FURNISHED WITH FACTORY PUNCHOUTS THROUGH WEBS FOR ROUTING CONDUIT AND BRIDGING; DO NOT CUT ADDITIONAL HOLES OR ENLARGE THE PUNCHOUTS. PUNCHOUTS SHALL BE AT LEAST THE DEPTH OF THE MEMBER CLEAR FROM THE CLOSEST FASTENER, WELDED CONNECTION OR BEARING POINT.

7. UNLESS NOTED OTHERWISE IN DRAWINGS, USE #12 SCREWS (16 GAUGE AND THICKER), #10 SCREWS (18 AND 20 GAUGE) AND #8 SCREWS (22 GAUGE) TO CONNECT COLD-FORMED STEEL FRAMING. SELF TAPPING AND DRILLING SCREWS TO BE HILTI KWIK-PRO (ICC ESR-2196) OR ITW BUILDEX TEKS (ICC ESR-1976). PLACE SCREWS WITH MINIMUM SPACING AND EDGE DISTANCE OF 3/4", UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE MINIMUM LENGTH FOR SCREW TO PENETRATE BEYOND FASTENED MEMBERS BY AT LEAST TWO FULL DIAMETER THREADS.



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Number	Description	Date

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NORTHGATE SIGNAGE

at

NORHTGATE SHOPPING CENTER

GEOCODE: 04-2200-17-2-14-01-0000

GENERAL STRUCTURAL NOTES

Date: 2026.04.10 Project No: 25.041

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SYMBOL/ANNOTATION	DESCRIPTION	SYMBOL/ANNOTATION	DESCRIPTION
	EARTH/SOIL HATCH		STEEL HATCH
	GRANULAR FILL/GRAVEL HATCH		SQUARE/RECTANGULAR HSS COLUMN
1 S5.1	DETAIL CALLOUT (90 DEGREE ORIENTATION TO CURRENT VIEW) VIEW ORIENTED TOWARD ARROW		ROUND HSS COLUMN
2 S5.1	DETAIL CALLOUT (MATCHES ORIENTATION OF CURRENT VIEW) ENLARGED VIEW		WIDE-FLANGE COLUMN
1 S4.1	ELEVATION CALLOUT		STEEL BEAM SIMPLE SHEAR CONNECTION TO COLUMN, UNLESS NOTED OTHERWISE
1 S4.1	SECTION CALLOUT		STEEL BEAM SIMPLE SHEAR CONNECTION TO BEAM, UNLESS NOTED OTHERWISE
TOF = 97' - 0 "	COMPONENT ELEVATION		CONCRETE HATCH
			GROUT HATCH

STRUCTURAL ANNOTATIONS

#	NUMBER OR POUNDS
&	AND
@	AT
Ø	DIAMETER
AA	ADHESIVE ANCHOR
AB	ANCHOR BOLT
ABV	ABOVE
ACI	AMERICAN CONCRETE INSTITUTE
AD	ADHESIVE DOWEL
ADDL	ADDITIONAL
ADJ	ADJACENT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AOR	ARCHITECT OF RECORD
APA	AMERICAN PLYWOOD ASSOCIATION
APPROX	APPROXIMATELY
AR	ANCHOR ROD
ARCH	ARCHITECT
AS	ANGLE STRUT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
BC	BOTTOM CHORD
BF	BRACED FRAME
BLDG	BUILDING
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BO	BOTTOM OF
BOT	BOTTOM
BP	BASE PLATE
BRB	BUCKLING RESTRAINED BRACE
BRBF	BUCKLING RESTRAINED BRACED FRAMED
BRG	BEARING
BSMT	BASEMENT
BTWN	BETWEEN
BU	BUILT UP
C	CHANNEL
CANTL	CANTILEVER
CB	CARRIAGE BOLT
CC	CONCRETE COLUMN
CD	CONSTRUCTION DOCUMENTS
CDF	CONTROLLED DENSITY FILL
CFS	COLD FORMED STEEL
CG	CENTER OF GRAVITY
CIP	CAST IN PLACE
CJ	CONSTRUCTION/CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS/ CONTINUED
CONTR	CONTRACTOR
COORD	COORDINATE
CTR	CENTER
CTRD	CENTERED
D	PENNY (NAIL) OR DEPTH
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DET	DETAIL
DF	DOUGLAS FIR
DIA	DIAMETER
DIM	DIMENSION
DIST	DISTANCE
DL	DEAD LOAD
DWG	DRAWING
DWL	DOWEL
(E)	EXISTING
EA	EACH
EAP	ENGINEERED AGGREGATE PIER
EF	EACH FACE
EL	ELEVATION
ELEV	ELEVATOR
EMBED	EMBEDMENT
ENGR	ENGINEER
EOR	ENGINEER OF RECORD
EQ	EQUAL/ EQUALLY
EQUIP	EQUIPMENT
EW	EACH WAY
EXP	EXPANSION
EXP BT	EXPANSION BOLT
EXST	EXISTING
EXT	EXTERIOR
FDN	FOUNDATION
FLR	FLOOR
FO	FACE OF
FS	FOOTING STEP
FSTNR	FASTENER
FT	FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLUE LAMINATED
GLB	GLUE LAMINATED BEAM
GR	GRADE
GR BM	GRADE BEAM
GSN	GENERAL STRUCTURAL NOTES
GYP	GYPSUM
H	HIGH
HD	HOLD-DOWN
HDR	HEADER
HG	WOOD BEAM HANGER
HGR	HANGER
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SECTION
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
INFO	INFORMATION
INT	INTERIOR
J	JOIST
JT	JOINT
K	KIP(S)
KSI	KIPS PER SQUARE INCH
L	ANGLE
2L	DOUBLE ANGLE
LAM	LAMINATED
LBS	POUND
LD	DEVELOPMENT LENGTH
LF	LINEAR FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LS	LAP SPLICE
LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER
M	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MBR	MEMBER
MD	METAL DECK
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MEZZ	MEZZANINE
MF	MOMENT FRAME
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
ML	MASONRY LINTEL
MMI	MORRISON-MAIERLE INC
MP	MASONRY PIER
MTL	METAL
N	NORTH
(N)	NEW
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NLB	NONLOAD BEARING
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OWJ	OPEN WEB JOIST
PAF	POWER-ACTUATED FASTENERS
PAR	PARALLEL
PC	PIER CAP/CONCRETE PILE
PERP	PERPENDICULAR
PH	PHASE
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLYWD	PLYWOOD
PREFAB	PREFABRICATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED/POST TENSIONED
QA	QUALITY ASSURANCE
R/RAD	RADIUS
RD	ROUND
REBAR	REINFORCING STEEL BARS
REF	REFERENCE OR REFER TO
REINF	REINFORCE, REINFORCING
REQD	REQUIRED
REQT	REQUIREMENT
REV	REVISION
RO	ROUGH OPENING
RT	RIGHT
SA	SCREW ANCHOR
SC	SLIP CRITICAL
SCHED	SCHEDULE
SD	STEEL DECK
SF	SQUARE FEET
SHTHG	SHEATHING
SI	SQUARE INCH
SIM	SIMILAR
SIP	STRUCTURAL INSULATED PANEL
SL	SNOW LOAD
SMS	SHEET METAL SCREW
SOG	SLAB ON GRADE
SOMD	SLAB ON METAL DECK
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
SUB	SUBSTITUTE
SUB FLR	SUBFLOOR
T	TON
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
THRU	THROUGH
TJI	TRUSS JOIST
TMBR	TIMBER
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOD	TOP OF DECK/SHEATHING
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
URM	UNREINFORCED MASONRY
VERT	VERTICAL
VIF	VERIFY IN FIELD
W OR WF	WIDE FLANGE
W/	WITH
W/O	WITHOUT
WD	WOOD
WL	WIND LOAD
WLD	WELD/WELDED
WP	WORKING POINT
WSP	WOOD STRUCTURAL PANEL
WT	STRUCTURAL TEE
WWF	WELDED WIRE FABRIC
X BRACE	CROSS BRACE

STRUCTURAL ABBREVIATIONS

MONTANA
TANNER EVENSON
No. 86055 PE
LICENSED PROFESSIONAL ENGINEER

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ANNOTATIONS AND SYMBOLS & ABBREVIATIONS

Date: 2026.04.10 Project No: 25.041

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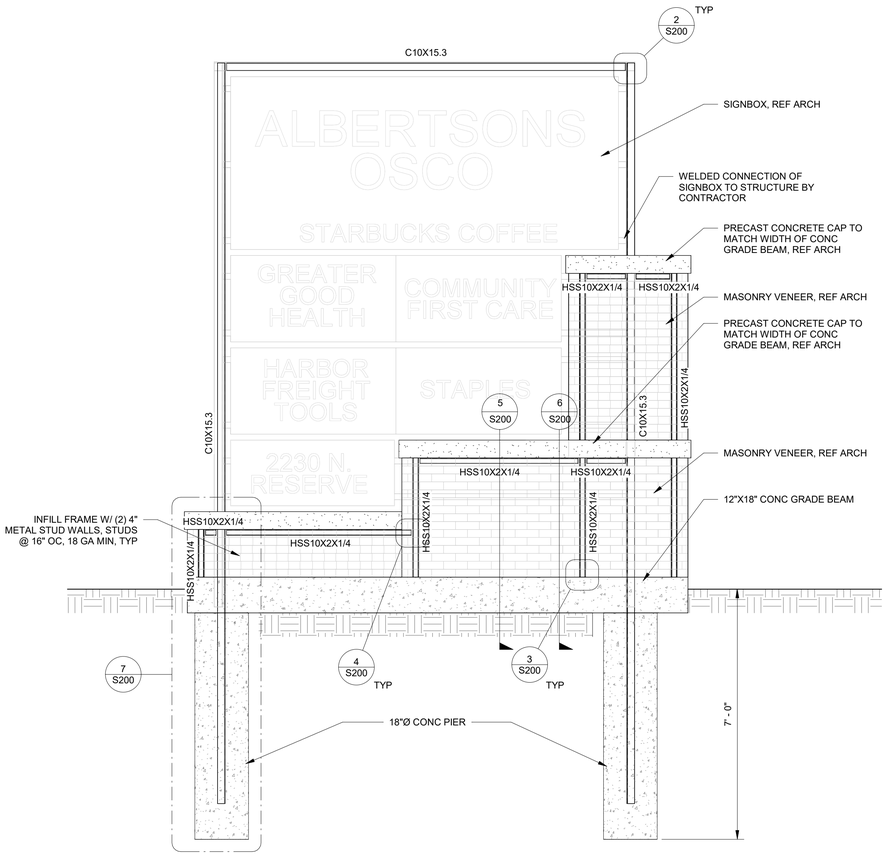
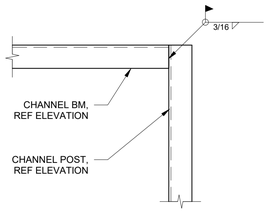
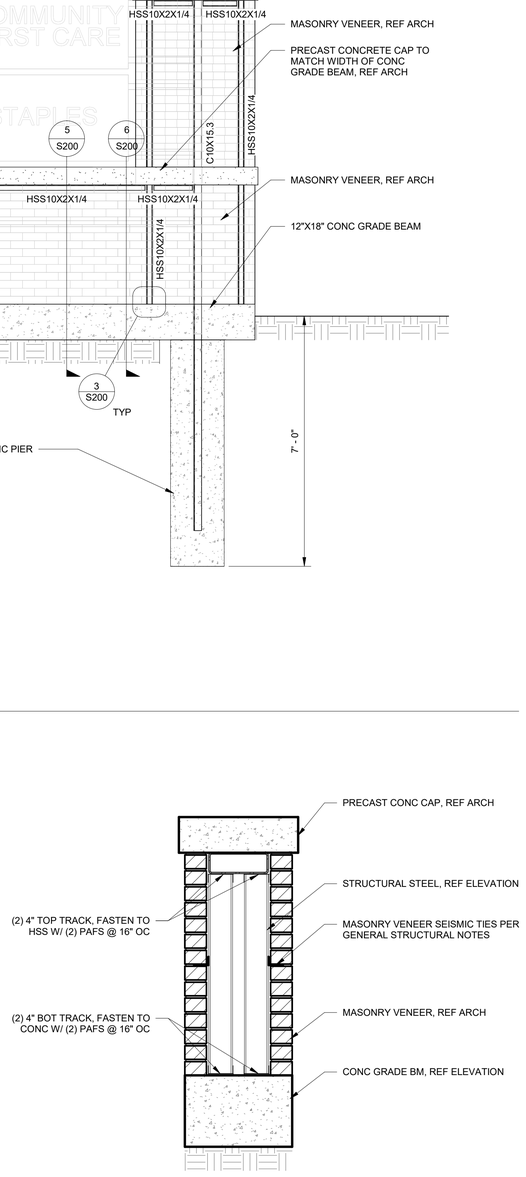


1 SOUTH ELEVATION
1/2" = 1'-0"

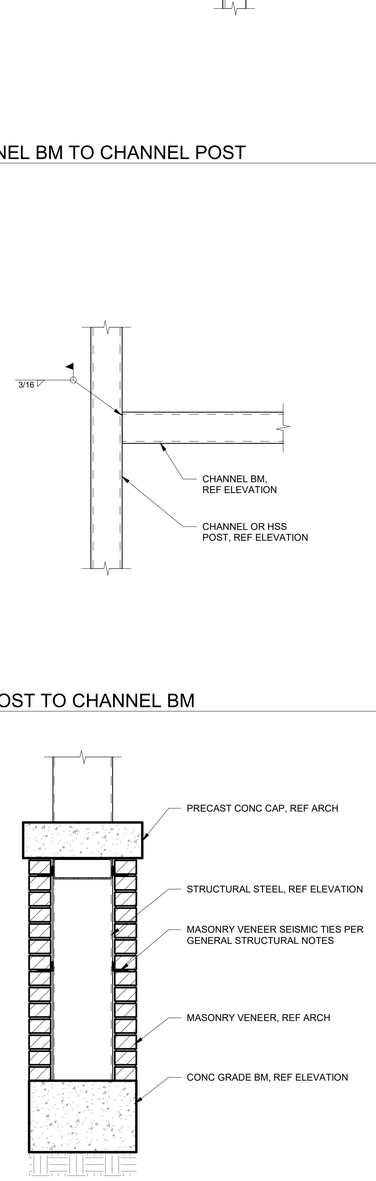


2 CHANNEL BM TO CHANNEL POST
NTS

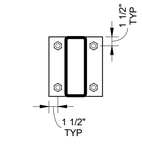
4 HSS POST TO CHANNEL BM
NTS



5 MASONRY VENEER AT INFILL FRAMING
NTS



6 MASONRY VENEER AT STEEL POST
NTS

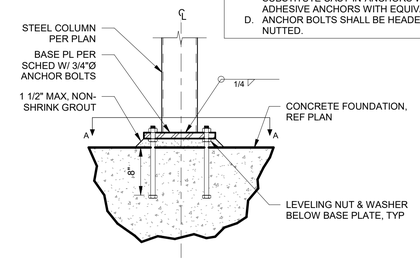


HSS COLUMN

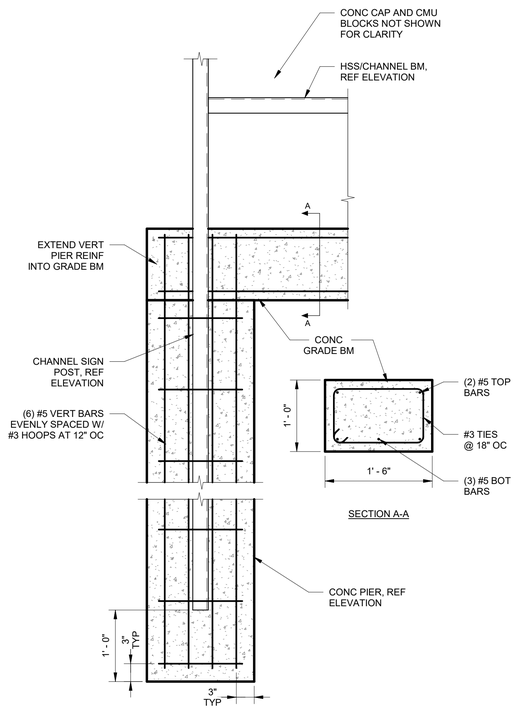
SECTION A-A

COLUMN BASE PL SCHEDULE	
COLUMN SIZE	BASE PL
HSS10X3 1/2X1/4	PL5/8x9x0'-10"

NOTES:
1. BASE PLATE SCHEDULE IS TO BE USED FOR ALL GRAVITY COLUMNS ON PLAN UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR MAY SELECT ONE OF THE FOLLOWING OPTIONS FOR HOLES IN BASE PLATE:
   A. USE TEMPLATE PLATES WITH CAST-IN-ANCHORS AND PROVIDE ANCHOR DIAMETER + 1/8" HOLES.
   B. PROVIDE 1/2" OVERSIZED HOLES AND 1/4"X2X2 PLATE WASHERS WITH STANDARD HOLES WELDED TO TOP OF BASE PLATE WITH 3/16" FILLET ON TWO SIDES.
   C. PROVIDE STANDARD HOLES IN BASE PLATE AND SUBSTITUTE CAST-IN-ANCHORS WITH POST-INSTALLED ADHESIVE ANCHORS WITH EQUIVALENT EMBEDMENT.
   D. ANCHOR BOLTS SHALL BE HEADED OR THREADED AND NUTTED.



3 TYPICAL BASE PL DETAIL
NTS



7 CONC PIER AND GRADE BM
NTS

MONTANA
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No. 86055 PE
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PROFESSIONAL ENGINEER

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STRUCTURAL ELEVATION & DETAILS

Date: 2026.04.10 Project No: 25.041

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4/10/2026 9:13:55 AM

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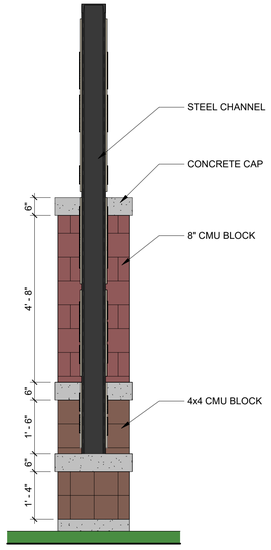
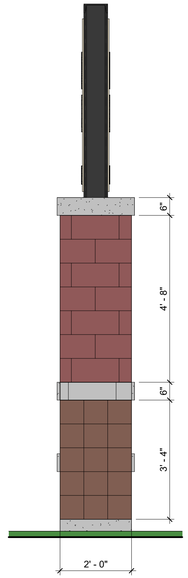
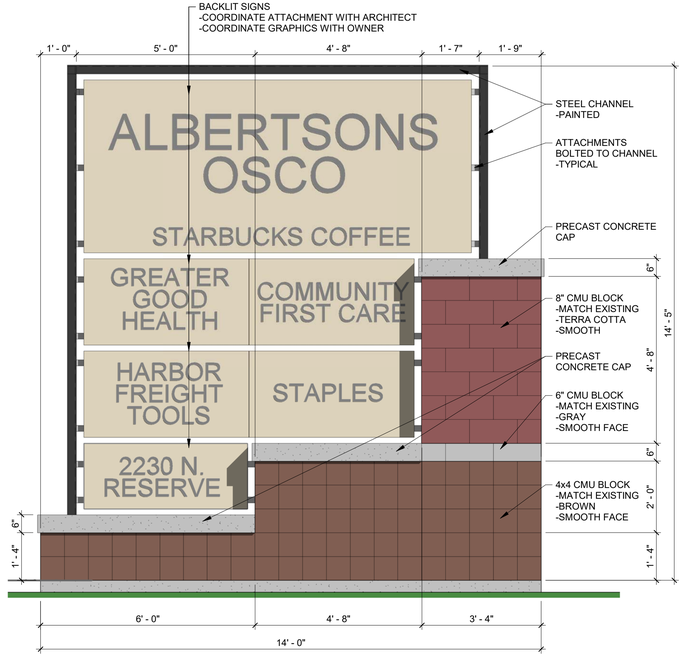
SHEET INDEX



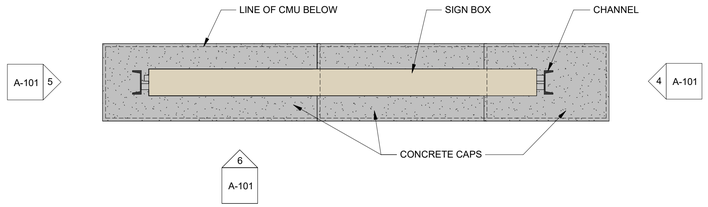
5 WEST ELEVATION
1/2" = 1'-0"



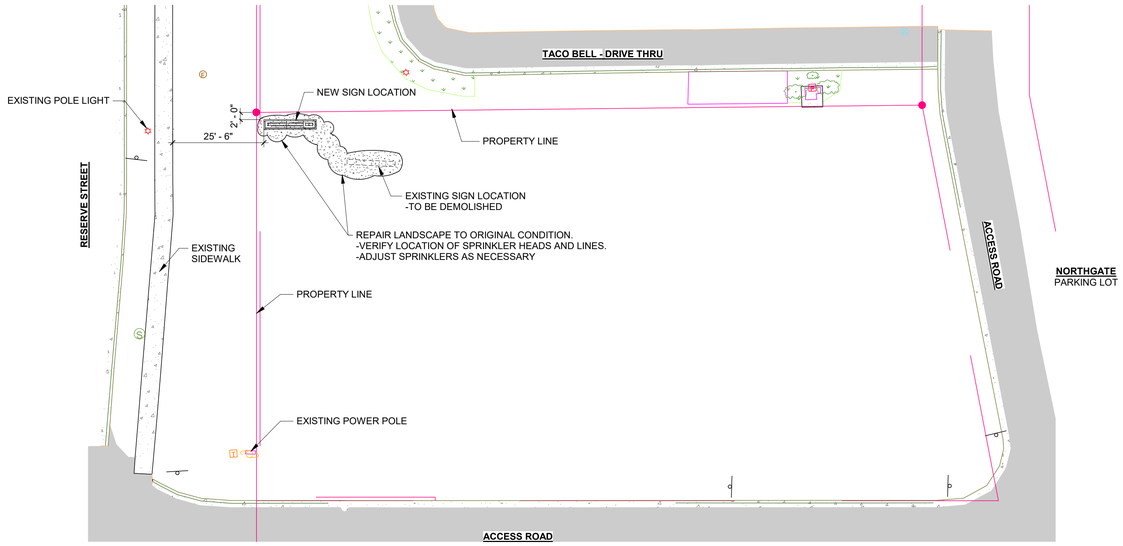
4 EAST ELEVATION
1/2" = 1'-0"



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



2 PLAN VIEW
1/2" = 1'-0"



N

1 SITE PLAN
1" = 20'-0"

ZONING

ZONE: M1R-2
OVERLAY: DE-CORRIDOR TYPE 4

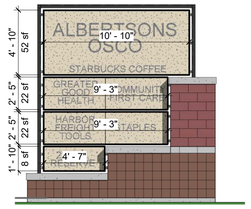
20.75: SIGNS IN NONRESIDENTIAL DISTRICTS

-BASE ALLOWANCE OF 1 MONUMENT SIGN PER SITE OF **50 sf**.,
PLUS
-1 SF FOR EACH 2 LINEAR FT OF STREET FRONTAGE IN EXCESS OF 100 FT. (108 lf OF STREET FRONTAGE: (108-100)/2 = **4 sf**.)
PLUS
-AN ADDITIONAL 2 SF IN SIGN AREA PER LINEAR FT THE SIGN IS SET BACK FROM THE RIGHT OF WAY.
-25.5' WITH ALLOWS FOR AN ADDITIONAL 51 SF OF SIGNAGE.

THEREFORE:

-1 SIGN PER SITE:	50 sf
-STREET FRONTAGE:	4 sf
-RIGHT OF WAY SETBACK:	51 sf
MAXIMUM TOTAL:	105 sf

CURRENT DESIGN SHOWS 104 sf.



ZONING - ELEVATION
3/16" = 1'-0"

SCHEMATIC DESIGN
NOT FOR CONSTRUCTION

Revision Schedule		
Number	Description	Date

OZ architects
531 N. Higgins Avenue
Missoula, Montana 59802
ph: 406.728.3013
www.oza.com

NORTHGATE SIGNAGE

at

NORHTGATE SHOPPING CENTER

GEOCODE: 04-2200-17-2-14-01-0000

PLAN AND ELEVATIONS

Date: 2026.04.10 Project No: 25.041

A-101

4/13/2026 8:19:17 AM

260010 - GENERAL REQUIREMENTS OF ELECTRICAL

A. SUMMARY
1. THE REQUIREMENTS LISTED IN THIS SECTION ARE SUPPLEMENTAL TO THE DIVISION 01 GENERAL REQUIREMENTS.
2. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO EXAMINE AND REFER TO ALL ARCHITECTURAL, CIVIL, AND STRUCTURAL, DRAWINGS AND SPECIFICATIONS FOR CONSTRUCTION CONDITIONS WHICH MAY AFFECT THE SCOPE OF ELECTRICAL WORK. INSPECT THE SITE AND EXISTING FACILITIES FOR VERIFICATION OF PRESENT CONDITIONS. MAKE PROPER PROVISIONS FOR THESE CONDITIONS IN PERFORMANCE OF THE WORK AND COST THEREOF.
3. ELECTRICAL WORK FOR THIS PROJECT SHALL INCLUDE ALL ITEMS, ARTICLES, MATERIALS AND THE ASSOCIATED LABOR MENTIONED, SCHEDULES OR SHOWN IN THESE SPECIFICATIONS AND IN THE ACCOMPANYING DRAWINGS.
4. FURNISH AND INSTALL ALL EQUIPMENT, MATERIALS AND ANY REQUIRED INCIDENTAL ITEMS REQUIRED BY GOOD PRACTICE TO COMPLETE THE SYSTEMS DESCRIBED HEREIN.
5. REFER TO DIVISION 01 FOR ALL LISTED ALTERNATES AND PROVIDE SEPARATE PRICING AND WORK AS INDICATED IN DIVISION 01 AND CONTRACT DOCUMENTS.

B. DEFINITIONS - THROUGHOUT CONTRACT DOCUMENTS THESE WORDS AND PHRASES ARE USED:
1. CONTRACT DOCUMENTS - ALL DRAWINGS, SPECIFICATIONS, ADDENDA AND CHANGE ORDERS THAT DOCUMENT WORK TO BE DONE.
2. DEMOLITION – CAREFULLY DISCONNECT AND REMOVE ITEMS. ALL REASONABLE CAUTION SHALL BE TAKEN TO AVOID DAMAGING REMOVED EQUIPMENT AND TO RETAIN ITS OPERABILITY.
3. EQUIVALENT OR EQUAL - PRODUCT OF LIKE TYPE AND FUNCTION THAT COMPLIES WITH ALL APPLICABLE PROVISIONS OF DRAWINGS AND SPECIFICATIONS AND WHICH HAS BEEN APPROVED AS SUBSTITUTE FOR SPECIFIED ITEM.
4. FURNISH - PURCHASE MATERIAL AS SHOWN AND SPECIFIED, AND PLACE MATERIAL TO APPROVED LOCATION ON SITE OR ELSEWHERE AS NOTED OR AGREED UPON.
5. INSTALL - SET IN PLACE AND CONNECT, READY FOR USE AND IN COMPLETE AND PROPERLY OPERATING FINISHED CONDITION.
6. PROVIDE - FURNISH AND INSTALL WITH ALL PRODUCTS, LABOR, SUB-CONTRACTS, AND APPURTENANCES REQUIRED FOR A COMPLETE AND PROPERLY OPERATING, FINISHED CONDITION.
7. ROUGH-IN - PROVIDE CONDUIT RACEWAY SYSTEM WITH JUNCTION BOXES, FITTINGS, STRAPS, BUSHINGS, ETC., FOR FUTURE INSTALLATION OF WIRING, DEVICES, DISCONNECTS AND BREAKERS. PROVISION SHALL BE MADE IN PANELBOARD (HARDWARE, ETC.) FOR FUTURE INSTALLATION OF BREAKERS.
8. SERVICEABLE - ARRANGED SO THAT COMPONENT OR PRODUCT IN QUESTION MAY BE PROPERLY REMOVED AND REPLACED WITHOUT DISASSEMBLY, DESTRUCTION OR DAMAGE TO SURROUNDING INSTALLATION.

C. CODES, STANDARDS AND REGULATIONS
1. CODES - PERFORM ALL WORK IN STRICT ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES; INCLUDING, BUT NOT LIMITED TO LATEST LEGALLY ENACTED EDITIONS OF FOLLOWING CODES:
   a. NFPA 70, NATIONAL ELECTRIC CODE – NEC
   b. NFPA 72, NATIONAL FIRE ALARM CODE
   c. ANSI-C2, NATIONAL ELECTRICAL SAFETY CODE – NESC
   d. INTERNATIONAL BUILDING CODE – IBC
   e. INTERNATIONAL FIRE CODE – IFC
   f. INTERNATIONAL ENERGY CONSERVATION CODE – IECC
2. STANDARDS - REFERENCE TO STANDARDS INFERS THAT INSTALLATION, EQUIPMENT AND MATERIAL SHALL BE WITHIN LIMITS FOR WHICH IT WAS DESIGNED, TESTED AND APPROVED, IN CONFORMANCE WITH CURRENT PUBLICATIONS AND STANDARDS OF FOLLOWING ORGANIZATIONS:
   a. AMERICAN NATIONAL STANDARDS INSTITUTE – ANSI
   b. AMERICAN SOCIETY FOR TESTING AND MATERIALS – ASTM
   c. AMERICAN SOCIETY OF HEATING REFRIGERATING AND AIR CONDITIONING ENGINEERS – ASHRAE (STANDARD 90-75)
   d. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS – IEEE
   e. INSULATED CABLE ENGINEERS ASSOCIATION – ICEA
   f. NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION – NECA
   g. NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION – NEMA
   h. NATIONAL FIRE PROTECTION ASSOCIATION – NFPA
   i. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION – OSHA
   j. UNDERWRITERS' LABORATORIES, INC. – UL
   k. RULES AND REGULATIONS OF THE STATE/LOCAL FIRE MARSHAL
   l. STANDARDS AND REQUIREMENT OF THE SERVING UTILITIES
   m. STATE AND LOCAL ORDINANCES
3. REGULATIONS - DESIGN HAS BEEN PERFORMED IN ACCORDANCE WITH APPLICABLE REGULATIONS AND GUIDELINES NOTED BELOW. CONTRACTOR SHALL CAREFULLY APPLY THESE REGULATIONS AND BRING ANY DISCREPANCIES TO IMMEDIATE ATTENTION OF ARCHITECT/ENGINEER.
   a. AMERICANS WITH DISABILITIES ACT – ADA

D. FEES AND PERMITS
1. ELECTRICAL CONTRACTOR SHALL PAY FOR ALL PERMITS OR FEES IN CONNECTION WITH ELECTRICAL WORK. FEES SHALL INCLUDE ANY OR ALL USER FEES, GOVERNMENT FEES, SYSTEM DEVELOPMENT FEES, CONNECTION FEES OR OTHER FEES THAT ARE REQUIRED TO BE PAID BEFORE SYSTEMS CAN BE CONNECTED OR USED.
2. SCHEDULE ALL REQUIRED ELECTRICAL INSPECTIONS WITH LOCAL ELECTRICAL INSPECTOR. NOTIFY ENGINEER OF ALL ITEMS OF DISCREPANCY NOTED BY ELECTRICAL INSPECTOR IF THOSE ITEMS AFFECT COST OR FUNCTION OF SYSTEM, OR IF THEY CONFLICT WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS.
3. DELIVER ALL INSPECTION CERTIFICATES TO ARCHITECT/ENGINEER PRIOR TO FINAL ACCEPTANCE OF WORK.

E. INTENT OF SPECIFICATIONS AND DRAWINGS
1. PLANS AND SPECIFICATIONS ARE INTENDED TO RESULT IN COMPLETE ELECTRICAL INSTALLATION IN FULL COMPLIANCE WITH ALL APPLICABLE CODES, STANDARDS AND ORDINANCES.
2. PLANS AND SPECIFICATIONS ARE TO SUPPLEMENT EACH OTHER AND ANY DETAILS CONTAINED IN ONE SHALL BE INCLUDED AS IF CONTAINED IN BOTH.
3. ELECTRICAL DRAWINGS SHALL SERVE AS WORKING DRAWINGS, BUT ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE IF ANY DIMENSIONAL DISCREPANCIES EXIST.
4. DRAWINGS ARE PARTLY DIAGRAMMATIC AND DO NOT SHOW ROUTING OF CONDUITS, EXACT LOCATION OF PRODUCTS, OR INSTALLATION FEATURES IN EXACT DETAIL. LOCATIONS OF DEVICES, FIXTURES AND EQUIPMENT ARE APPROXIMATE UNLESS DIMENSIONED.
5. ITEMS ARE SHOWN ON DRAWINGS IN LOCATIONS TO MINIMIZE INTERFERENCE WITH OTHER EQUIPMENT, STRUCTURAL MEMBERS, ETC. EXACT FINISH LOCATIONS ARE NOT INDICATED, HOWEVER, AND ALL WORK SHALL BE DONE TO AVOID INTERFERENCE, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.
6. IN EVENT THAT DISCREPANCIES OF ANY KIND EXIST OR REQUIRED ITEMS/DETAILS HAVE BEEN OMITTED, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING OF SUCH DISCREPANCY OR OMISSION AT LEAST TEN DAYS PRIOR TO BID DATE. FAILURE TO DO SO SHALL BE CONSTRUED AS WILLINGNESS OF CONTRACTOR TO SUPPLY ALL NECESSARY MATERIALS AND LABOR REQUIRED FOR PROPER COMPLETION OF WORK.

F. CONTRACTOR'S RESPONSIBILITY - CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF COMPLETE AND FUNCTIONAL PIECE OF WORK IN ACCORDANCE WITH TRUE INTENT OF CONTRACT DOCUMENTS. PROVIDE ALL INCIDENTAL ITEMS REQUIRED FOR COMPLETE INSTALLATION AND SATISFACTORY OPERATION OF ALL EQUIPMENT, WHETHER OR NOT SPECIFICALLY NOTED IN CONTRACT DOCUMENTS.
1. LICENSING AND CERTIFICATION - ALL DIVISION 26 WORK SHALL BE ACCOMPLISHED BY ELECTRICIANS, LICENSED BY STATE IN WHICH WORK IS BEING DONE. CERTIFIED AS REQUIRED, AND SKILLED IN THEIR CRAFT.
2. COORDINATION
   a. CONTRACTOR SHALL CONSULT ALL CONTRACT DOCUMENTS, SHOP DRAWINGS OF OTHER TRADES, AND ACTUAL BUILDING DIMENSIONS TO PREDETERMINE THAT HIS WORK AND EQUIPMENT WILL FIT AS PLANNED. DO NOT SCALE DRAWINGS FOR FABRICATION. NO EXTRA PAYMENT WILL BE ISSUED FOR MATERIALS OR ITEMS WHICH DO NOT FIT BECAUSE OF CONTRACTOR'S FAILURE TO VERIFY AS-BUILT BUILDING DIMENSIONS.
   b. CONTRACTOR SHALL CHECK LOCATION OF FIXTURES, OUTLETS, EQUIPMENT, CONDUIT, ETC., TO DETERMINE THEY CLEAR ALL OPENINGS, STRUCTURAL MEMBERS, AND MISCELLANEOUS EQUIPMENT HAVING FIXED LOCATIONS.
   c. CHANGES IN LOCATION OF ELECTRICAL WORK, NECESSARY DUE TO OBSTACLES OR INSTALLATION OF OTHER TRADES SHOWN ON CONTRACT DOCUMENTS, SHALL BE MADE BY ELECTRICAL CONTRACTOR AT NO EXTRA COST.
   d. PHYSICAL DIMENSIONS SHALL BE DETERMINED FROM ARCHITECTURAL AND STRUCTURAL PLANS. VERIFY LOCATIONS FOR JUNCTION BOXES, DISCONNECT SWITCHES, STUB-UPS, ETC., FOR CONNECTION TO EQUIPMENT FURNISHED BY OTHERS, OR IN OTHER DIVISIONS OF THIS WORK.
   e. CONTRACTOR SHALL COORDINATE AND PLAN WORK TO PROCEED WITH WORK OF OTHER TRADES.
   f. CONTRACTOR SHALL INFORM GENERAL CONTRACTOR OF ALL REQUIRED OPENINGS IN BUILDING STRUCTURE FOR INSTALLATION OF ELECTRICAL EQUIPMENT.
   g. CONTRACTOR SHALL CHECK DIMENSIONS OF ALL ELECTRICAL EQUIPMENT INSTALLED, PROVIDED BY HIMSELF OR BY OTHERS, SO CORRECT CLEARANCES AND CONNECTIONS CAN BE MADE.
   h. CONSULTING ALL CONTRACT DOCUMENTS AND SHOP DRAWINGS OF OTHER TRADES, CONTRACTOR SHALL DETERMINE WHERE ELECTRICAL JUNCTION/PULL BOXES AND EQUIPMENT CAN BE INSTALLED TO MAINTAIN PROPER ACCESSIBILITY. REPORT ANY CONFLICTS TO ARCHITECT/ENGINEER.

G. REVIEW - ALL WORK AND MATERIAL IS SUBJECT TO REVIEW AT ANY TIME BY THE ARCHITECT/ENGINEER OR HIS REPRESENTATIVE. IF THE ARCHITECT/ENGINEER OR HIS REPRESENTATIVE FINDS MATERIAL THAT DOES NOT CONFORM TO THESE SPECIFICATIONS OR THAT IS NOT PROPERLY INSTALLED OR FINISHED, CORRECT THE DEFICIENCIES IN A MANNER SATISFACTORY TO THE ARCHITECT/ENGINEER AT THE CONTRACTOR'S EXPENSE.

H. TEMPORARY FACILITIES
1. ELECTRICAL UTILITIES
   a. THE ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRICAL POWER TO THE CONSTRUCTION SITE AS DIRECTED BY THE GENERAL CONTRACTOR. NO CONNECTIONS TO THE OWNER'S SYSTEM SHALL BE ALLOWED WITHOUT OWNER'S WRITTEN APPROVAL. PROVIDE A SEPARATE UTILITY SERVICE IF REQUIRED.
   b. ALL COSTS ASSOCIATED WITH TEMPORARY POWER, COMMUNICATIONS AND UTILITY COST SHALL BE PAID BY THE GENERAL CONTRACTOR.
2. LADDERS AND SCAFFOLDS - THE ELECTRICAL CONTRACTOR SHALL PROVIDE THEIR LADDERS, SCAFFOLDS, ETC. OF SUBSTANTIAL CONSTRUCTION FOR ACCESS TO THEIR WORK WHEN NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR.
3. PROTECTION DEVICES - THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND MAINTAIN THEIR OWN NECESSARY BARRICADES, FENCES, SIGNAL LIGHTS, ETC., REQUIRED BY ALL GOVERNING AUTHORITIES OR SHOWN ON THE DRAWINGS. WHEN NO LONGER NEEDED, THEY SHALL BE REMOVED BY THE CONTRACTOR.

I. WARRANTY
1. THE CONTRACTOR SHALL GUARANTEE THAT ALL MATERIALS AND LABOR INSTALLED ARE NEW AND OF FIRST QUALITY AND THAT ANY MATERIAL OR LABOR FOUND DEFECTIVE SHALL BE REPLACED WITHOUT COST TO THE OWNER WITHIN ONE (1) YEAR AFTER SUBSTANTIAL COMPLETION OF THE CONTRACT OR ONE (1) FULL SEASON OF HEATING AND COOLING OPERATION, WHICHEVER IS THE GREATER. THE GUARANTEE SHALL LIST THE DATE OF THE BEGINNING OF THE ONE (1) YEAR PERIOD, WHICH SHALL BE THE DATE THAT THE SUBSTANTIAL COMPLETION CERTIFICATE IS ISSUED.
2. ANY DAMAGE TO THE SIGN OR SITE, CAUSED BY DEFECTIVE WORK OR MATERIAL OF THE CONTRACTOR WITHIN THE ABOVE-MENTIONED PERIOD, SHALL BE SATISFACTORILY REPAIRED WITHOUT COST TO THE OWNER.
3. NO EQUIPMENT INSTALLED AS PART OF THIS PROJECT SHALL BE USED FOR TEMPORARY HEAT DURING CONSTRUCTION.

J. MATERIALS AND EQUIPMENT
1. MANUFACTURER'S TRADE NAMES AND CATALOG NUMBERS LISTED ARE INTENDED TO INDICATE THE QUALITY OF EQUIPMENT OR MATERIALS DESIRED. MANUFACTURERS NOT LISTED IN THE SPECIFICATION WILL BE CONSIDERED SUBSTITUTIONS AND MUST HAVE PRIOR APPROVAL.
2. SEE DIVISION 01 FOR SUBSTITUTIONS PROCEDURES. REQUESTS FOR SUBSTITUTION ARE TO BE SUBMITTED SUFFICIENTLY AHEAD OF THE DEADLINE, TO GIVE AMPLE TIME FOR EXAMINATION.
3. IF THE ENGINEER APPROVES ANY PROPOSED SUBSTITUTION, THE APPROVED PRODUCT WILL BE LISTED IN AN ADDENDUM. BIDDERS SHALL NOT RELY ON APPROVAL MADE IN ANY OTHER MANNER.
4. ELECTRICAL EQUIPMENT MAY BE INSTALLED WITH MANUFACTURER'S STANDARD FINISH AND COLOR EXCEPT WHERE SPECIFIC COLOR, FINISH OR CHOICE IS INDICATED. IF THE MANUFACTURER HAS NO STANDARD FINISH, EQUIPMENT SHALL HAVE A PRIME COAT AND TWO FINISH COATS OF GRAY PAINT.
5. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR MATERIALS AND EQUIPMENT INSTALLED UNDER THIS CONTRACT. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROTECTION OF MATERIALS AND EQUIPMENT OF OTHERS FROM DAMAGE AS A RESULT OF HIS WORK.
6. MANUFACTURER'S MATERIAL SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED AND CONDITIONED AS DIRECTED BY MANUFACTURER UNLESS HEREIN SPECIFIED TO THE CONTRARY.

K. SUBSTITUTION OF MATERIALS - WHERE SUBSTITUTED EQUIPMENT REQUIRES STRUCTURAL, ARCHITECTURAL, OR ELECTRICAL WORK THAT DIFFERS FROM BASIC DESIGN, COST OF ALL CHANGES, INCLUDING RE-DESIGN, SHALL BE RESPONSIBILITY OF CONTRACTOR USING SUBSTITUTION.

L. PRODUCT AND SYSTEM SUBMITTALS
1. SUBMITTALS WILL BE REQUIRED FOR EACH PIECE OF EQUIPMENT, MATERIAL OR PRODUCT UTILIZED IN THE PROJECT. ALL SUBMITTALS SHALL BE SUBMITTED, REVIEWED AND ALL DISCREPANCIES ADDRESSED PRIOR TO ORDERING EQUIPMENT OR STARTING WORK. ANY EQUIPMENT ORDERED WITHOUT HAVING FIRST COMPLETED THE SUBMITTAL PROCESS IS DONE AT THE RISK OF THE CONTRACTOR. ANY WORK PERFORMED PRIOR TO COMPLETING THE SUBMITTAL PROCESS IS DONE AT THE RISK OF THE CONTRACTOR.
2. SUBMITTAL DEFINITIONS
   a. PRODUCT DATA: PROVIDE MANUFACTURERS CUT SHEETS THAT INCLUDE GENERAL PRODUCT INFORMATION INCLUDING BUT NOT LIMITED TO: MODEL NUMBER, PHYSICAL DATA, NOMINAL CAPACITIES, ROUGH-IN REQUIREMENTS.
   b. PERFORMANCE DATA: PROVIDE DETAILED PERFORMANCE AND CAPACITIES BASED ON PROJECT SPECIFIC REQUIREMENTS INCLUDING BUT NOT LIMITED TO: VOLTAGE, PHASE, AMPERAGE, OVERCURRENT PROTECTION, CONDUCTOR SIZE, CONDUCTOR MATERIAL, CONDUIT SIZE, AND IP RATINGS.
   c. SHOP DRAWINGS: PROVIDE DETAILED DRAWINGS OF THE EQUIPMENT SHOWING OVERALL DIMENSIONS, LOCATION OF ELECTRICAL CONNECTION, LOCATION OF ANCHORAGE POINTS, LOCATION OF ELECTRICAL AND CONTROL PANELS, AND ALL OPERATING, SERVICE AND MAINTENANCE CLEARANCES.
3. SUBMITTAL FORMATS
   a. INCLUDE THE FOLLOWING INFORMATION WITH EACH SUBMITTAL:
      - PROJECT NAME
      - SUBMITTAL DATE
      - NAME OF ARCHITECT
      - NAME OF ENGINEER
      - NAME OF GENERAL CONTRACTOR OR CONSTRUCTION MANAGER
      - NAME OF SUB-CONTRACTOR
      - NAME OF FIRM OR ENTITY THAT PREPARED THE SUBMITTAL
      - UNIQUE SUBMITTAL NUMBER
      - TYPE OF SUBMITTAL
      - SPECIFICATION SECTION
      - NAME OR MARK OF EQUIPMENT OR MATERIAL AND DETAIL OR DRAWINGS REFERENCE.
   b. ALL SUBMITTALS SHALL BE ELECTRONICALLY TRANSMITTED PDF'S. ALL SUBMITTALS OVER 8 MB SHALL BE SETUP ON A SHARE FILE SITE AND ACCESS GRANTED THROUGH EMAIL WITH FOLDER'S LINK FOR DOWNLOAD.
4. SUBMITTAL REQUIREMENTS
   a. SUBMITTALS SHALL BE SUBMITTED AS A COMPLETE SPECIFICATION SECTION. THE SUBMITTAL MUST INCLUDE ALL MATERIALS AND EQUIPMENT FOR THAT SPECIFICATION SECTION. SUBMITTALS FOR INDIVIDUAL MATERIALS OF EQUIPMENT WILL BE REJECTED WITHOUT REVIEW.
   b. SUBMITTALS SHALL BE COMPLETE, CLEARLY SHOW ITEM USED, SIZE, DIMENSIONS, CAPACITY, ROUGH IN, ETC., AS REQUIRED FOR COMPLETE CHECK AND INSTALLATION. MANUFACTURER'S LITERATURE SHOWING MORE THAN ONE ITEM SHALL BE CLEARLY MARKED AS TO WHICH ITEM IS BEING FURNISHED OR IT WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
   c. EACH SUBMITTAL SHALL BE THOROUGHLY CHECKED BY THE CONTRACTOR FOR COMPLIANCE WITH THE CONTRACT DOCUMENT REQUIREMENTS, ACCURACY OF DIMENSIONS, RELATIONSHIP TO THE WORK OF OTHER TRADES, AND CONFORMANCE WITH SOUND, SAFE PRACTICES AS TO ERECTION AND INSTALLATION. EACH SUBMITTAL SHALL THEN BEAR A STAMP EVIDENCING SUCH CHECKING AND SHALL SHOW CORRECTIONS MADE, IF ANY. SUBMITTALS REQUIRING EXTENSIVE CORRECTIONS SHALL BE REVISED BEFORE SUBMISSION. EACH SUBMITTAL NOT STAMPED AND SIGNED BY THE GENERAL AND ELECTRICAL CONTRACTORS EVIDENCING SUCH CHECKING WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
   d. ON EACH SUBMITTAL, CLEARLY INDICATE DEVIATIONS FROM REQUIREMENTS IN THE CONTRACT DOCUMENTS, INCLUDING MINOR VARIATIONS AND LIMITATIONS; INCLUDE RELEVANT ADDITIONAL INFORMATION AND REVISIONS, OTHER THAN THOSE REQUESTED ON PREVIOUS SUBMITTALS. INDICATE BY HIGHLIGHTING ON EACH SUBMITTAL OR NOTING ON ATTACHED SEPARATE SHEET.
   e. REVIEW OF THE SHOP DRAWINGS AND LITERATURE BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FOR RESPONSIBILITY FOR DEVIATIONS FOR THE DRAWINGS OR SPECIFICATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS IN THE SHOP DRAWINGS OR LITERATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE MATERIALS AND EQUIPMENT WHICH MEET THE SPECIFICATIONS AND JOB REQUIREMENTS.
5. ENGINEER'S REVIEW - SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE CONTRACTOR FROM ANY REQUIREMENTS OF CONTRACT DOCUMENTS. SUBMITTALS WILL NOT BE CHECKED FOR QUANTITY, DIMENSION, FIT OR PROPER TECHNICAL DESIGN OF MANUFACTURED EQUIPMENT. WHERE PRODUCT OR SYSTEM PERFORMANCE DEVIATIONS HAVE NOT BEEN SPECIFICALLY NOTED IN SUBMITTAL BY CONTRACTOR, ENGINEER'S REVIEW WILL NOT RELIEVE CONTRACTOR'S RESPONSIBILITY TO PROVIDE COMPLETE AND SATISFACTORY WORKING INSTALLATION OF EQUAL QUALITY AND PERFORMANCE TO SPECIFIED SYSTEM. ORDERING, MANUFACTURE, SHIPMENT OR INSTALLATION OF EQUIPMENT PRIOR TO RECEIPT OF ENGINEER'S WRITTEN REVIEW IS STRICTLY AT CONTRACTOR'S RISK AND ALL COSTS ASSOCIATED WITH SHIPPING, CHANGES, REPLACEMENT OR RESTOCKING SHALL BE CONTRACTOR'S RESPONSIBILITY.

M. SITE EXAMINATION
1. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VISIT SITE OF PROPOSED WORK AND FAMILIARIZE HIMSELF WITH CONDITIONS AFFECTING WORK. ALLOWANCE SHALL BE MADE IN BID FOR THESE CONDITIONS AND NO ADDITIONAL ALLOWANCE SHALL BE GRANTED BECAUSE OF LACK OF KNOWLEDGE OF SUCH CONDITIONS.
2. CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT BUILDING SITE.

N. CUTTING AND PATCHING
1. OBTAIN WRITTEN PERMISSION OF ARCHITECT/ENGINEER BEFORE CUTTING OR PIERCING STRUCTURAL MEMBERS.
2. SLEEVES THROUGH FLOORS AND WALLS SHALL BE BLACK IRON PIPE, FLUSH WITH WALLS, SIZED TO ACCOMMODATE RACEWAY. GROUT ALL PENETRATIONS THROUGH CONCRETE WALLS OR FLOORS. HOLES THROUGH EXISTING CONCRETE TO BE CORE DRILLED.

O. CLEAN-UP AND COMMISSIONING
1. DURING CONSTRUCTION - THROUGHOUT CONSTRUCTION, KEEP WORK AREA REASONABLY NEAT AND ORDERLY BY PERIODIC CLEAN-UPS.
2. AT COMPLETION OF WORK:
   a. CLEAN EQUIPMENT OF DIRT AND DEBRIS, INCLUDING INTERIOR OF PANELS, OUTLET BOXES, ETC. REMOVE LABELS FROM AND CLEAN ALL FIXTURE LENSES.
   b. REMOVE MATERIALS, SCRAPS, ETC., RELATIVE TO THIS WORK AND LEAVE PREMISES IN CLEAN AND ORDERLY CONDITION. THIS INCLUDES ALL TUNNELS, ATTICS, CEILING AND CRAWL SPACES.
   c. REMOVE ALL TEMPORARY FACILITIES AND RESTORE TO CONDITIONS PRESENT PRIOR TO WORK.

P. PROJECT COMPLETION AND DEMONSTRATION
1. TESTING
   a. PRIOR TO FINAL TEST, ALL SWITCHES, PANELBOARDS, DEVICES, AND FIXTURES SHALL BE IN PLACE.
   b. AT COMPLETION OF WORK, OR UPON REQUEST FROM ARCHITECT/ENGINEER, PLACE ENTIRE ELECTRICAL INSTALLATION, AND/OR ANY PORTION THEREOF, IN OPERATION TO DEMONSTRATE SATISFACTORY OPERATION.
   c. ALL ELECTRICAL SYSTEMS SHALL BE FREE FROM SHORT CIRCUITS AND UNINTENTIONAL GROUNDS.
2. ADJUSTMENTS
   a. IMMEDIATELY CORRECT ALL DEFICIENCIES WHICH ARE EVIDENCED DURING TESTS AND REPEAT TESTS UNTIL SYSTEM IS APPROVED. DO NOT COVER OR CONCEAL ELECTRICAL INSTALLATIONS UNTIL SATISFACTORY TESTS ARE MADE AND APPROVED.
3. FINAL WALK-THRU
   a. CONDUCT OPERATING TESTS DURING FINAL INSPECTION. DEMONSTRATE INSTALLATION TO OPERATE SATISFACTORILY IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS. SHOULD ANY PORTION OF INSTALLATION FAIL TO MEET REQUIREMENTS OF CONTRACT DOCUMENTS, REPAIR OR REPLACE ITEMS FAILING TO MEET REQUIREMENTS UNTIL ITEMS CAN BE DEMONSTRATED TO COMPLY.

260519 - CONDUCTORS

A. BRANCH CIRCUITS: COPPER, TYPE THHN/THWN-2, MINIMUM SIZE IS #12 AWG, SOLID FOR NO. 10 AWG AND SMALLER; STRANDED FOR NO. 8 AWG AND LARGER. SINGLE CONDUCTORS IN RACEWAY (EXPOSED) OR LIQUID-TIGHT METAL-CLAD CABLE, (TYPE LFMC) (EXPOSED).

260526 - GROUNDING AND BONDING

A. EQUIPMENT GROUND CONDUCTOR: COPPER WITH GREEN INSULATION (LARGER WIRES MAY BE PERMANENTLY MARKED WITH GREEN), SIZED PER NEC 250.122. DO NOT RELY ON CONDUIT FOR THE GROUNDING PATH.

260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

A. MINIMUM RACEWAY SIZE: 1 INCH TRADE SIZE FOR UNDERGROUND ELECTRICAL AND 3/4 INCH TRADE SIZE FOR ABOVE GRADE ELECTRICAL.
B. INSTALL NONMETALLIC CONDUIT OR TUBING FOR PROTECTING BARE GROUNDING CONDUCTORS.
C. ARRANGE STUB-UPS SO CURVED PORTIONS OF BENDS ARE NOT VISIBLE ABOVE FINISHED SLAB.
D. INSTALL NO MORE THAN THE EQUIVALENT OF THREE 90-DEGREE BENDS IN ANY CONDUIT RUN EXCEPT FOR CONTROL WIRING CONDUITS, FOR WHICH FEWER BENDS ARE ALLOWED. SUPPORT WITHIN 12 INCHES OF CHANGES IN DIRECTION. SUPPORT CONDUIT WITHIN 12 INCHES OF ENCLOSURES TO WHICH IT IS ATTACHED.
E. INSTALL RACEWAYS SQUARE TO THE ENCLOSURE AND TERMINATE AT ENCLOSURES WITH LOCKNUTS. INSTALL LOCKNUTS HAND TIGHT PLUS 1/4 TURN MORE. DO NOT RELY ON LOCKNUTS TO PENETRATE NONCONDUCTIVE COATINGS ON ENCLOSURES. REMOVE COATINGS IN THE LOCKNUT AREA PRIOR TO ASSEMBLING CONDUIT TO ENCLOSURE TO ENSURE A CONTINUOUS GROUND PATH.
F. INSTALL SLEEVES AND SLEEVE SEALS AT PENETRATIONS OF EXTERIOR AND WALL ASSEMBLIES.
G. OUTDOOR RACEWAYS:
1. EXPOSED CONDUIT: RIGID STEEL CONDUIT.
2. CONCEALED CONDUIT, ABOVE GROUND: EMT OR LFMC.
3. UNDERGROUND CONDUIT: RNC, TYPE EPC-40-PVC, DIRECT BURIED. USE TYPE EPC-80-PVC UNDER PAVED SURFACES.
4. BOXES AND ENCLOSURES, ABOVE GROUND: NEMA250, TYPE 3R.

H. ENCLOSURES – BOXES AND ENCLOSURES FOR DISCONNECT SWITCH. BASED ON THE INSTALLATION LOCATIONS/ENVIRONMENTS.
1. INDOOR, DRY AND CLEAN LOCATIONS: NEMA 250, TYPE 1.
2. OUTDOOR LOCATIONS: NEMA 250, TYPE 3R.

I. GENERAL BOX MOUNTING
1. MOUNT BOXES AT HEIGHTS INDICATED ON DRAWINGS. IF MOUNTING HEIGHTS OF BOXES ARE NOT INDIVIDUALLY INDICATED, GIVE PRIORITY TO ADA REQUIREMENTS. INSTALL BOXES WITH HEIGHT MEASURED TO CENTER OF BOX UNLESS OTHERWISE INDICATED.
2. FASTEN JUNCTION AND PULL BOXES TO OR SUPPORT FROM STRUCTURE. DO NOT SUPPORT BOXES BY CONDUITS.

J. HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND WIRING
1. POLYMER-CONCRETE HANDHOLES AND BOXES WITH POLYMER-CONCRETE COVER: MOLDED OF SAND AND AGGREGATE, BOUND TOGETHER WITH POLYMER RESIN, AND REINFORCED WITH STEEL, FIBERGLASS, OR A COMBINATION OF THE TWO. DESIGNED FOR FLUSH BURIAL WITH OPEN BOTTOM UNO. INCLUDE WEATHERPROOF, NONSKID COVER SECURED BY TAMPER-RESISTANT LOCKING DEVICES LABELED WITH "ELECTRIC" OR "COM" AS INDICATED ON DRAWINGS.
2. COMPLY WITH ANSI/SCTE 77 WITH LOAD RATINGS AS FOLLOWS:
   a. TIER 8 FOR NON-TRAFFIC AREAS AND SIDEWALK APPLICATIONS WITH A SAFETY FACTOR FOR OCCASIONAL NON-DELIBERATE VEHICULAR TRAFFIC.
   b. TIER 22 FOR DRIVEWAY, PARKING LOT, AND OFF-ROAD APPLICATIONS SUBJECT TO OCCASIONAL NON-DELIBERATE HEAVY VEHICULAR TRAFFIC.
   c. AASHTO H-20 FOR ROADWAYS AND OTHER DELIBERATE VEHICULAR TRAFFIC APPLICATIONS.
3. INSTALL HANDHOLES AND BOXES LEVEL AND PLUMB AND WITH ORIENTATION AND DEPTH COORDINATED WITH CONNECTING CONDUITS TO MINIMIZE BENDS AND DEFLECTIONS REQUIRED FOR PROPER ENTRANCES. SUPPORT ON A LEVEL BED OF CRUSHED STONE OR GRAVEL, GRADED FROM 1/2-INCH SIEVE TO NO. 4 SIEVE AND COMPACTED TO SAME DENSITY AS ADJACENT UNDISTURBED EARTH.
4. IN PAVED AREAS, SET SO COVER SURFACE WILL BE FLUSH WITH FINISHED GRADE. SET COVERS OF OTHER ENCLOSURES 1 INCH (25 MM) ABOVE FINISHED GRADE.

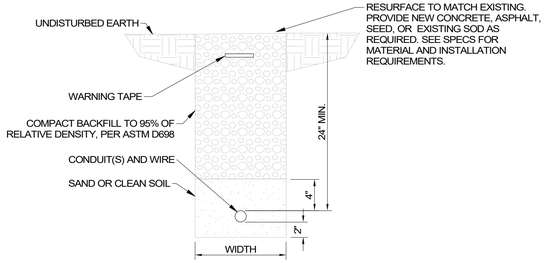
260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

B. CONDUCTOR COLOR-CODING:
1. 120/240V: PHASE A - BLACK, PHASE B - RED, NEUTRAL - WHITE.
2. 208Y/120V: PHASE A - BLACK, PHASE B - RED, PHASE C - BLUE, NEUTRAL - WHITE.
3. GROUNDS: BARE COPPER OR GREEN.

C. UNDERGROUND LINE WARNING TAPE - INSTALL UNDERGROUND-LINE WARNING TAPE FOR DIRECT-BURIED CABLES AND CABLES IN RACEWAYS. DURING BACKFILLING OF TRENCHES, INSTALL CONTINUOUS UNDERGROUND-LINE WARNING TAPE DIRECTLY ABOVE CABLE OR RACEWAY AT 6 TO 8 INCHES BELOW FINISHED GRADE. USE MULTIPLE TAPES WHERE WIDTH OF MULTIPLE LINES INSTALLED IN A COMMON TRENCH OR CONCRETE ENVELOPE EXCEEDS 16 INCHES OVERALL.
D. DISCONNECT LABEL SHALL INCLUDE - PANEL NAME, VOLTAGE, AMPERAGE, NUMBER OF PHASES AND WIRES.

262816 - ENCLOSED SWITCHES

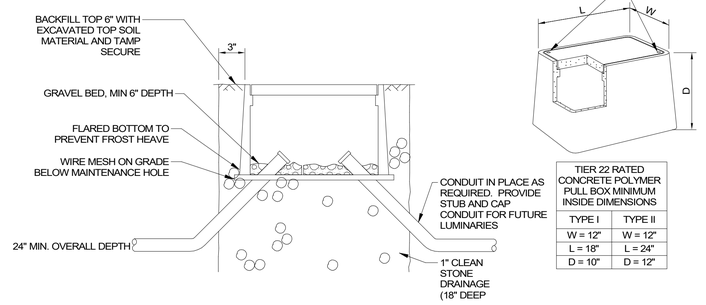
A. FUSIBLE AND NON-FUSIBLE SWITCHES
1. TYPE HD, HEAVY DUTY, SINGLE THROW, TWO- OR THREE-POLE, 240 OR 600V AC AS NOTED ON PLANS, UL 98 AND NEMA KS 1, HORSEPOWER RATED. WITH CLIPS OR BOLT PADS TO ACCOMMODATE FUSES AS REQUIRED BY MANUF



NOTES:
1. WIDTH: MINIMUM 6"
2. WHERE POSSIBLE PUSH CONDUIT UNDER SIDEWALKS AND DRIVES TO AVOID EXCAVATION.
3. CONTRACTOR MAY USE BORING MACHINE IN LIEU OF TRENCHING WHERE CONDITIONS PERMIT. EQUIPMENT AND CONDUIT SHALL BE PRE-APPROVED BY ARCHITECT/ENGINEER.

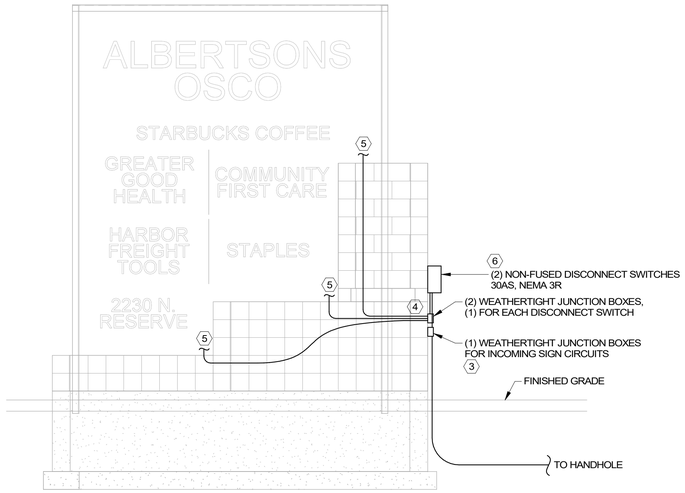
5 TRENCH DETAIL - SINGLE CONDUIT
NTS

NOTES:
- LABEL BOX LID: "ELECTRIC" FOR POWER
- COVER ALL BELOW-GRADE OPENINGS TO PREVENT RODENT ENTRY.

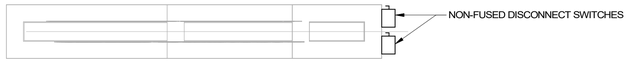


TIER 22 RATED CONCRETE POLYMER PULL BOX MINIMUM INSIDE DIMENSIONS	
TYPE I	TYPE II
W = 12"	W = 12"
L = 18"	L = 24"
D = 10"	D = 12"

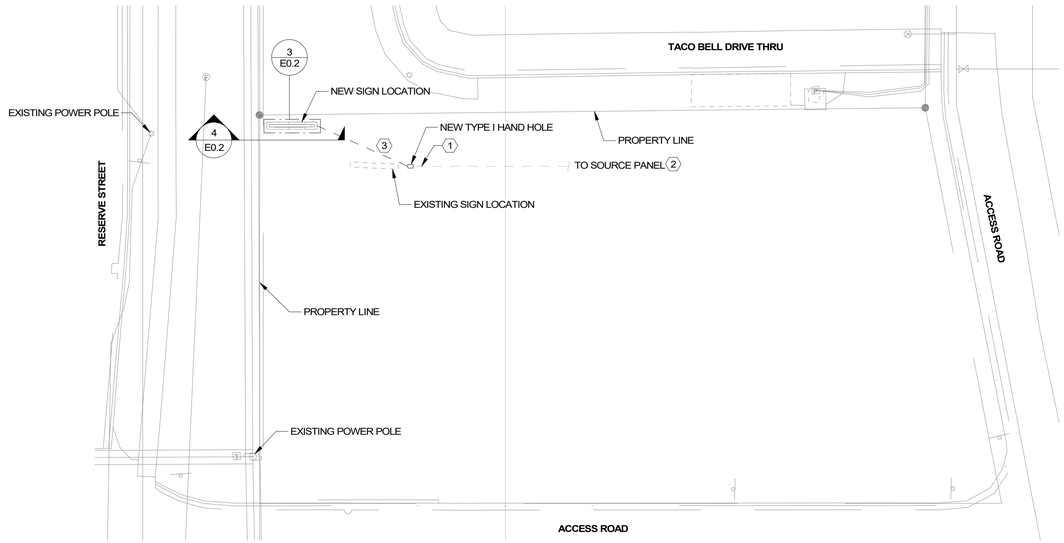
6 HANDHOLE DETAIL
NTS

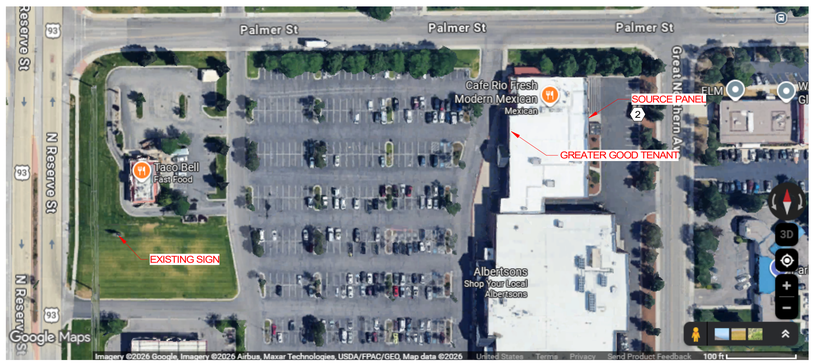


4 SOUTH ELEVATION
3/8" = 1'-0"



3 ENLARGED PLAN VIEW
3/8" = 1'-0"





1 SOURCE PANEL LOCATION
NTS

N

2 ELECTRICAL SITE PLAN
1" = 20'-0"

ELECTRICAL GENERAL NOTES

A. IT IS ABSOLUTELY NECESSARY FOR ALL TRADES INVOLVED TO COORDINATE WITH EACH OTHER AND VERIFY THAT THERE ARE NO CONFLICTS IN LOCATION OF DUCTS, CONDUITS, DIFFUSERS, BOXES, AND OTHER ITEMS THROUGHOUT THIS PROJECT BEFORE FINAL PLACEMENT OF MATERIALS.
B. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING OF FLOORS, WALLS, CEILINGS, AND ROOFS TO PERFORM THE REQUIRED WORK DEPICTED IN THESE DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL PATCHING OF HOLES TO THE SATISFACTION OF THE ARCHITECT/ENGINEER.
C. EC SHALL BE RESPONSIBLE FOR ALL TRENCHING ASSOCIATED WITH ELECTRICAL WORK, WHETHER THE ACTUAL WORK IS ACCOMPLISHED BY THE EC OR THE GC.
D. CAREFULLY CUT AND RETAIN SOD ALIVE FOR REINSTALLATION.
E. BACKFILL TRENCH AND COMPACT TO MATCH ADJACENT UNDISTURBED SOIL. REPLACE SOD TO MATCH EXISTING.
F. EC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO EXISTING BURIED POWER, COMMUNICATIONS, GAS, WATER, SEWER, IRRIGATION, PIPING, ETC. AND SHALL HIRE TRAINED AND CERTIFIED CRAFTSMEN TO PERFORM THE REPAIRS AND BRING THEM BACK TO 'LIKE EXISTING CONDITIONS'. REPAIR WORK WILL NOT BE CONSIDERED COMPLETE UNTIL ALL SYSTEMS ARE ONCE AGAIN FUNCTIONING PROPERLY AND OWNER IS SATISFIED WITH THE REPAIRS.

KEY NOTES:

1. AT EXISTING SIGN LOCATION, DISCONNECT WIRING AND DEMO CONDUIT BACK TO BELOW GRADE. PRESERVE REMAINING WIRING AND CONDUIT FOR EXTENSION TO NEW SIGN.
2. BASED ON INFORMAITON FROM OWNER, EXISTING SIGNAGE APPEARS TO BE SOURCED/CONTROLLED FROM (2) 20A/1P BREAKERS IN A 480Y/277V PANEL BEHIND GREATER GOOD, NEXT TO CAFE RIO. EXACT ROUTE BACK TO PANEL IS UNKNOWN, BUT IT IS ANTICIPATED TO ROUTE VIA SITE POLE LIGHTS AND OTHER HANDHOLES BETWEEN THE SITE SIGN AND SOURCE PANEL.
3. INTERCEPT EXISTING CONDUIT AND EXTEND INTO NEW HANDHOLE. PROVIDE NEW 1" C. FROM HANDHOLE TO JUNCTION BOX MOUNTED ON NEW SIGN BASE, BEFORE SPLITTING CIRCUITS TO THEIR RESPECTIVE DISCONNECTS. EXTEND WIRING WITH #10 CU. COORDINATE EXACT LOCATION OF JUNCTION BOX WITH SIGN BASE.
4. EXTEND WIRING FROM EACH DISCONNECT TO A SEPARATE JUNCTION BOX BEFORE CONTINUING CIRCUITS TO EACH SIGN GROUP. IT IS INTENDED THAT (1) DISCONNECT AND JUNCTION BOX SERVES THE LARGE SIGN AT THE TOP, AND (1) DISCONNECT AND JUNCTION BOX SERVES THE TWO SMALLER SIGN GROUPS. COORDINATE EXACT LOCATION OF EACH JUNCTION BOX WITH SIGN BASE. ROUTE CIRCUITING TO EACH SIGN GROUP VIA SUPPORTED LFMC WITHIN SIGN BASE. WEATHER-SEAL EACH PENETRATION THROUGH SIGN BASE.
5. COORDINATE EXACT ENTRANCE, WIRING, AND CONNECTIONS WITH SIGNAGE SUPPLIER PRIOR TO ROUGH-IN. DESIGN INTENT IS THAT CONDUIT ENTERS EACH SIGN GROUP FROM THE BOTTOM FOR BEST WEATHER PROTECTION.
6. COORDINATE EXACT ELEVATION OF DISCONNECTS WITH SIGN BASE. DESIGN INTENT IS BOTTOM OF BOX AT 4FT AFG. QUANTITY OF DISCONNECTS IS BASED ON NUMBER OF BREAKERS IN SOURCE PANEL. NOTIFY ENGINEER OF ANY DISCREPANCIES ON SITE.

Revision Schedule		
Number	Description	Date

Morrison Maierle
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at

NORTHGATE SHOPPING CENTER

GEOCODE: 04-2200-17-2-14-01-0000

ELECTRICAL SITE PLAN

Date: 2026.04.10 Project No: 25.041

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