

TACO BELL RESTAURANT

1000 LIBERTY WAY

NORTH LIBERTY, IOWA 52317

JOHNSON COUNTY

GLMV PROJECT NO: 21678R21001

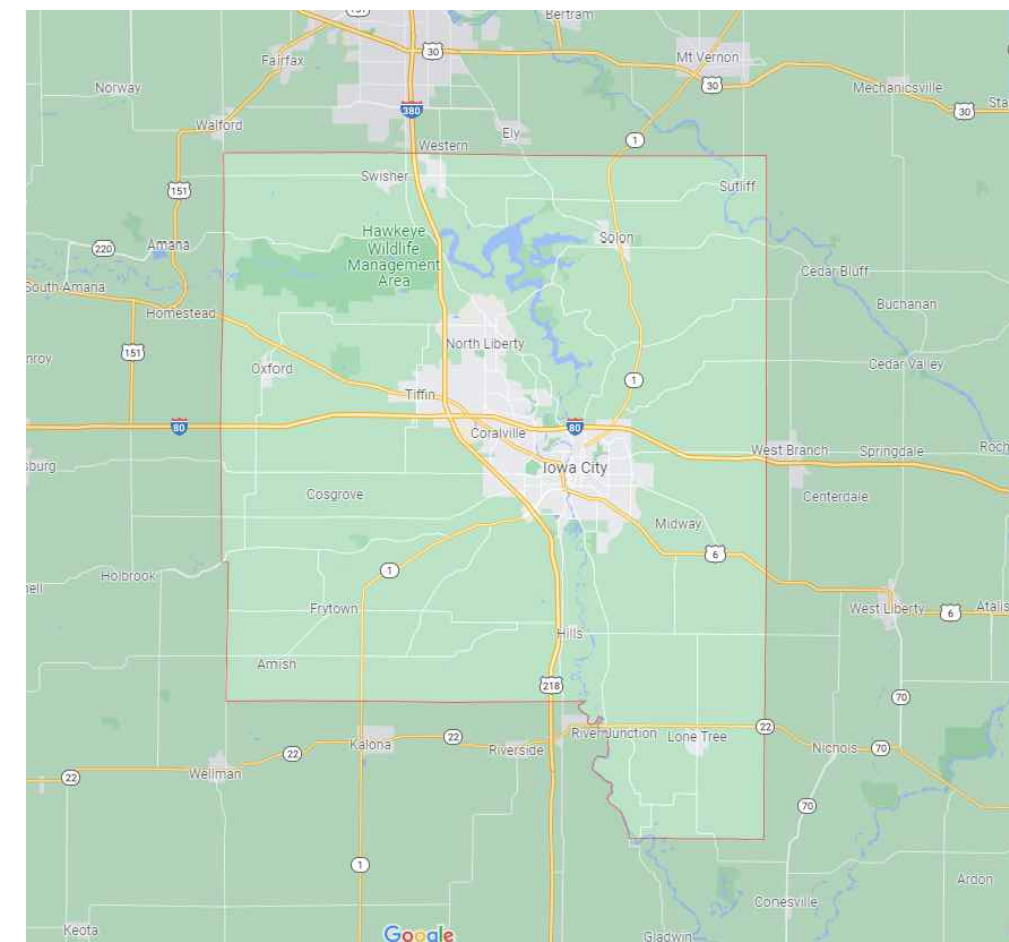
DECEMBER 1, 2021

REVISIONS

DECEMBER 27, 2021

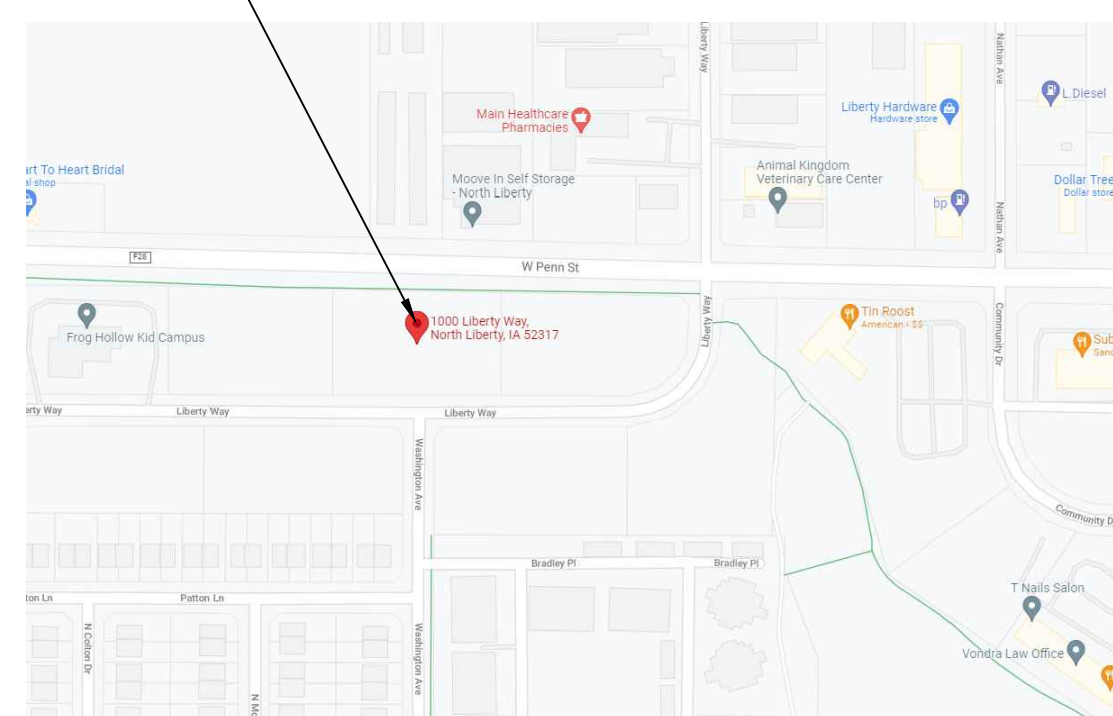
JANUARY 18, 2022

JANUARY 19, 2022



JOHNSON COUNTY SITE MAP
NOT TO SCALE

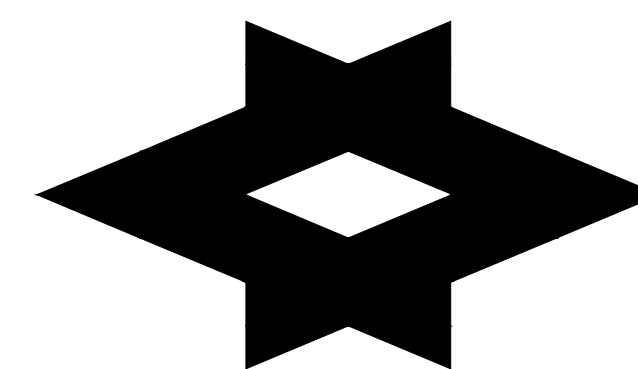
PROJECT
LOCATION



VICINITY MAP
NOT TO SCALE

HAZA BELL OF NEBRASKA, LLC

4415 HIGHWAY 6
SUGARLAND, TX 77478-4476
JIMMY WACHAA



GLMV Architecture
9229 Ward Pkwy, Suite 210 Kansas City, MO 64114
Tel: (816) 444.4200 Fax: (816) 444.4355
www.glmv.com

| DWG. NO. | DESCRIPTION | REVISIONS | | | | | |
|----------|------------------------------|-----------|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| C-100 | COVER SHEET | * | * | * | | | |
| | SURVEY (BY OTHERS) | | | | | | |
| C-101 | EXISTING & DEMOLITION PLAN | | * | * | | | |
| C-102 | SITE PLAN | * | * | * | | | |
| C-102.1 | PHOTOMETRIC PLAN (BY OTHERS) | * | * | | | | |
| C-103 | EROSION CONTROL PLAN | | | * | | | |
| C-104 | UTILITIES PLAN | | | | | | |
| C-105 | GRADING PLAN | * | * | | | | |
| C-501 | SITE DETAILS I | | * | | | | |
| C-502 | SITE DETAILS II | | * | | | | |
| C-503 | DUMPSTER ENCLOSURE DETAILS | | | | | | |
| C-504 | EROSION CONTROL DETAILS I | | | | | | |
| C-505 | EROSION CONTROL DETAILS II | | | | | | |
| C-506 | CONCRETE DRIVEWAY DETAILS | | * | | | | |
| C-507 | UTILITY DETAILS | | | | | | |
| C-508 | STORMWATER DETAILS | | | | | | |
| LP-101 | LANDSCAPE PLAN & DETAILS | * | | | | | |
| LP-102 | IRRIGATION PLAN & DETAILS | * | | | | | |

OWNERSHIP: TACO BELL
HAZA BELL OF NEBRASKA, LLC
4415 HIGHWAY 6
SUGARLAND, TX 77478-4476

PROPERTY: 1000 LIBERTY WAY
NORTH LIBERTY, IA 52317

THIS PROJECT CONSISTS OF DESIGN OF A NEW TACO BELL WITH ALL SUPPORTING SITE FEATURES.

PARCEL ID: 0612327002
ZONE: C-2-A

DISTURBED AREA = 0.99 ACRES

**COVER
SHEET
C-100**



CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS
1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-8282
www.mmsconsultants.net

Table with 2 columns: Date, Revision. Row 1: 11/22/2021, Added utilities and internal review.

TOPOGRAPHIC AND BOUNDARY SURVEY

LOT 3 OF LIBERTY CENTRE PART 1, 1000 LIBERTY WAY NORTH LIBERTY, JOHNSON COUNTY, IOWA

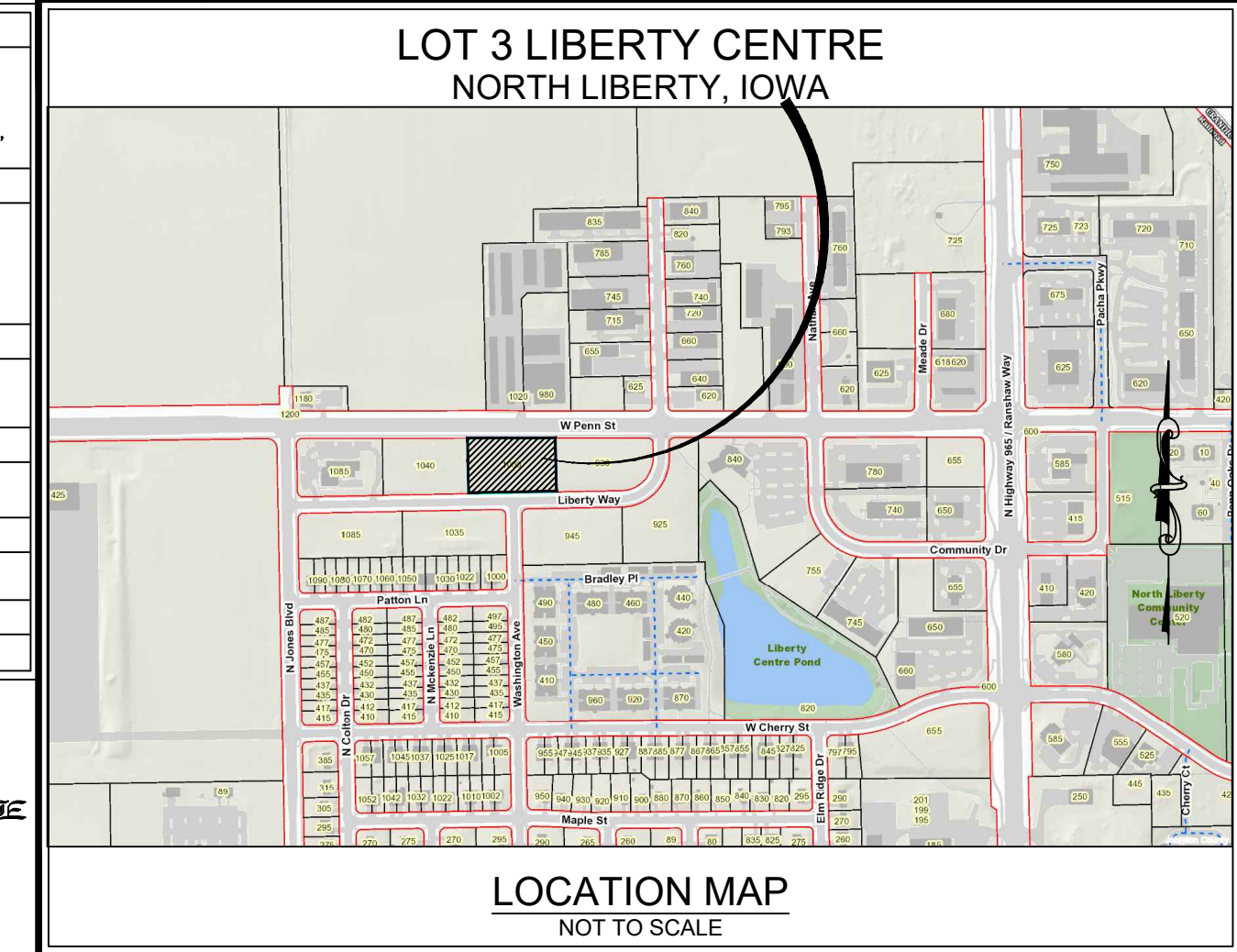
MMS CONSULTANTS, INC.

Table with 2 columns: Date, 11-09-21; Field Book No., 1327; PG 53; Scale, 1"=20'; Sheet No., 1.

TOPOGRAPHIC AND BOUNDARY SURVEY
LOT 3 LIBERTY CENTRE - PART ONE
NORTH LIBERTY, JOHNSON COUNTY, IOWA

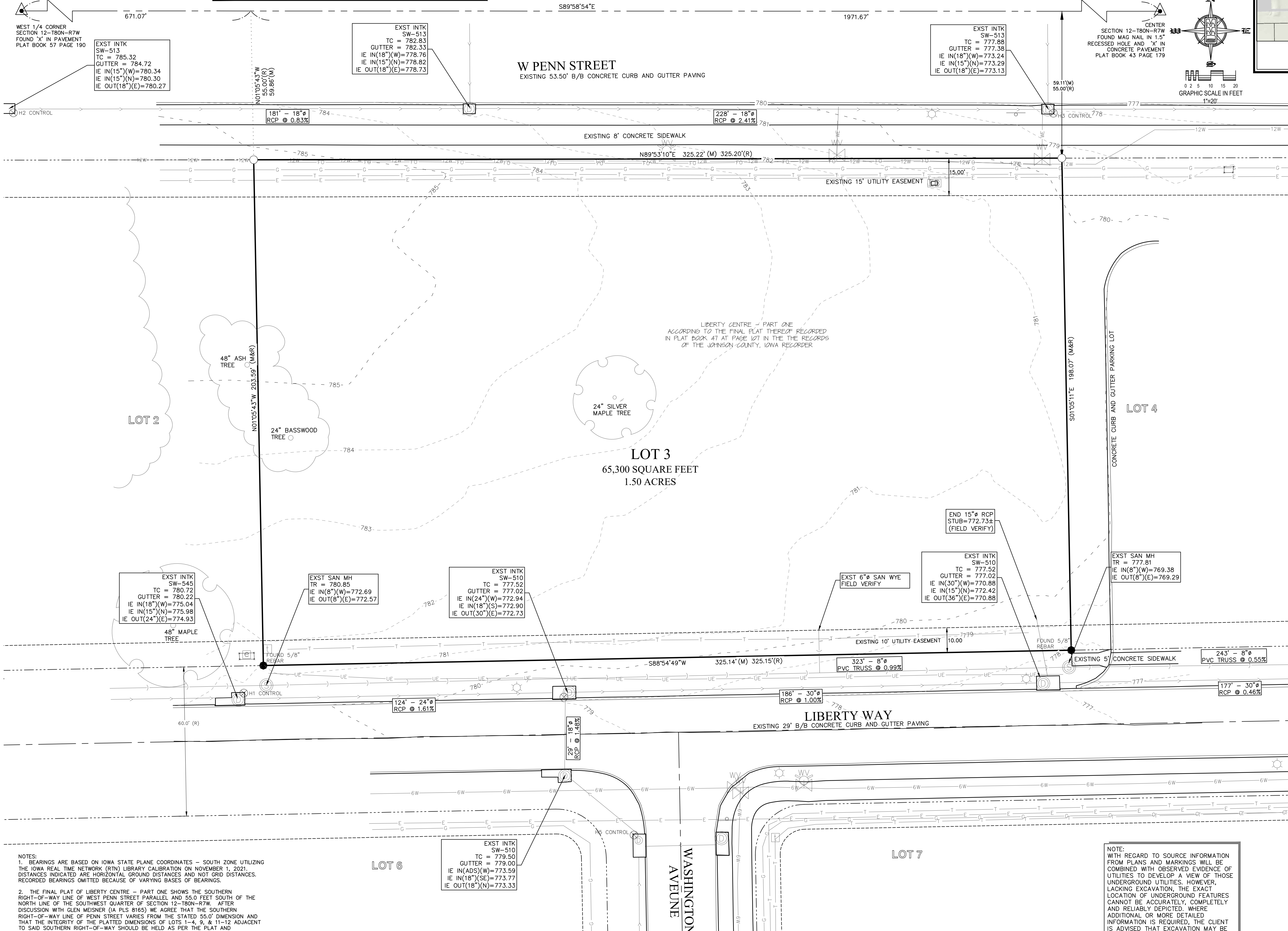
DESCRIPTION
LOT 3, LIBERTY CENTRE - PART ONE TO NORTH LIBERTY, IOWA ACCORDING TO THE FINAL PLAT THEREOF RECORDED IN BOOK 47, PAGE 107, PLAT RECORDS OF JOHNSON COUNTY, IOWA, CONTAINING 1.50 ACRES (AT THE TIME OF SURVEY) AND IS SUBJECT TO ANY EASEMENTS AND RESTRICTIONS OF RECORD.

LOCATION:
LOT 3, LIBERTY CENTRE - PART ONE TO NORTH LIBERTY, IOWA, LOCATED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 12-180N-R7W OF THE 5TH P.M., CITY OF NORTH LIBERTY, JOHNSON COUNTY, IOWA.
LAND SURVEYOR, INCLUDING FIRM OR ORGANIZATION:
DAVID M. WEST, P.L.S.
MMS CONSULTANTS INC.
1917 SOUTH GILBERT STREET
IOWA CITY, IOWA, 52240
PHONE: 319-351-8282
SURVEY REQUESTED BY:
GLVM ARCHITECTURE
(OREOLUWA ADEAPO)
PROPRIETOR OR OWNER:
NLD, L.C.
AS OF THE DATE OF SURVEY
DATE OF SURVEY:
NOVEMBER 1, 2021
DOCUMENT RETURN INFORMATION:
LAND SURVEYOR



STANDARD LEGEND AND NOTES
PROPERTY CORNER(S), FOUND (as noted)
PROPERTY CORNERS SET 5/8" REBAR W/O RANGE, PLASTIC LS CAP NO. 15749 UNLESS NOTED OTHERWISE
SET OUT "X" IN CONCRETE UNLESS NOTED OTHERWISE
PROPERTY &/OF BOUNDARY LINES
CONGRESSIONAL SECTION LINES
RIGHT-OF-WAY LINES
CENTER LINES
LOT LINES, PLATTED OR BY DEED
EXISTING EASEMENT LINES, PURPOSE NOTED
STORM SEWER LINES
SANITARY SEWER LINES
HOT & CHILLED WATER LINES
WATER MAIN WITH SIZE
WATER MAIN LINES
TELECOMMUNICATION LINES
ELECTRICAL LINES - UNDERGROUND
ELECTRICAL LINES - OVERHEAD
FIBER OPTIC LINES
GAS LINES
WALL (TYPE NOTE)
FENCE
FENCE CORNER
FENCE LINE SHOT
EVERGREEN TREE WITH SIZE
BUSH LINE
DECIDUOUS TREE WITH SIZE
RECORDED DIMENSIONS
MEASURED DIMENSIONS
HYDRANT METER
FIRE HYDRANT
WATER VALVE
SIGN
UTILITY CLEANOUT
SANITARY MANHOLE
STORM MANHOLE
STORM GRATE INLET
STORM CURB INLET
STORM DRAINAGE MANHOLE
MANHOLE (UNKNOWN)
MONITORING WELL
TELEPHONE CAN
GAS SHUTOFF
GAS METER
AIR CONDITIONER
GUY WIRE
POWER POLE WITH TRANSFORMER
LIGHT POLE
POWER POLE WITH LIGHT
POWER POLE
ELECTRIC TRANSFORMER/PAD
ELECTRIC MANHOLE
TELEPHONE MANHOLE
FUEL MANHOLE
TRAFFIC CONTROL BOX
TRAFFIC LIGHT BASE
PAY PHONE
BOLLARD
BENCHMARK LOCATION
UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN FEET AND HUNDRETHS

HORIZONTAL CONTROL & BENCHMARK INFORMATION table with columns: POINT, NORTHING, EASTING, IOWA RTN DATUM, DESCRIPTION.

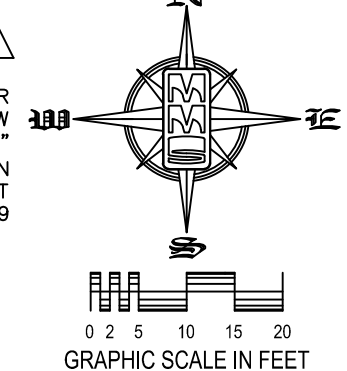


WEST 1/4 CORNER SECTION 12-180N-R7W FOUND "X" IN PAVEMENT PLAT BOOK 57 PAGE 190
EXST INTK SW-513
TC = 785.32
GUTTER = 784.72
IE IN(18°)(W)=780.34
IE IN(15°)(N)=780.30
IE OUT(18°)(E)=780.27

EXST INTK SW-513
TC = 782.83
GUTTER = 782.33
IE IN(18°)(W)=778.76
IE IN(15°)(N)=778.82
IE OUT(18°)(E)=778.73

EXST INTK SW-513
TC = 777.88
GUTTER = 777.38
IE IN(18°)(W)=773.24
IE IN(15°)(N)=773.29
IE OUT(18°)(E)=773.13

SECTION 12-180N-R7W RECESSED HOLE AND "X" IN CONCRETE PAVEMENT PLAT BOOK 43 PAGE 179
59.11'(M)
55.00'(M)

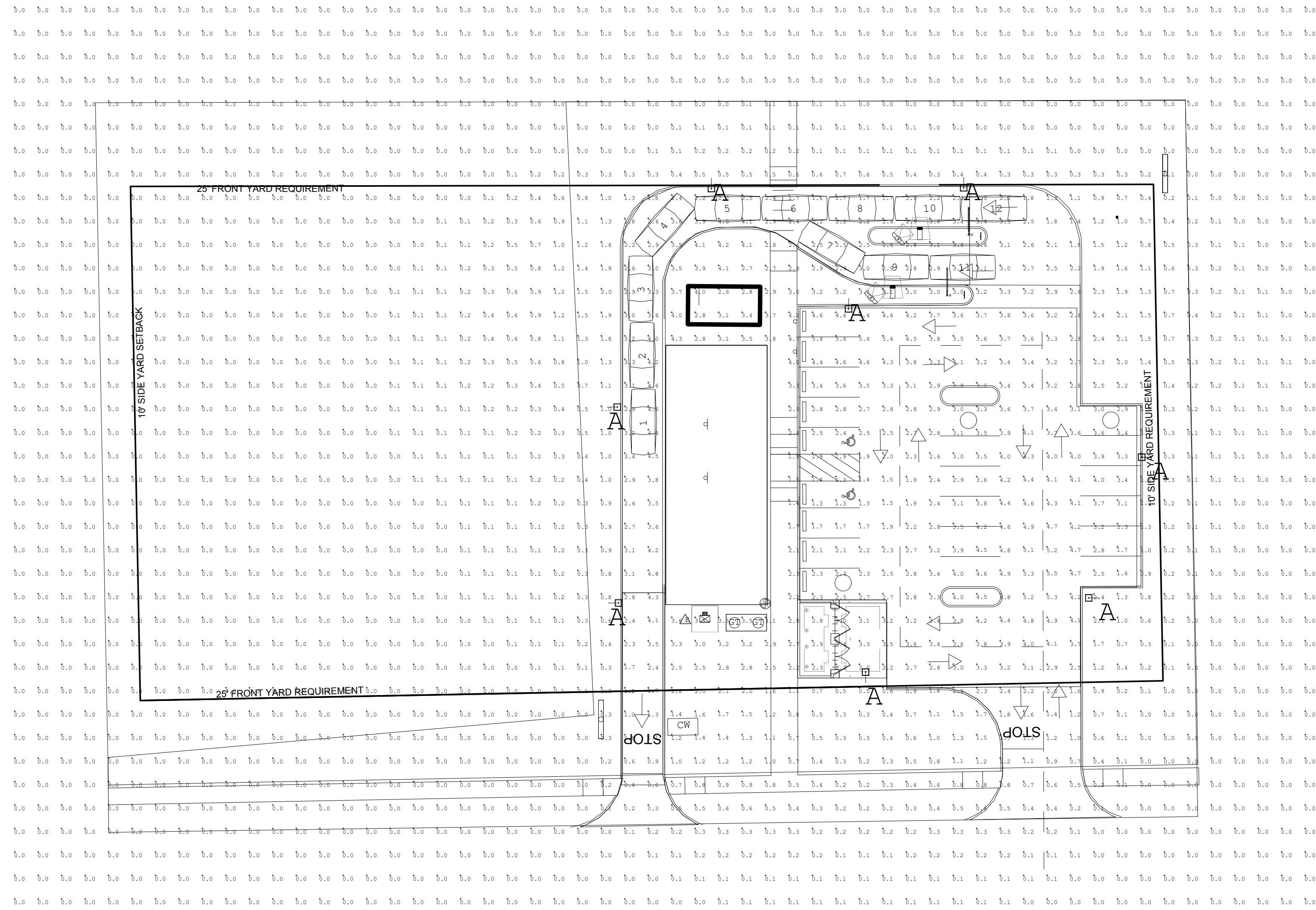


NOTES:
1. BEARINGS ARE BASED ON IOWA STATE PLANE COORDINATES - SOUTH ZONE UTILIZING THE IOWA REAL TIME NETWORK (RTN) LIBRARY CALIBRATION ON NOVEMBER 1, 2021. DISTANCES INDICATED ARE HORIZONTAL GROUND DISTANCES AND NOT GRID DISTANCES. RECORDED BEARINGS OMITTED BECAUSE OF VARYING BASES OF BEARINGS.
2. THE FINAL PLAT OF LIBERTY CENTRE - PART ONE SHOWS THE SOUTHERN RIGHT-OF-WAY LINE OF WEST PENN STREET PARALLEL AND 55.0 FEET SOUTH OF THE NORTH LINE OF THE SOUTHWEST QUARTER OF SECTION 12-180N-R7W. AFTER DISCUSSION WITH GLEN WEISNER (A PL 5 8165) WE AGREE THAT THE SOUTHERN RIGHT-OF-WAY LINE OF PENN STREET VARIES FROM THE STATED 55.0' DIMENSION AND THAT THE INTEGRITY OF THE PLATTED DIMENSIONS OF LOTS 1-4, 9, & 11-12 ADJACENT TO SAID SOUTHERN RIGHT-OF-WAY SHOULD BE HELD AS PER THE PLAT AND MONUMENTATION AS PLACED.

NOTE:
WITH REGARD TO SOURCE INFORMATION FROM PLANS AND MARKINGS WILL BE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED, WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.

UTILITIES
THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL AT 811 OR 800/292-8989 NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.
WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THESE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly licensed Professional Land Surveyor under the laws of the State of Iowa.
David M. West
NOVEMBER 23, 2021
DAVID M. WEST
P.L.S. Iowa Lic. No. 15749
My license renewal date is December 31, 2022.
Pages or sheets covered by this seal: 1
SEAL



| Luminaire Schedule | | | | |
|--------------------|-----|-------|-------------|--|
| Symbol | Qty | Label | Arrangement | Description |
| —□ | 8 | A | SINGLE | MRM-LED-18L-SIL-FT-40-70CRI-IL WITH REAR HOUSING SHIELD MOUNTED AT 25' |

| Calculation Summary | | | | | | |
|---------------------|-------|------|------|------|---------|---------|
| Label | Units | Avg | Max | Min | Avg/Min | Max/Min |
| - | Fc | N.A. | N.A. | N.A. | N.A. | N.A. |
| DRIVE THRU SURFACE | Fc | 2.76 | 4.8 | 0.4 | 6.90 | 12.00 |
| PARKING LOT SURFACE | Fc | 3.38 | 5.5 | 1.3 | 2.60 | 4.23 |



21678R21001

- ▲ 12/27/2021 RESPONSE TO COMMENTS
- ▲ 01/06/2022 RESPONSE TO COMMENTS
- ▲
- ▲
- ▲
- ▲
- ▲
- ▲
- ▲
- ▲

CONTRACT DATE: 12.01.2021
 BUILDING TYPE: END. MED40
 PLAN VERSION: XX.XX.XXXX
 SITE NUMBER: XXXXXX
 STORE NUMBER:

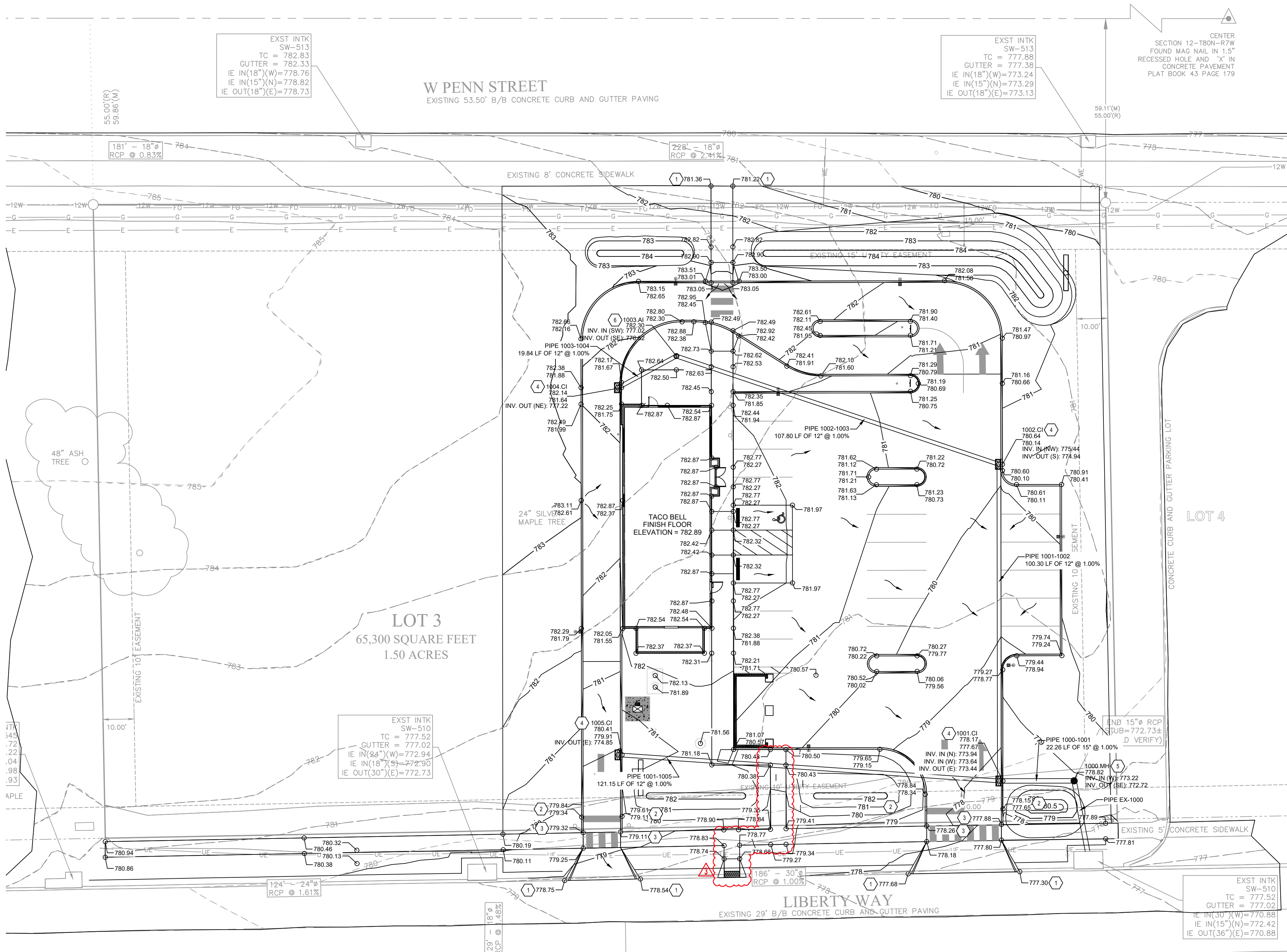
TACO BELL
 1000 LIBERTY WAY
 NORTH LIBERTY, IA 52317



ENDEAVOR 2.0

PHOTOMETRIC PLAN

C-102.1



GENERAL GRADING NOTES:

1. CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT BEFORE STARTING CONSTRUCTION.
2. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
3. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED (GREEN SPACES) SHALL BE FINISH GRADED WITH A MINIMUM OF SIX INCHES OF TOPSOIL.
4. ALL EXCAVATIONS AND EMBANKMENTS SHALL COMPLY WITH THE RECOMMENDATIONS PROVIDED BY THE GEOTECHNICAL ENGINEER.
5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1, UNLESS NOTED OTHERWISE ON THE PLANS.
6. ALL SITE WORK FOR THIS PROJECT IS CONSIDERED "UNCLASSIFIED". THE TERM "UNCLASSIFIED" EXCAVATION SHALL BE DEFINED AS MEANING THE CONTRACTOR BEARS THE ENTIRE RISK OF THE SOIL QUANTITIES AND/OR TYPE (E.G. ROCK, CLAY, PEAT, SILT, SHALE, ETC.) ENCOUNTERED EITHER ABOVE OR BELOW PROPOSED SUBGRADES. IN THE EVENT IT BECOMES NECESSARY FOR UNSUITABLE SOIL TO BE HANDLED, REMOVED FROM THE SITE, OR FOR SUITABLE MATERIAL TO BE IMPORTED TO THE SITE, THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF SUCH ADDITIONAL WORK. "UNSUITABLE" SOIL ALSO INCLUDES SATURATED SOILS THAT MAY NEED REPLACING AND/OR TREATING IN ORDER TO MEET SCHEDULE DATES. THIS DEFINITION OF "UNCLASSIFIED" SUPERCEDES ANY CONTRARY DEFINITIONS OR STATEMENTS WHICH MAY BE CONTAINED IN SPECIFICATIONS, PLANS, OR OTHER DOCUMENTS.
7. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS OF CONNECTION POINTS AS SHOWN ON GRADING PLANS. NOTIFY ENGINEER IF DISCREPANCY EXISTS FOR DIRECTION.
8. ALL GRADES SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT TRANSITIONS AT THE TOP OF SLOPES WHERE PROPOSED GRADES MEET EXISTING ARE NOT ACCEPTABLE. GRADING SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE ADDITION OF THE TOPSOIL LAYER.

ADA NOTES

1. ANY AND ALL NEW SITE FEATURES SHOWN ON PLANS AND INTENDED TO BE "ADA ACCESSIBLE PATHS" SHALL BE BUILT IN COMPLIANCE TO CURRENT FEDERAL, STATE AND LOCAL ACCESSIBILITY RULES AND REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO KNOW AND UNDERSTAND ALL CURRENT ACCESSIBILITY REGULATIONS AS THEY PERTAIN TO THE CONSTRUCTION OF ACCESSIBLE SITE FEATURES.
2. ALL NEW CONCRETE SIDEWALK PAVEMENT SHALL BE INSTALLED WITH A MAXIMUM 5% RUNNING SLOPE AND A MAXIMUM 2% CROSS SLOPE.
3. SURFACES OF ALL NEW CONCRETE PAVEMENT PATHWAYS SHALL BE SMOOTH AND EVEN WITH NO ABRUPT CHANGES IN ELEVATION OF 1/4" OR GREATER AS REQUIRED BY THE ACCESSIBILITY DESIGN REGULATIONS.

GENERAL STORMWATER NOTES

1. ALL PROPOSED STORMWATER PIPING SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) DUAL WALL PIPE (ADS HP STORM OR APPROVED EQUAL) UNLESS NOTED OTHERWISE.

GRADING PLAN KEYNOTES

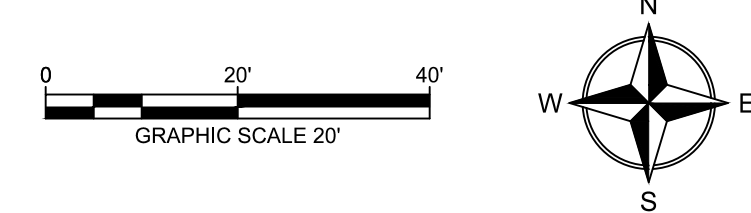
- 1 MATCH EXISTING ELEVATION (+/-). NOTIFY ENGINEER IF SIGNIFICANT GRADE DIFFERENCE EXISTS.
- 2 BEGIN TRANSITION FROM FULL 6" CURB TO FLUSH CURB.
- 3 FLUSH CURB.

STORMWATER PLAN KEYNOTES

- 4 PROPOSED 2' X 3' NYLOPLAST CURB INLET. REF: C-508
- 5 PROPOSED 24" DIAMETER NYLOPLAST DRAIN BASIN W/ SOLID COVER. REF: C-508. CONTRACTOR TO FIELD VERIFY EXISTING PIPE STUB IN THIS VICINITY.
- 6 PROPOSED 24" DIAMETER NYLOPLAST DRAIN BASIN W/ DOME GRATE. REF: C-508.

| LEGEND | |
|--------|-----------------------------|
| | SPOT ELEVATION |
| | TOP OF CURB ELEVATION |
| | FLOWLINE ELEVATION |
| | PROPOSED MAJOR CONTOUR |
| | PROPOSED MINOR CONTOUR |
| | EXISTING CONTOUR |
| | FLOWLINE ARROW |
| | PROPOSED STORM SEWER |
| | PROPOSED CURB INLET |
| | PROPOSED STORMWATER MANHOLE |
| | PROPOSED AREA INLET |

1 GRADING PLAN
1" = 20'-0"



21678R21001

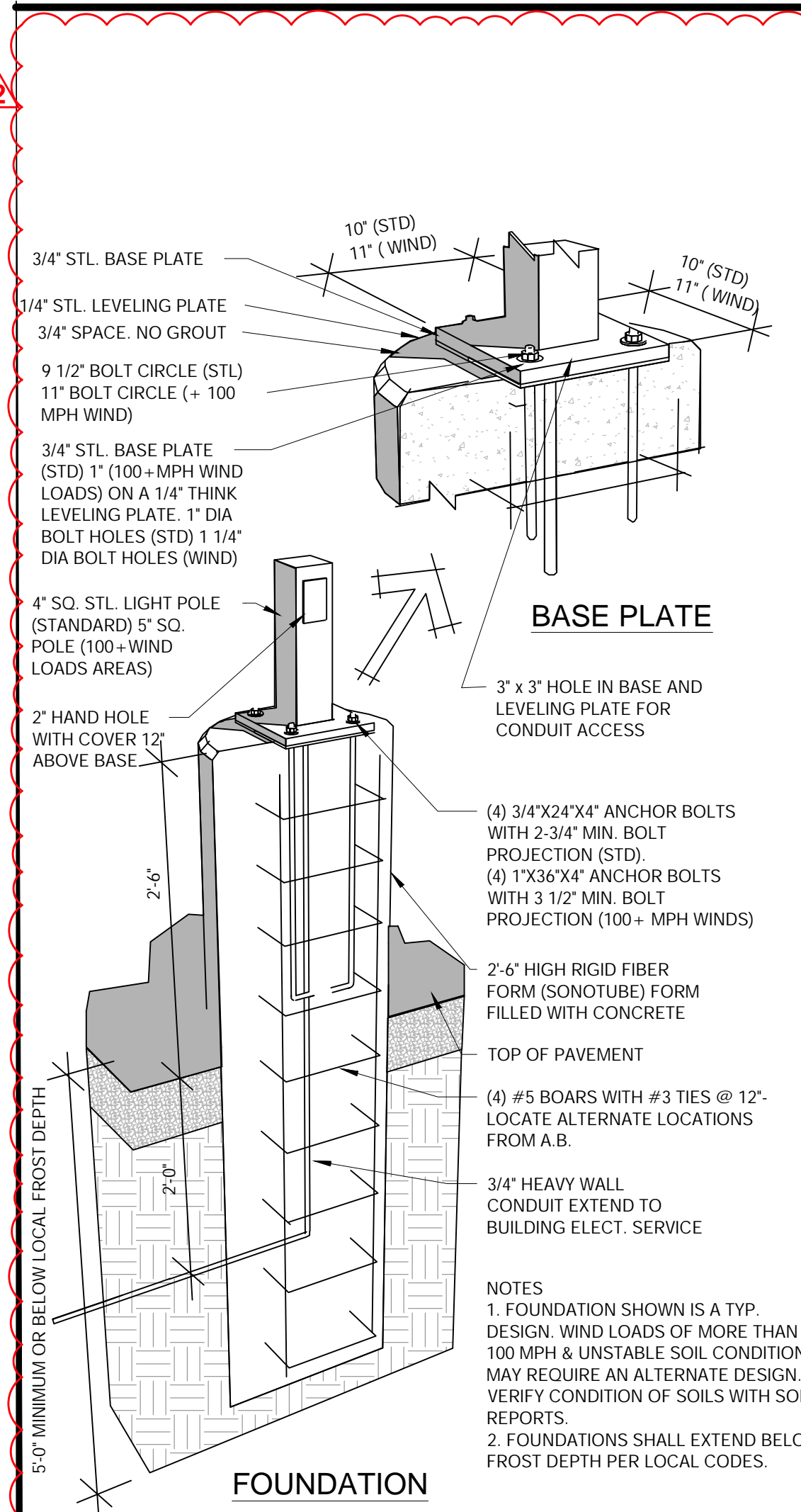
- 1 12/27/2021 RESPONSE TO COMMENTS
- 2 01/18/2022 RESPONSE TO COMMENTS
- 3 01/19/2022 RESPONSE TO COMMENTS

CONTRACT DATE: 12.01.2021
BUILDING TYPE: END, MED40
PLAN VERSION: XX.XX.XXXX
SITE NUMBER: XXXXXX
STORE NUMBER:

TACO BELL
1000 LIBERTY WAY
NORTH LIBERTY, IA 52317

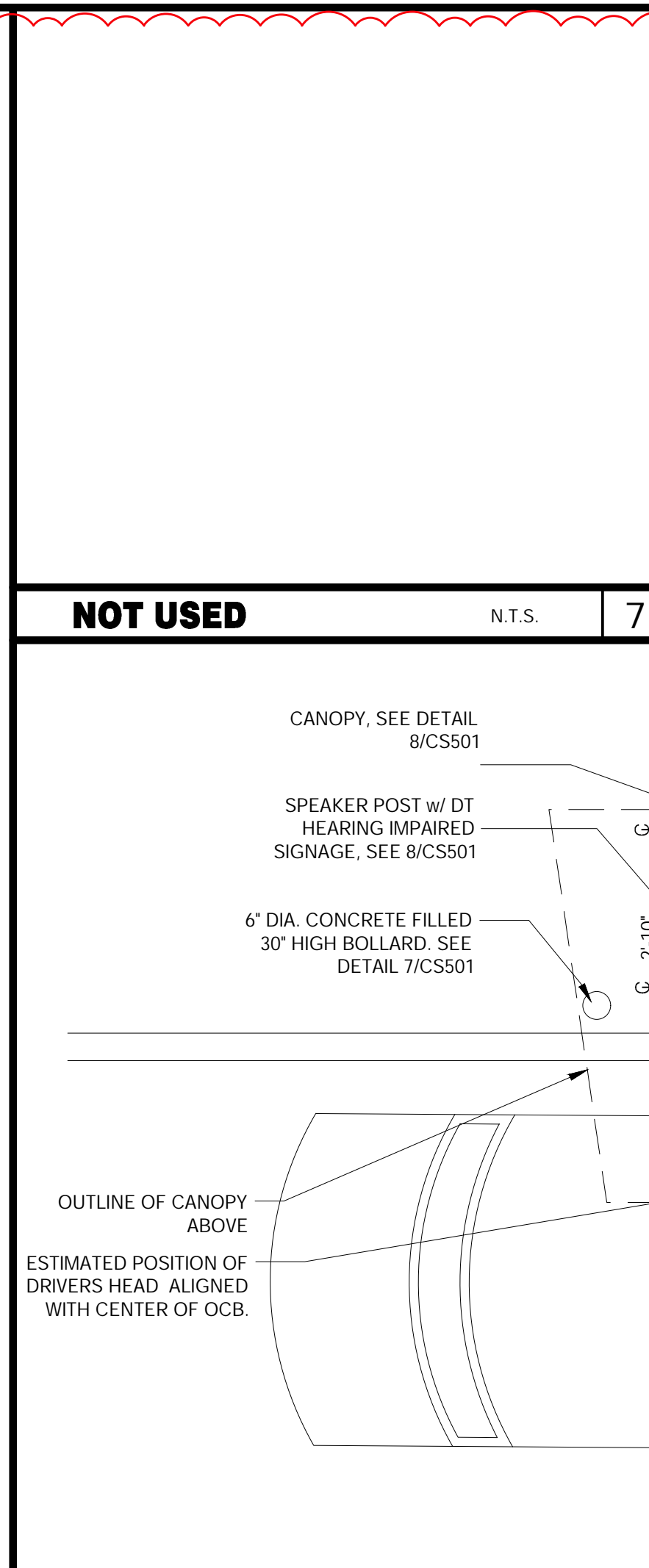


GRADING PLAN
C-105



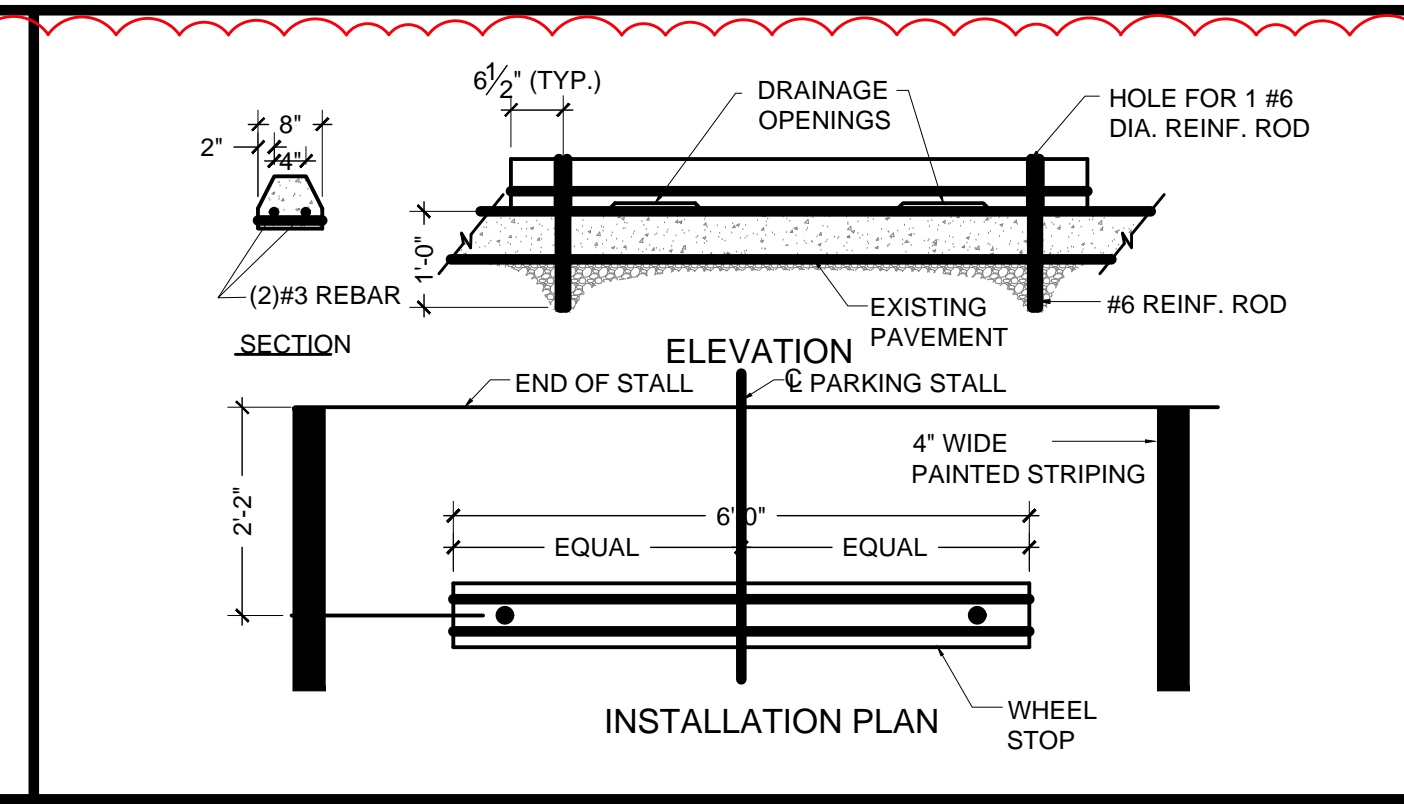
LIGHT POLE FOOTING

N.T.S. 10



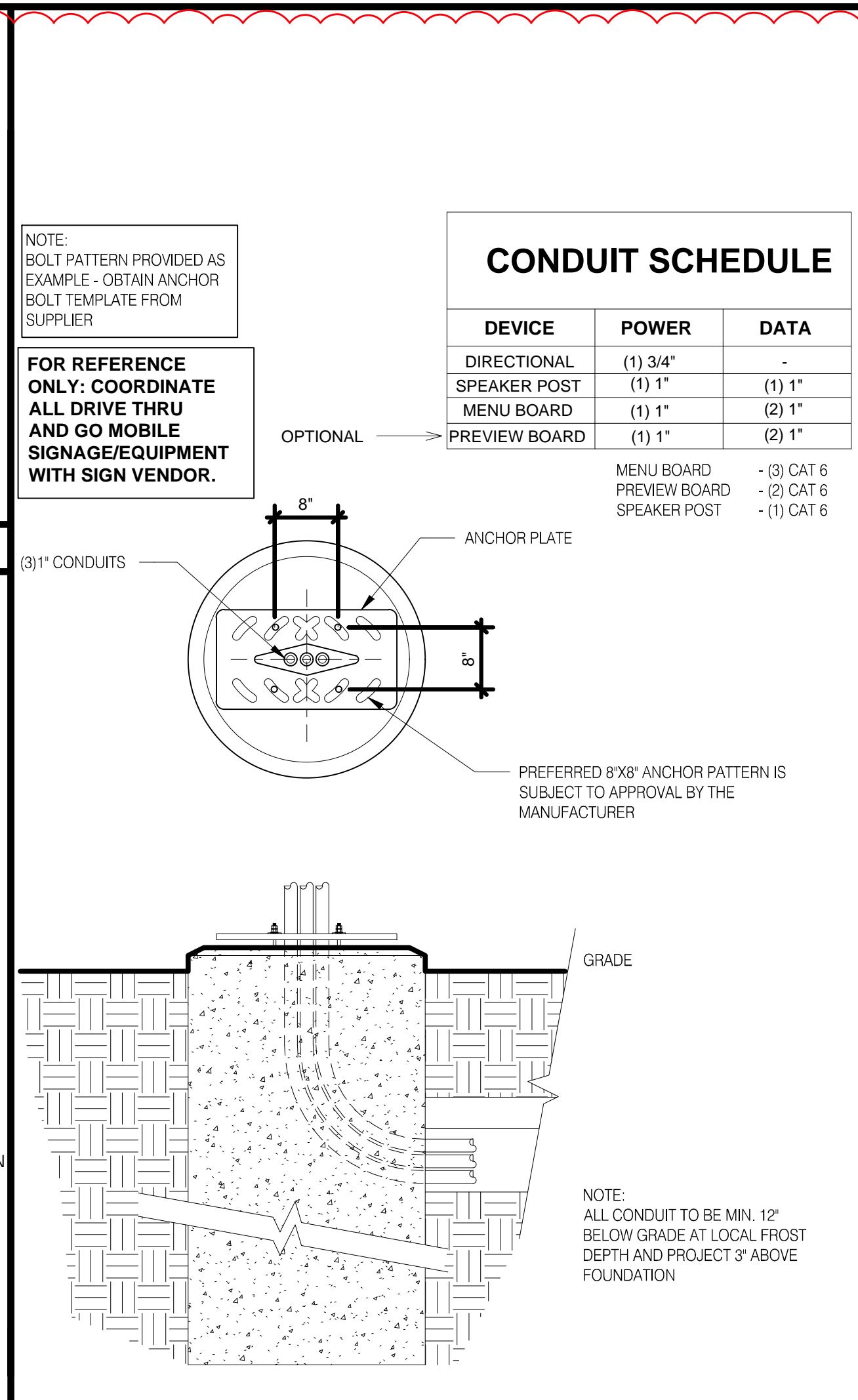
ENLARGED MENU BOARD DETAIL @ STRAIGHT CURB

N.T.S. 8



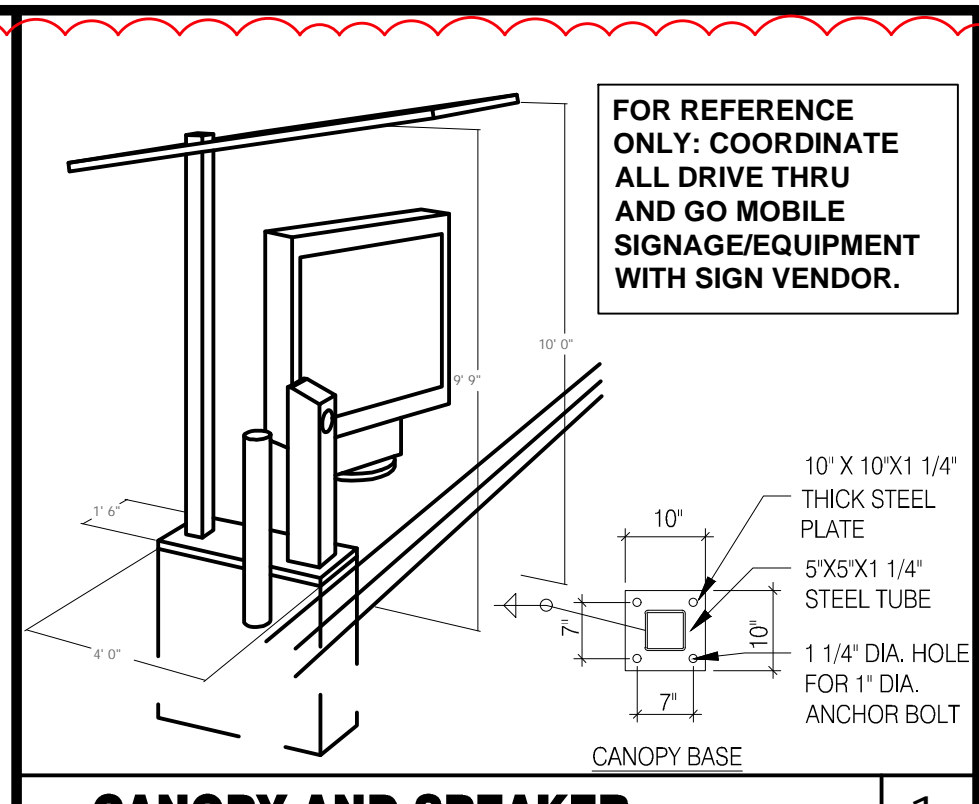
WHEEL STOP

N.T.S. 6



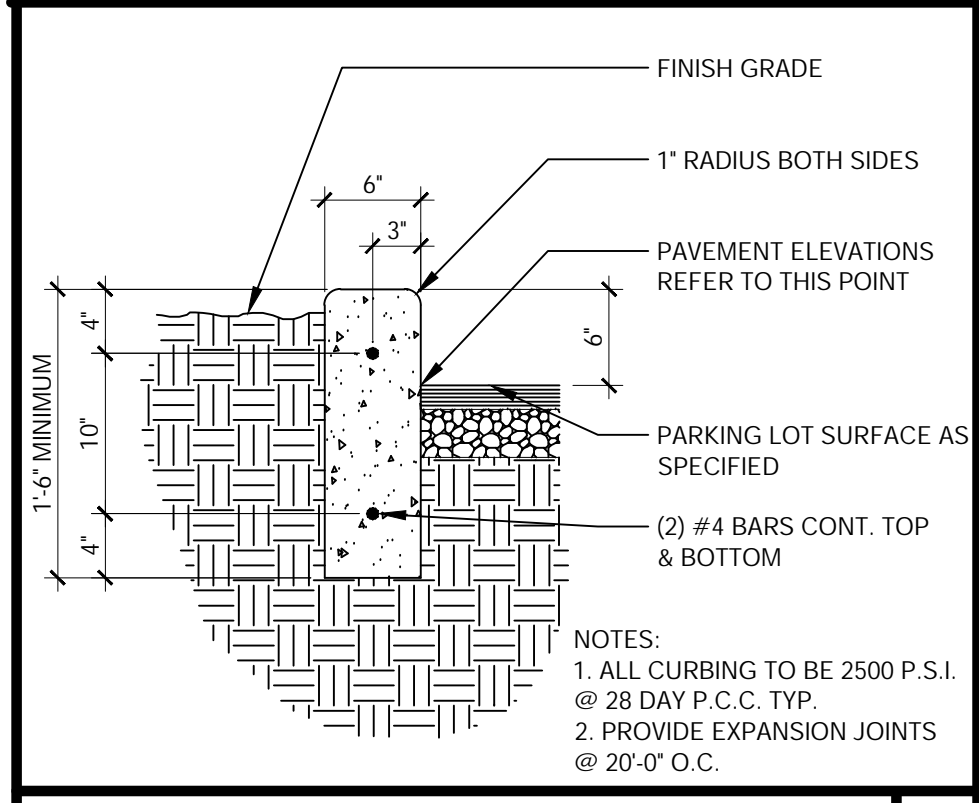
MENU BASE

N.T.S. 4



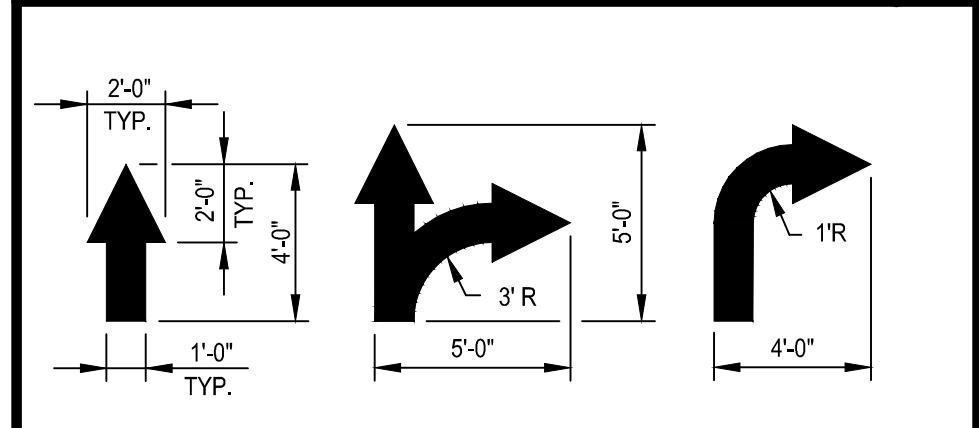
CANOPY AND SPEAKER

N.T.S. 1



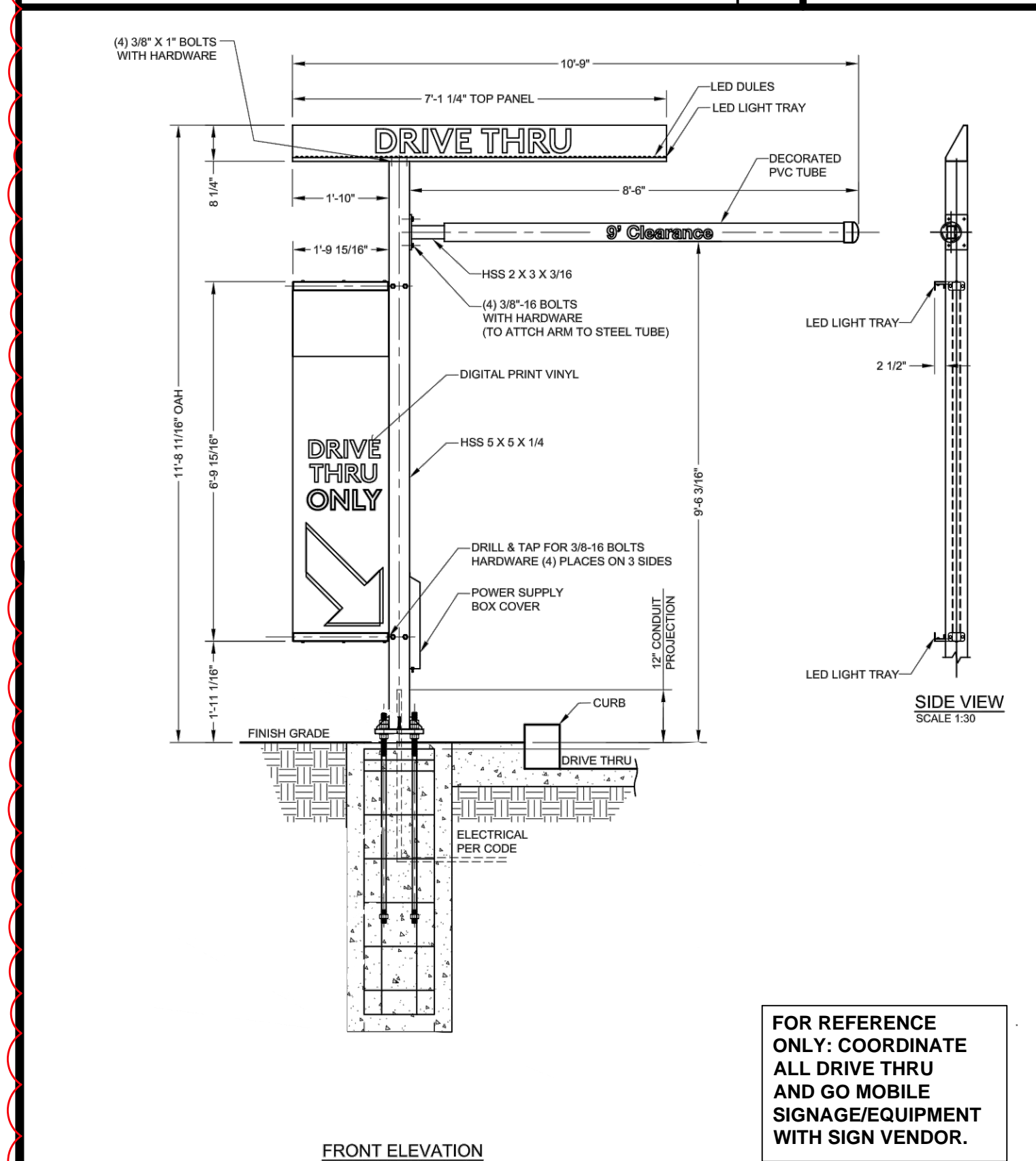
STANDARD CONCRETE CURB

N.T.S. 2



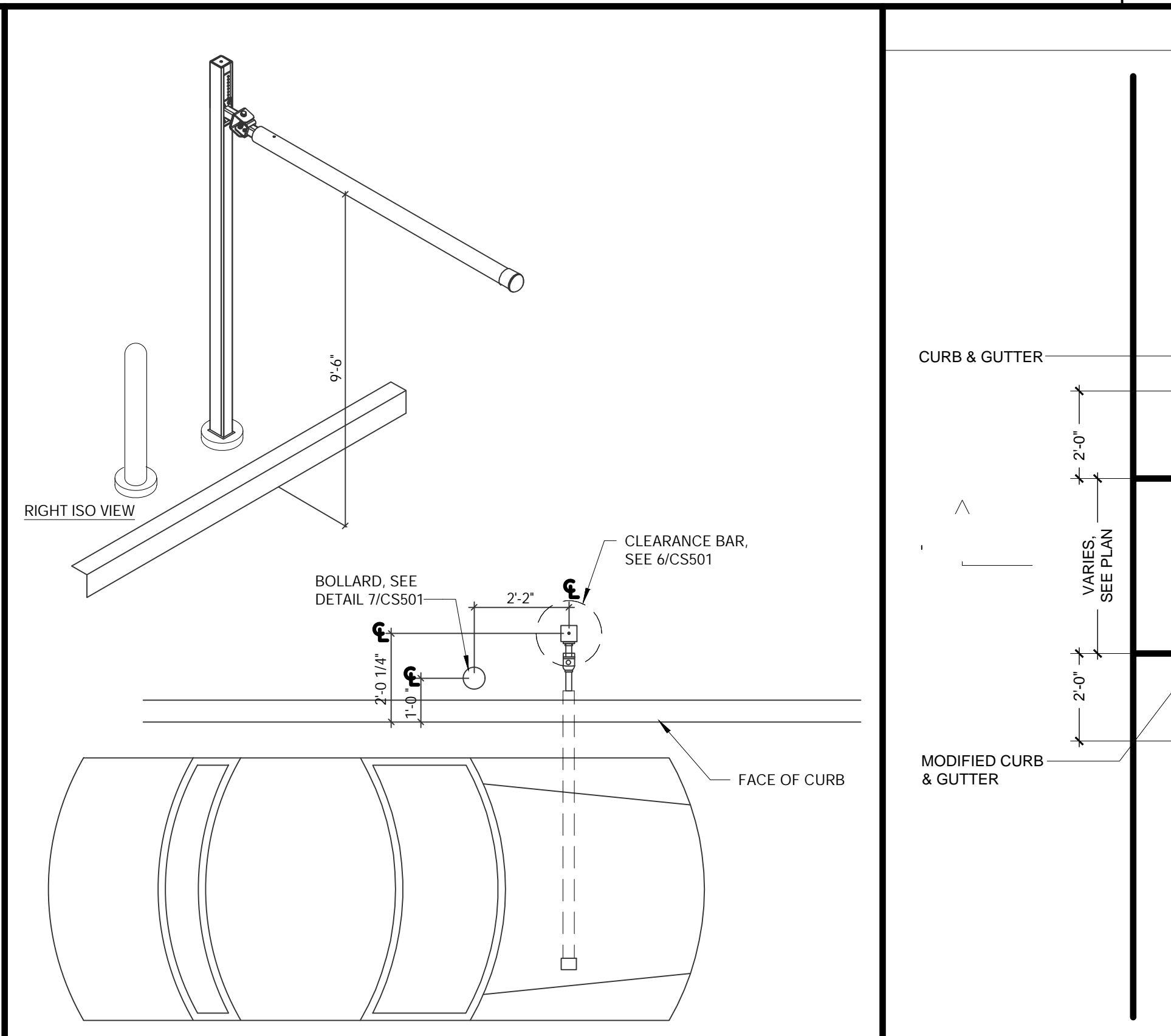
PAINTED TRAFFIC ARROWS

N.T.S. 3



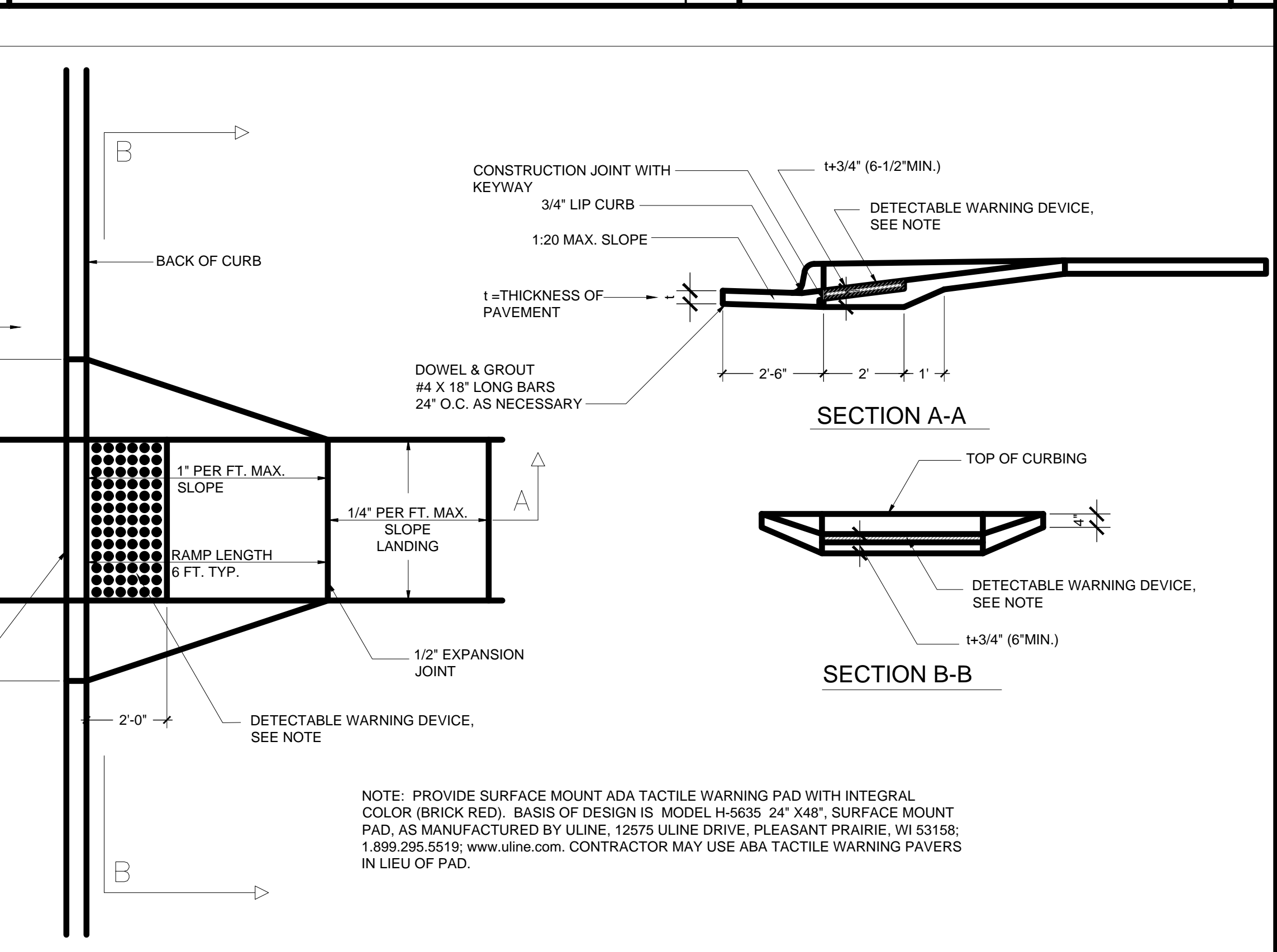
DRIVE THRU CLEARANCE BAR

N.T.S. 11



CLEAR BAR PLACEMENT DETAIL

N.T.S. 9



PERPENDICULAR CURB RAMP

N.T.S. 5



21678R21001

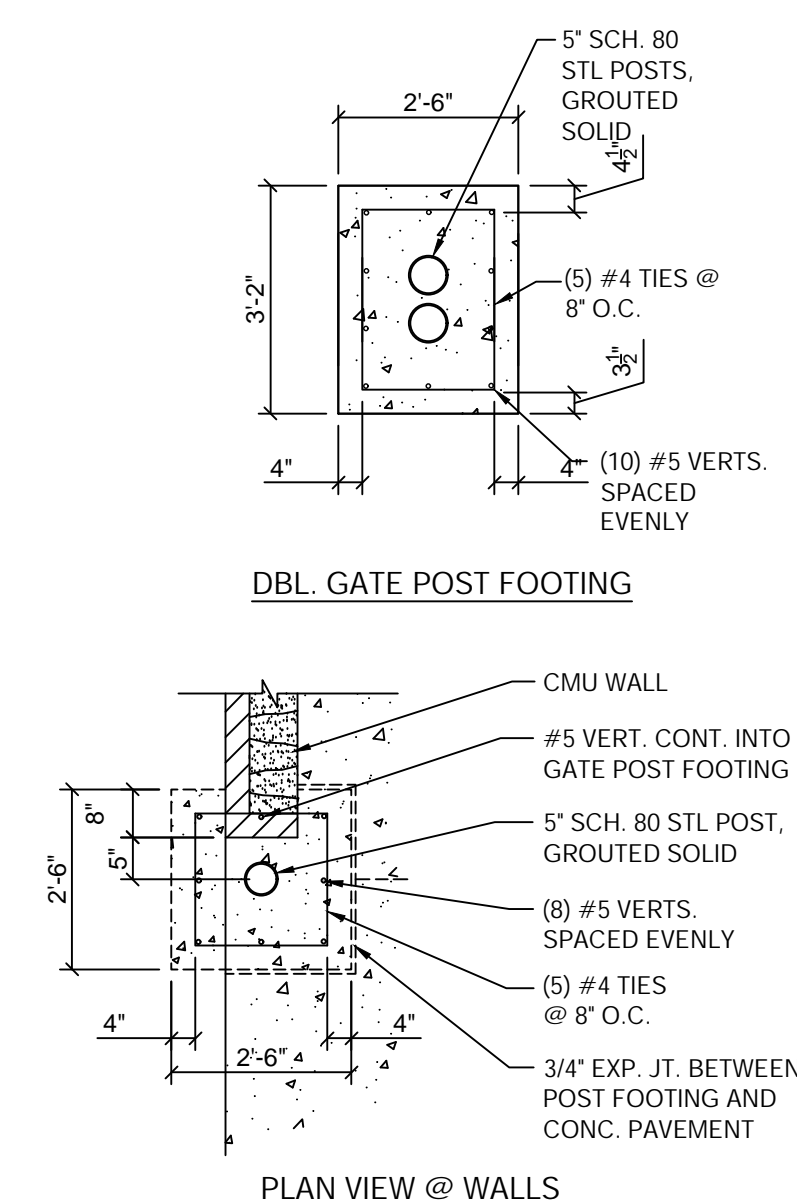
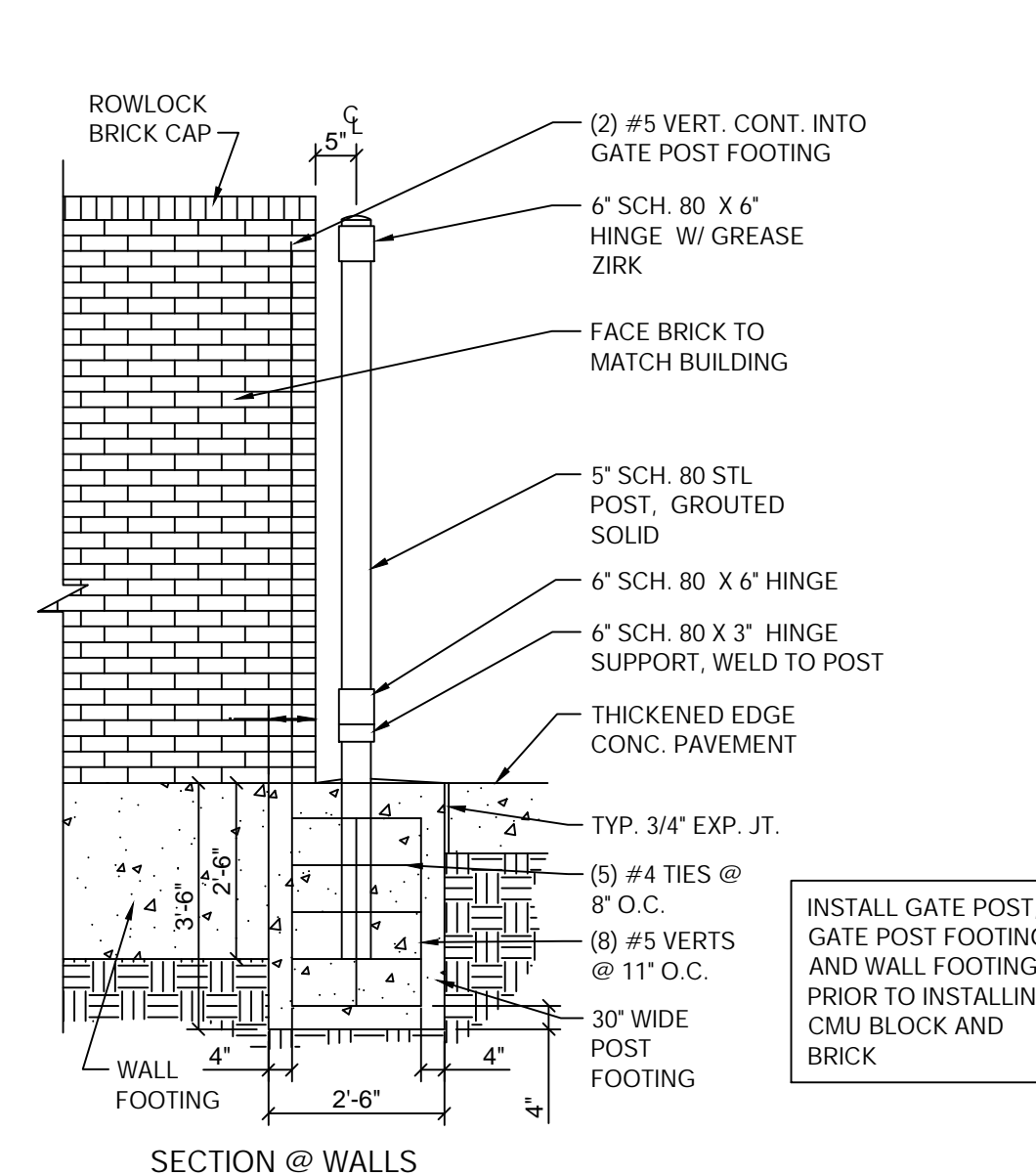
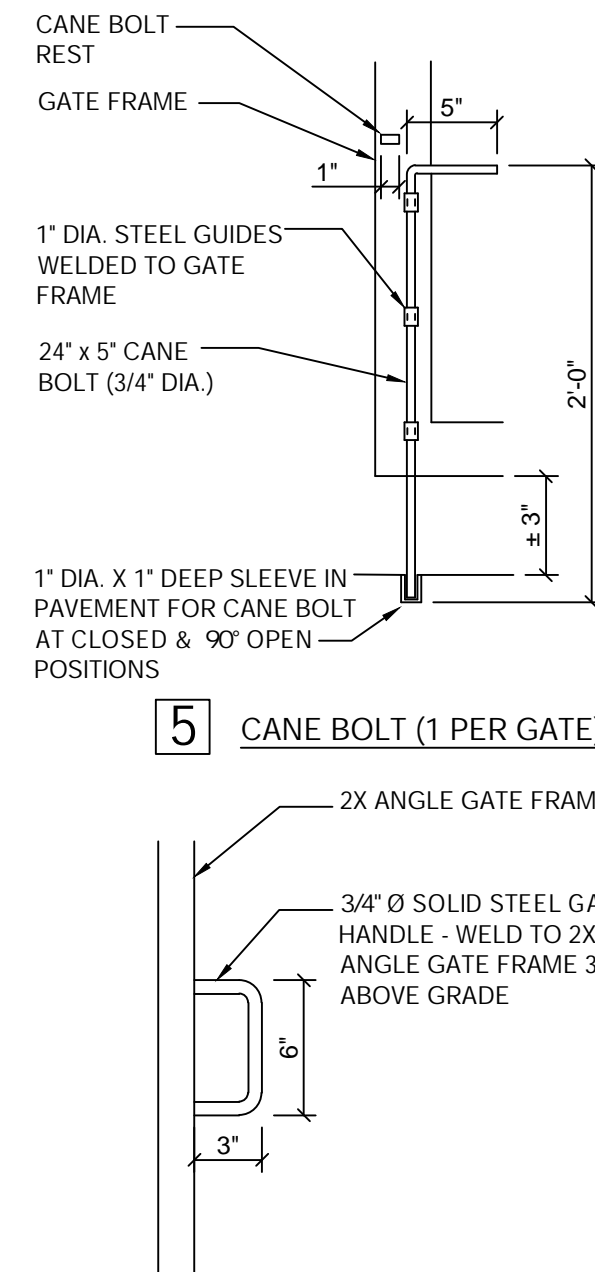
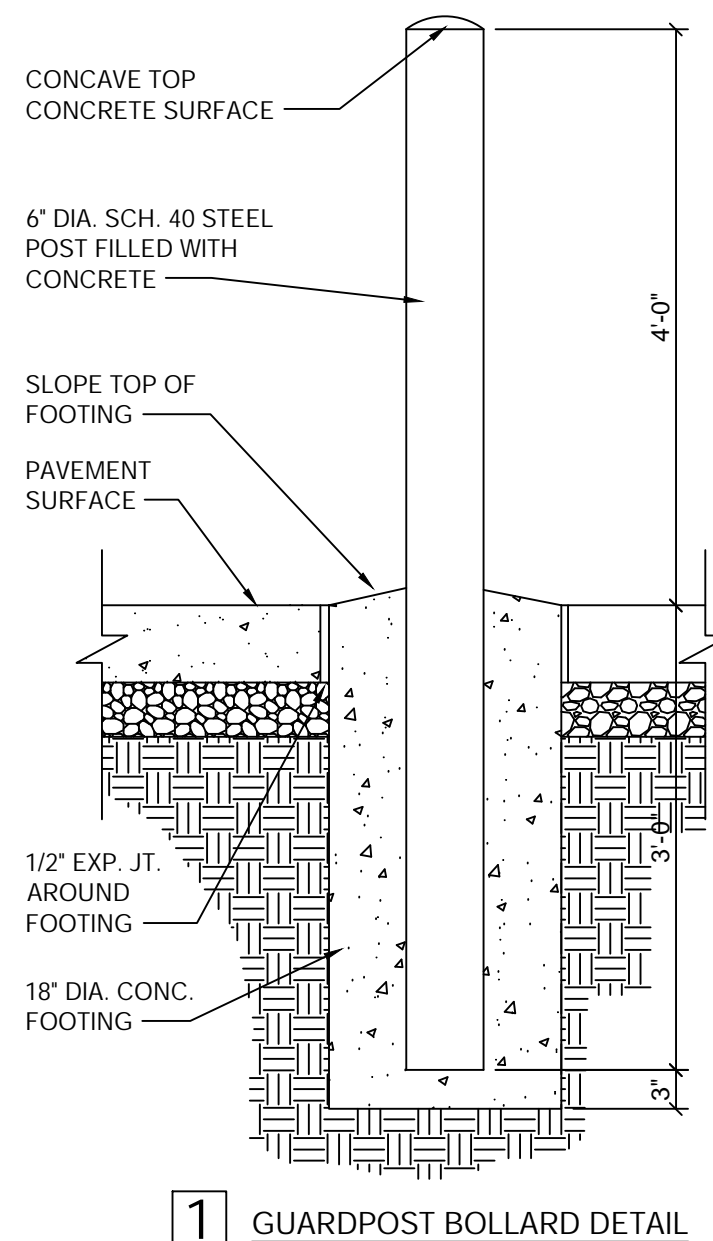
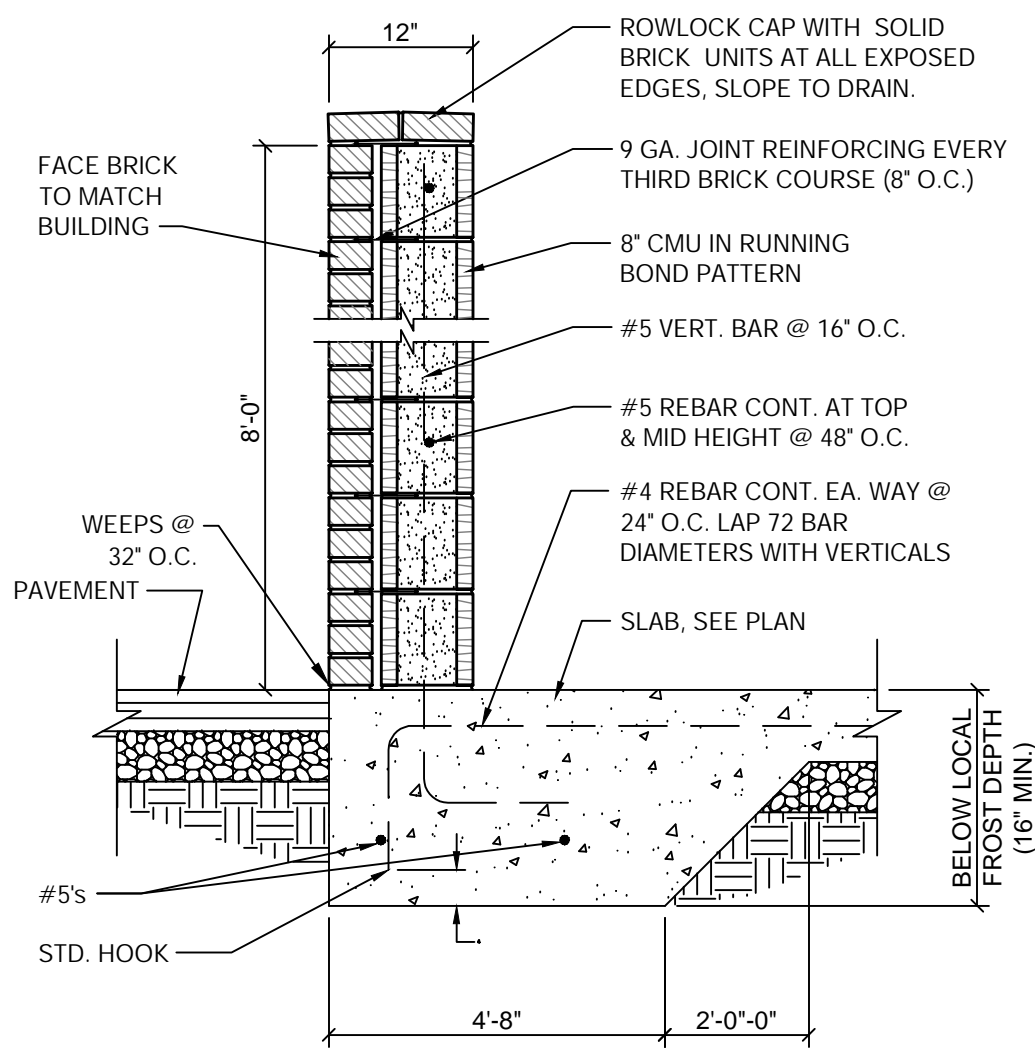
01/18/2022 RESPONSE TO COMMENTS

CONTRACT DATE: 12.01.2021
 BUILDING TYPE: END. MED40
 PLAN VERSION: XX.XX.XXXX
 SITE NUMBER: XXXXXX
 STORE NUMBER:

TACO BELL
 1000 LIBERTY WAY
 NORTH LIBERTY, IA 52317



SITE DETAILS I
C-501



1 SECTION @ WALL ENCLOSURE WALL
No Scale

2 BOLLARD DETAILS
No Scale

GATE HARDWARE: ALL HARDWARE AND ACCESSORIES SHALL BE HEAVY GALVANIZED.

GATE STOP: MUSHROOM TYPE OR FLUSH PLATE WITH ANCHORS SET IN CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.

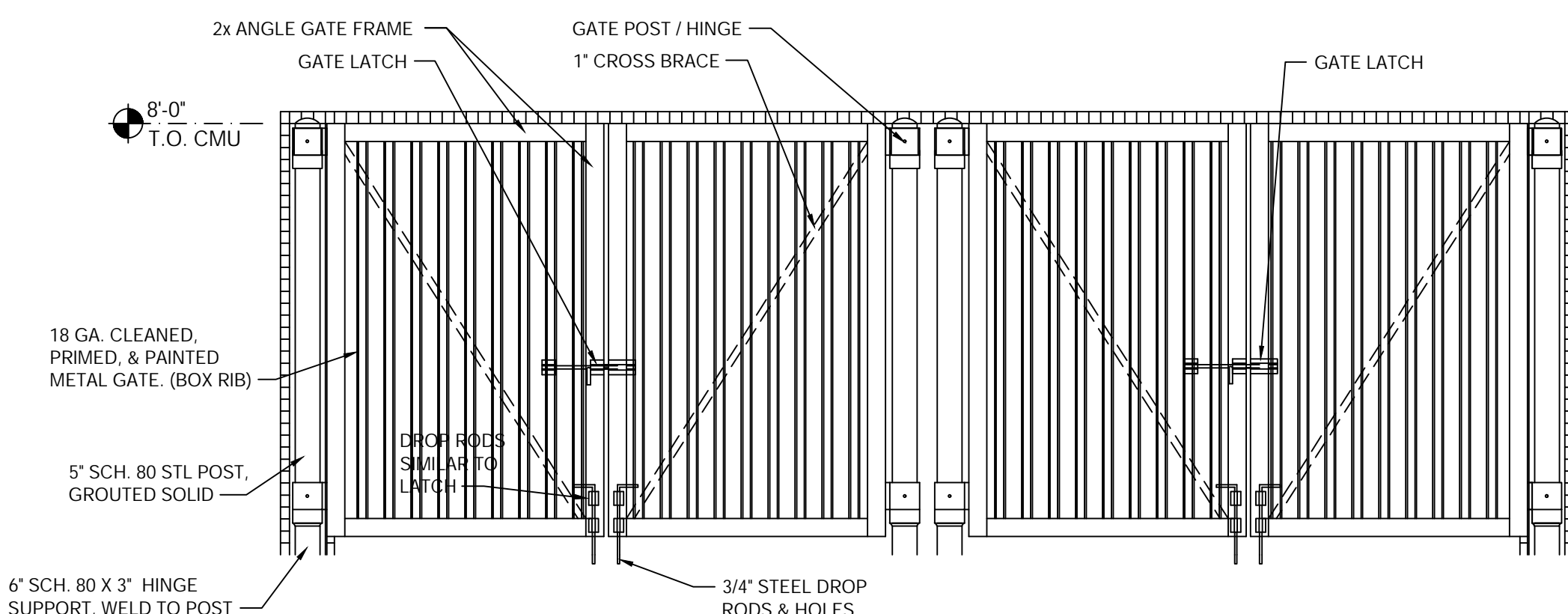
GATE NOTES: (4) EQUAL WIDE X 7'-8" HIGH MTL. GATES, TYPE 'B' 1 1/2" DECKING, 22GA. W/ T.S. 1 X .1875 BAR CROSS BRACING WELD AND GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT ALL STEEL COMPONENTS.

| SYMBOL | AREA | MANUFACTURER | COLOR |
|--------|---------------|------------------|--------------------|
| 1 | GATE COLOR | SHERWIN WILLIAMS | REFER TO ARCH DWGS |
| 2 | BRICK | ACME | REFER TO ARCH DWGS |
| 3 | PIPE BOLLARDS | SHERWIN WILLIAMS | REFER TO ARCH DWGS |

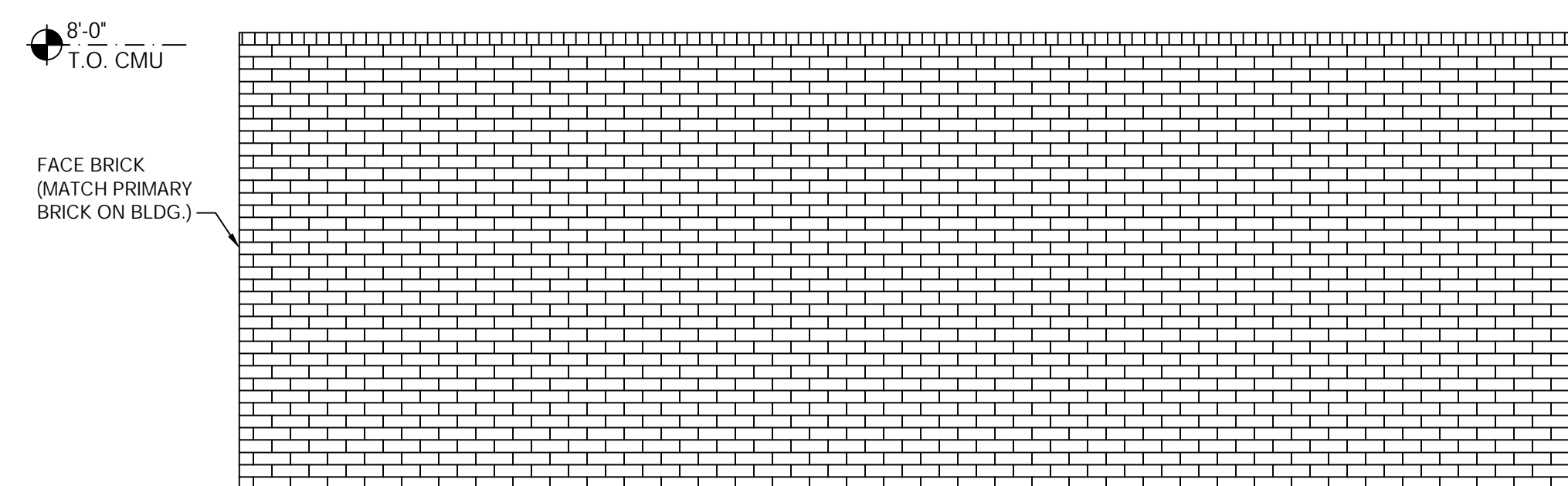
NOTE: PAINT CMU TO MATCH BRICK

3 ENCLOSURE NOTES
No Scale

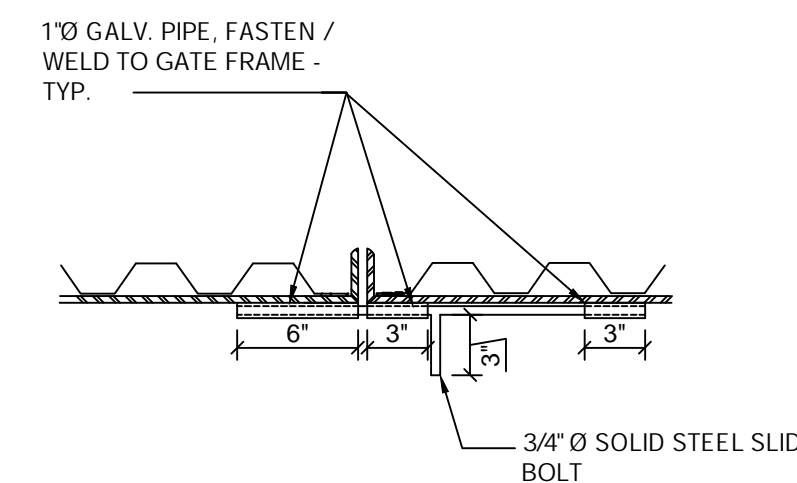
4 SCHEDULE
No Scale



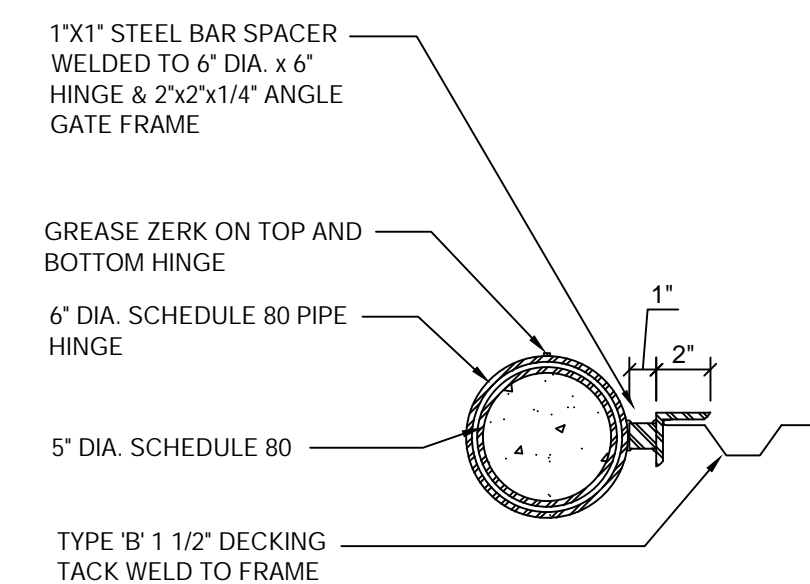
5 FRONT ELEVATION
No Scale



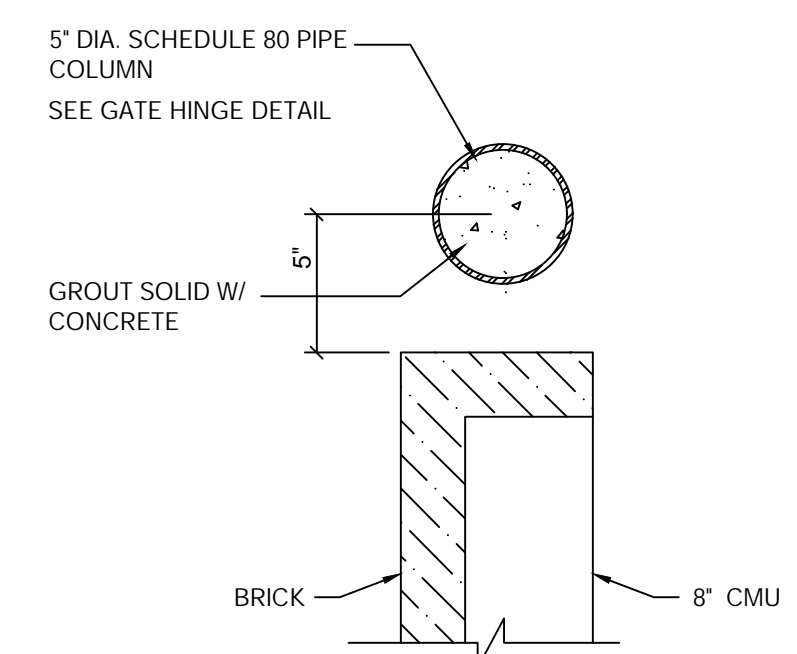
6 REAR ELEVATION
No Scale



3 GATE LATCH



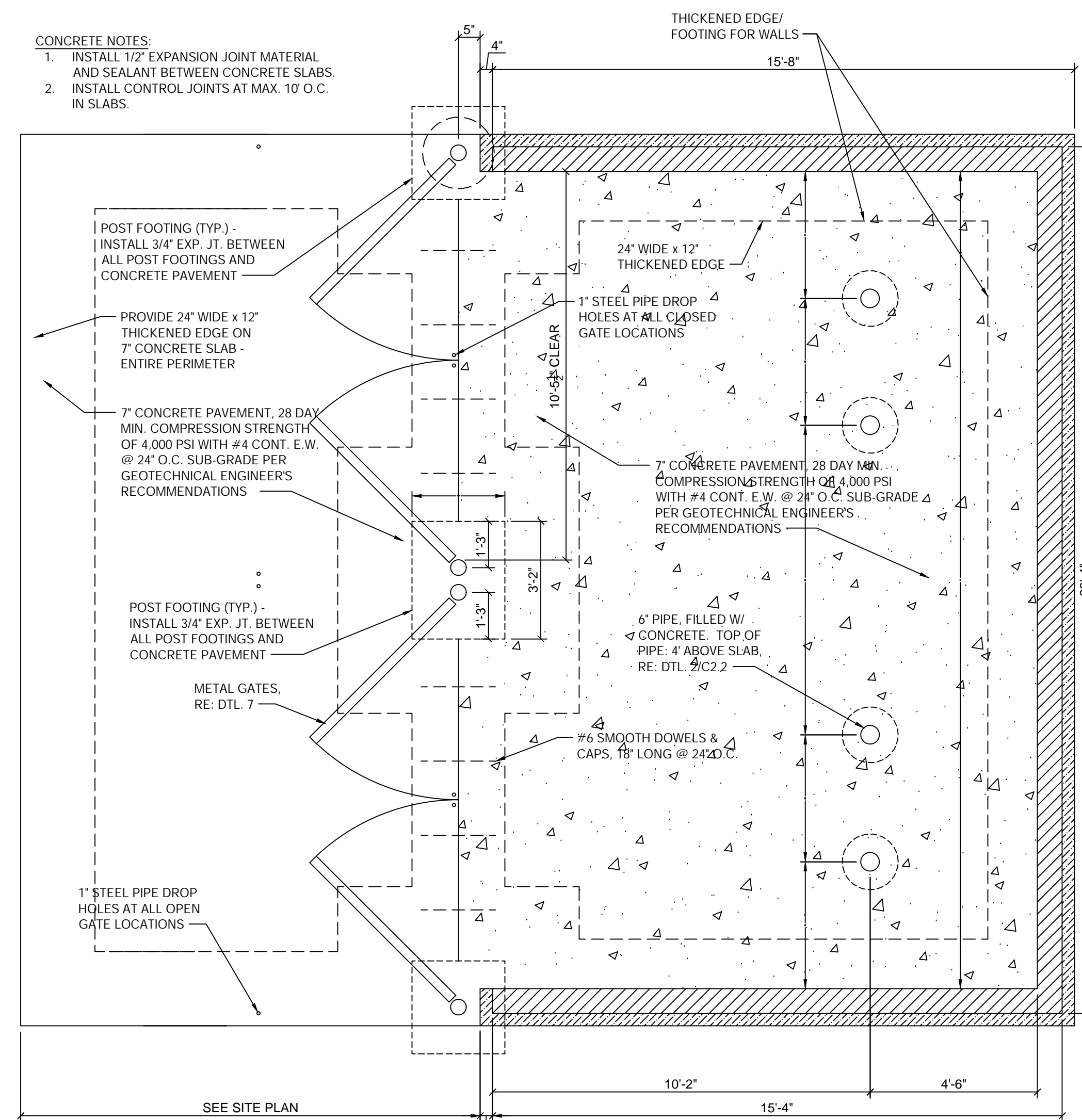
2 GATE HINGE DETAIL



1 JAMB DETAIL

7 GATE DETAILS
No Scale

8 GATE POST FOOTINGS
No Scale



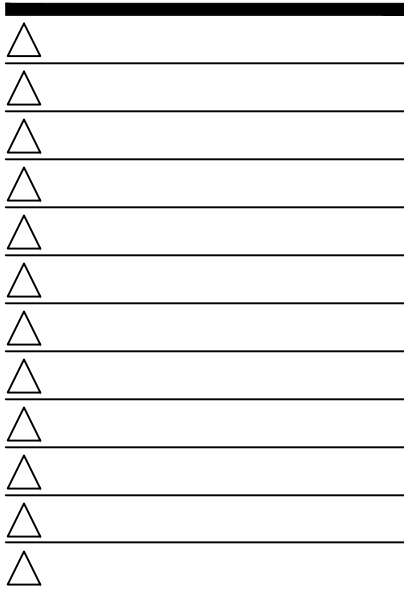
9 DUMPSTER LAYOUT PLAN
No Scale



GLMW Architecture
1526 E. Douglas Wichita, KS 67211
Tel: (316) 265-3387
www.glmw.com



21678R2100



CONTRACT DATE: 12.01.202
BUILDING TYPE: END. MED.4
PLAN VERSION: XX.XX.XXX
SITE NUMBER: XXXXX
STORE NUMBER:

TACO BELL

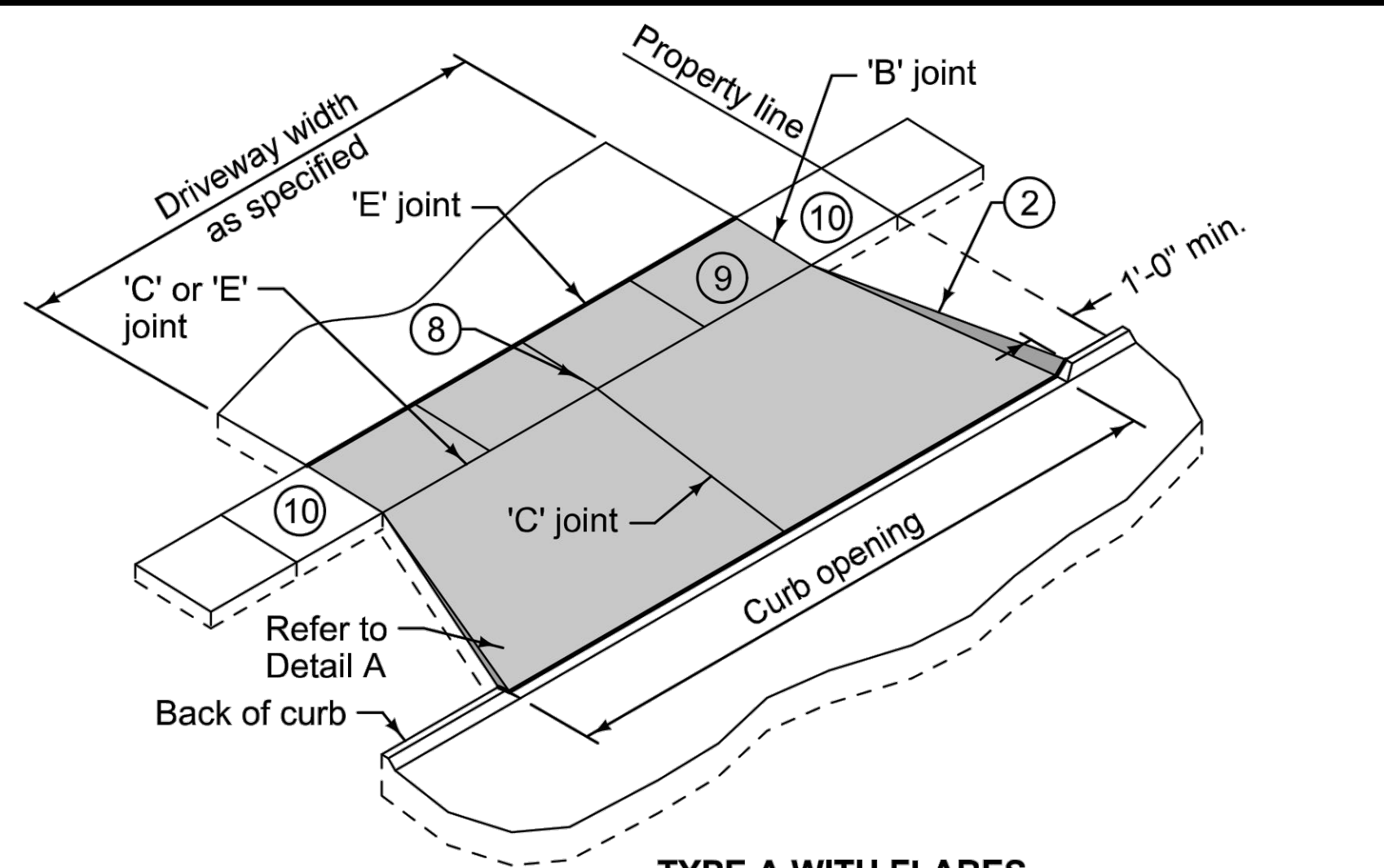
1000 LIBERTY WAY
NORTH LIBERTY, IA 52317



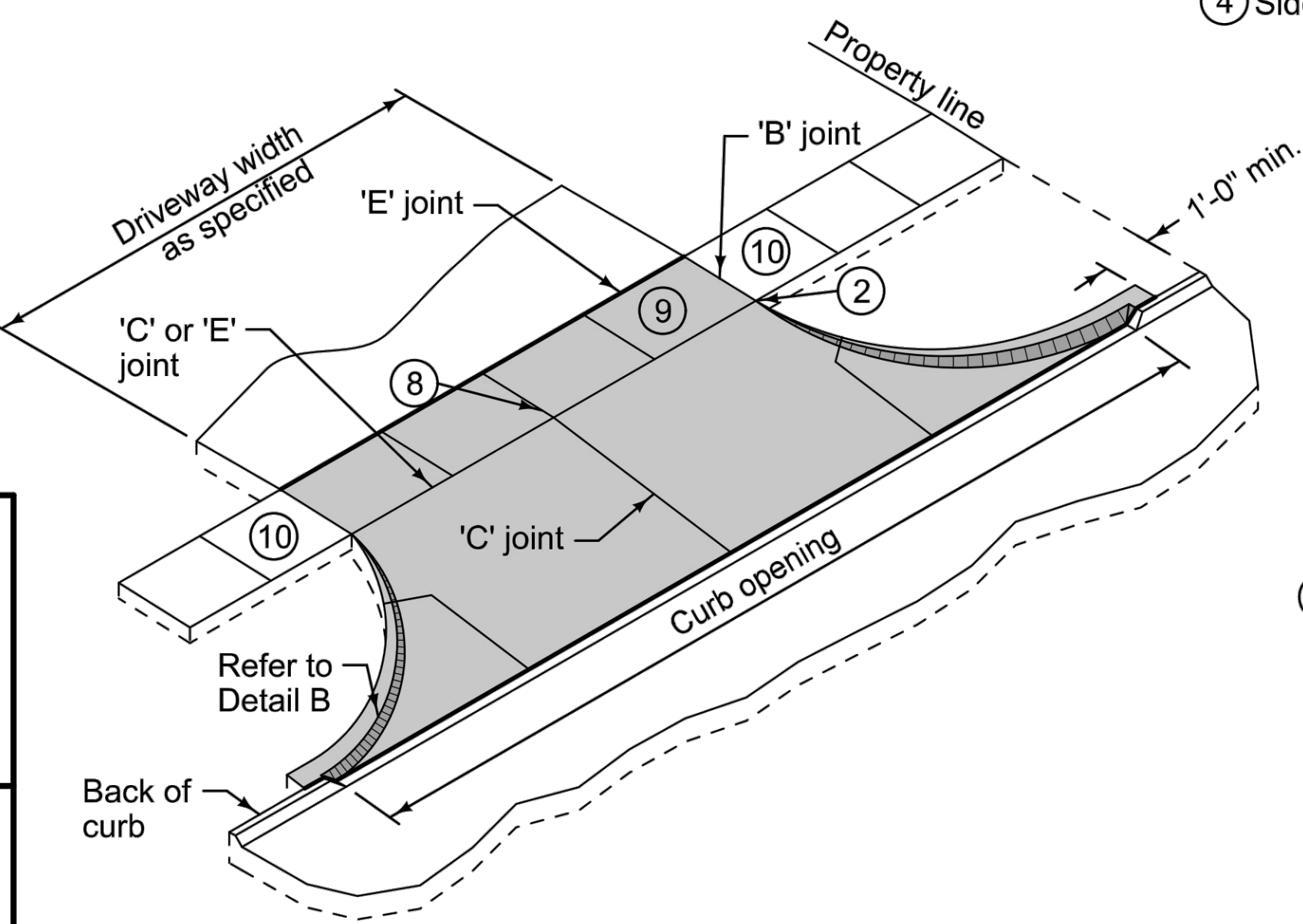
ENDEAVOR 2.0

DUMPSTER
ENCLOSURE
DETAILS

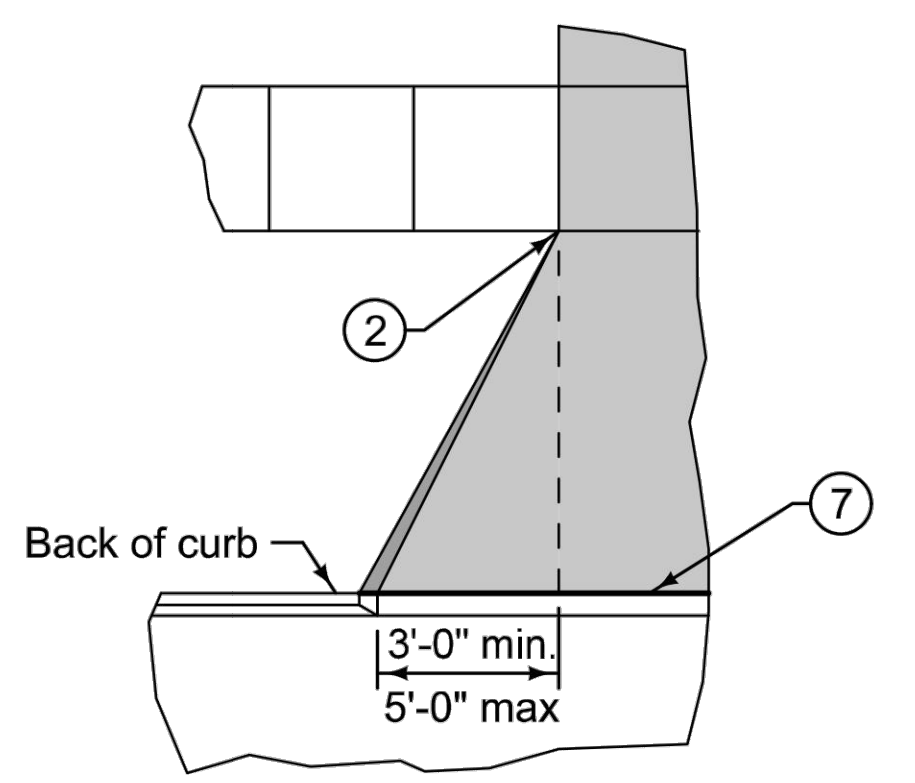
C-503



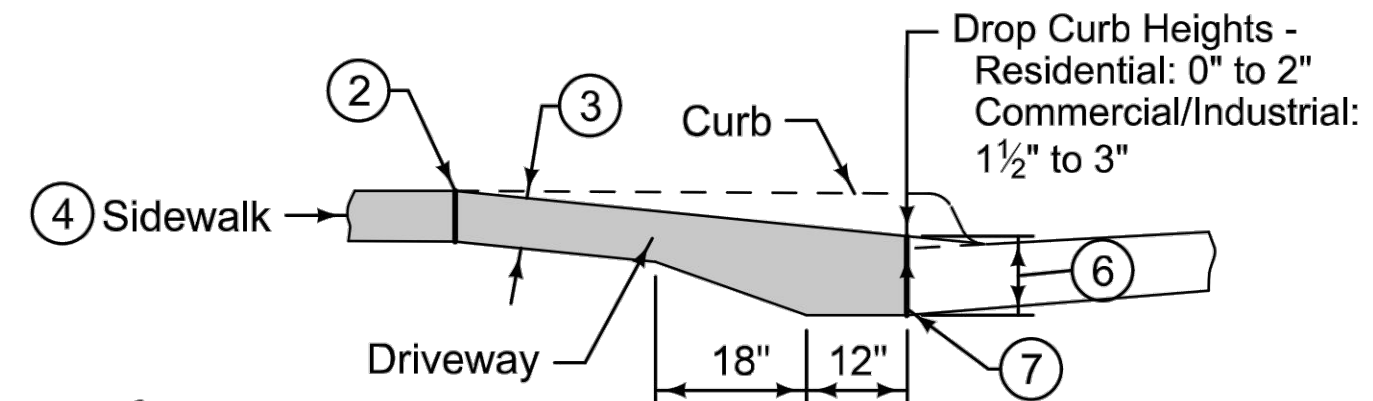
TYPE A WITH FLARES



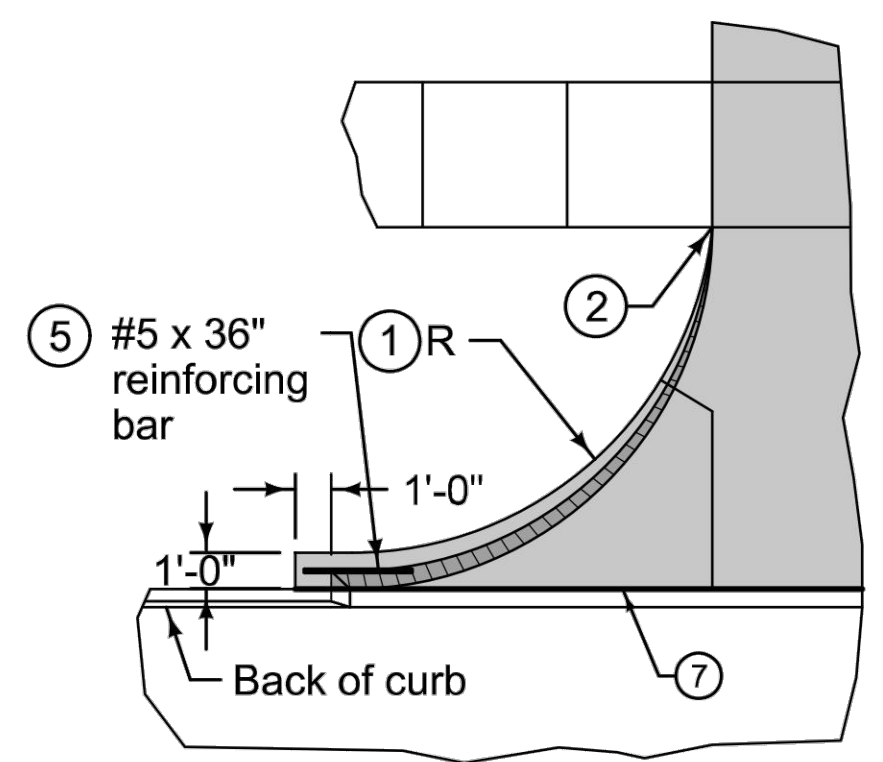
TYPE A WITH RADII



DETAIL A
(Residential/Agricultural Only)



TYPICAL SECTION



DETAIL B

- ① Driveway radius (R).
Residential: 10 foot minimum, 15 foot maximum.
Commercial and industrial: As specified in the contract documents.
- ② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
- ③ Pavement thickness.
Residential: 6 inches minimum.
Commercial and industrial: 7 inches minimum.
- ④ Sidewalk thickness through driveway to match thickness of driveway.
- ⑤ Center reinforcing bar vertically in the pavement.
- ⑥ Match thickness of adjacent roadway, 8 inches minimum.
- ⑦ Provide 'E' joint at back of curb unless 'B' joint is specified.
- ⑧ For alleys, invert the pavement crown 2% toward center of alley.
- ⑨ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- ⑩ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If elevation change requires a curb ramp, comply with Figure 7030.205; verify need for detectable warning panel with Engineer.

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| SUDAS | REVISION |
| | 3 2020 Edition |
| | 7030.101 |
| SHEET 1 of 1 | |

SUDAS Standard Specifications

CONCRETE DRIVEWAY, TYPE A

FIGURE 7030.101 SHEET 1 OF 1



21678R21001

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CONTRACT DATE: 12.01.2021
 BUILDING TYPE: END. MED40
 PLAN VERSION: XX.XX.XXXX
 SITE NUMBER: XXXXXX
 STORE NUMBER:

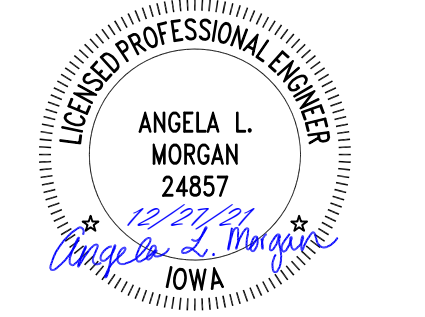
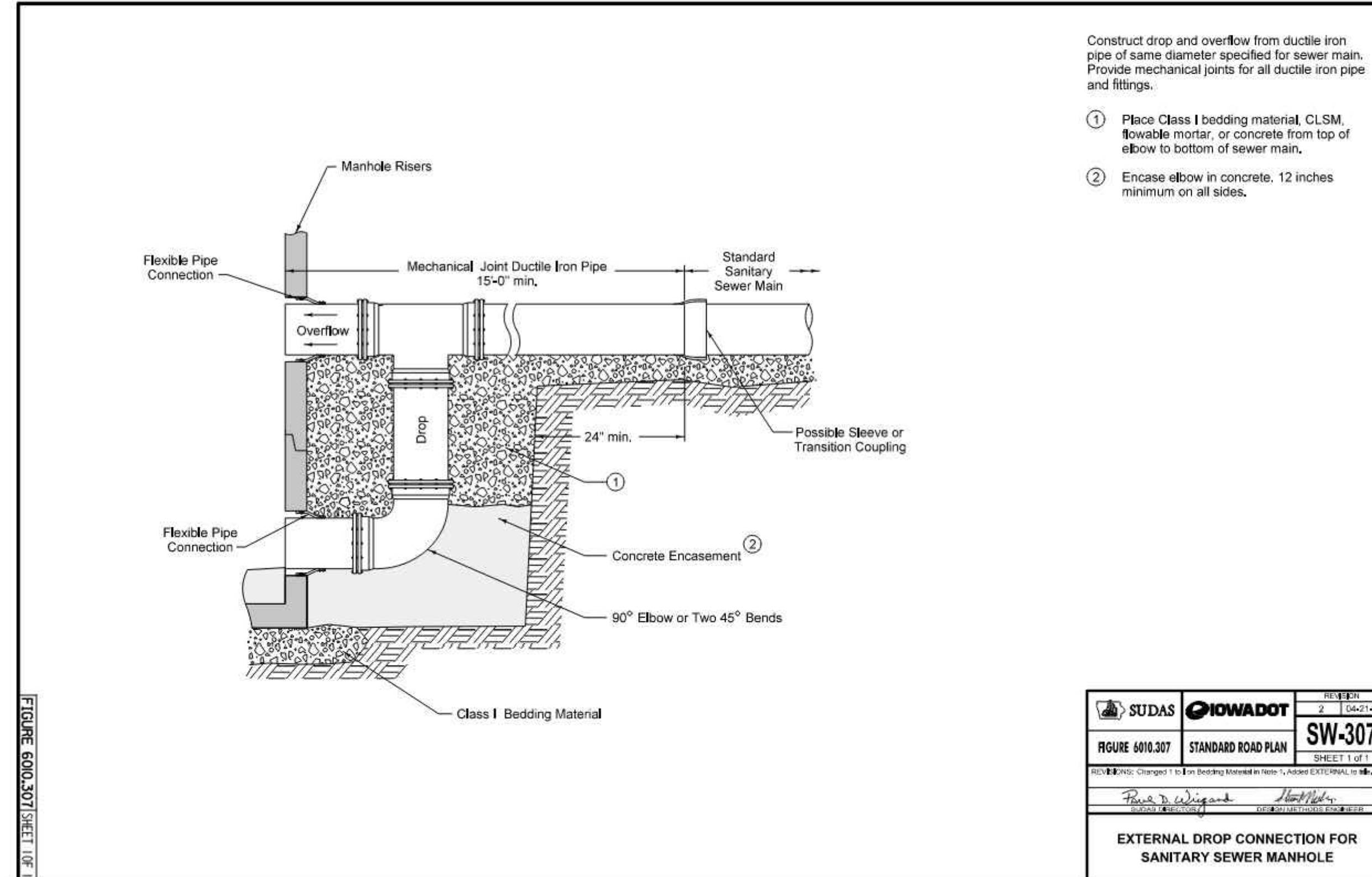
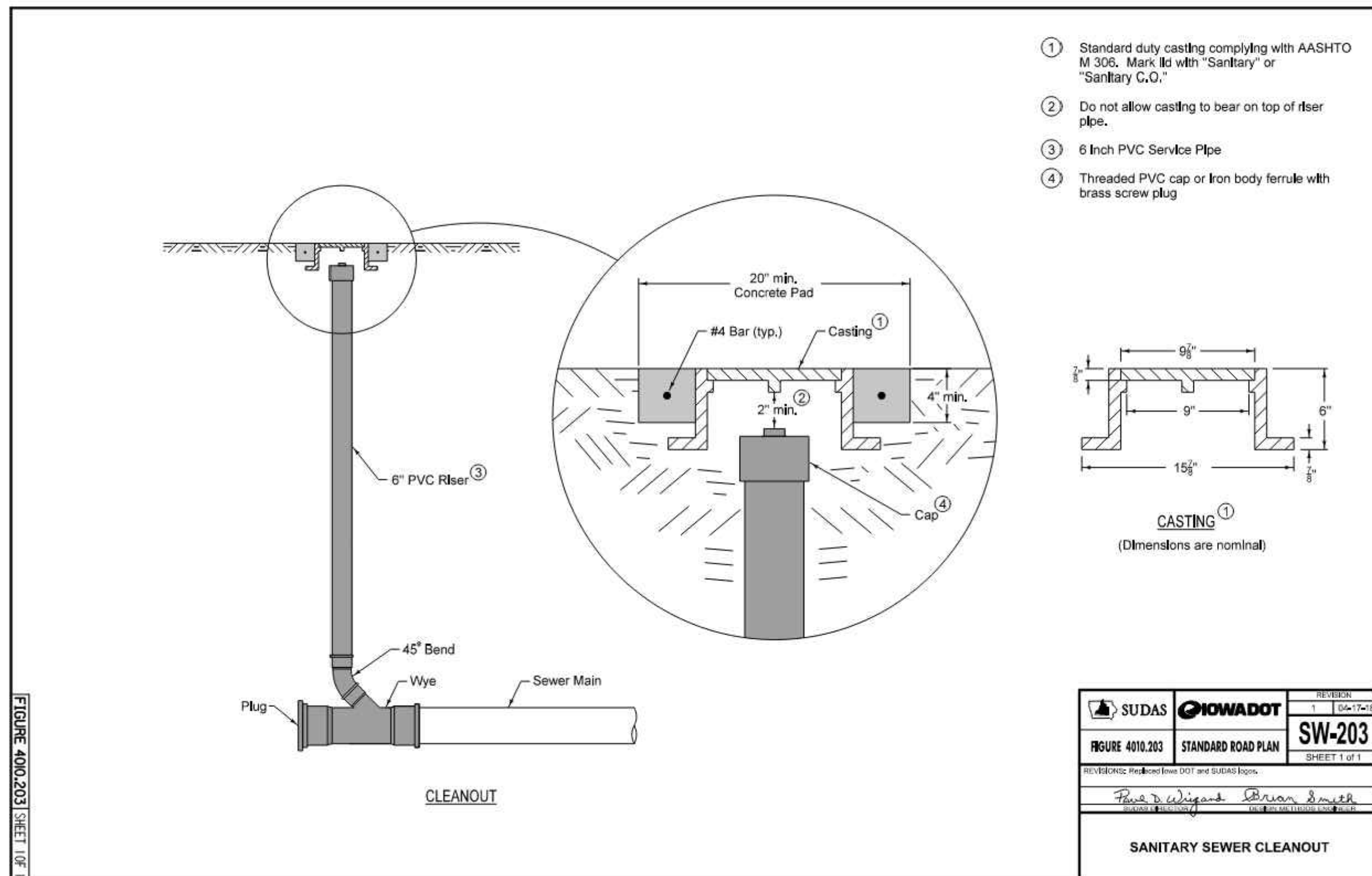
TACO BELL
 1000 LIBERTY WAY
 NORTH LIBERTY, IA 52317



ENDEAVOR 2.0

CONCRETE DRIVEWAY DETAILS

C-506



21678R21001

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CONTRACT DATE: 12.01.2021
 BUILDING TYPE: END. MED40
 PLAN VERSION: XX.XX.XXXX
 SITE NUMBER: XXXXXX
 STORE NUMBER:

TACO BELL
 1000 LIBERTY WAY
 NORTH LIBERTY, IA 52317



UTILITY DETAILS
 C-507

Section 2721
Engineered Surface Drainage Products

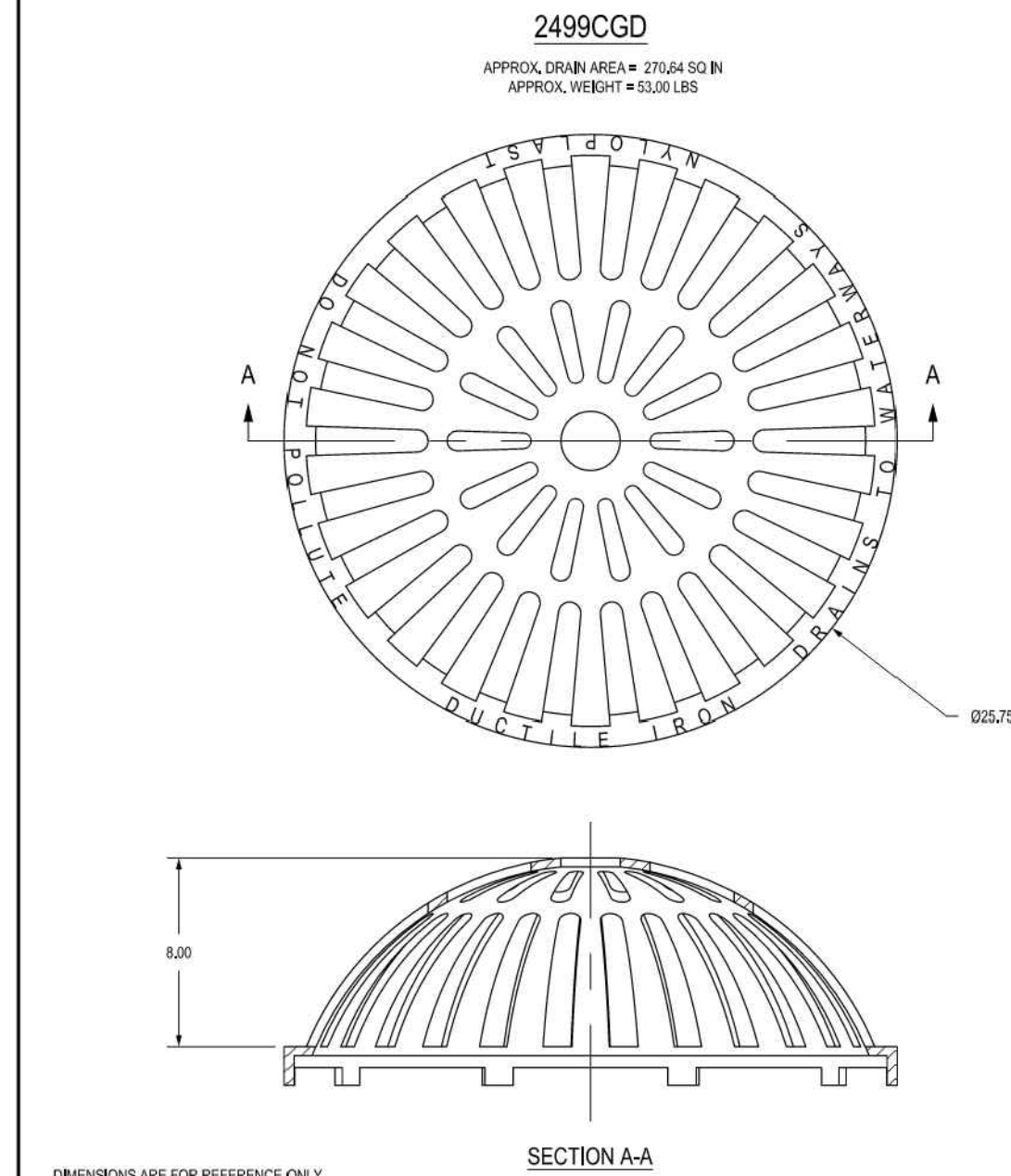
GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

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

The grates and frames furnished for all surface drainage inlets shall be ductile iron for structure sizes 8", 10", 12", 15", 18", 24", 30" and 36" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

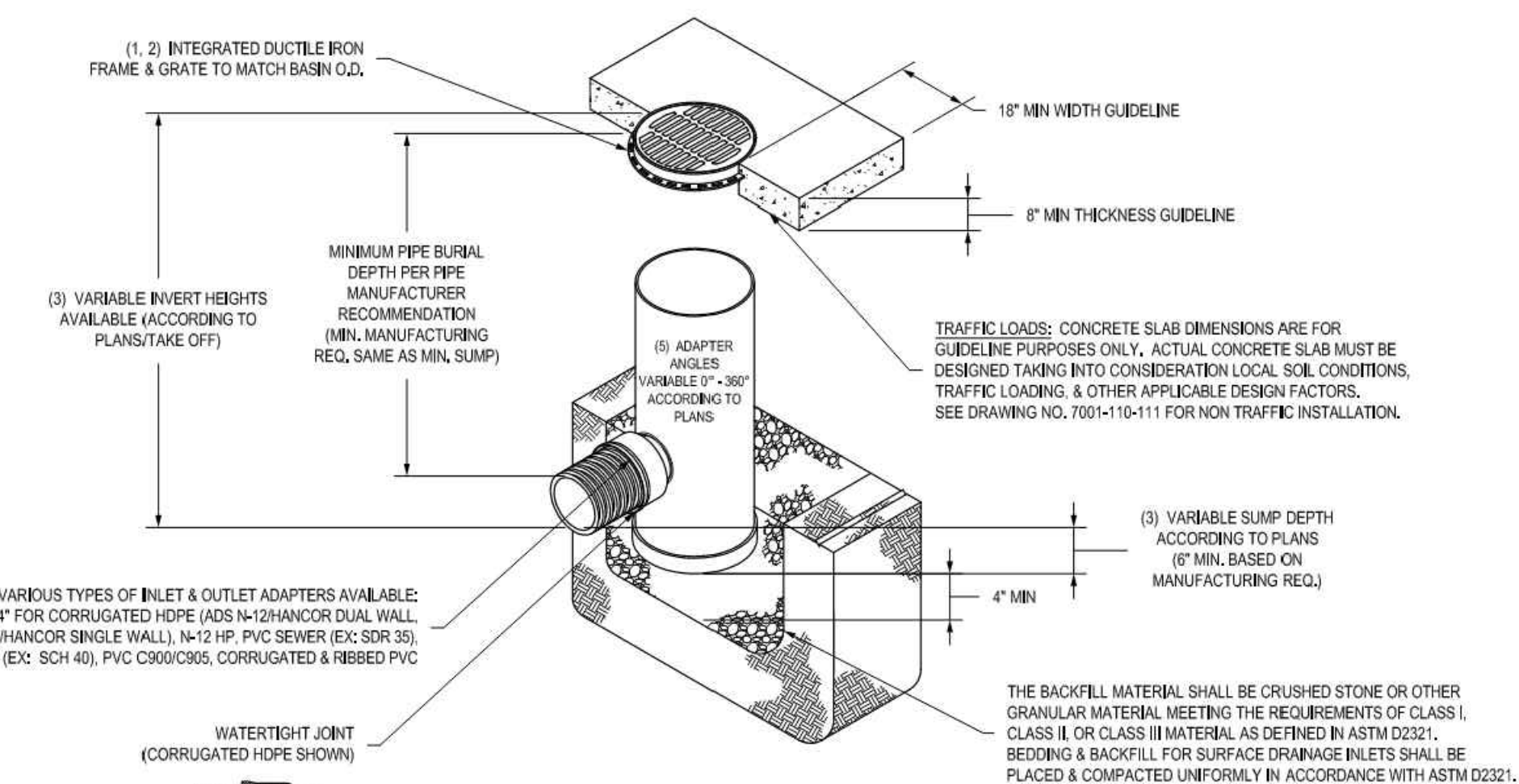
INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

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| DATE | 3-10-00 | PROJECT NO./NAME | | TITLE | 8 IN - 36 IN DRAIN BASIN SPECIFICATIONS | |
| REVISIONS | | DATE | 02-14-15 | BY | NMH | |
| DWG SIZE | A | SCALE | 1:1 | SHEET | 1 OF 1 | DWG NO. 7001-110-011 REV J |



| | | | | | | |
|---|--------|------------------|---------|----------|------------------|--|
| DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY. DIMENSIONS ARE IN INCHES. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT. LOCKING DEVICE AVAILABLE UPON REQUEST. | | DRAWN BY | EBG | MATERIAL | DUCTILE IRON | 3130 YERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast-usa.com |
| DATE | 3-4-05 | PROJECT NO./NAME | | TITLE | 24 IN DOME GRATE | |
| REVISIONS | | DATE | 3-24-11 | BY | EBG | |
| DWG SIZE | A | SCALE | 1/8" | SHEET | 1 OF 1 | DWG NO. 7001-110-219 REV D |

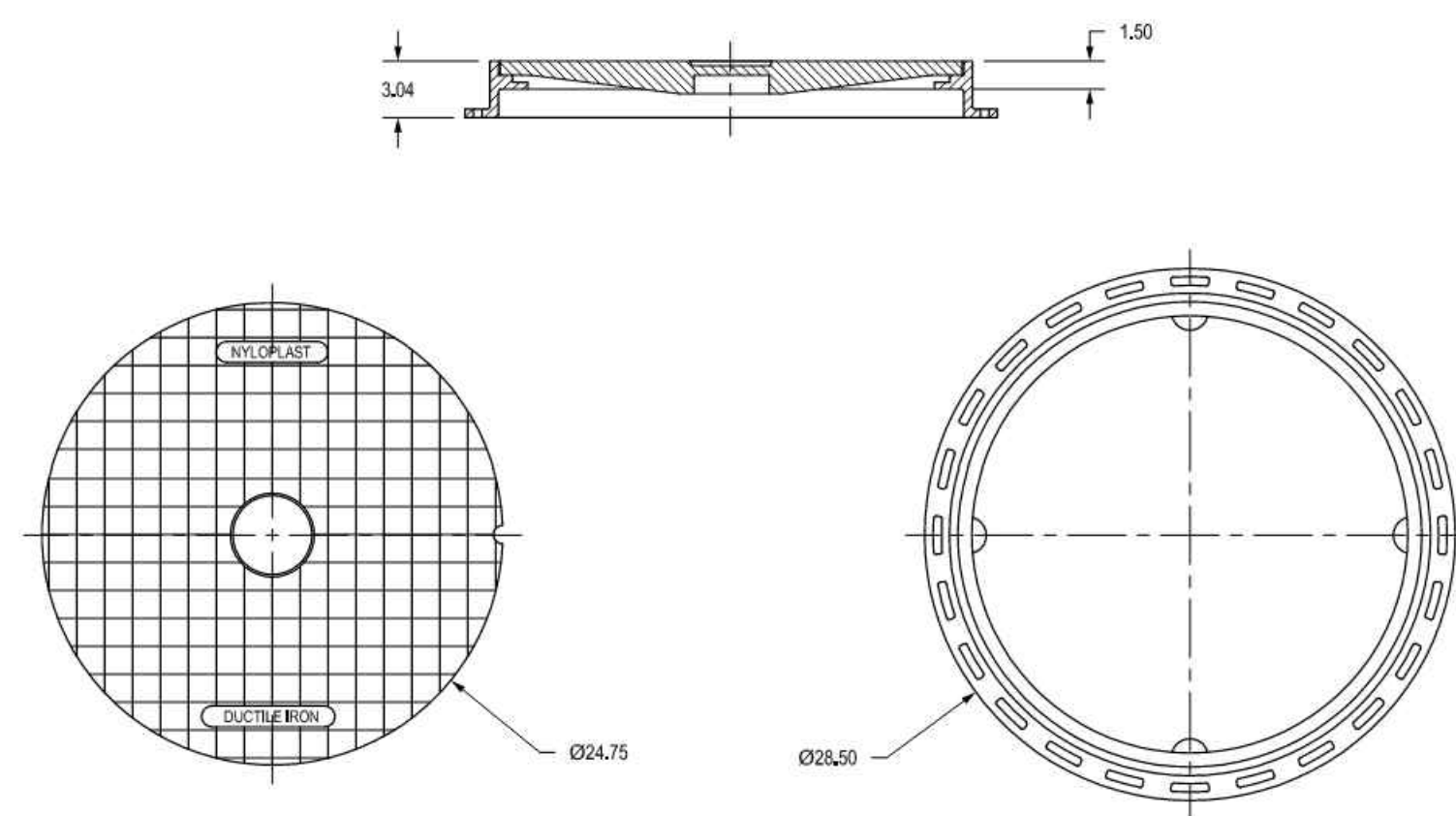
NYLOPLAST 24" DRAIN BASIN: 2824AG __X



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|---|----------|------------------|----------|----------|--|--|
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| DATE | 04-13-05 | PROJECT NO./NAME | | TITLE | 24 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL | |
| REVISIONS | | DATE | 05-14-15 | BY | NMH | |
| DWG SIZE | A | SCALE | 1/40 | SHEET | 1 OF 1 | DWG NO. 7001-110-192 REV E |

2499CGC

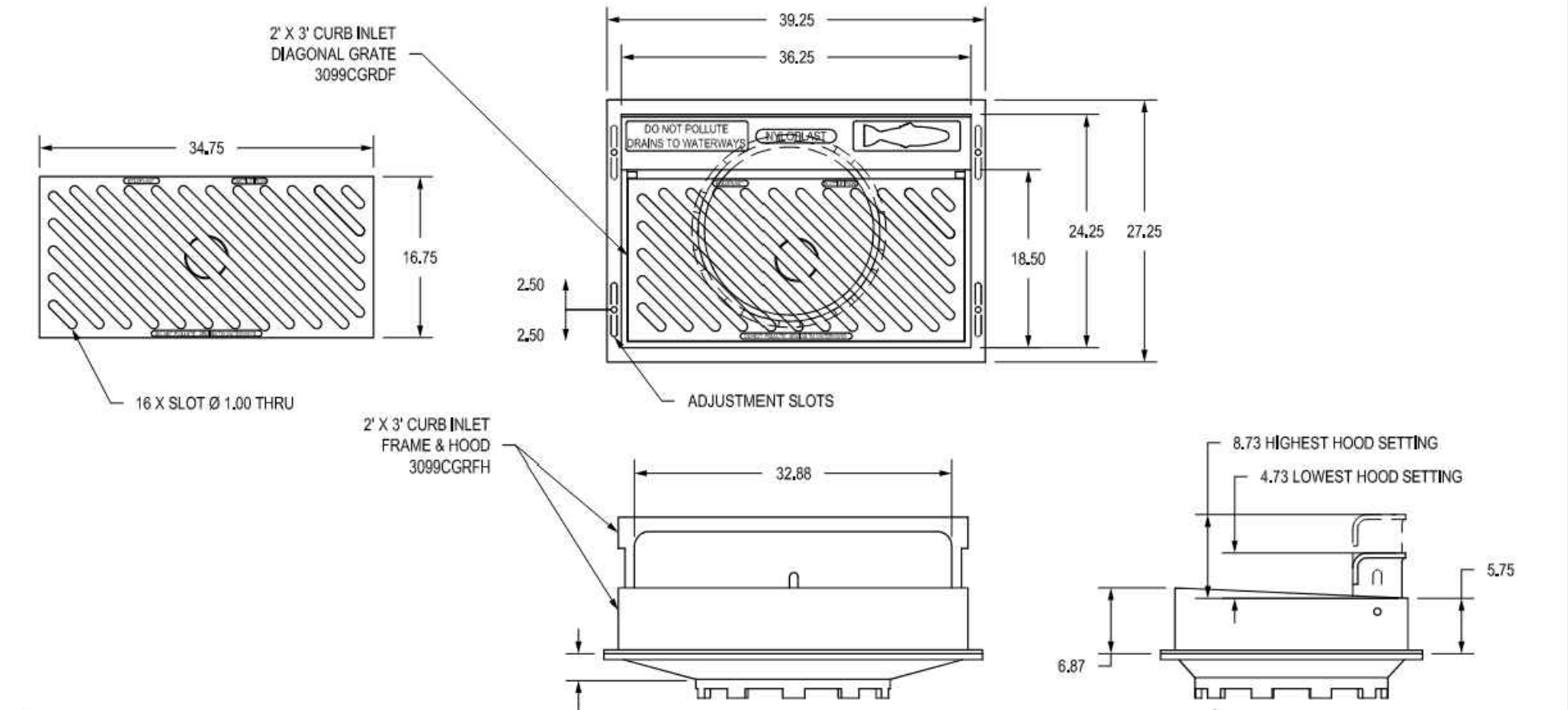
APPROX. WEIGHT WITH FRAME = 138.00 LBS



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|--|---------|---|----------|-------|-------------------------------------|----------------------------|--|
| DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY. DIMENSIONS ARE IN INCHES. GRATE MEETS H-20 LOAD RATING. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT. LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-025. | | THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. | DRAWN BY | EBG | MATERIAL | DUCTILE IRON | 3130 YERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast-usa.com |
| DATE | 3-13-10 | PROJECT NO./NAME | | TITLE | 24 IN SOLID COVER ASSEMBLY - TYPE B | | |
| REVISIONS | | DATE | 3-13-10 | BY | EBG | | |
| DWG SIZE | A | SCALE | 1/20 | SHEET | 1 OF 1 | DWG NO. 7001-110-218 REV C | |

3099CGRDF & 3099CGRFH

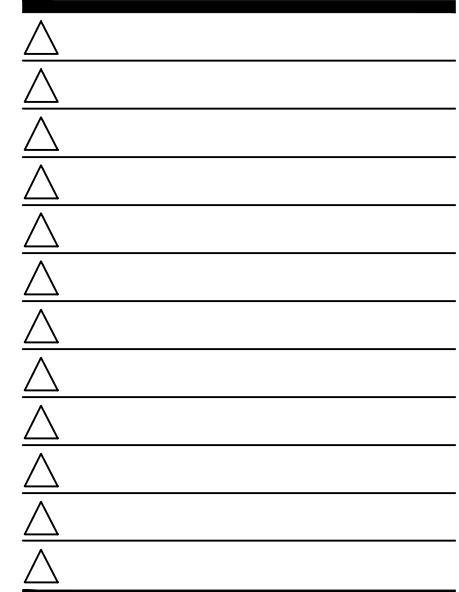
APPROX. GRATE DRAIN AREA = 232.87 SQ IN
APPROX. WEIGHT WITH FRAME & HOOD = 344.00 LBS



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|--|----------|---|----------|-------|--|----------------------------|--|
| DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY. DIMENSIONS ARE IN INCHES. GRATE MEETS H-20 LOAD RATING. QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT. LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7002-110-057. SLOPE OF GRATE SURFACE IS 5.2%. CURB INLET FRAME INSIDE VOLUME IS APPROX 2.73 CU FT. APPROX. DRAIN AREA OF GRATE & HOOD: LOWEST SETTING = 365.54 SQ IN. LOWEST + 1" SETTING = 402.41 SQ IN. LOWEST + 2" SETTING = 433.29 SQ IN. LOWEST + 3" SETTING = 468.16 SQ IN. HIGHEST SETTING = 501.04 SQ IN. | | THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. | DRAWN BY | EBG | MATERIAL | DUCTILE IRON | 3130 YERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2499 www.nyloplast-usa.com |
| DATE | 04-10-06 | PROJECT NO./NAME | | TITLE | 2 FT X 3 FT CURB INLET DIAGONAL GRATE ASSEMBLY | | |
| REVISIONS | | DATE | 09-05-13 | BY | CCA | | |
| DWG SIZE | A | SCALE | 1/16" | SHEET | 1 OF 1 | DWG NO. 7001-110-046 REV D | |



21678R21001



CONTRACT DATE: 12.01.2021
BUILDING TYPE: END. MED40
PLAN VERSION: XX.XX.XXXX
SITE NUMBER: XXXXXX
STORE NUMBER:

TACO BELL
1000 LIBERTY WAY
NORTH LIBERTY, IA 52317



ENDEAVOR 2.0

STORM WATER DETAILS

C-508

