

PERMIT

City of Napoleon
255 W. Riverview
Napoleon, OH 43545

Division of Building and Zoning
PH (419) 592-4010
FAX (419) 599-8393

Permit No: 002464 Date Issued: 11-18-04 Issued by: MBS
Job Location: 607 WOOD DR Est. Cost: 10000.00
Lot #: 2&PT3 Subdivision Name: MWT SUBDIVISION
Owner: WENDYS OF COLORADO SPRING Agent: BI-STATE SIGN CO
Address: 1515 N ACADEMY BLVD Address: 501 HIGH ST
CSZ: COLORADO SPRINGS, CO 80909 CSZ: TOLEDO, OH 43609
Phone: 719-573-8557 Phone: 419-255-1301
Use Type – Residential: Other:

ZONING INFORMATION

Dist: Lot Dim: Area: Fyrd: Syrd: Ryrd:
Max HT: # Pkg Spaces: # Loading SP: Max Lot Cov:

BOARD OF ZONING APPEALS:

Work Type – New: Replmnt: Addn'n: Alter: Remodel:

WORK INFORMATION

Size - Lgth: Width: Stories: Living Area SF:
Garage Area SF: Height: Bldg Vol Demo Permit:

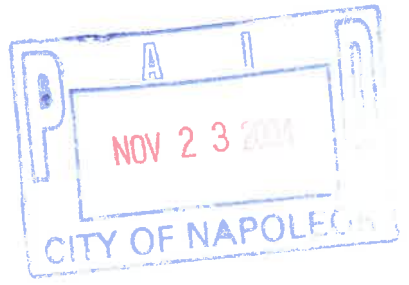
WORK DESCRIPTION

18'7X22' & 12'X9' TOTAL SQFT 425

FEE DESCRIPTION	PAID DATE	FEE AMOUNT DUE
SIGN PERMIT		62.50

COPY

Total Fees Due 62.50



Date

Applicant Signature

City of Napoleon
Engineering Department

Office Use Only
Permit No: _____
App. Date: _____
Est. Cost: _____
Base Fee: _____
Plus Fee: _____
Total Fee: _____

Application for Sign Permit

Owner Name: Wensy's
Owner Address: 6007 Wood
Contractor Name: Bi-State Sign Co.
Contractor Address: 501 Highst - PH: 419-255-1301
Location of Project: 6007 Wood
Additional Information: Sign Type - Post _____ Wall _____ Ground X Awning _____
Dimensions: 18'7" x 22' + 12' x 9' Total S.F. 425
Date: _____ Applicant Signature: [Signature]

Application must include a site drawing or a description of the location of the sign (where applicable) and a sketch of the proposed sign(s).

The permit fee is as follows: \$25.00 base which includes up to 50 square feet of sign area, plus .10 per square foot after 50 square feet, not to exceed \$100.00 in any case.

$$\begin{array}{r} \$62.50 \\ 25.00 \\ \hline 87.50 \end{array}$$

KORDA / NEMETH ENGINEERING, INC.

SECTION 50' Pylon

PAGE NO. Cover

JOB NO. 2004-1018.05

BY GMF DATE 11/4/04

THE OHIO BUILDING CODE

BASIC WIND SPEED = 90 MPH

WIND EXPOSURE = EXPOSURE C

IMPORTANCE FACTOR = 1.0

DESIGN WIND PRESSURE = 23.1 PSF



The Ohio Building Code

(Wind Loads as Shown in ASCE 7-98)

Basic Wind Speed = 90 mph

Wind Exp. Factor = C

Importance Factor = 1

At height of 50' above ground

F = 23.1 * Af
 Area of Top of Sign
 w1 = 14.9 FT
 h1 = 12.25 FT
 Af = 183 SQ FT

F1 = 4216 # on sign face
 Area of Bottom of Sign
 w2 = 9 FT
 h2 = 6.1667 FT
 Af = 56 SQ FT

F2 = 1282 # on sign face
 Area of Pole, Assume width = 24 IN
 L = 50 FT
 Af = 100 SQ FT
 F3 = 2310 # on pole

Design for Overturning

Bot of Ftg @ d= 5 FT

Overturning Moment

$$Mot = F1 * [(h1)/2 + L + d] + F2 * [(h2)/2 + 15 - h2 + d] + F3 * (L/2 + d)$$

Mot = 348.71 FT-K

Resisting Moment Required

$$Mr = 1.5 * Mot$$

Mr = 523.0667 FT-K

Footing Dimensions

B = 8 Ft
 L = 16 Ft
 H = 5 Ft

Mr Provided:

Assume wt. of soil = 110 pcf
 Soil: $B * L * (d - H) * (wt. of soil) * L/2 = 0.0$ FT-K
 Ftg: $B * L * H * (wt. of conc) * L/2 = 768.0$ FT-K
 TOTAL Mr = 768 FT-K
 Mr OF FOOTING FS = 2.20

Check Soil Bearing Pressure

Weight of Foundation

P = 96 K

Overturning Moment

Mot = 348.71 FT-K e = 3.63 FT 3e = 10.90 FT

Distance to P from edge of fig (@ max soil brg) = 4.37 FT

P does not fall within kern

Soil Bearing Pressure, w max

w max = 1.83 KSF

Allow. Soil Brg Pressure = 2.67 KSF BRG PRESSURE OK

Design for Overturning Opposite Direction

Bot of Ftg @ d= 5 FT

Width of Sign = 36 IN

Overturning Moment

Mot = 151.25 FT-K

Resisting Moment Required

Mr = 1.5*Mot

Mr = 226.8715 FT-K

Footing Dimensions

B = 8 Ft

L = 16 Ft

H = 5 Ft

Mr Provided:

Assume wt. of soil = 110 pcf

Soil: $B*L*(d-H)*(wt. of soil)*B/2 = 0.0 FT-K$

Ftg: $B*L*H*(wt. of conc)*B/2 = 384.0 FT-K$

TOTAL Mr = 384.0 FT-K

Mr OF FOOTING FS = 2.54

Pole Design

Pole Elev.	Moment	Sreq.	DIA.	Wall Thk.	S	A
@base	309.7	133	24	0.5	212 OK	36.914
@ 16.5'	186.5	80.1	18	0.5	117 OK	27.489
@ 37.75'	27.1	11.6	8.625	0.322	17 OK	8.3993

Fb = 1.33*0.6*35ksi= 27.9 KSI

Axial Load L

Sign weight <	2 K	fa
Upper pole =	12.25 0.35 K	0.059 KSI OK
Middle pole =	21.25 1.99 K	0.156 KSI OK
Bottom pole =	16.5 2.07 K	0.332 KSI OK

Design Splice

Try 3 ft. stub for the bottom splice
 M= 186.5 FT-KIP
 Couple F= 62.2 K
 Fillet Weld Circumference @ Middle DIA. = 56.55 IN
 5/16" Fillet Weld Cap = 262 K OK
 Plug welds @ Lower Plate
 4 - .75" X 6" Slots 4 in^2
 (consider 1/2 perpendicular are effective)
 Cap. = 223 K OK
 Use 3/4" Plate @ Bottom of Splice

Design Splice

Try 2 ft. stub for the upper splice
 M= 27.1 FT-KIP
 Couple F= 13.5 K
 Fillet Weld Circumference @ Top DIA. = 27.10 IN
 5/16" Fillet Weld Cap = 126 K OK
 Plug welds @ Lower Plate
 4 - 1/2" X 4" Slots 1.75 in²
 (consider 1/2 perpendicular are effective)
 Cap. = 98 K OK
 Use 1/2" Plate @ Bottom of Splice

Check Plain Concrete Capacity

Mcap = $0.65 \cdot 5 \cdot (3000 \text{ psi})^{0.5} \cdot S / 1.275 = 139.6 \cdot S$
 $S = [(B \cdot 12) - \text{pole Dia}] \cdot (H \cdot 12)^2 / 6 = 43200 \text{ IN}^3$
 Mcap = 503 FT-KIP
 w max = 1.83 KSF
 3e = 10.90 FT
 w @ pole = 0.49 KSF
 M@toe = 354.16138 FT-KIP OK
 M@heel = 192 FT-KIP OK

Check Concrete in Weak Direction

Footing depth = 5 FT
 Couple Arm = 3.00 FT
 M @ 2.25 Feet below grade
 M = 96 FT-KIP
 Fc = 32 K
 Moment from Fc = 16 FT-KIP
 Check Plain Concrete Section Resisting Fc d= 54.000
 Mcap = 102 FT-KIP OK
 $\phi V_c = 90.505675 \text{ K} \quad \text{OK}$

City of Napoleon Inspection Form

Permit #002464

Date Issued: 11-18-2004

Job Location: 607 WOOD DR

Owner: WENDYS OF COLORADO SPRINGS

Owner Phone: 13472

Contractor:

11-29-04 shed work + sidewalk

Contractor Phone:

Work Description: SI

11-24-04 shed water meter + RP backflow

Plumbing: UNDGR _____ RGHIN _____ FINAL _____

SEWER INSP _____

Mechanical: UNDGR _____ RGHIN _____ FINAL _____

FURNACE REPLAC _____ AIR COND _____

Electrical: UNDGR _____ RGHIN _____ FINAL _____

SEVR UPGR _____

Building: Site _____ FTG _____ FNDDT _____

STRU _____ ROOF _____ EXT _____

VENT _____ ACCES _____ EGRS _____

SMKDT _____ FINAL _____

ISSUE TEMP OCCUP _____ ISSUE OCCUP _____

STGE Shed: SITE _____ FINAL _____

Sign: FTG _____ FINAL _____

Fence: SITE _____ FINAL _____

DRIVEWAY: _____ SIDEWALK: _____

MISC INSP: _____

NOTES: _____

INSPECTORS INITIALS: _____

1. DESIGN WIND LOAD = 23.1 PSF PER GRC 60 M.P.H. EXPOSURE "C"

2. STEEL PLATE AND ANGLE SHALL BE ASTM A-36

3. STEEL TUBE SHALL CONFORM TO ASTM A-500 GRADE B

4. STEEL PIPE SHALL CONFORM TO ASTM A-53 GRADE B

5. FOUNDATION RECOMMENDATIONS ARE BASED UPON COMPACT CLAY OR UNDISTURBED GOOD MEDIUM SOIL CONDITIONS WITH THE FOLLOWING ASSUMED MINIMUM PROPERTIES AND CONDITIONS.

- ALLOWABLE BEARING CAPACITY..... = 3000 PSF
- ANGLE OF INTERNAL FRICTION..... = 20 DEGREES
- UNIT WEIGHT OF SOIL..... = 100 PCF
- COHESION..... = 400 PSF
- WATER TABLE IS 3 FEET MINIMUM BELOW BOTTOM OF FOOTING

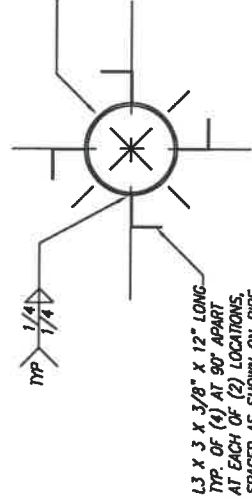
VERIFY ACTUAL SOIL CONDITIONS WITH LOCAL GEOTECHNICAL ENGINEER IF ACTUAL CONDITIONS VARY FROM THOSE ASSUMED FOR THIS FOUNDATION DESIGN, THEN THE FOUNDATION SIZE MUST BE REVISED AS REQUIRED.

PROVIDE FOUNDATION REINFORCING AS NOTED, AND AS LOCAL CODE REQUIRES

MINIMUM CONCRETE 28-DAY COMPRESSIVE STRENGTH REQUIRED IS 3000 PSI.

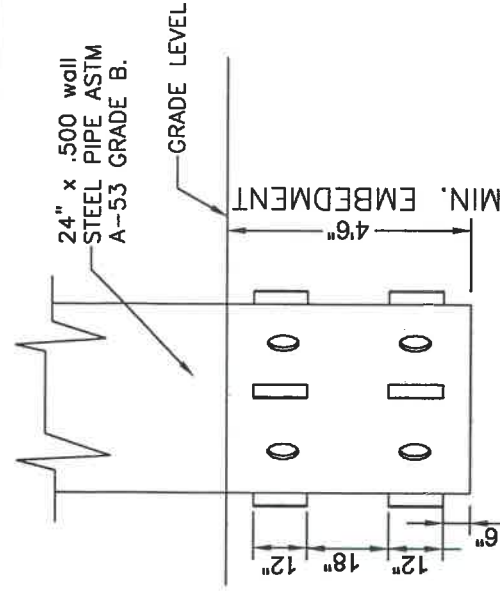
REBAR SHALL CONFORM TO ASTM A-615 GRADE 60

CENTERLINE OF PIPE & CASSON



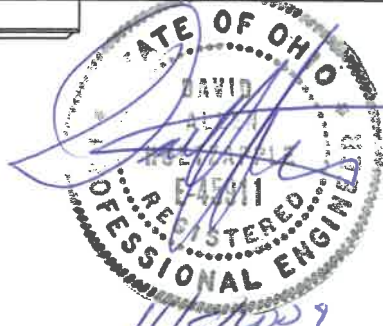
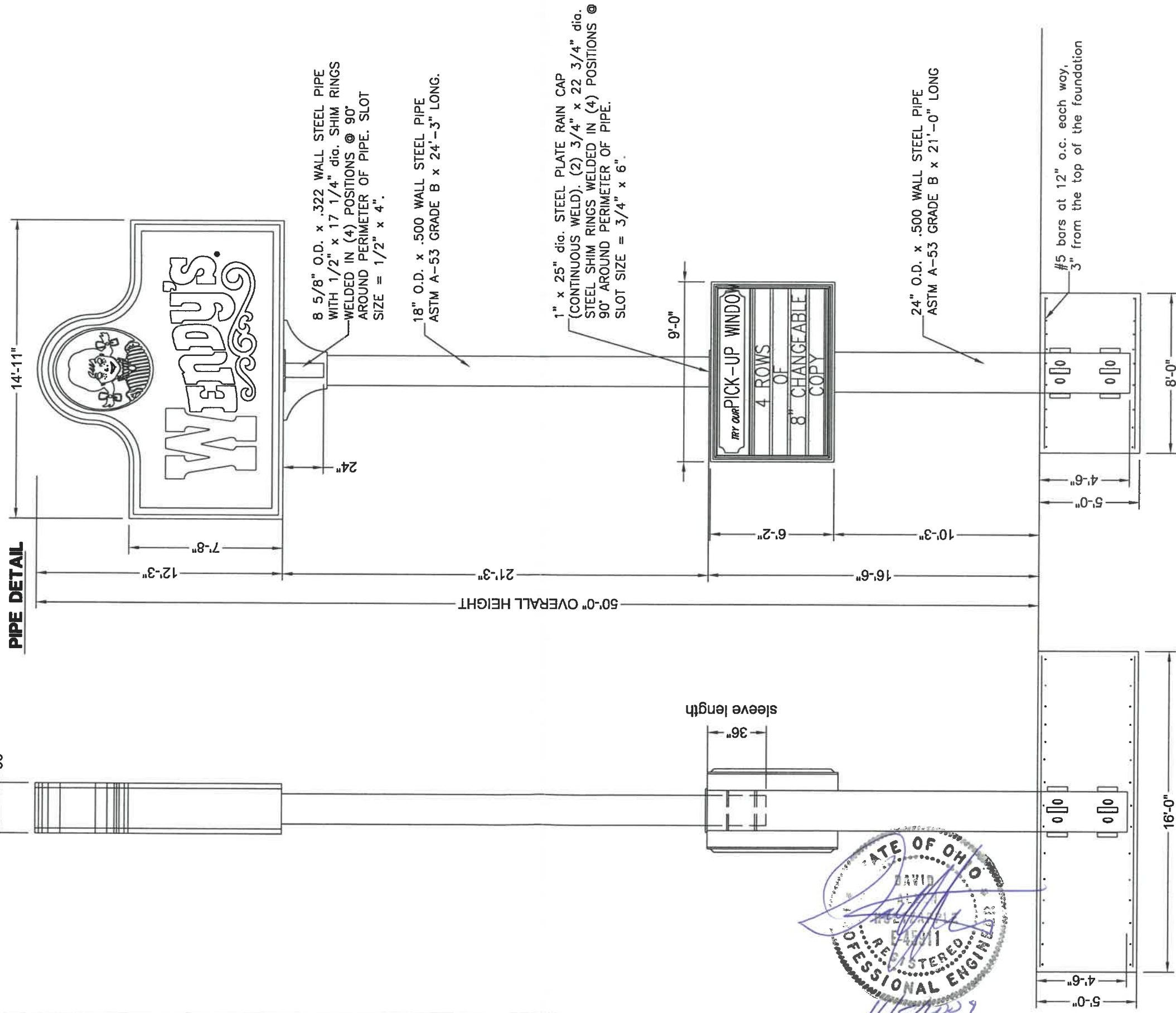
(4) - 4" DIA. SMOOTH DRILLED HOLES AT 90° APART, TYPICAL AT (2) LOCATIONS AS SHOWN ALONG EMBEDDED SECTION OF PIPE TO PERMIT CONCRETE TO FULLY FILL. CONTRACTOR TO COMPLETELY FILL EMBEDDED SECTION OF PIPE WITH CONCRETE.

1.3 X 3 X 3/8" X 12" LONG TYP. OF (4) AT 90° APART AT EACH OF (2) LOCATIONS, SPACED AS SHOWN ON PIPE.



PIPE DETAIL - FRONT VIEW

PIPE DETAIL



SHEET 1.1	FILE/DWG# 040820	UL YES	CIRCUIT	VOLTS	AMPS	DATE 11-03-04	SCALE 3/16" = 1'-0"	REVISION	INITIAL	DATE
LAST REVISION XX/XX/04	PROJECT WHR 150 Hi-Rise @ 50'-0" OAH					CLIENT WENDYS		Δ XXXXXX	XX	XX/XX/04
PART NO. 040820						ADDRESS 607 Woods Drive				
						CITY NAPOLEAN	STATE OHIO			
						SALESPERSON DS	DESIGNER JH			
						APPROV. JH				
						ORIGINAL W.O.				



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