

**APPLICATION FOR  
URBAN DESIGN COMMISSION  
REVIEW AND APPROVAL**

**AGENDA ITEM #** \_\_\_\_\_  
**Project #** \_\_\_\_\_

DATE SUBMITTED: <u>1/31/07</u>	<b>Action Requested</b>
UDC MEETING DATE: <u>2/7/07</u>	<input type="checkbox"/> Informational Presentation
	<input type="checkbox"/> Initial Approval and/or Recommendation
	<input checked="" type="checkbox"/> Final Approval and/or Recommendation

PROJECT ADDRESS: 801 REDAN DR. MADISON, WI 53593  
ALDERMANIC DISTRICT: 1

OWNER/DEVELOPER (Partners and/or Principals) Madison Metro. School District ARCHITECT/DESIGNER/OR AGENT: DAVE BARNES, AIA  
545 W. DAYTON ST. Zimmerman Architectural Studios  
Madison, WI 53703

CONTACT PERSON: DAVE BARNES  
Address: 7707 HARWOOD AVE.  
MILWAUKEE, WI 53213  
Phone: 414.918.1461  
Fax: 414.476.8582  
E-mail address: dave.barnes@zastudios.com

- TYPE OF PROJECT:  
(See Section A for:)
- Planned Unit Development (PUD)
    - General Development Plan (GDP)
    - Specific Implementation Plan (SIP)
  - Planned Community Development (PCD)
    - General Development Plan (GDP)
    - Specific Implementation Plan (SIP)
  - Planned Residential Development (PRD)
  - New Construction or Exterior Remodeling in an Urban Design District \* (A public hearing is required as well as a fee)
  - School, Public Building or Space (Fee may be required) LINDEN PARK ELEMENTARY SCHOOL
  - New Construction or Addition to or Remodeling of a Retail, Hotel or Motel Building Exceeding 40,000 Sq. Ft.
  - Planned Commercial Site

(See Section B for:)  
 New Construction or Exterior Remodeling in C4 District (Fee required)

(See Section C for:)  
 R.P.S.M. Parking Variance (Fee required)

(See Section D for:)  
 Comprehensive Design Review\* (Fee required)  
 Street Graphics Variance\* (Fee required)  
 Other \_\_\_\_\_

\*Public Hearing Required (Submission Deadline 3 Weeks in Advance of Meeting Date)  
Where fees are required (as noted above) they apply with the first submittal for either initial or final approval of a project.

**DESCRIPTION**

PHOCUS defines the ultimate floodlighting solution; powerful performance, easily concealable size and a stunningly beautiful shape. Available in wattages up to 150 watt T-6 Metal Halide and 250 watt T-4 Quartz Halogen. PHOCUS is versatile in application. Ground, wall, ceiling, burial and remote mounting configurations offer a wide variety of application alternatives to accomplish specific design requirements. Offering seven (7) uniquely shaped optical distributions, plus an array of HID and Quartz Halogen PAR lamps, PHOCUS is unrivaled in it's optical versatility. An available family of light control accessories provides custom cutoff solutions to meet specific distribution requirements.

**SPECIFICATION FEATURES**

**A ... Housing**

One-piece, die-cast aluminum housing maintains a nominal .125" wall to endure the toughest environments while maintaining precise tolerance control. Cast indicator mark on backside of housing reference 2.5 degree internal aiming marks on yoke arm for precise vertical aiming control.

**B ... Door**

Die-cast aluminum door maintains a nominal .125" wall thickness. Door is secured with two (2) tamper resistant recessed stainless steel fasteners. Lens is impact resistant .20" tempered clear contoured glass, sealed to the door with a one-piece molded silicone gasket.

**C ... Yoke Arms**

Heavy-duty die-cast aluminum yoke utilizes a taper-lock adjustment mechanism for both solid attachment and infinite aiming. Vertical adjustment is made via one (1) captive stainless steel fastener consistent with doorframe fasteners. Tested in all planes to sustain 3G of vibration.

**D ... Base Assembly**

Die-cast aluminum base assembly grounds yoke arms and allows for 357 degrees of horizontal rotation. Base assembly includes angle increment markers spaced at 2.5 degree intervals for ease of aiming, and an internal cast stop to prohibit rotation beyond one full revolution. Continuous silicone gaskets prevent water intrusion into base.

**E ... Optical Systems**

Choice of seven (7) high efficiency optical systems constructed of highly reflective anodized aluminum sheet, or bright anodized polished spun aluminum. Available distributions include Narrow Spot Axial, Horizontal Narrow Flood, Horizontal Medium Flood, Horizontal Wide Flood, Vertical Narrow Flood, Vertical Medium Flood, and Vertical Wide Flood. Metal Halide and Quartz Halogen PAR lamps also available in a variety of beam spreads. Metal Halide T6 lamps feature G12 lampholders, Metal Halide PAR-20 lamps feature medium screw base lampholders and Quartz Halogen T4 lamps feature mini-can lampholders. Quartz Halogen PAR-30 lamps feature medium screw base lampholders while Quartz PAR-36 lamps feature a chip on socket.

**F ... Integral Ballast Box**

Die-cast aluminum ballast enclosure attaches to mounting surface with two (2) 3/8" stainless steel lag bolts. Wiring compartment features a removable cover and is completely sealed from electrical components to prevent water or vapor entry into the fixture. Standard silicone-filled wire nuts prevent wicking of water through wire leads. Continuous silicone gasketing throughout base assembly forbids contaminant entry.

**G ... Electrical Components**

Choice of high power factor (HPF) magnetic, or superior performing electronic HID ballasts.

**H ... Finish**

Fixtures and accessories are finished in a premium 5 stage TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult your INVUE Lighting Systems Representative for more information.

Catalog #		Type
Project		
Comments		Date
Prepared by		



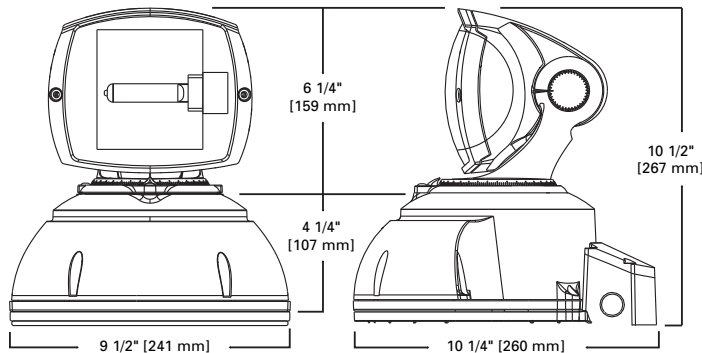
**PHH  
PHOCUS  
FLOOD**

**39-150W  
Metal Halide**  
**ARCHITECTURAL  
FLOODLIGHT**

Wattage Table

	PHH
Metal Halide T6	39, 70, 100, 150W
Metal Halide PAR20	39W

**DIMENSIONS**



Certifications

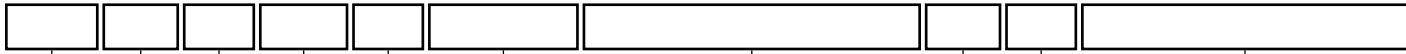
IP65 Rated	U.L. 1598	2G Vibration Tested
CSA Listed	25° C Ambient	ISO 9001

**EPA** (effected projected area)  
1.56

**SHIPPING DATA** (approx.)  
Net Weight (lbs.): 10

ORDERING INFORMATION

Sample Number: PHH-150-MH-120-MB-HNF-GIB-BK-L



**Product Family**  
PHH: PHOCUS HID

**Lamp Wattage**  
**HID T6 Lamps** <sup>1</sup>  
39: 39W<sup>2</sup>  
70: 70W<sup>3</sup>  
100: 100W  
150: 150W  
**HID PAR Lamps** <sup>4</sup>  
39: 39W<sup>2</sup>

**Lamp Type**  
MH: Metal Halide

**Voltage** <sup>5</sup>  
120: 120V  
208: 208V  
240: 240V  
277: 277V  
347: 347V  
DT: Dual-Tap wired 277V<sup>6, 7</sup>  
MT: Multi-Tap wired 277V<sup>6, 8</sup>  
TT: Triple-Tap wired 347V<sup>6, 9</sup>  
XXX: None

**Ballast**  
MB: Magnetic Ballast  
EB: Electronic Ballast<sup>10</sup>  
XX: No Ballast

**Optical System**  
**HID T6 Lamps**  
NS: Narrow Spot Axial  
HNF: Horizontal Narrow Flood  
HMF: Horizontal Medium Flood  
HWF: Horizontal Wide Flood  
VNF: Vertical Narrow Flood  
VMF: Vertical Medium Flood  
VWF: Vertical Wide Flood  
**HID PAR Lamps** <sup>11</sup>  
SP10: 10° Spot  
FL30: 30° Flood

**Mounting**  
**Ground Mount**  
GBB: Direct Burial Mount (supplied w/ burial ballast)<sup>12</sup>  
GIB: Integral Ballast Box  
GRB: Remote Mount (supplied w/ remote burial ballast)<sup>12</sup>  
GRNB: Remote Mount (requires remote potted ballast by others)<sup>13</sup>  
GSR: Spike Mount (supplied w/ remote burial ballast)<sup>12</sup>  
**Wall/Ceiling Mount**  
WIB: Integral Ballast Box  
WRNB: Remote Mount (requires remote potted ballast by others)

**Color** <sup>14</sup>  
BK: Black  
AP: Grey  
BZ: Bronze  
WH: White  
DP: Dark Platinum  
GM: Graphite Metallic  
VR: Verde Green

**Options** <sup>15</sup>  
F: Single Fuse (120, 277 or 347V)<sup>16</sup>  
Specify Voltage  
FF: Double Fuse (208, 240 or 480V)<sup>16</sup>  
Specify Voltage  
FR: Frosted Flat Glass Lens  
L: Lamp Included

**Accessories** <sup>17</sup>  
VA3003-XX: Color Filter Adapter with Red Gel  
VA3004-XX: Color Filter Adapter with Bright Blue Gel  
VA3005-XX: Color Filter Adapter with Deep Green Gel  
VA3006-XX: Color Filter Adapter with Warm Orange Gel  
VA3001-XX: Top Visor  
VA3002-XX: Four Sided Shield  
VA3007-XX: Wire Guard

- Notes: <sup>1</sup> T6 lamps use G12 base.  
<sup>2</sup> Available in Dual-Tap, 120 and 277V only.  
<sup>3</sup> 70W magnetic ballast limited to Dual-tap 120/277 or 120/347.  
<sup>4</sup> 39W PAR20 lamps use medium screw base.  
<sup>5</sup> Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.  
<sup>6</sup> Magnetic ballasts only.  
<sup>7</sup> Dual-tap is 120/277V wired 277V.  
<sup>8</sup> Multi-tap is 120/208/240/277V wired 277V.  
<sup>9</sup> Triple-tap is 120/277/347V wired 347V.  
<sup>10</sup> 120 through 277V only. Not available with 150 MH lamp, or GBB, GRB, GSR ground mount options.  
<sup>11</sup> PAR 20 MH lamps available in 39W only.  
<sup>12</sup> GBB, GRB, GSR mounting options include a magnetic potted burial ballast enclosure. Not available in 150W MH. Maximum 50' remoting distance from fixture head.  
<sup>13</sup> For use when ground mounting in non-earth or interior surface environments.  
<sup>14</sup> Custom and RAL color matching available upon request. Consult your INVUE Lighting Systems Representative for further information.  
<sup>15</sup> Add as suffix in the order shown.  
<sup>16</sup> Fusing available on GIB and WIB mounting options only.  
<sup>17</sup> Order separately, replace XX with color suffix.

**DESCRIPTION**

ENTRI Series' family of modular faceplate designs provide a tasteful architectural statement equally suitable for indoor and outdoor environments. Available luminous faceplate window adds a signature look, while affording custom color capability.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

**SPECIFICATION FEATURES**

**A ... Housing**

One piece die-cast aluminum construction for precise tolerance control and repeatability in manufacturing. Accommodates either up or down mounting configurations with no modifications. Downlight and uplight lens' are impact resistant 5/32" thick tempered clear or frosted flat glass, sealed to the housing with high strength VHB adhesive tape and a continuous silicone bead gasket. Silicone wireway plug on housing back wall seals incoming electrical leads to prevent moisture and dust entry.

**B ... Faceplate**

One piece die-cast aluminum faceplate utilizes a continuous silicone gasket to seal securely to housing. Side hinged faceplate swings open via release of one (1) flush mount die-cast aluminum latch on housing side panel. Available luminous glass insert is .16" thick frosted glass, secured to back of faceplate with a continuous EPDM gasket. Available colored gel film secures behind glass.

**C ... Optical System**

Choice of ten (10) high efficiency optical systems constructed of premium 95% reflective anodized aluminum sheet, or bright specular anodized polished spun aluminum. Available distributions include Type III, Type III with 10% secondary glow, Type III with pencil secondary, Forward Throw, Forward Throw with 10% secondary glow, Forward Throw with pencil secondary, FX grazing optic, FXF 50% up/50% down grazing optic, Tight Spot, and 50% up/50% down Tight Spot. Optical segments are rigidly mounted inside a heavy wall aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs, or other means of attachment which may cause streaking in the light distribution. All reflector modules feature quick disconnect wiring plugs. T6 Metal Halide lamps feature G12 lampholders, White Son™ High Pressure Sodium lamp features a GX12 lampholder, Quartz Halogen lamps feature mini-can screw based lampholders, and Compact Fluorescent lamps feature GX24q-(3,4,5) 4-pin lampholders.

**D ... Electrical Components**

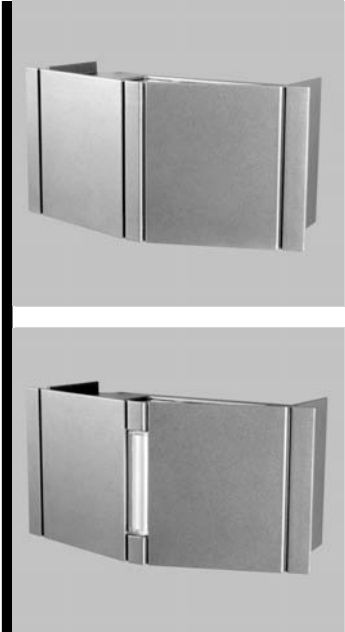
Ballast and related electrical componentry are heat sunk to the housing for cooler operation and prolonged life.

**E ... Mounting**

Standard zinc plated attachment plate mounts directly to 4" J-Box. Fixture slides over mounting plate and is secured with two (2) concealed stainless steel fasteners. Mounting plate features one-piece, EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates. Optional mounting arrangements utilize a die-cast aluminum adapter box to allow for surface conduit wiring, quartz lamp options, and emergency battery pack capability.

**F ... Finish**

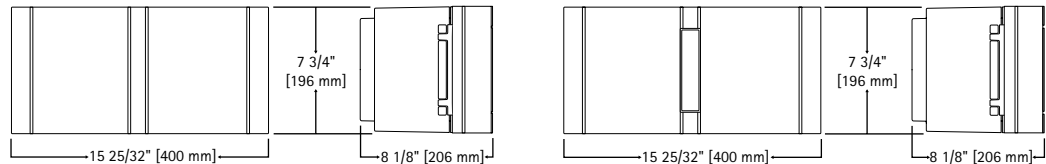
Housing finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic. RAL and custom color matches available. Consult your INVUE Lighting Systems Representative for more information.



**ENT  
ENTRI TRIANGLE  
REVEALS**

**26-250W**  
Metal Halide  
WhiteSON High Pressure Sodium  
Compact Fluorescent  
Quartz Halogen  
**ARCHITECTURAL  
WALL LUMINAIRE**

**DIMENSIONS**



Wattage Table	
ENT	
Metal Halide	39, 70, 100, 150W
White Son HPS	100W
Compact Fluorescent	26, 32, 42, 57W
Dual Compact Fluorescent	(2) 26, (2) 32, (2) 42W
Quartz Halogen	100, 150, 250W

Certifications			
IP66 Rated	U.L. 1598		FCO Full Cutoff
CSA Listed	25°C Ambient	ISO 9001	



\*In downlight only configurations with no faceplate window.

**Shipping DATA** (approx.)  
Net Weight (lbs.): 13  
Volume (cu. ft): 4.5

ORDERING INFORMATION

Sample Number: ENT-150-MH-120-EB-3S-BK-LG-L

--	--	--	--	--	--	--	--	--	--

**Product Family**

ENT: ENTRI  
Triangle  
Reveals

**Lamp Wattage**

**HID** <sup>1</sup>  
**39**- 39W  
**70**- 70W  
**100**- 100W  
**150**- 150W  
**Compact Fluorescent** <sup>2</sup>  
**26**- 26W  
**32**- 32W  
**42**- 42W  
**52**- (2) 26W<sup>3</sup>  
**57**- 57W<sup>4</sup>  
**64**- (2) 32W<sup>3</sup>  
**84**- (2) 42W<sup>3</sup>  
**Halogen** <sup>5</sup>  
**100**- 100W  
**150**- 150W  
**250**- 250W

**Lamp Type**

**MH**- Metal Halide  
**WS**- WhiteSON High <sup>6</sup>  
 Pressure Sodium  
**CF**- Compact Fluorescent<sup>7</sup>  
**HL**- Quartz Halogen

**Voltage** <sup>8</sup>

**120**- 120V  
**208**- 208V  
**240**- 240V  
**277**- 277V  
**347**- 347V  
**DT**- Dual-Tap <sup>9</sup>  
 wired 277V  
**MT**- Multi-Tap <sup>10</sup>  
 wired 277V  
**TT**- Triple-Tap <sup>11</sup>  
 wired 347V  
**UNV**- 120-277V  
 Universal  
 Electronic  
 Ballast

**Ballast**

**MB**- Magnetic Ballast  
**EB**- Electronic<sup>12</sup>  
 Ballast  
**X**- None (for Halogen  
 Lamp)

**Optical System**

**Downlight or Uplight (HID or Halogen)**  
**3S**- Type III  
**FT**- Forward Throw  
**FX**- Wall Grazing Optic  
**TS**- Tight Spot  
**Downlight and Uplight (HID and Halogen)**  
**3SG**- Type III, 90% Main/10% Secondary  
 Glow  
**3SP**- Type III with Pencil Secondary  
**FTG**- Forward Throw, 90% Main/10%  
 Secondary Glow  
**FTP**- Forward Throw with Pencil  
 Secondary  
**FXF**- Wall Grazing Optic, 50% Up/50%  
 Down  
**TSF**- Tight Spot, 50% Up/50% Down  
**Compact Fluorescent**  
**CFG**- 90% Main + 10% Secondary Glow  
**CFM**- 100% Main, Up or Downlighting

**Color** <sup>13</sup>

**BK**- Black  
**AP**- Grey  
**BZ**- Bronze  
**WH**- White  
**DP**- Dark Platinum  
**GM**- Graphite Metallic

**Optional Luminous Faceplate Insert**

**LG**- Luminous Glass Insert  
**LGO**- Luminous Glass Insert  
 w/ Warm Orange Gel  
**LGR**- Luminous Glass Insert  
 w/ Red Gel  
**LGB**- Luminous Glass Insert  
 w/ Bright Blue Gel  
**LGG**- Luminous Glass Insert  
 w/ Deep Green Gel

**Options** <sup>14</sup>

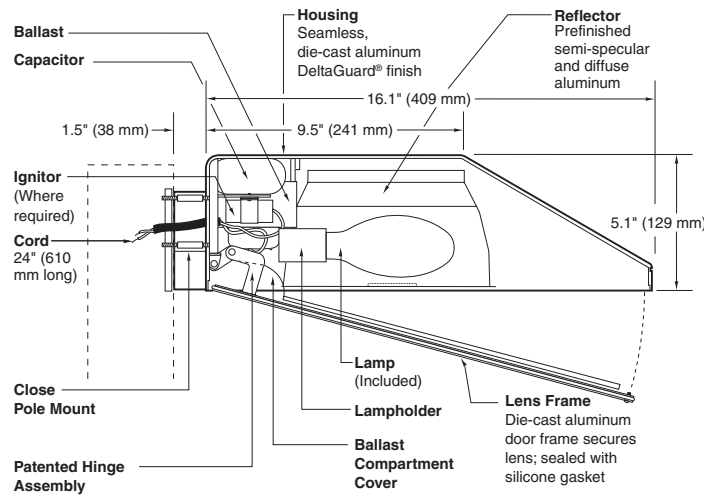
**F**- Single Fuse (120, 277 or 347V) Specify Voltage  
**FF**- Double Fuse (208, 240 or 480V) Specify Voltage  
**DSAB**- Dual Fluorescent Switching Control Adapter Box<sup>15</sup>  
**QAB**- Quartz Restrike Adapter Box  
**EMAB**- Quartz Restrike w/ Delay Adapter Box (Also  
 Strikes at Cold Start)  
**EM/SCAB**- Quartz Emergency Separate Circuit Adapter  
 Box  
**CF/EMAB**- Emergency Battery Backup Adapter Box<sup>16</sup>  
**PC**- Button Type Photocontrol (Specify Voltage)  
**WG**- Wire Guard<sup>17</sup>  
**FRM**- Frosted Main Flat Glass  
**FRS**- Frosted Secondary Flat Glass<sup>18</sup>  
**L**- Lamp Included (Standard for all Halogen lamps)

**Accessories** <sup>19</sup>

**VA2001-XX**- Thru-way Box  
**VA2002**- Wire Guard Kit

- Notes:**
- All MH lamps are T6 envelope with G12 lamp base. All HPS lamps are T6 envelope with GX12 lamp base.
  - All 26/32/42/57W CF lamps feature a 4-pin lamp base. Available in CFM and CFG distributions only.
  - Dual compact fluorescent lamps.
  - Nominal M.O.L lamp length of 57W CFL not to exceed 7".
  - All Halogen lamps are T4 envelope with mini-can base.
  - WhiteSON HPS lamp available in 100W only. Requires electronic ballast. 120/277V only. Requires use of VA2001 accessory Thru-way Box.
  - Compact Fluorescent ballasts contain internal fusing. No supplemental fusing is necessary. CF ballasts are 120 through 277V. Specify with UNV voltage designation.
  - Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.
  - Dual-tap is 120/277V wired 277V.
  - Multi-tap is 120/208/240/277V wired 277V.
  - Triple-tap is 120/277/347V wired 347V.
  - 120 through 277V only. Electronic ballasts contain internal fusing, no supplemental fusing is necessary. Electronic ballast available with all CF lamps, and 39/70/100W MH lamps. Available with 150W MH lamp with use of VA2001 accessory Thru-way Box. Not available with QAB or EMAB options.
  - Custom and RAL color matching available upon request. Consult your INVUE Lighting Systems Representative for further information.
  - Add as suffix in the order shown.
  - Dual switching requires dual 26, 32 or 42W Compact Fluorescent lamps. Allows independent switching control of each lamp through use of two (2) electronic ballasts. Allows 50% power reduction when dual ballasts are independently wired and controlled.
  - Battery backup provides 90 minutes of supplemental light at 60% of initial rated lamp lumens. Must specify 26/32/42W Compact Fluorescent lamp.
  - For use in down lighting applications only.
  - Frosted secondary lens provided standard on 3SG, FTG, and CFG distributions.
  - Order separately, replace XX with color suffix.

Beta Catalog Number:



Notes:

Product Family	Housing Indicator	Lamp Position	Beam Distribution	Mounting Options	Lamp Selection*	Ballast Voltage	Color Options	Factory-Installed Options
BAA	W16	H	T3 <sup>6</sup>	CP <sup>5</sup>	100 PMH 150 PMH 175 MHX	100 HPS 150 HPS MT <sup>1</sup> DT <sup>2</sup> 20-208V 24-240V 27-277V 34-347V 48-480V <sup>3</sup> 5_-50 Hz <sup>4</sup>	BZ BK WH PB SV	If choosing more than one option, please type in manually on the lines provided above. F-Fuse <sup>7</sup> GS-Decorative Gray Color Striping P-Photocell <sup>7</sup> Q-Quartz Standby <sup>8</sup> RS-Decorative Red Color Stripe

\*Lamp Abbreviation Key:  
PMH = Pulse Start Metal Halide  
MHX = Metal Halide  
HPS = High Pressure Sodium

Field-Installed Accessories



Backlight Shield  
SBL-16



Wire Guard  
FWG-16

1-150W PMH, 175W MHX and 100W & 150W HPS are standard with multi-tap (MT) ballast  
2-100W PMH are standard with dual-tap (DT) ballast  
3-480V ballast available for 175W MHX and 100W HPS

4-International 50 Hertz ballasts available, consult factory  
5-CP (Close Pole mounting arm)-Offsets the fixture 1.5" from pole  
6-T3-IESNA Type III  
7-Must specify voltage other than MT or DT

8-Delay-relay type and includes 100W T4 dual-contact quartz lamp

General Description

Parking lot and roadway full cuoff luminaire for HID lamp, totally enclosed. For downlight application only. Housing is seamless, die cast aluminum. Mounting consists of a 1.8" (44 mm) wide by 2.5" (63 mm) high by 1.5" (38 mm) long extruded aluminum arm. The arm is held in place with two 3/8" (9 mm) mounting rods fastened to a steel backing plate inside the pole, and by two nuts inside the fixture housing. Mounting rods are provided with sealing washers to prevent water leakage. Lens assembly consists of rigid aluminum frame, high impact, clear tempered glass.

Electrical

Fixture includes clear, medium base lamp. Pulse-rated porcelain enclosed, 4kv rated screw shell type lampholder. Lamp ignitor included where required. All ballast assemblies are high power factor and use the following circuit types: Reactor 120V: 100W & 150W HPS; HX - High Reactance: 100W MH and 100W & 150W HPS; CWA - Constant Wattage Autotransformer: 125W & 150W PSMH and 175W MH

Finish

Exclusive Colorfast DeltaGuard™ finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. The finish is covered by our 7 year limited warranty.

Labels

ANSI lamp wattage label supplied, visible during relamping. UL Listed in U.S. and Canada for wet locations and enclosure classified IP65 per IEC 529.

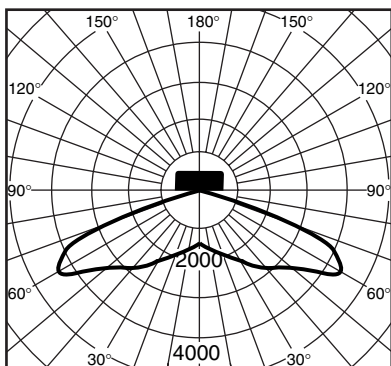
Patents

U.S. 4,689,729; 4,709,312; D352,126; Canada 74203

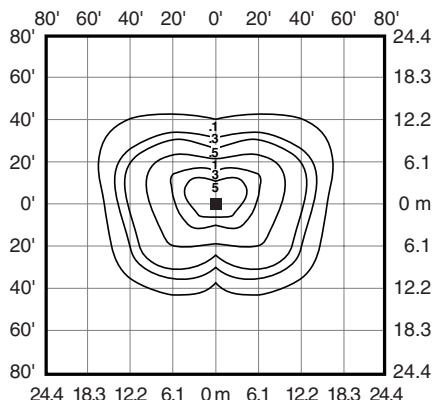
# BAA-W16-H-T3-CP 16" Wedge w/ Close Pole Mounting Arm

## EPA RATING

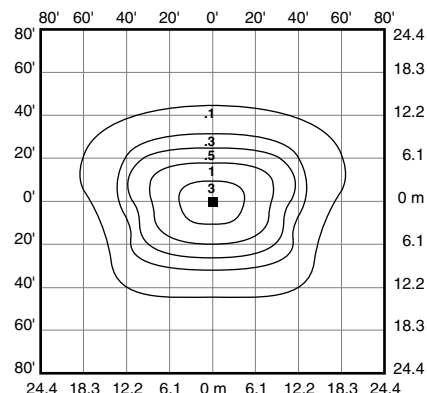
EPA 0.45 for single fixture with 0° tilt. Refer to Specifier Reference Guide or [www.beta-lighting.com/TechnicalData/Windloading.pdf](http://www.beta-lighting.com/TechnicalData/Windloading.pdf) for EPA rating on multiple units or other tilt angles.



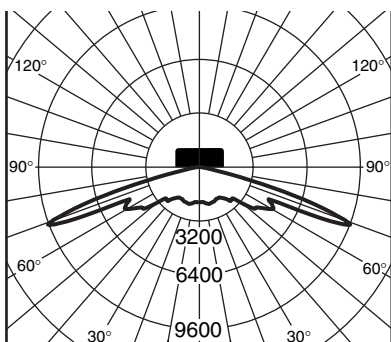
Lighting Sciences Inc.  
Certified Test Report No. LSI 10694  
Candlepower distribution curve of 175W  
MH Rectangular Parking/Roadway Light.



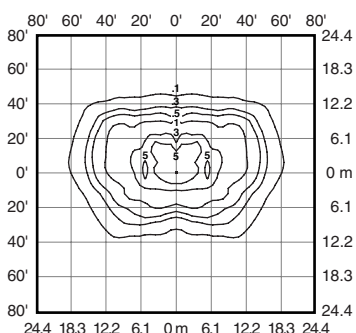
Isofootcandle plot of 175W MH  
Parking/Roadway Light at 15' (4.6 m)  
mounting height and 0° vertical tilt.  
(Plan view)



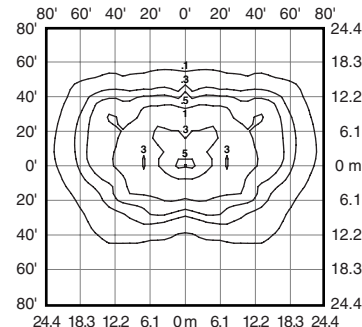
Isofootcandle plot of 175W MH  
Parking/Roadway Light at 20' (6.1 m)  
mounting height and 0° vertical tilt.  
(Plan view)



Lighting Sciences Inc.  
Certified Test Report No. LSI 10110  
Candlepower distribution curve of 150W  
HPS Rectangular Parking/Roadway Light.

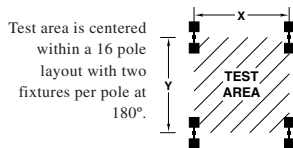


Isofootcandle plot of 150W HPS  
Parking/Roadway Light at 15' (4.6 m)  
mounting height and 0° vertical tilt.  
(Plan view)



Isofootcandle plot of 150W HPS  
Parking/Roadway Light at 20' (6.1 m)  
mounting height and 0° vertical tilt.  
(Plan view)

Isofootcandle plots show initial footcandles at grade.  
Footcandles ÷ 0.0929 = Lux.



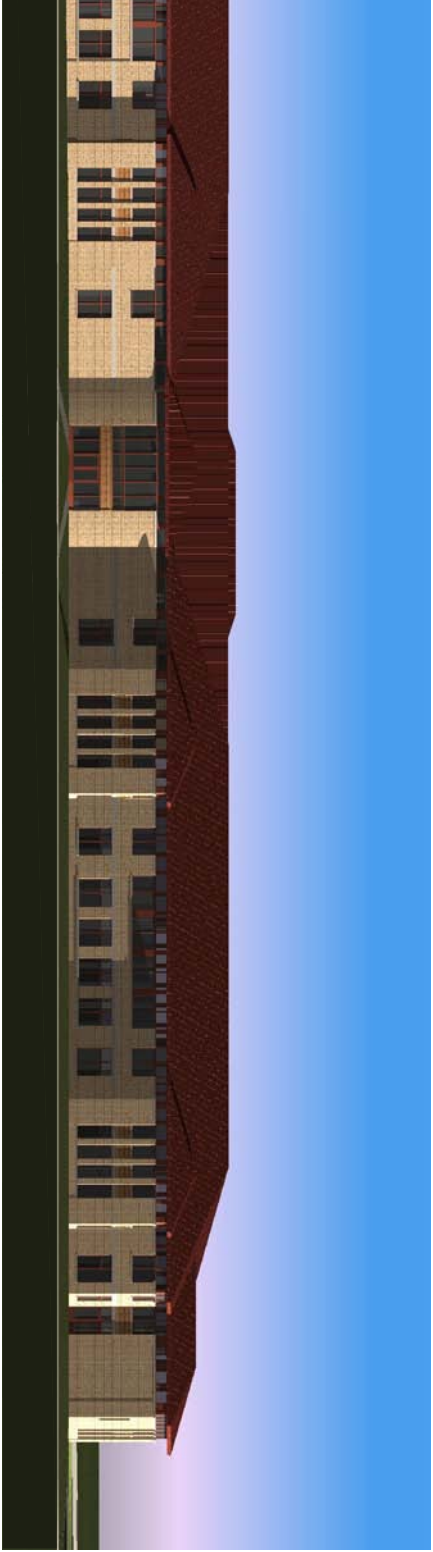
## Pole-spacing Example Data

Luminaire	Lamp Type	Lamp Lumens	Mounting Height	Max. Recommended Pole-spacing X x Y	Average Initial Light Levels at Grade 2 Fixtures per pole @ 180°	
					Footcandles	Lux
BAA-W16-H-T3	100W MH	8,100	10' (3.0 m)	60' (18.3 m) x 40' (12.2 m)	5.84	68
			15' (4.6 m)	90' (27.4 m) x 60' (18.3 m)	2.48	27
BAA-W16-H-T3	175W MH	12,000	15' (4.6 m)	90' (27.4 m) x 60' (18.3 m)	3.69	40
			20' (6.1 m)	120' (36.6 m) x 80' (24.4 m)	2.01	22
BAA-W16-H-T3	100W HPS	9,500	10' (3.0 m)	60' (18.3 m) x 40' (12.2 m)	7.32	79
			15' (4.6 m)	90' (27.4 m) x 60' (18.3 m)	2.94	32
BAA-W16-H-T3	150W HPS	16,000	15' (4.6 m)	90' (27.4 m) x 60' (18.3 m)	4.95	53
			20' (6.1 m)	120' (36.6 m) x 80' (24.4 m)	2.64	28

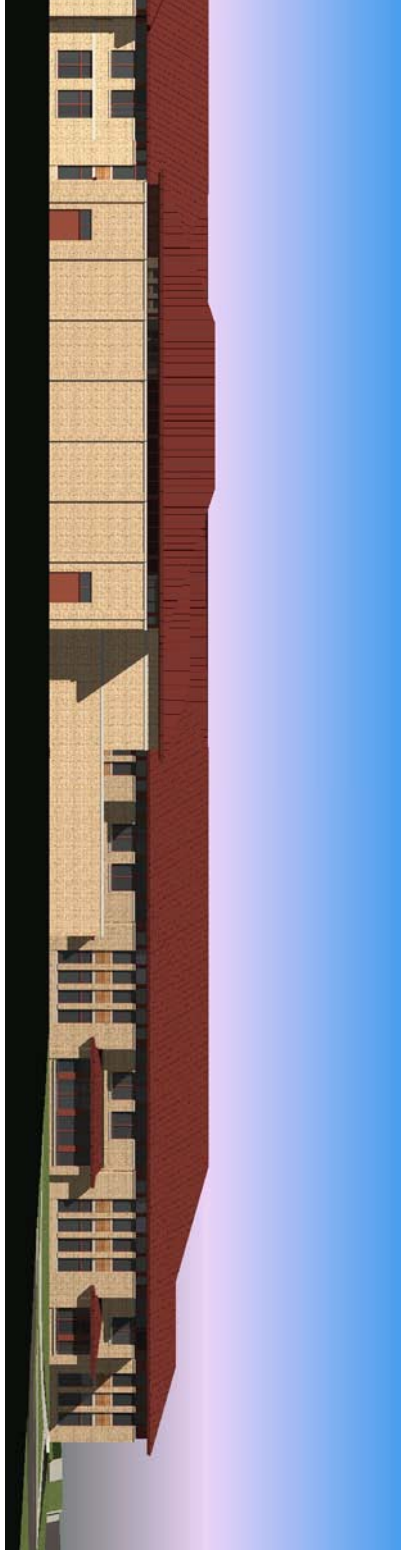


Partial west elevation

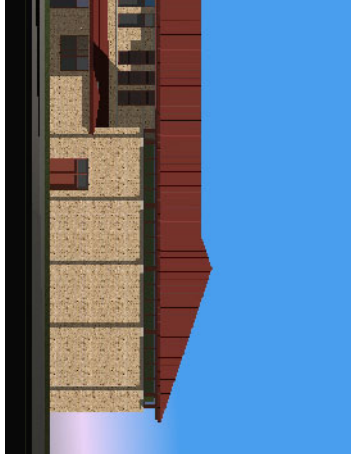
Partial perspective view of North Elevation



North Elevation



South Elevation



East Elevation / Perspective

# Linden Park Elementary School

Madison, Wisconsin

**Zimmerman**  
ARCHITECTURAL STUDIOS, INC.

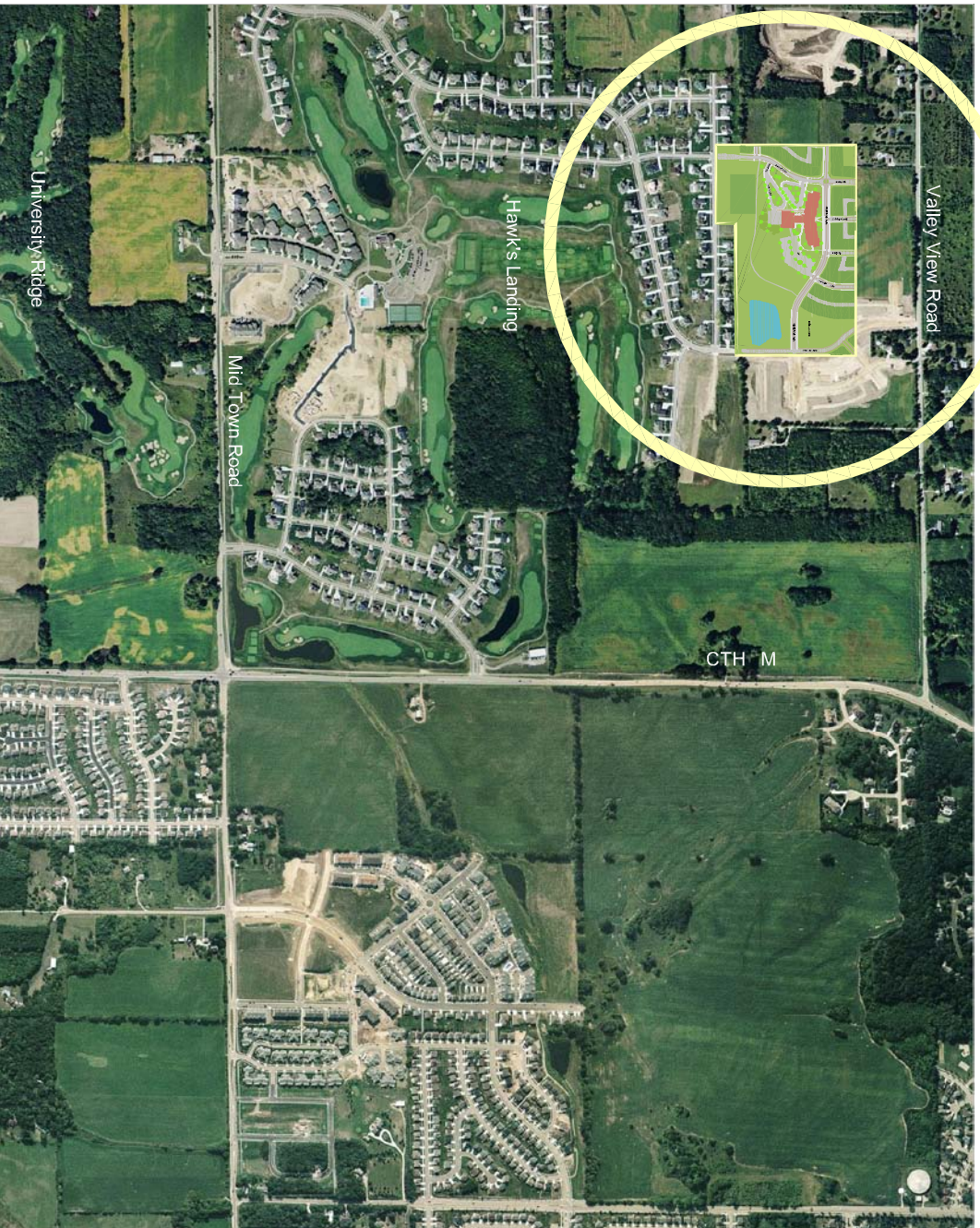
7707 Harwood Avenue | Milwaukee, WI 53219 | zastudios.com





**HWEST**

SECOND FLOOR	39,688 S.F.
TOTAL	89,849 S.F.
<b>TOTAL BUILDING OCCUPANTS:</b>	
STUDENTS	650
STAFF	90
TOTAL	740
<b>BICYCLE PARKING (1 PER 10 FACULTY &amp; STUDENTS ABOVE THE 2ND GRADE):</b>	
SPACES REQUIRED	42 (30 STUDENTS, 90 STAFF)
SPACES PROVIDED	59 (48 STUDENTS, 11 STAFF)
<b>PARKING SPACES (ONE PARKING SPACE FOR EVERY TWO (2) EMPLOYEES):</b>	
SPACES REQUIRED	45
SPACES PROVIDED	117
FACULTY/STAFF	95 (5 ACCESSIBLE, INCLUDING 1 VAN)
VISITOR	22 (1 ACCESSIBLE)
<b>HOURS OF OPERATION:</b>	
M-F 6:00 A.M. TO 10:00 P.M.	
<b>SITE ACREAGE:</b>	
8.3 ACRES	



LOCATION MAP

Consultant:

Project:  
**LINDEN PARK  
 ELEMENTARY SCHOOL**  
**MADISON  
 METROPOLITAN  
 SCHOOL  
 DISTRICT**

Location:  
 801 Redden Drive  
 Madison, WI 53593



Sheet:  
**Location Plan**

Scale:  
 Not to Scale

Revisions:		
No.	Date	Description
1/29/06		Madison DCC Interim Report Submitted
1/30/07		Madison City Commission/CCD Final Report Submitted
1/31/07		Madison City Commission/CCD Final Report Submitted

Date:  
 January 31, 2007

Project No.:  
 060092.00

Sheet No.:

**A0.0**

## Landscape Notes

### LANDSCAPE INSTALLATION NOTES

**NOTE: All landscaping to be installed and maintained per the Madison Metropolitan School District Standards.**

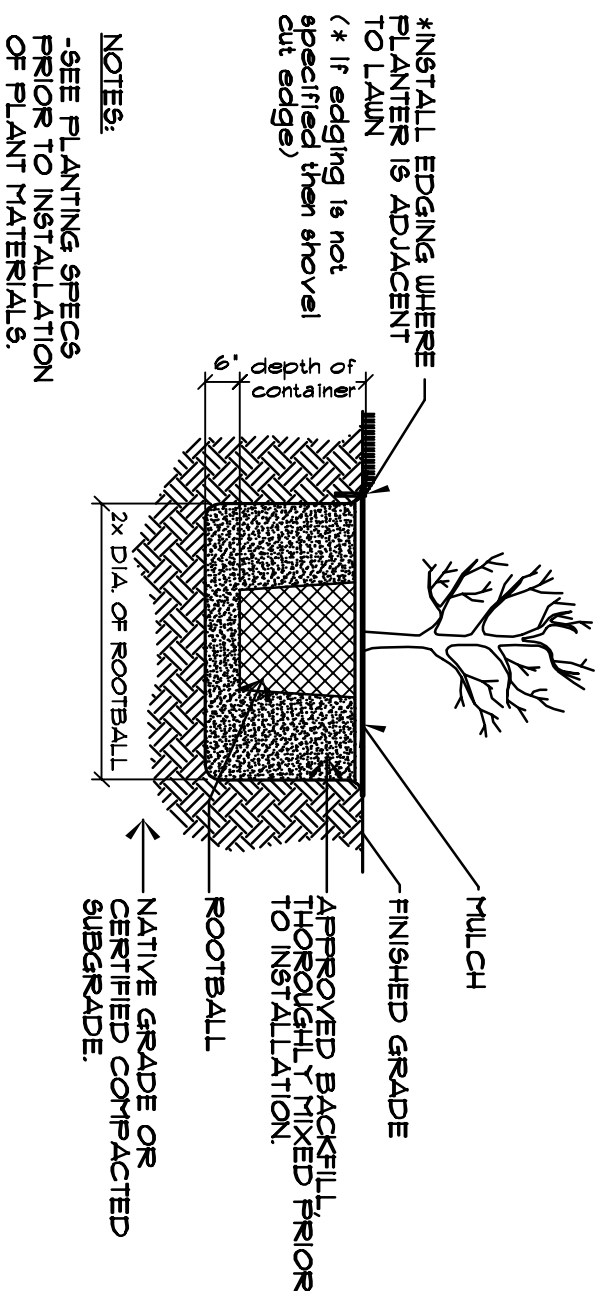
- All written dimensions supersede scaled dimensions.
- All dimensions are taken from face of curb, wall or existing building foundations.
- The Contractor shall verify location of all underground utilities and additional information prior to commencement of site construction.
- Rooting grouting and drainage is to be completed prior to Landscape Contractor's work. Verify all existing site and grading conditions prior to construction.
- All plants shall be in conformance with all applicable local codes and ordinances.
- All areas established by grading or site construction shall be fine graded and seeded. Seed plans for seed locations, see notes for appropriate seed mixes & installation.
- Contractor shall verify plant quantities shown on plan and provide a list to the Client identifying the species and standard to be used throughout the project. The Landscape Architect reserves the right to reject any substandard planting material. Such rejected material shall be removed from the project site immediately.
- All planting beds shall receive a blended topsoil mix to a depth of 6". Contractor shall provide positive drainage away from all buildings for a minimum of 10'. Remove existing clay, gravel & stones which would be detrimental to healthy plant growth. Rebuild new topsoil mix exceeding 4" depth.
- All perennial and groundcover areas shall receive a blend of organic soil amendments prior to planting. Rebuild the amendments into the existing soil to a depth of 12". Avoid damage to existing tree roots where applicable by tightly working amendments into soil with push broom.

Add per 100 square feet:
1-2 qt. bale of Peat Moss
1-2 qt. of 5-0-5 garden fertilizer (Ozmocone or Milorganite)
1-2 qt. Super mesh
1-4 qt. of mushroom compost

- All shrubs and perennials areas shall be planted with groundcover. See plant schedule.
- Unless otherwise shown, all perennials & shrubs to be planted in a triangular arrangement. For plants not shown individually, refer to the spacing shown in the plant schedule.
- Before 60-day maintenance period ends, Contractor to install a 6" sheaved bed edge wherever noted.

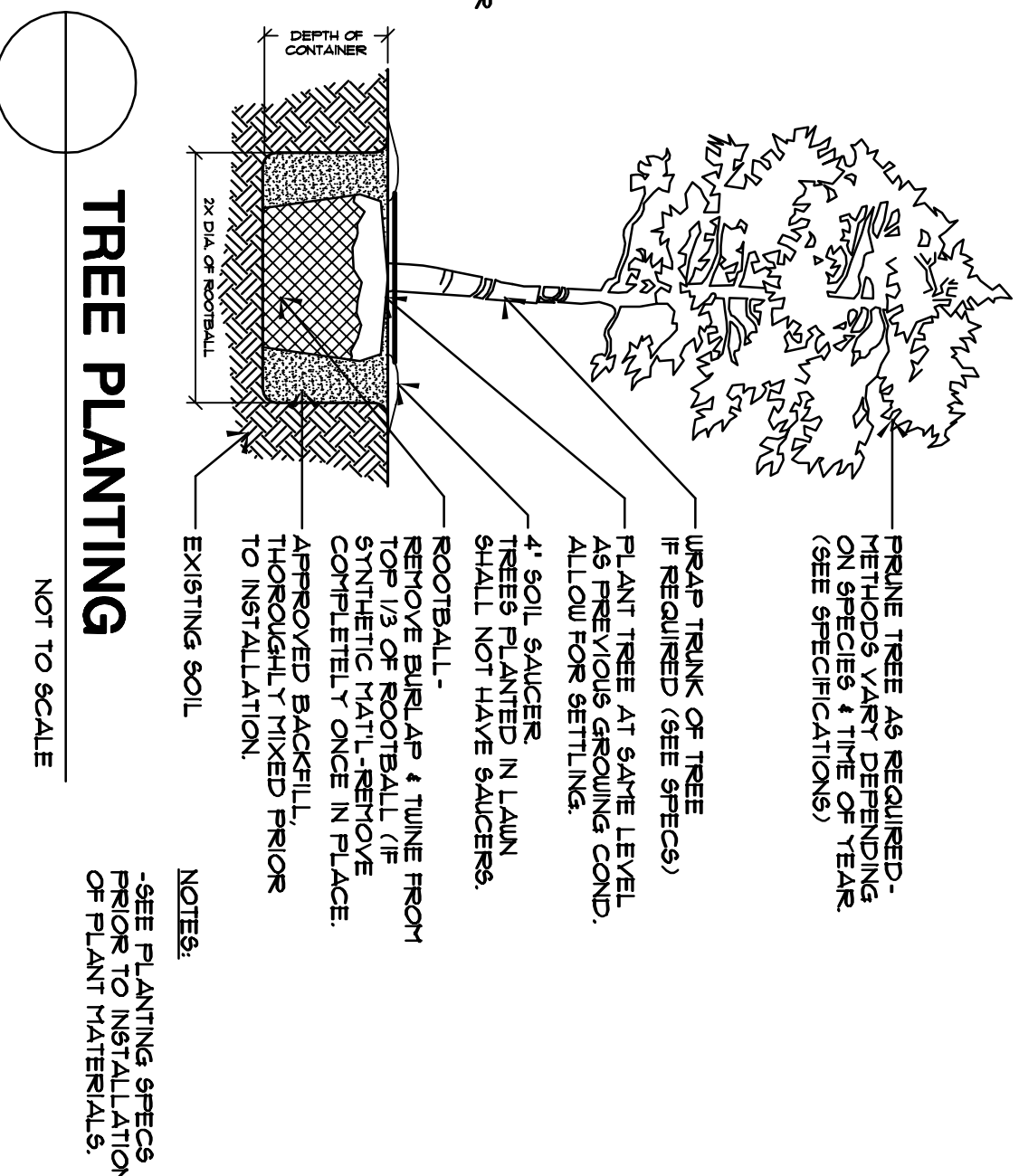
### SEEDING INSTALLATION

- All wet located seeding shall conform with the specifications outlined in WDNR's Technical Document 1003 "Terrestrial Began".
- Contractor shall provide seeding material to the site prior to installation. Installations performed outside of acceptable seeding dates shall be the sole responsibility of the contractor.
  - Prior to applying the seed, Contractor shall ensure the seeding zones for approval by Landscape Architect.
  - Seed shall be PLS and will be mixed in accordance with specifications.
  - Seed straw mulch shall be clean without weeds and blown onto seeded area at a rate of 55 stalks per acre. Mulch shall be 1/2" wood shavings at 4" or 6" or any location of different seed types for identification & maintenance purposes.



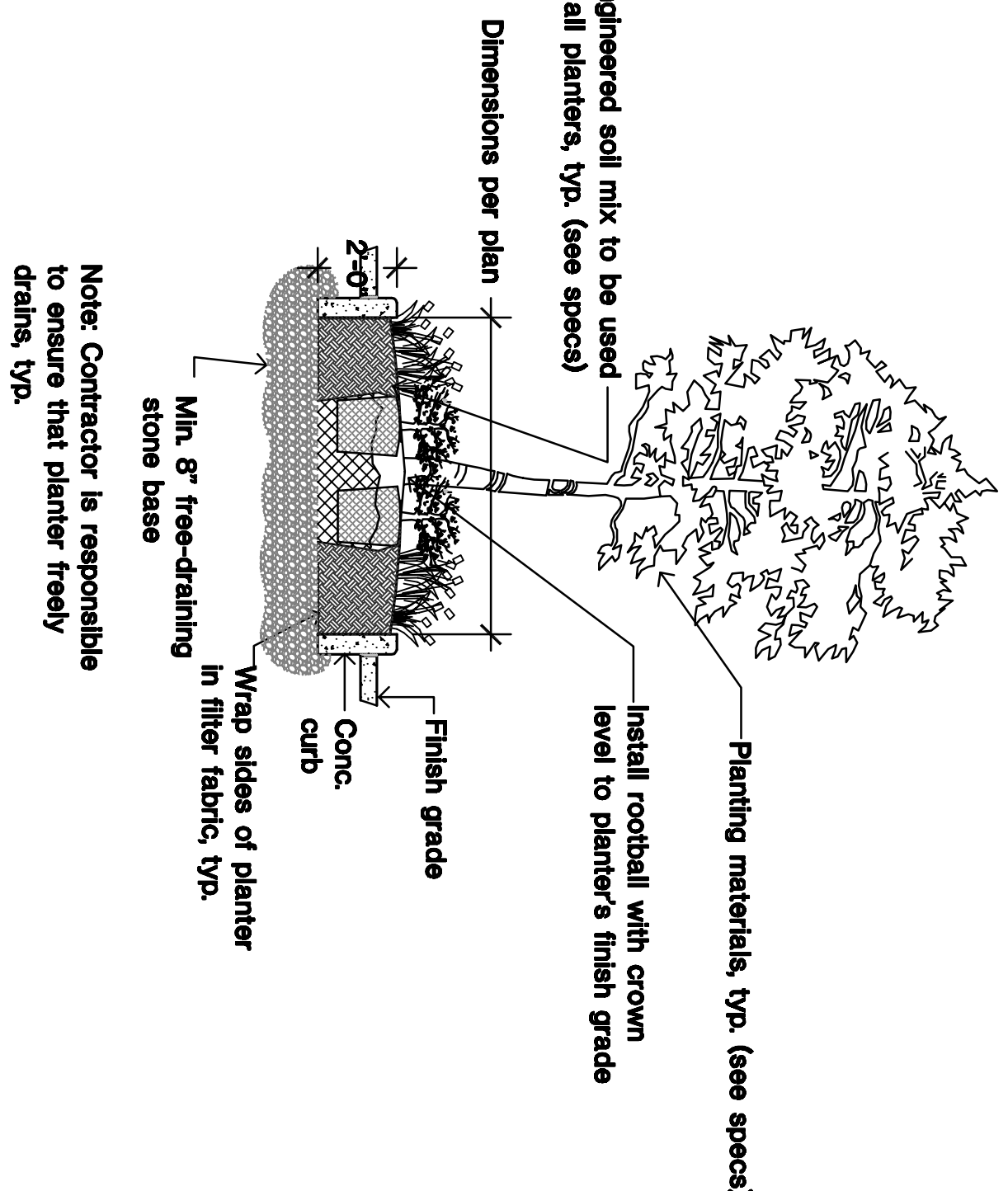
## SHRUB PLANTING

NOT TO SCALE



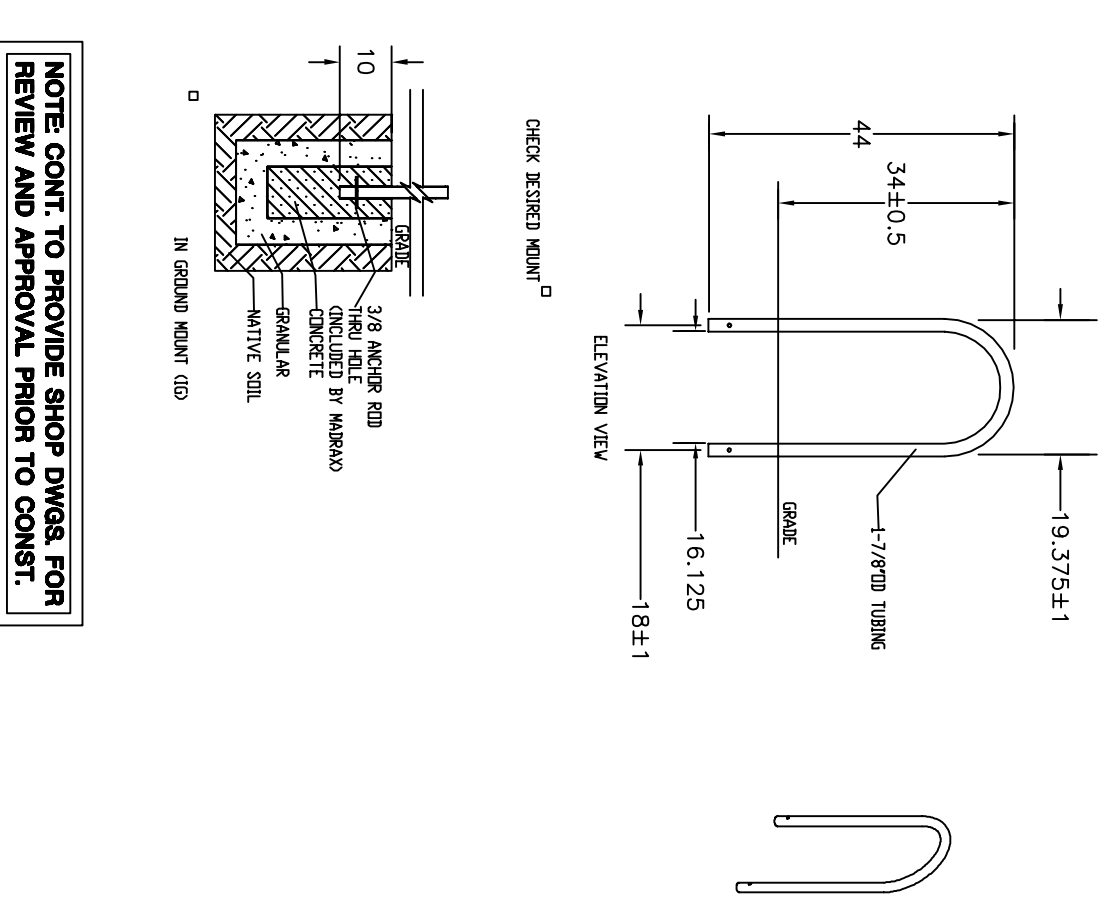
## TREE PLANTING

NOT TO SCALE



## 1 Typical Curbed Planter

Scale: 1/4" = 1'-0"



## 5 Typical Bicycle Rack

Scale: NOT TO SCALE

## Plant Schedule

### P L A N T L I S T

SET	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
-----	-----	----------------	-------------	------	------	---------

NOTE: All heights are 'at time of planting'. Evergreen & shrub heights are to 6" TP.

SET	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS CANOPY TREES	1	Acacia saligna	Acacia Saligna	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem

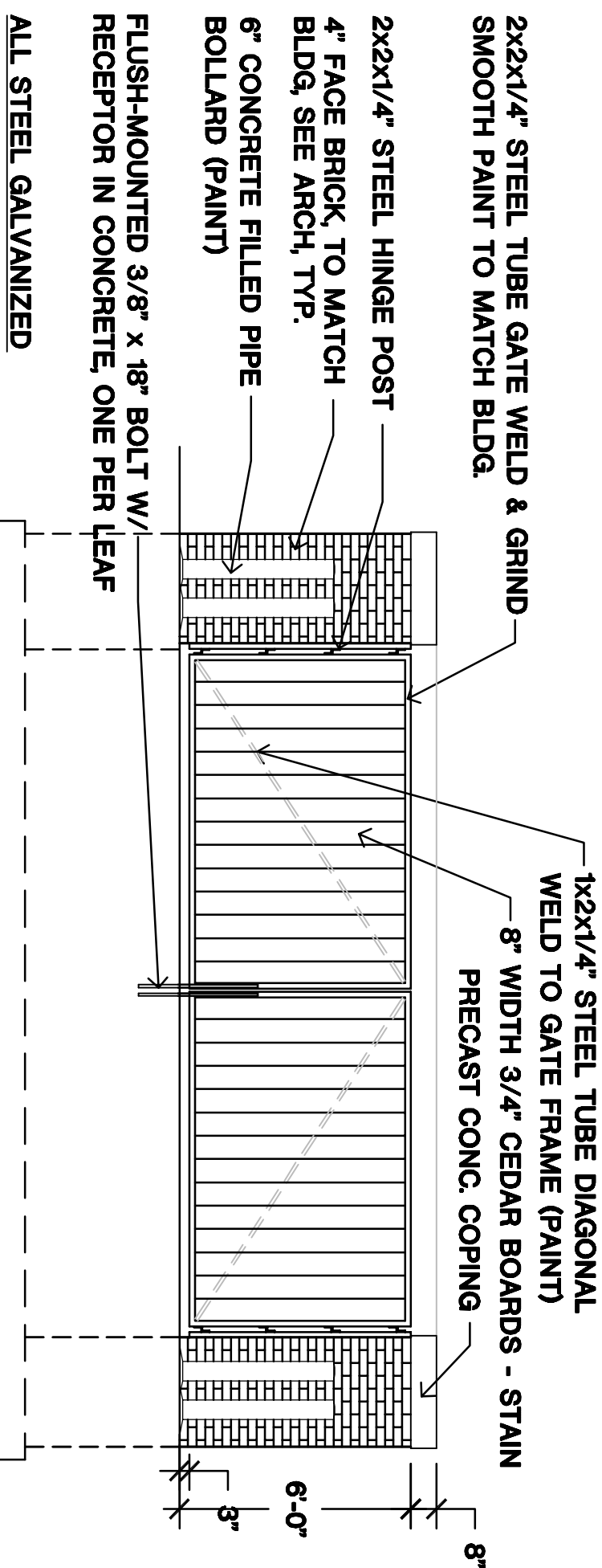
### P L A N T L I S T

SET	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
-----	-----	----------------	-------------	------	------	---------

NOTE: All heights are 'at time of planting'. Evergreen & shrub heights are to 6" TP.

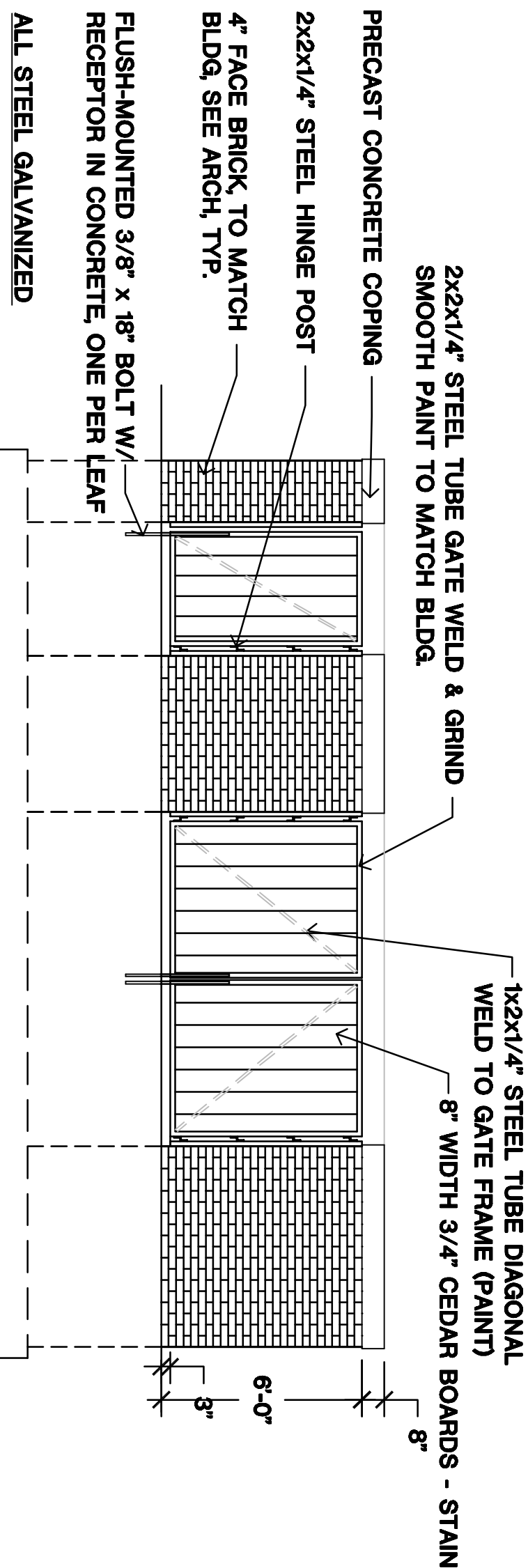
SET	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem
DECIDUOUS CANOPY TREES	1	Albizia julibrissin	Albizia Julibrissin	10' H.	B/B	Three-stem

NOTE: PROVIDE LATCH TO PIPE BOLLARD, BOTH SIDES, TO HOLD OPEN GATES. CON'T. TO PROVIDE SHOP DWGS. FOR REVIEW AND APPROVAL PRIOR TO CONST.



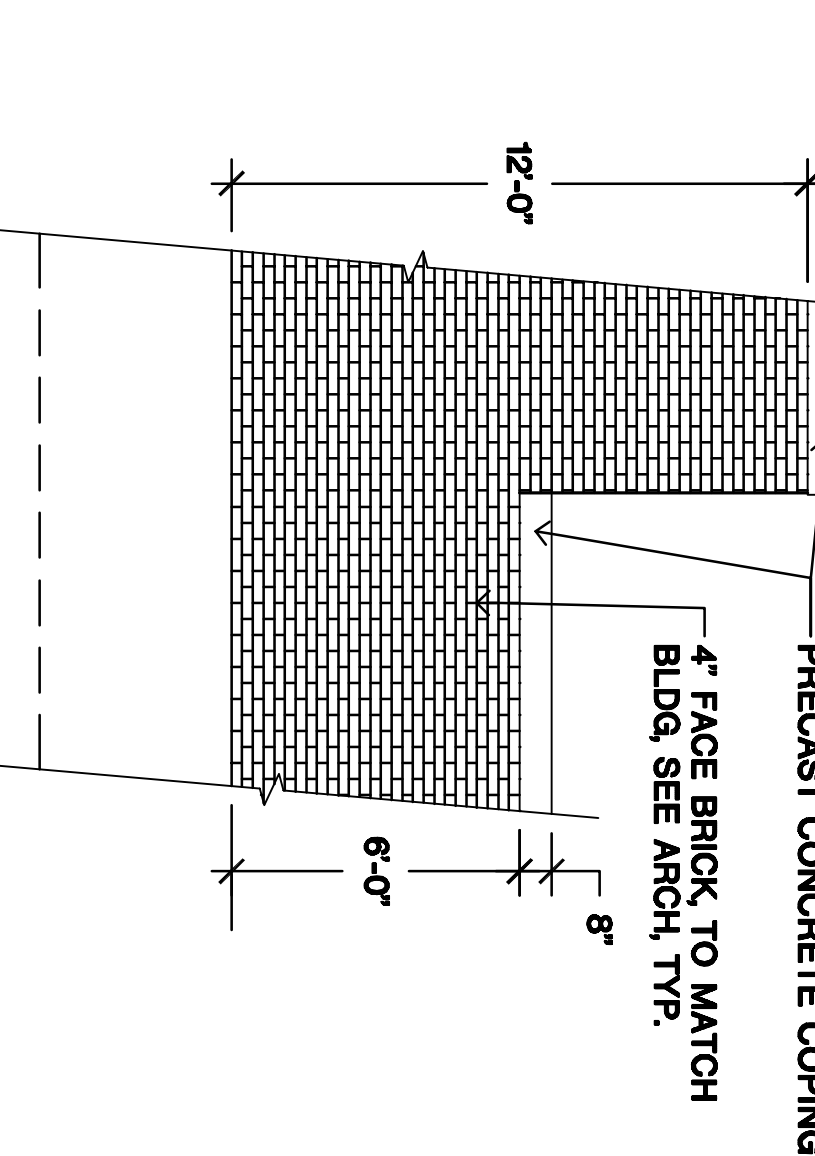
## 2 Typical Trash Encl. Elevation

Scale: 1/4" = 1'-0"



## 3 Typical Trash Encl. Elevation

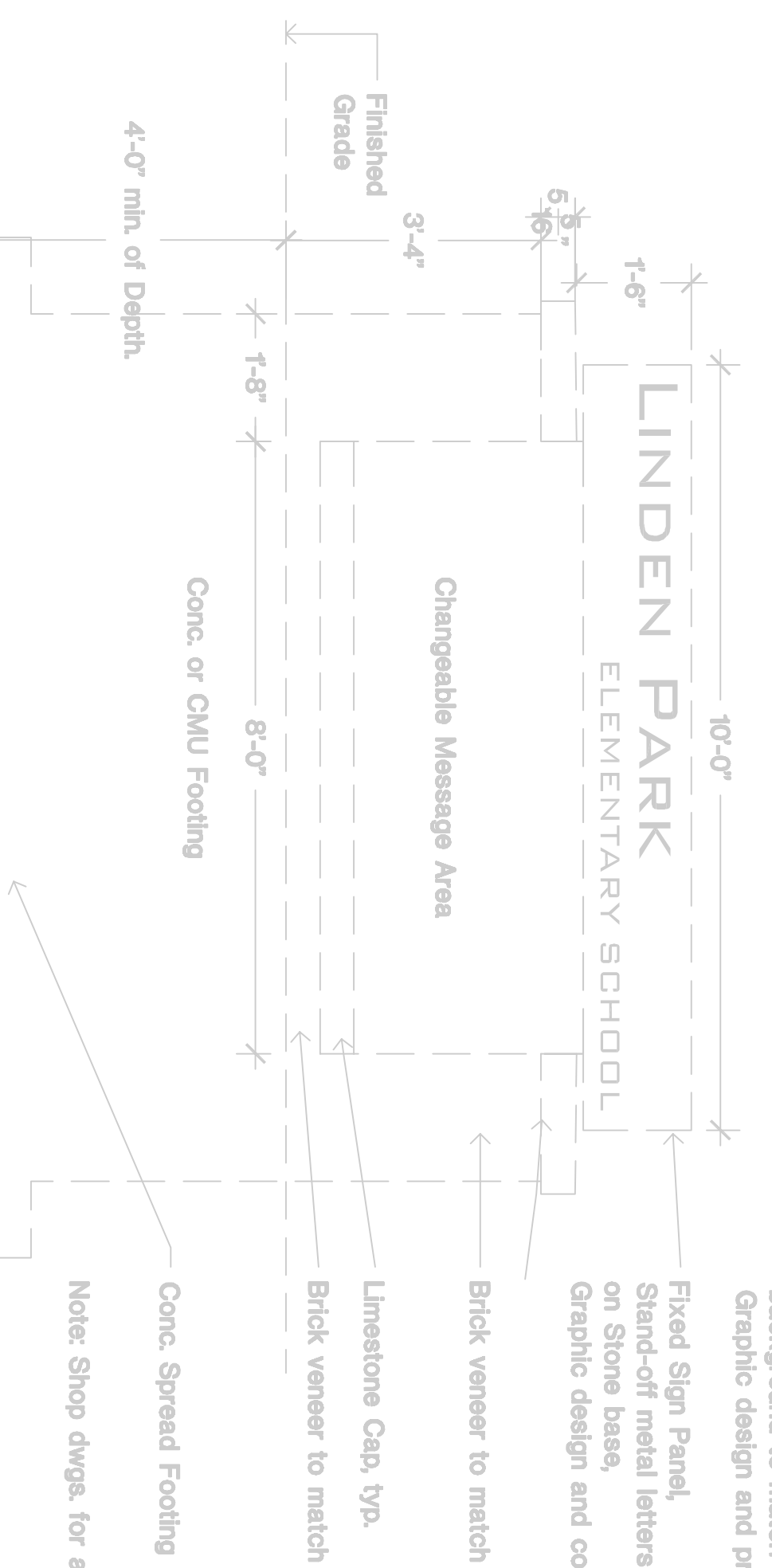
Scale: 1/4" = 1'-0"



## 4 Trash Encl. Height Transition Elevation

Scale: 1/4" = 1'-0"

Future Monument sign to be donated. Final design and submits to city TBD.

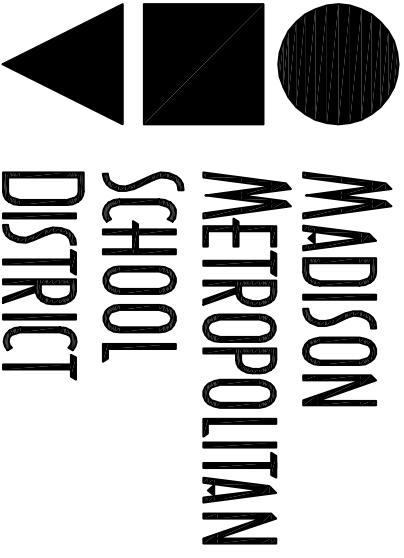


## 6 Monument Sign

Scale: 1/2" = 1'-0"

Consultant

Project:  
LINDEN PARK  
ELEMENTARY SCHOOL



Location:  
801 Redden Drive  
Madison, WI 53593

Key Plan:



Sheet:  
Landscape  
Engagements

Scale:  
1/16"=1'-0"

Revisions:

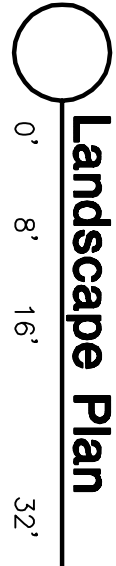
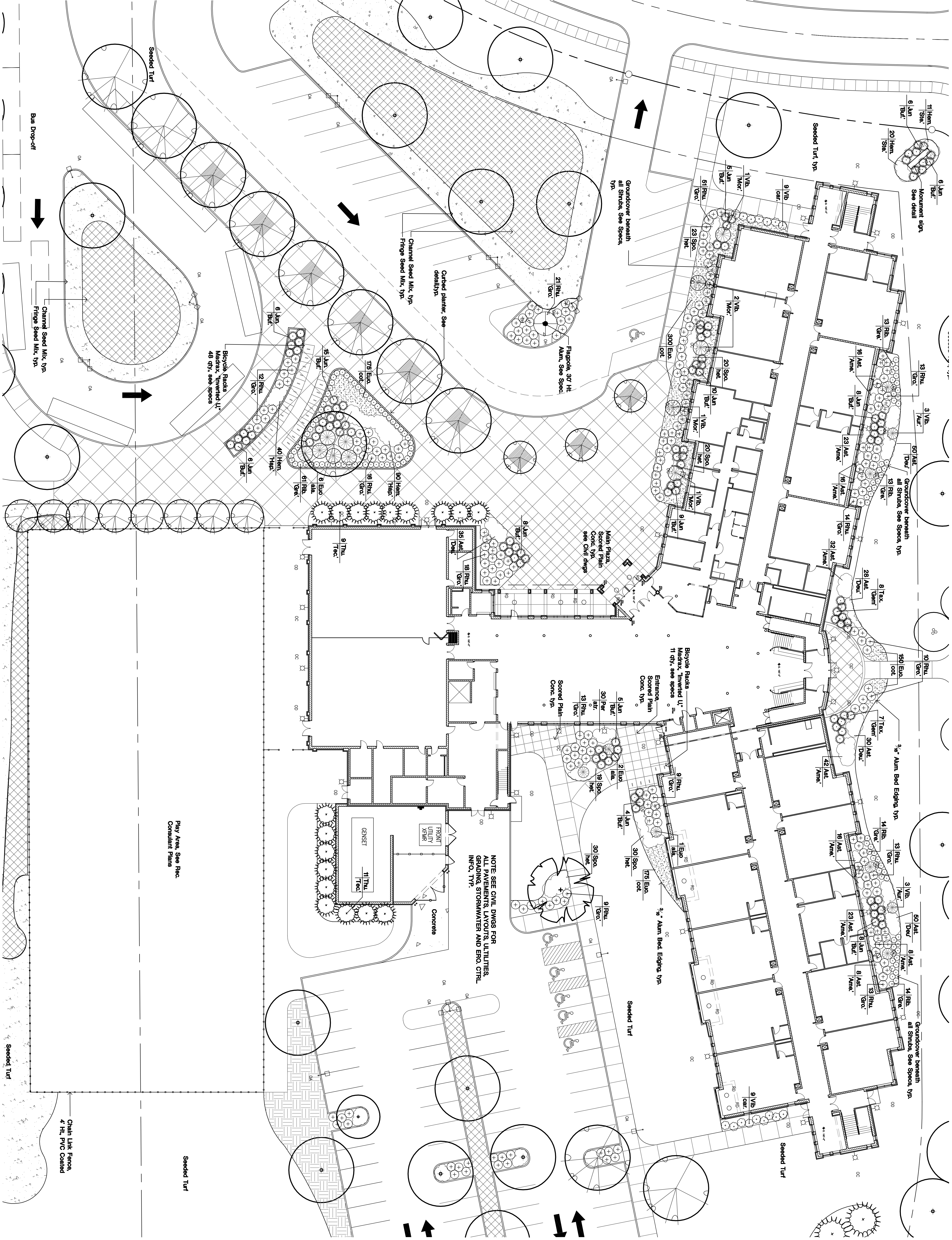
No.	Date	Description
11/29/06	Madison City Wastewater Solutions	
1/2/07	Madison Fire Commission/DCI Field Approval Sheet	
1/29/07	Madison Fire Commission/DCI Field Approval Sheet	

Date:  
January 31, 2007

Project No.:

060092.00

Sheet No.:



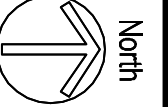
Consultant:

Project:  
LINDEN PARK  
ELEMENTARY SCHOOL



Location:  
801 Redan Drive  
Madison, WI 53593

Key Plan:



Sheet:  
Overall  
Landscape Plan

Scale:  
1" = 30'-0"

Revisions:

No.	Date	Description
11/28/06	Madison City Wastewater Solutions	
1/2/07	Madison Fire Commission/DCI - 11th Approx. Station	
1/29/07	Madison Fire Commission/DCI - 12th Approx. Station	

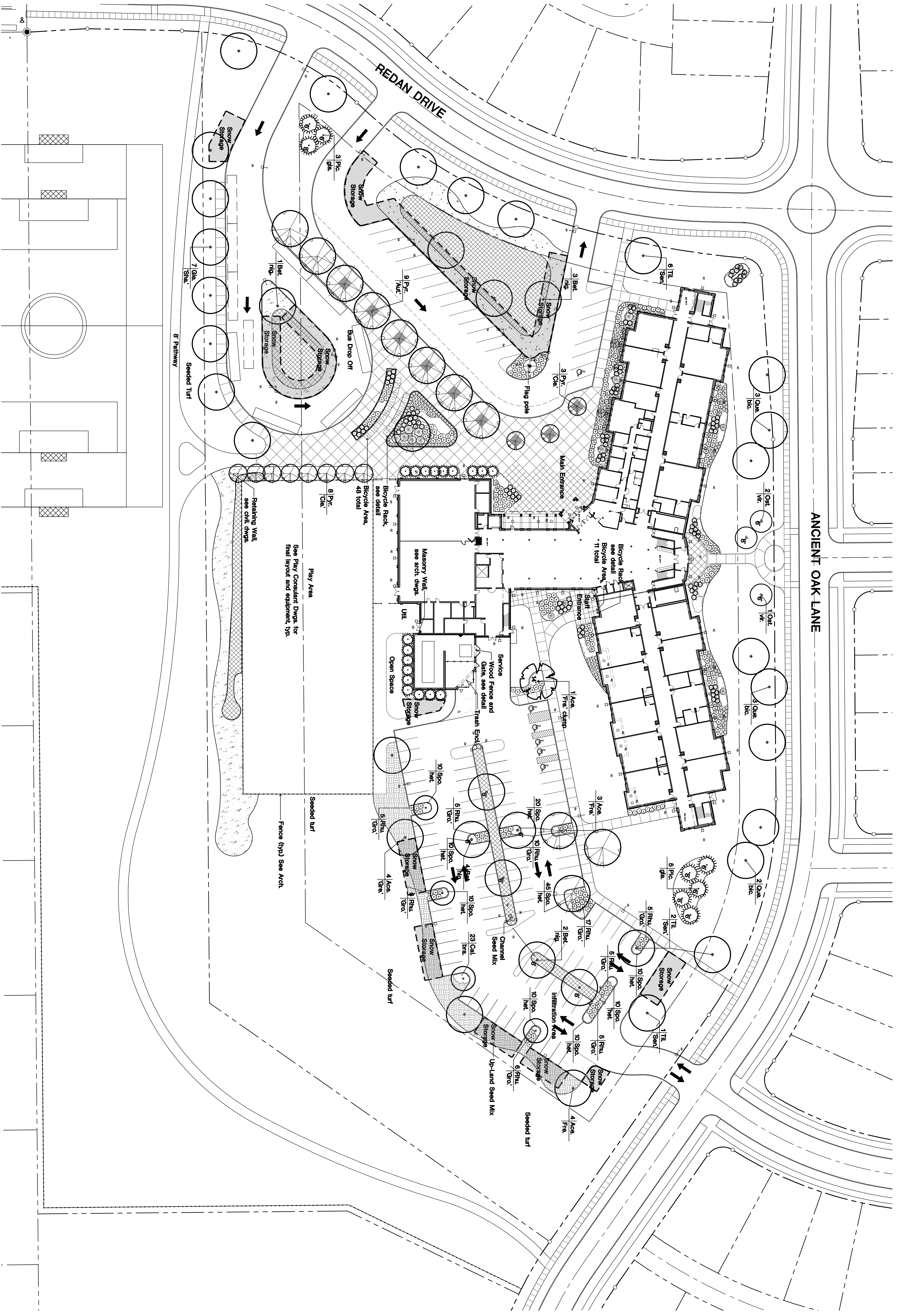
Date:  
January 31, 2007

Project No.:

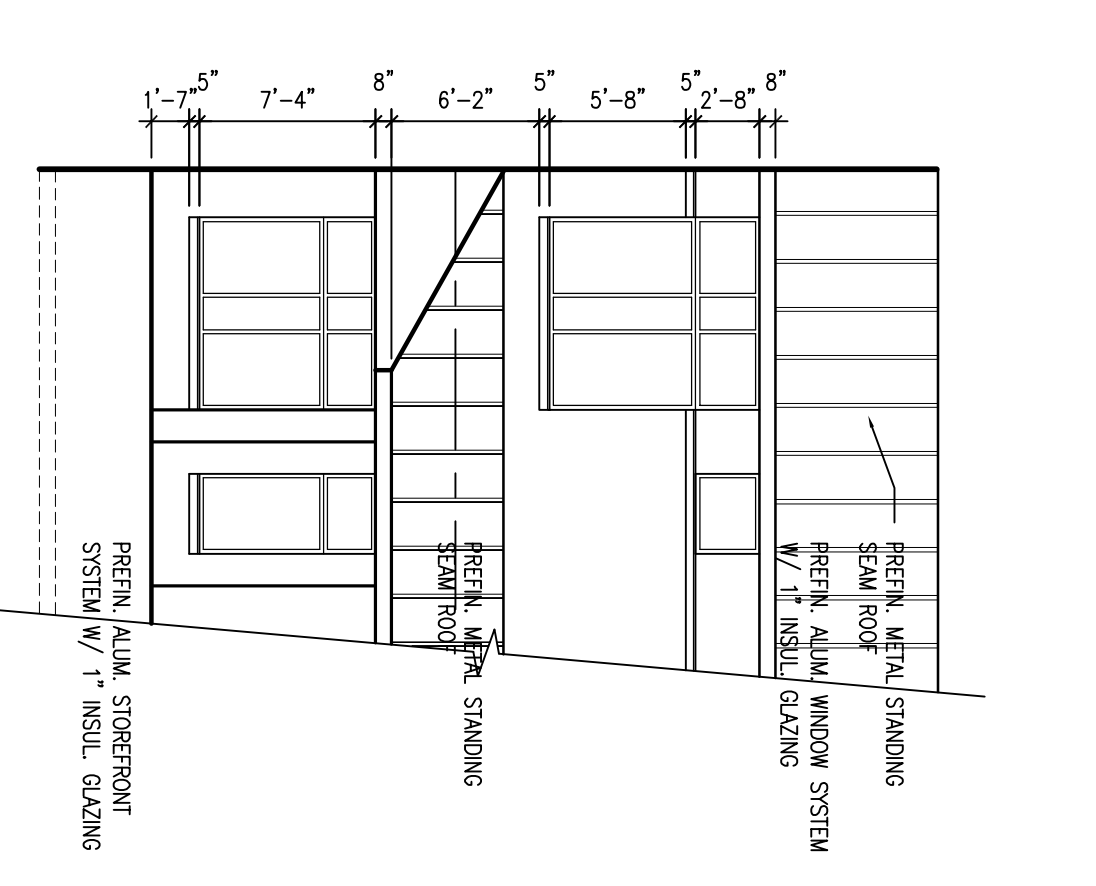
060092.00

Sheet No.:

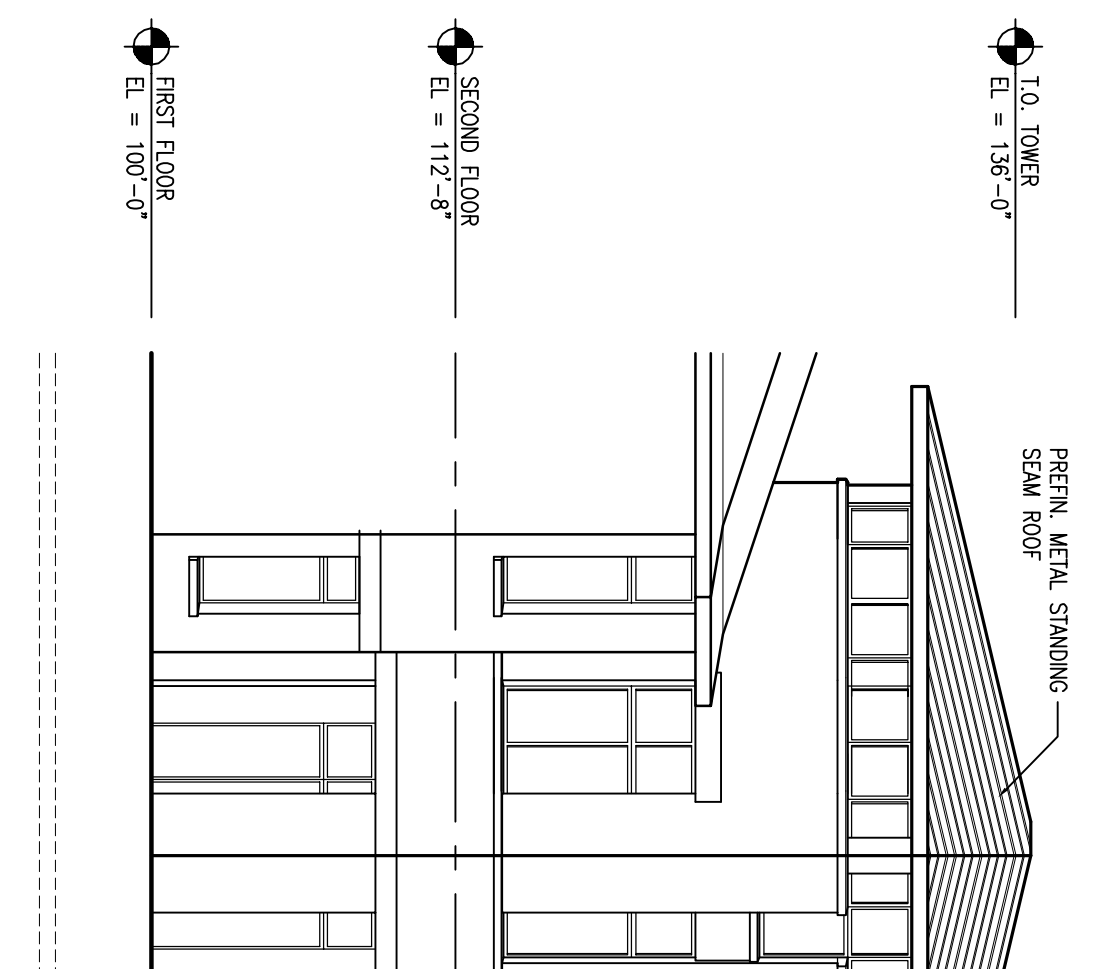
**L7.10**



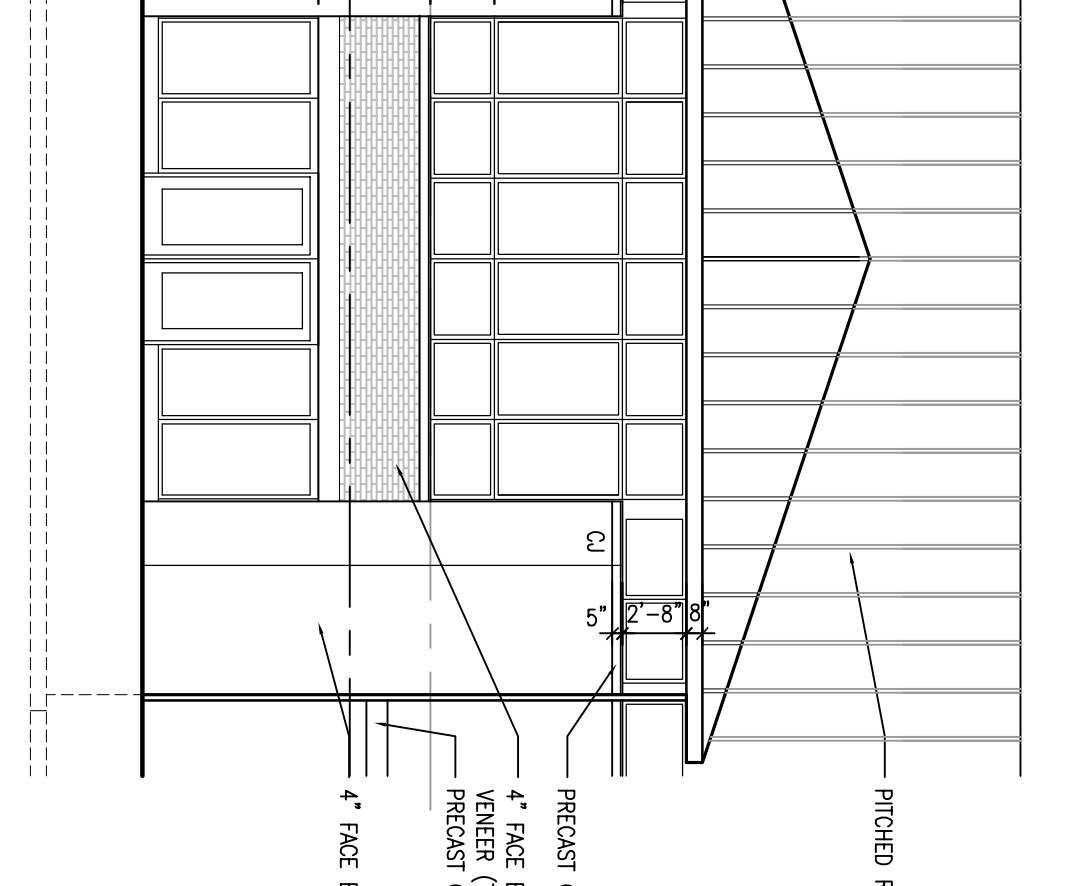
Landscape Plan



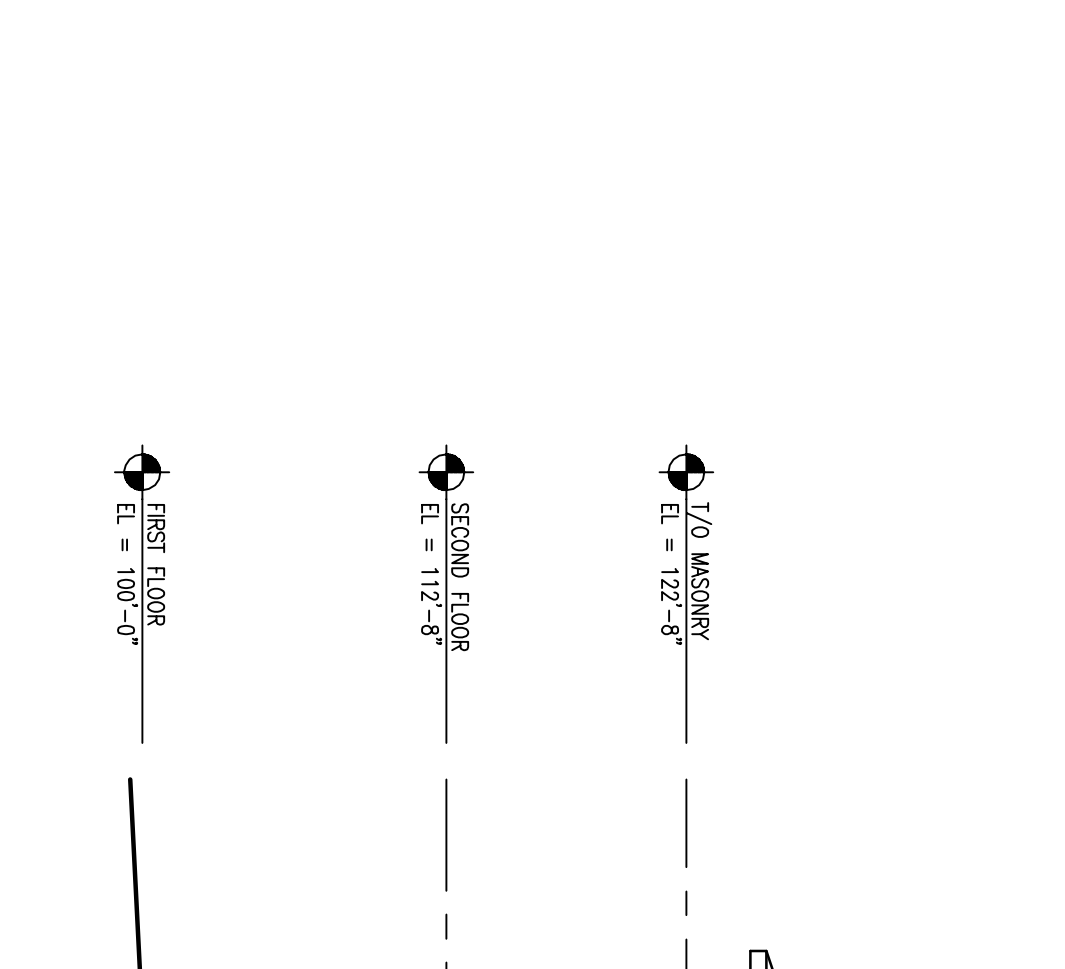
5 Area C' - West Elevation  
1/8" = 1'-0"



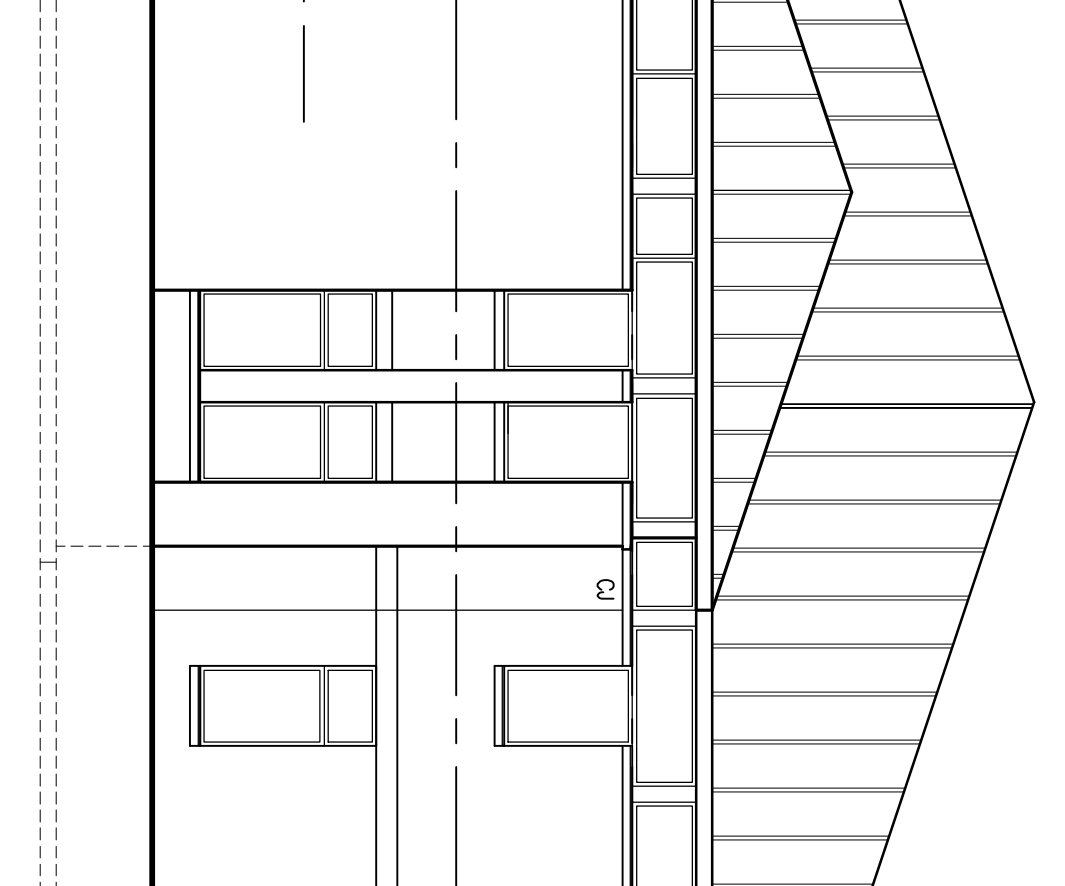
1 Area C' - West Elevation  
1/8" = 1'-0"



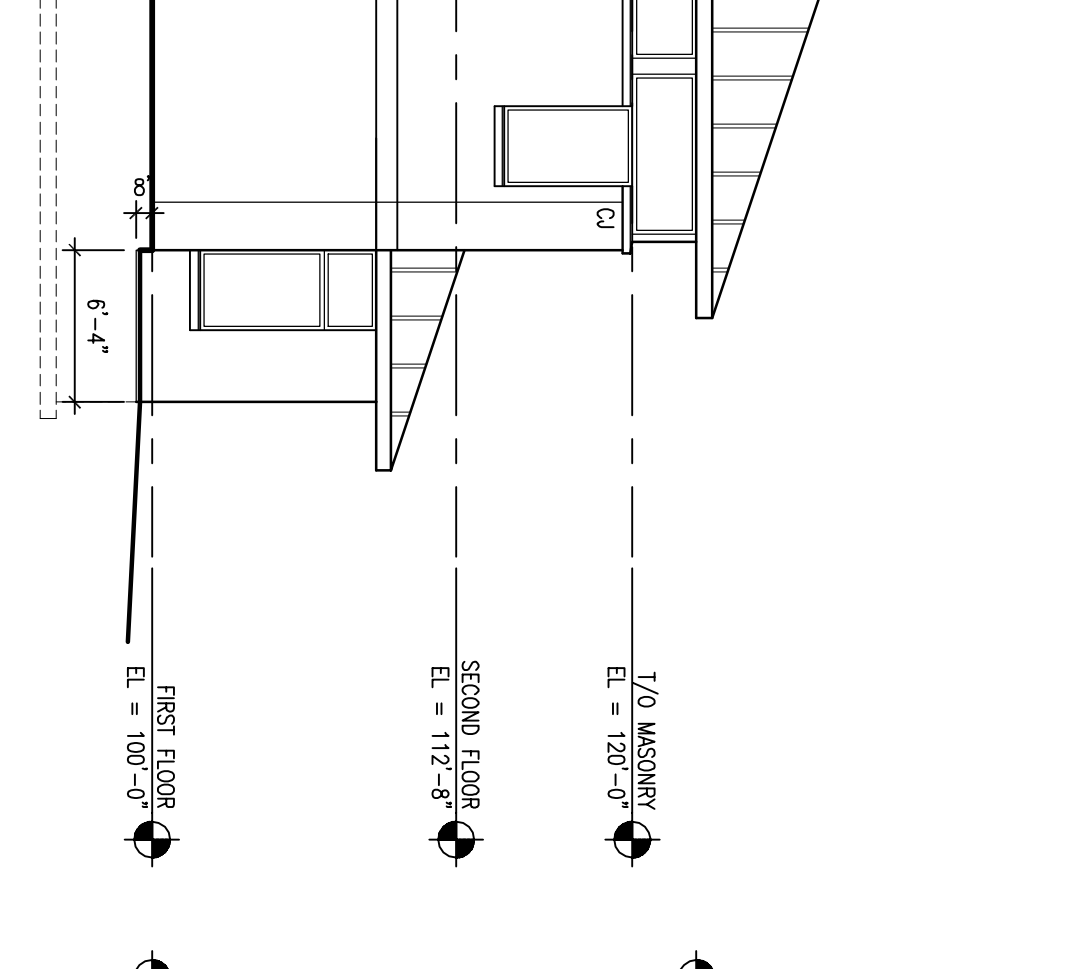
6 Area A' - North Elevation  
1/8" = 1'-0"



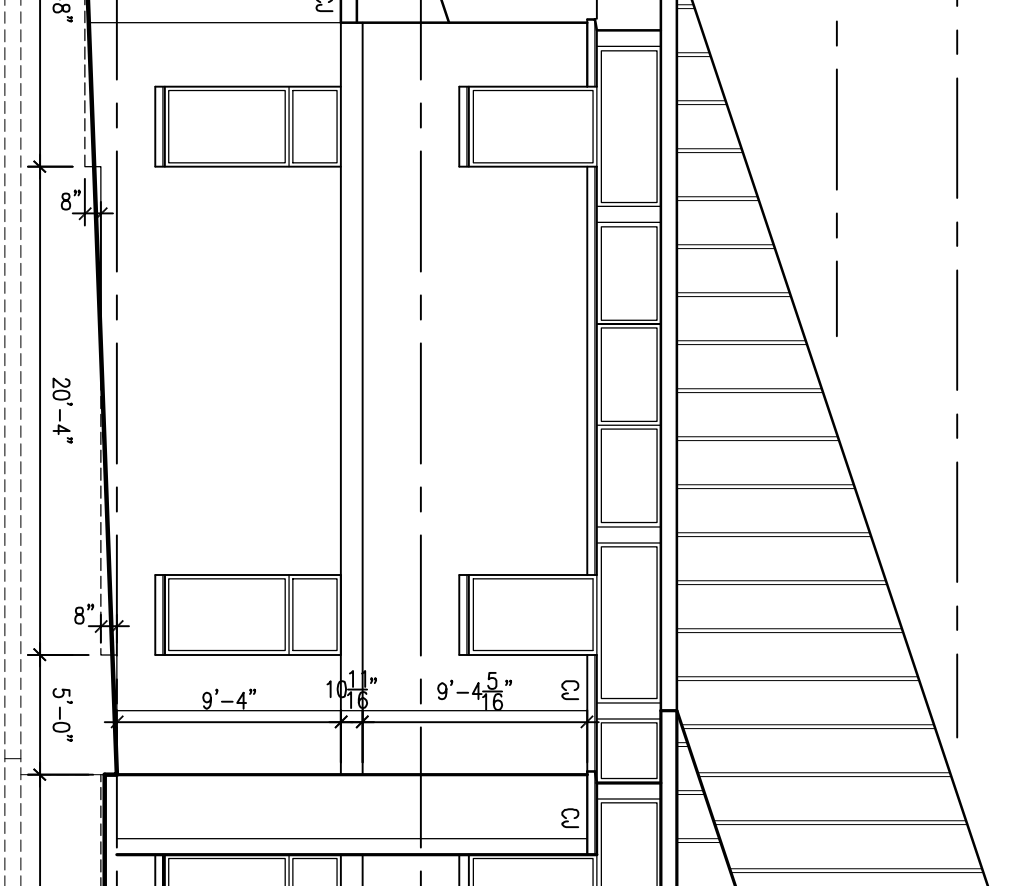
2 Area A' & C' - East Elevation  
1/8" = 1'-0"



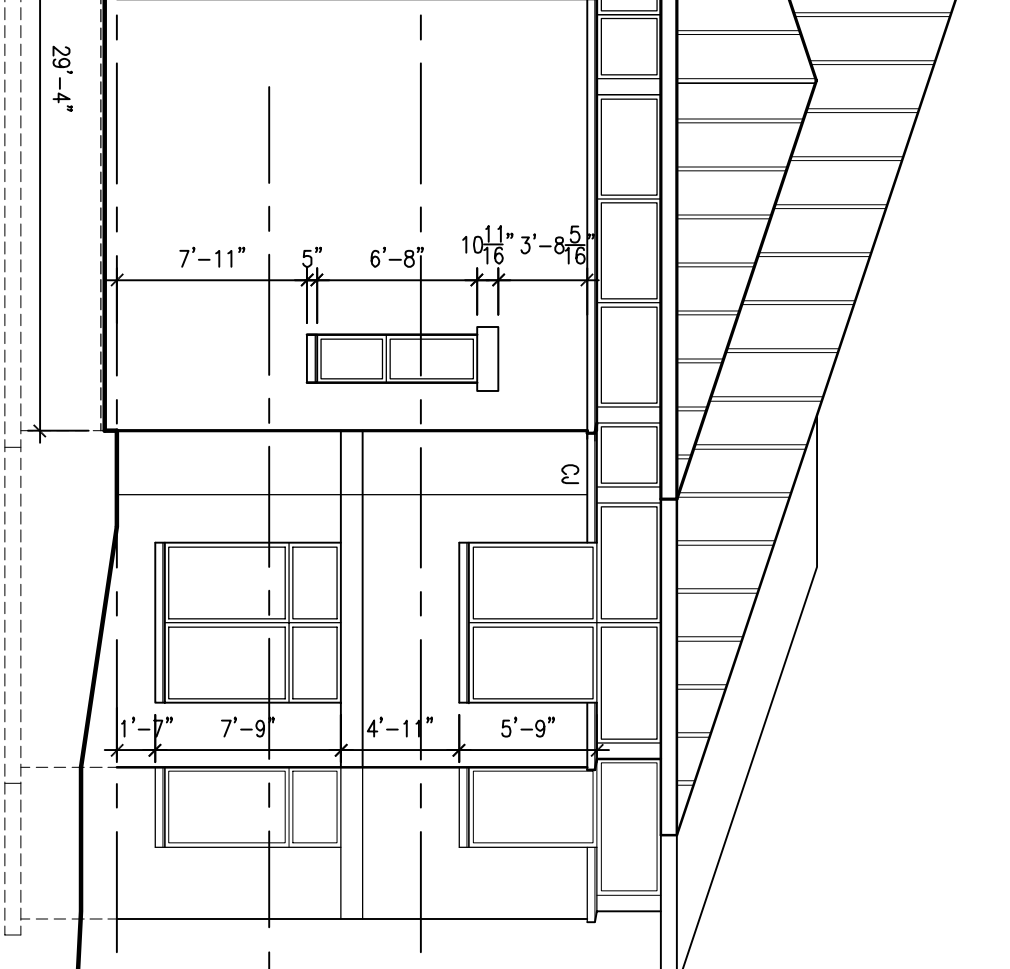
7 Area A' - West Elevation  
1/8" = 1'-0"



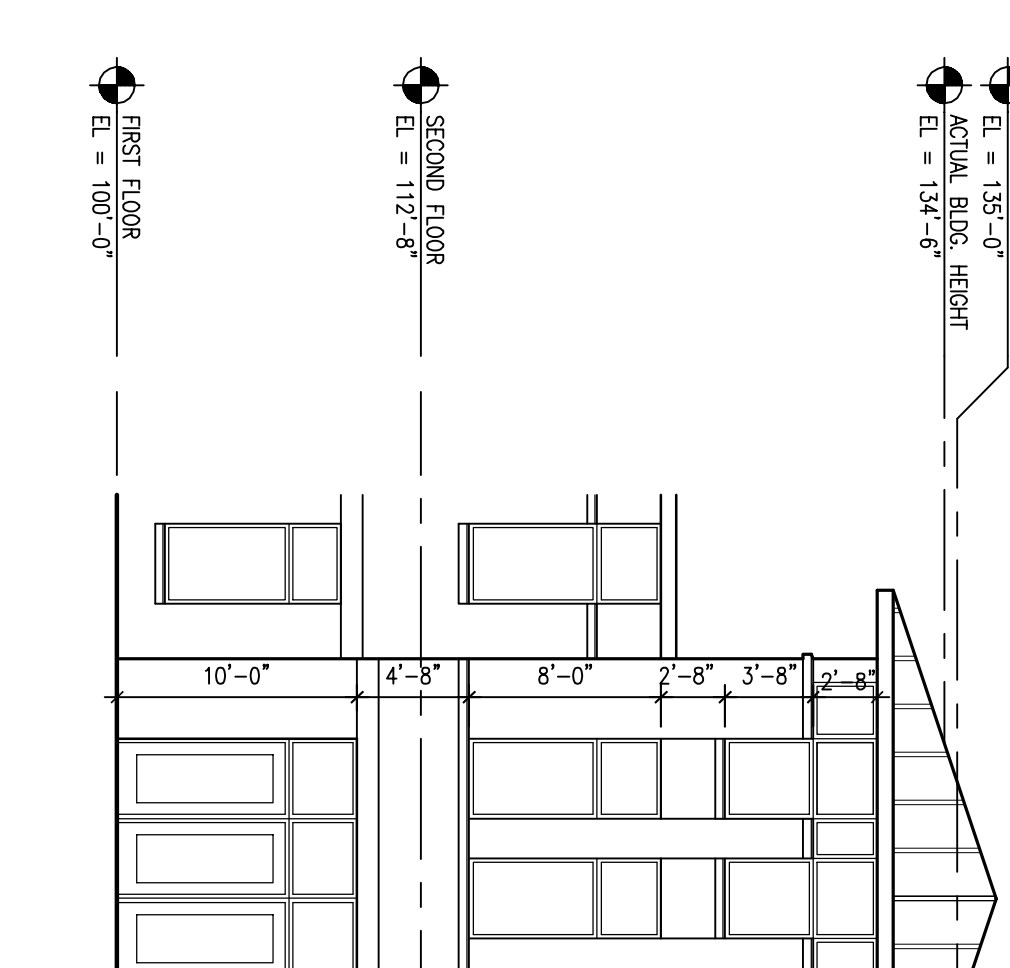
3 Area C' - South Elevation  
1/8" = 1'-0"



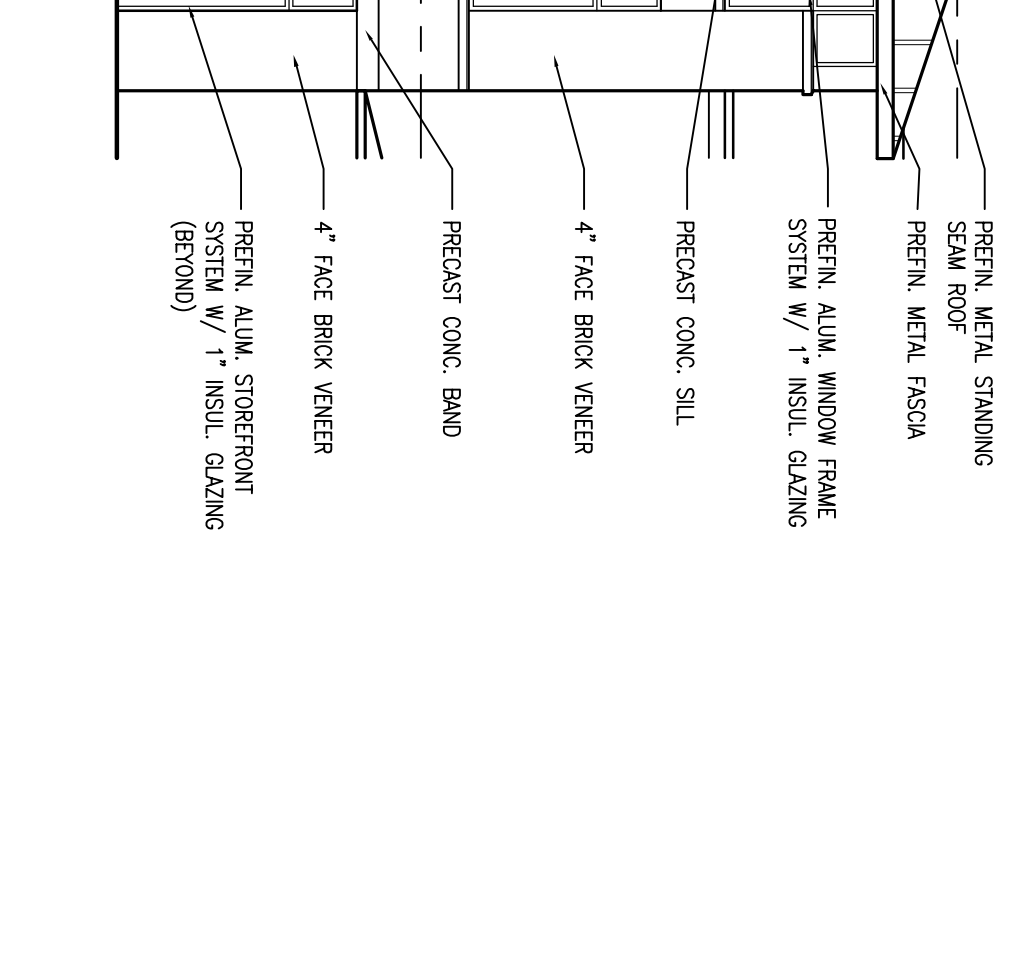
8 Area B' - East Elevation  
1/8" = 1'-0"



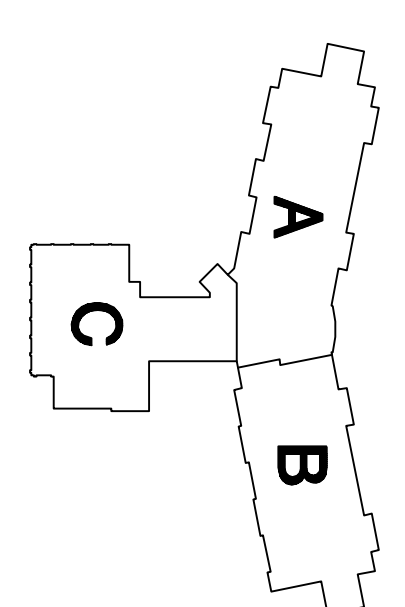
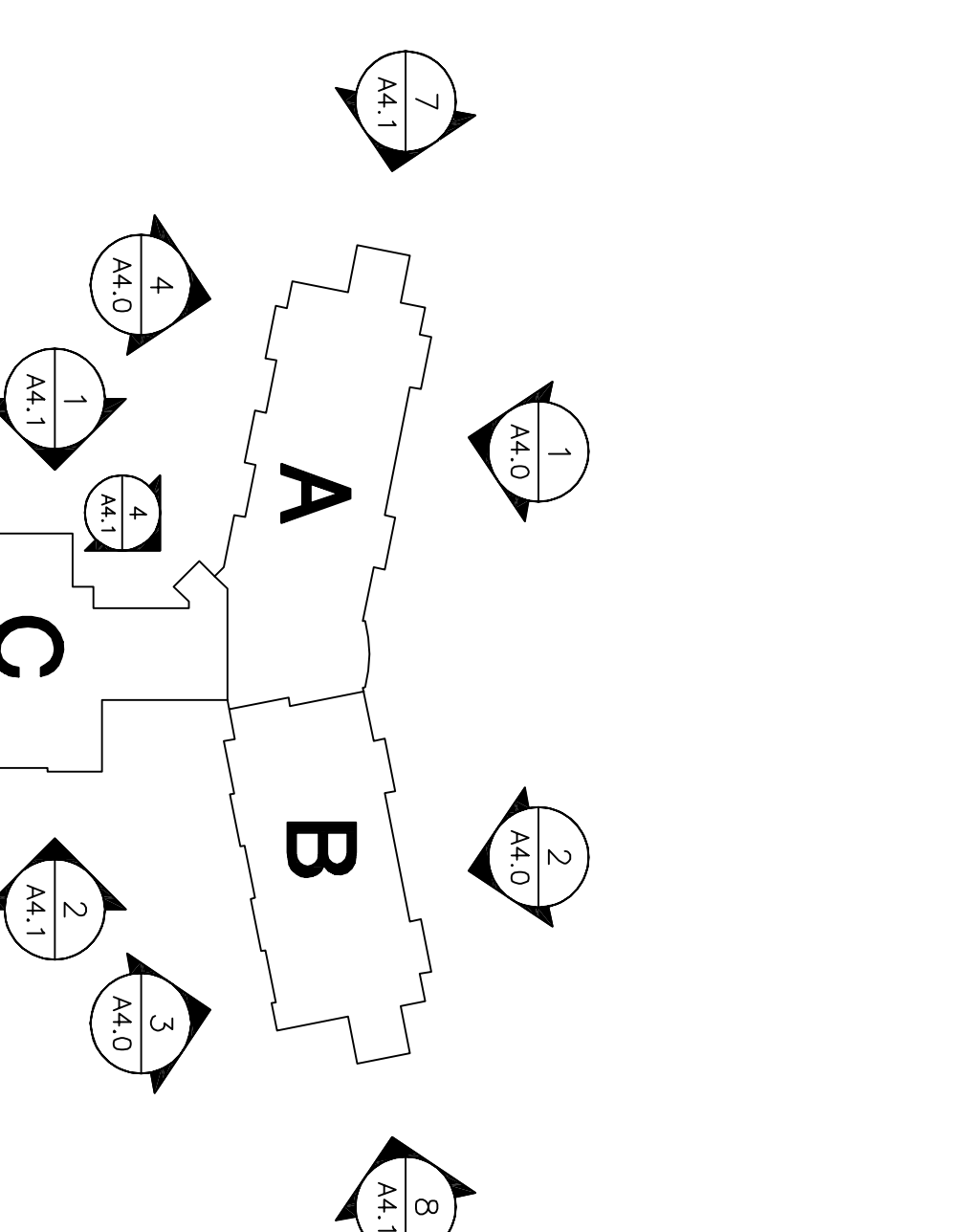
4 Area C' - Entrance Tower Elevation  
1/8" = 1'-0"

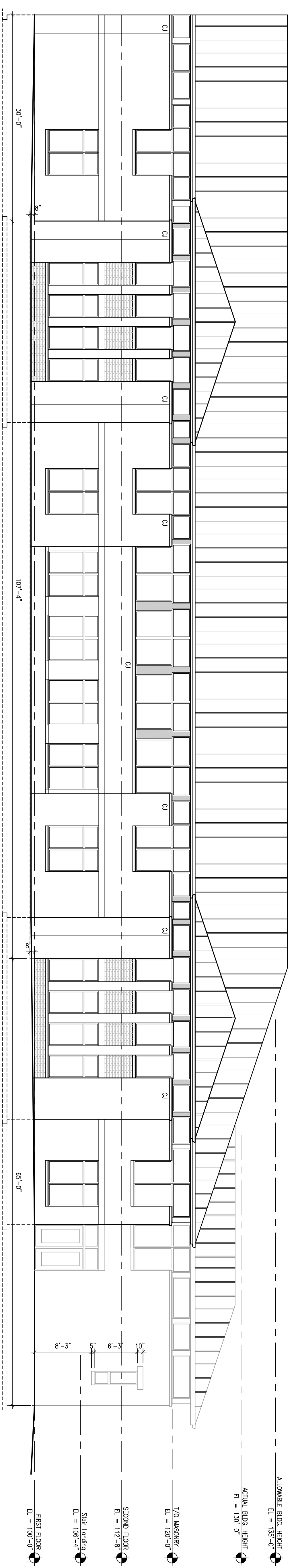


3 Area C' - South Elevation  
1/8" = 1'-0"

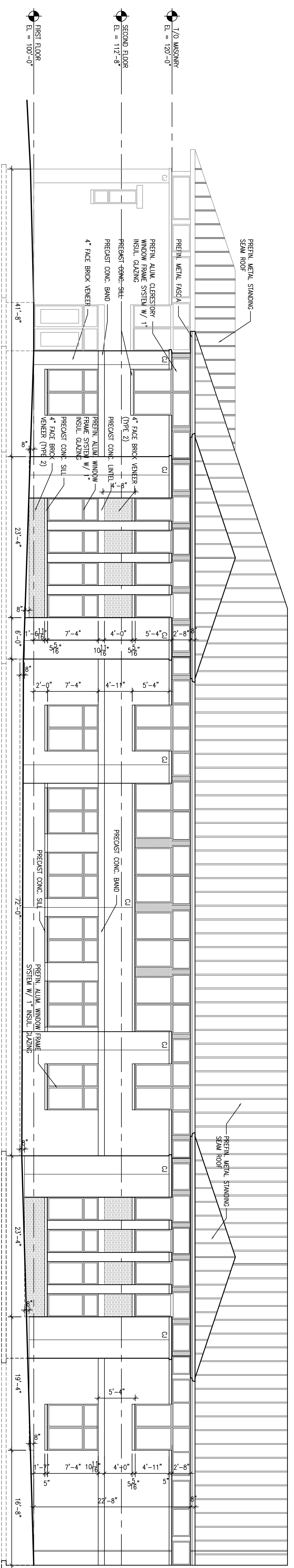


4 Area C' - Entrance Tower Elevation  
1/8" = 1'-0"

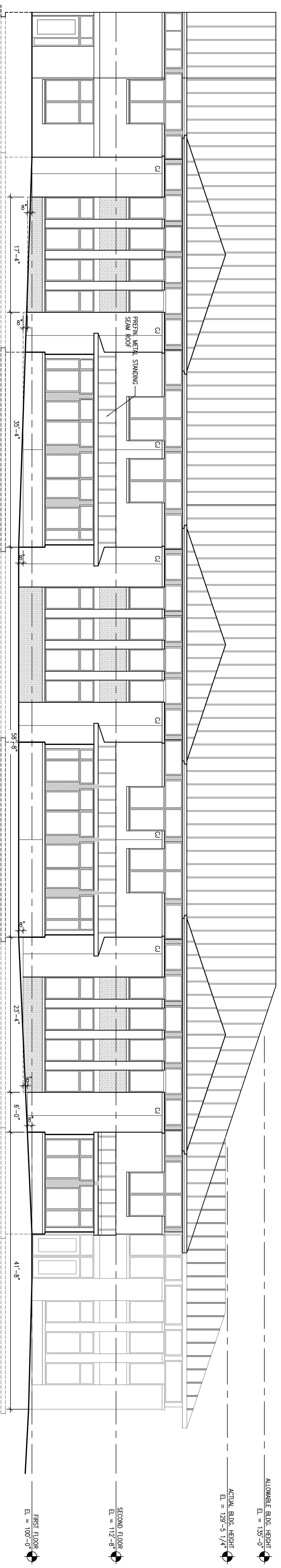




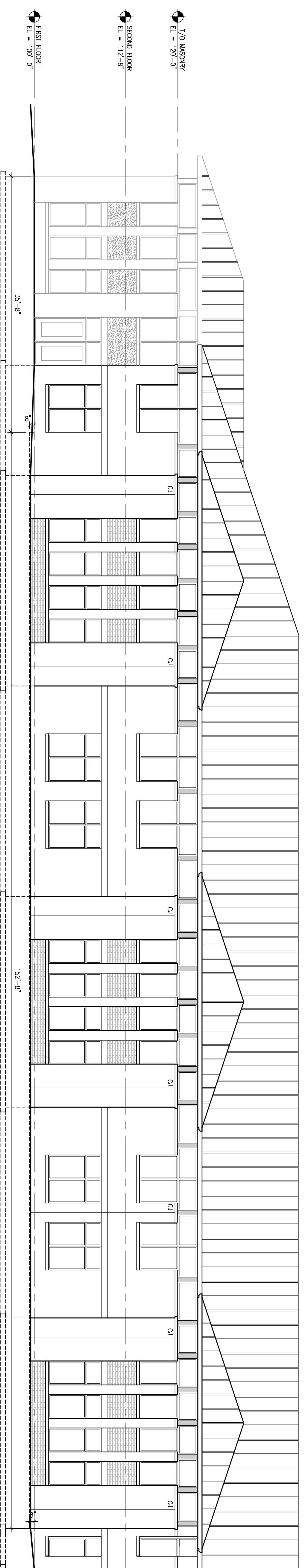
1 Area 'A' - North Elevation  
1/8" = 1'-0"



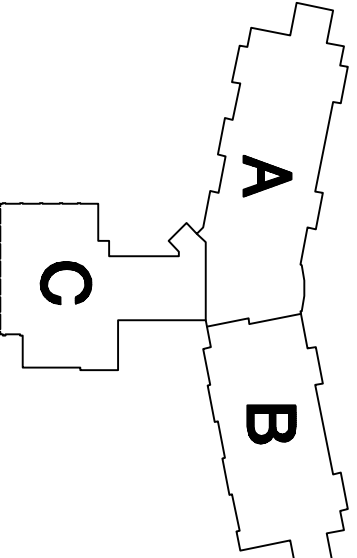
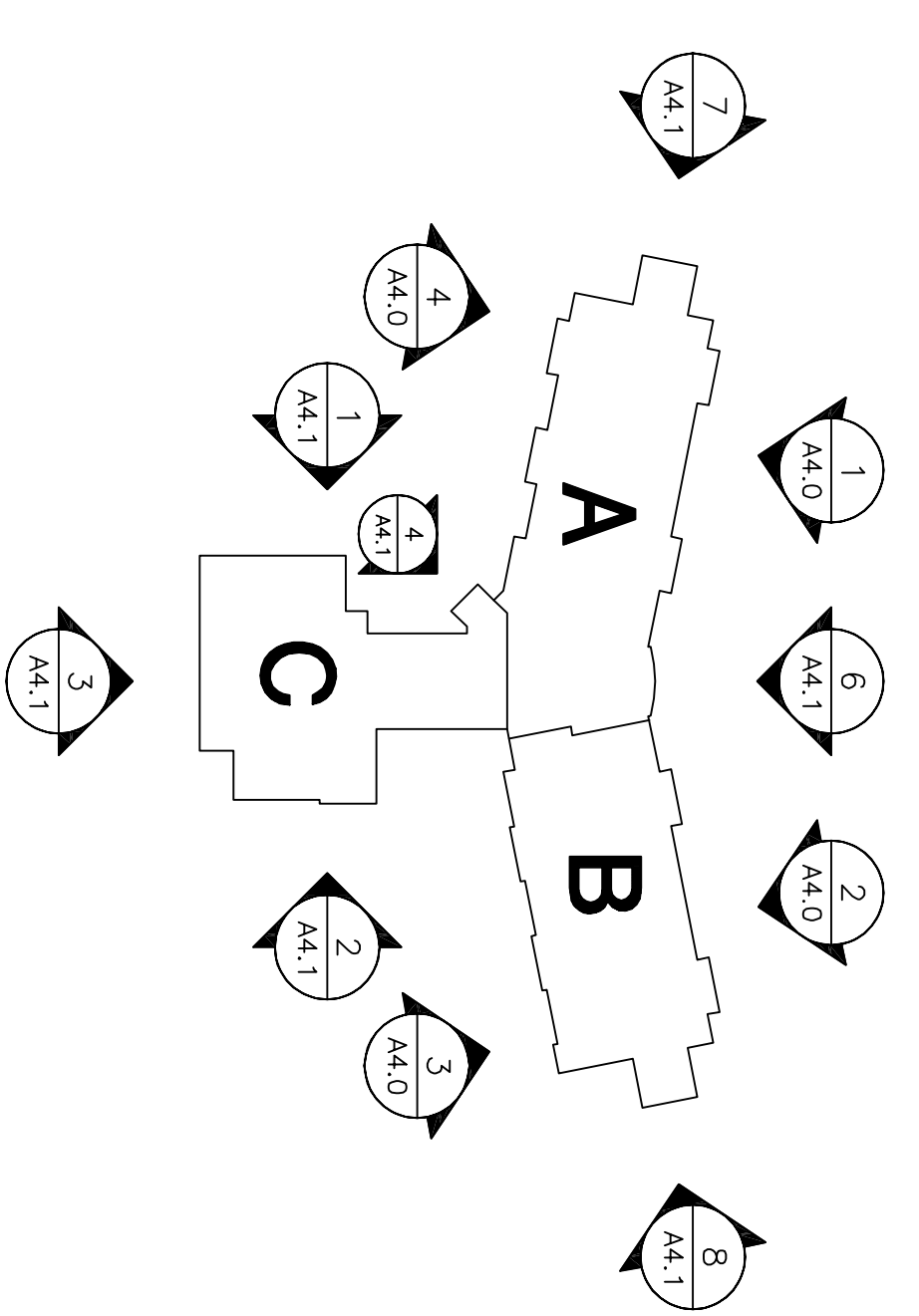
2 Area 'B' - North Elevation  
1/8" = 1'-0"

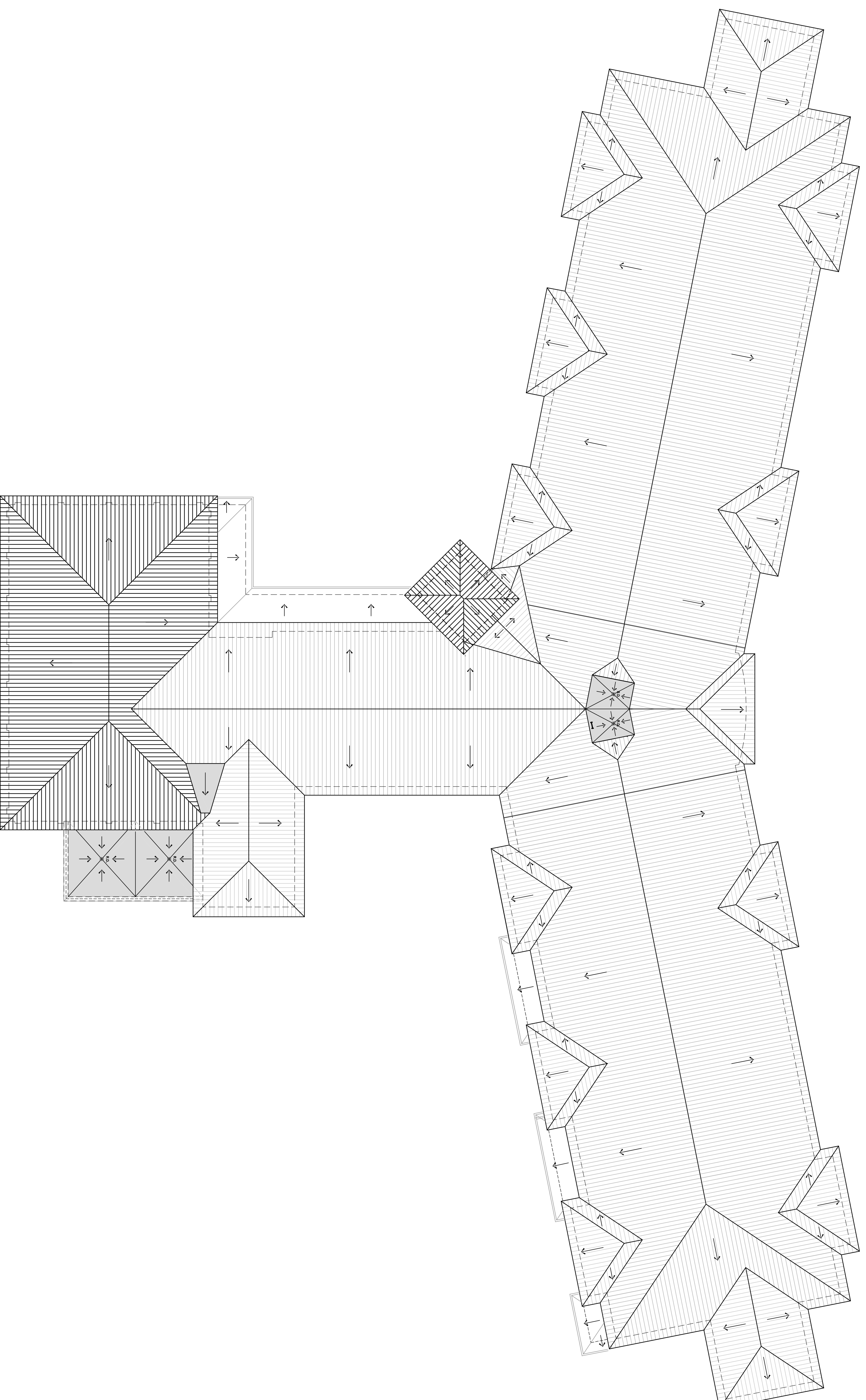


3 Area 'B' - South Elevation  
1/8" = 1'-0"



4 Area 'A' - South Elevation  
1/8" = 1'-0"





1 Overall Roof Plan  
1/16" = 1'-0"

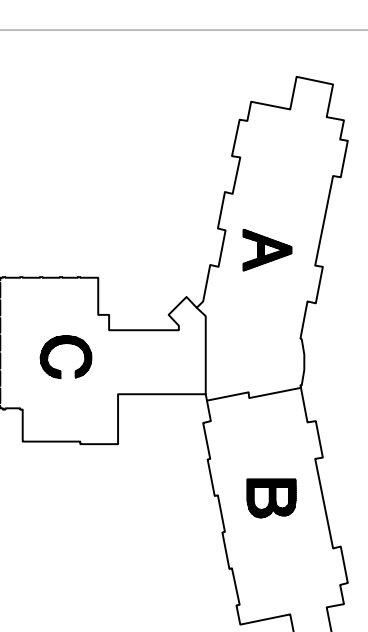
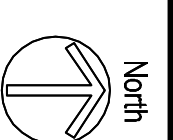
Consultant:

Project:  
LINDEN PARK  
ELEMENTARY SCHOOL

MADISON  
METROPOLITAN  
SCHOOL  
DISTRICT

Location:  
801 Redden Drive  
Madison, WI 53593

Key Plan:



Sheet:  
Overall Roof Plan

Scale:  
1/16" = 1'-0"

Revisions:

No.	Date	Description
1/2/06	Madison DEC	Madison School District
1/2/07	Madison PHS	Madison Park Elementary School
1/29/07	Madison PHS	Madison Park Elementary School

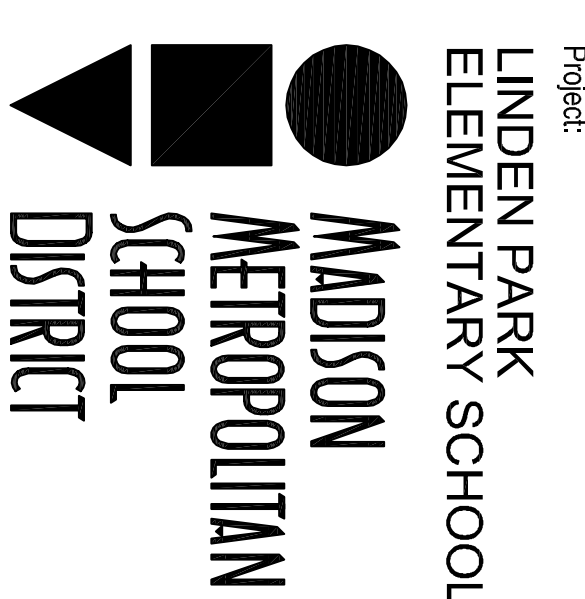
Date:  
January 31, 2007

Project No.:  
060092.00

Owner/Project No.:

Sheet No.:

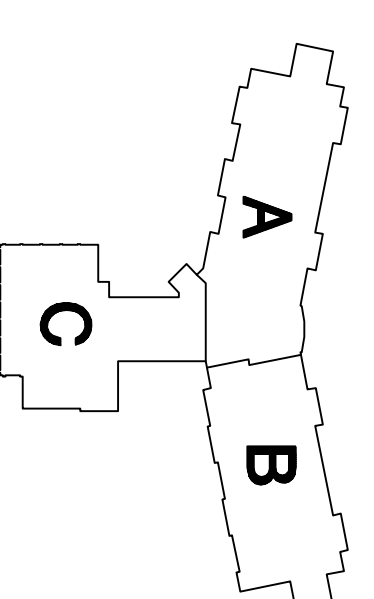
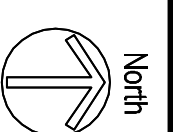
Consultant:



Project:  
LINDEN PARK  
ELEMENTARY SCHOOL

Location:  
801 Redden Drive  
Madison, WI 53593

Key Plan:



Sheet:  
Partial Second Floor Plan -  
Area C'

Scale:  
1/8" = 1'-0"

Revisions:

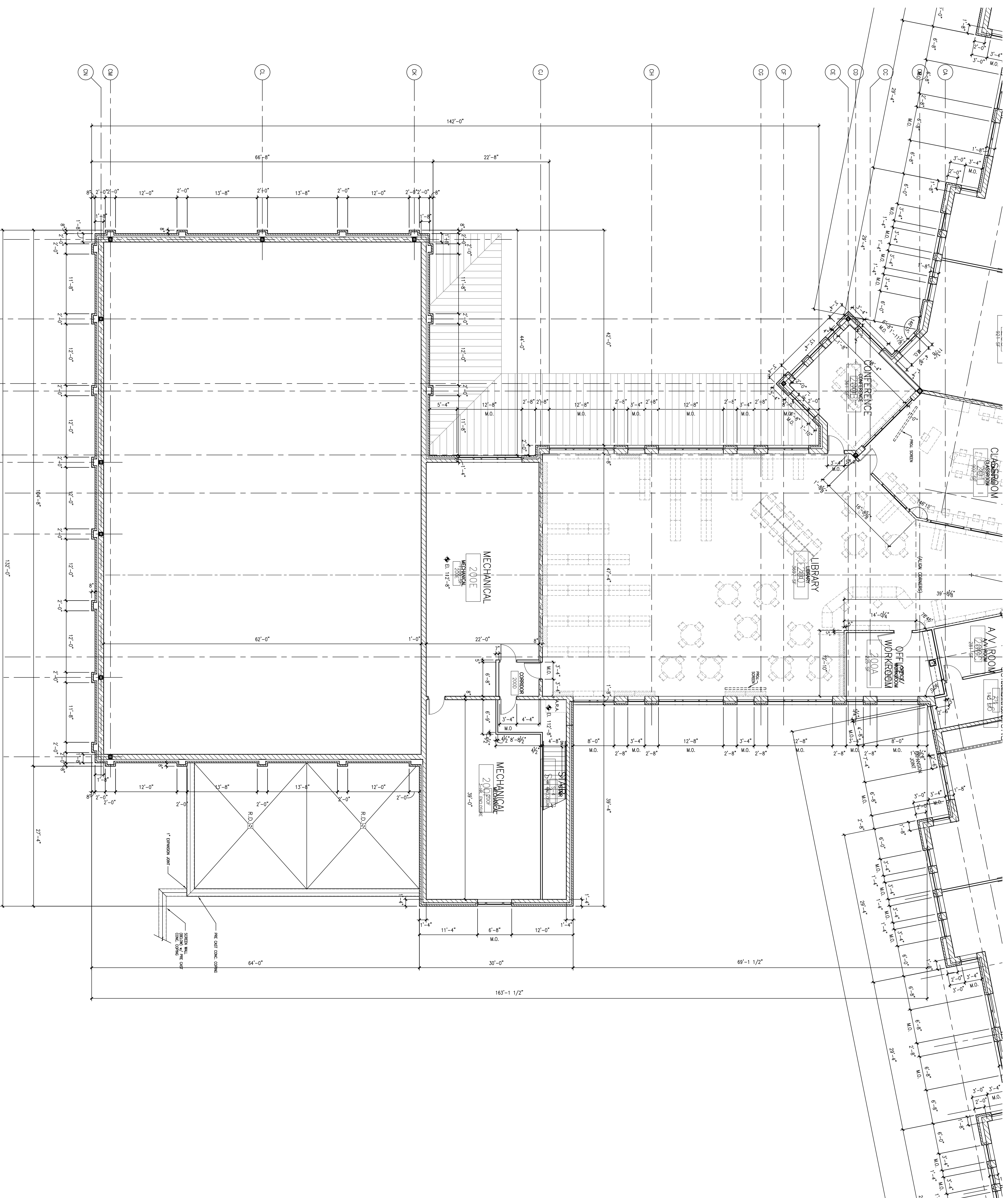
No.	Date	Description
11/2/06	Revised	Revised Schedule
1/2/07	Revised	Revised Schedule
1/29/07	Revised	Revised Schedule

Date:  
January 31, 2007

Project No.:

060092.00

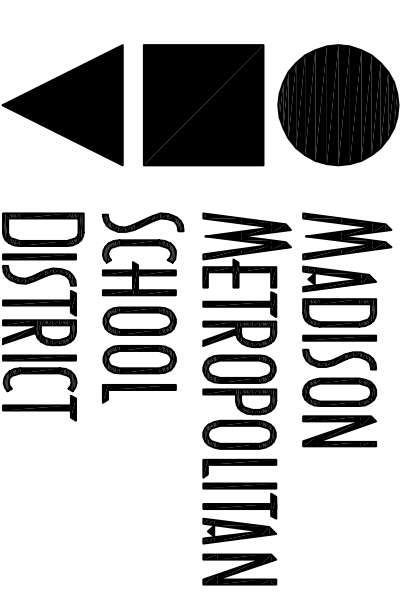
Sheet No.:





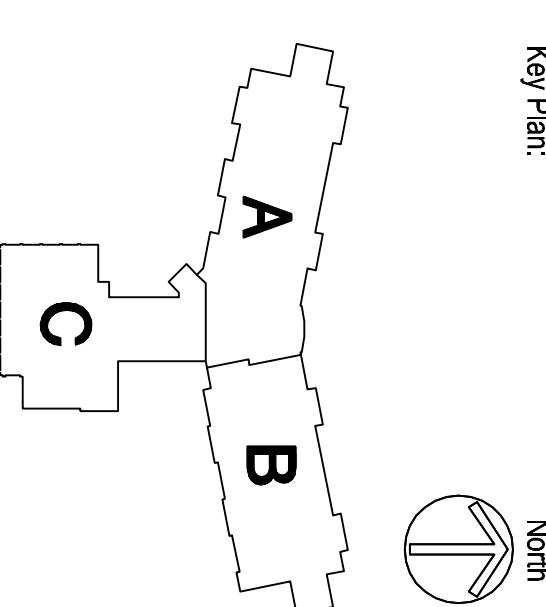
Consultant

Project:  
LINDEN PARK  
ELEMENTARY SCHOOL



Location:  
801 Redden Drive  
Madison, WI 53593

Key Plan:



**1** Partial Second Floor Plan - Area B'  
1/8" = 1'-0"



Scale:  
1/8" = 1'-0"

Revisions:

No.	Date	Description
1	11/29/06	Initial Design
2	1/2/07	Revisions Per Comments/DCI Final Approval Sheet
3	1/29/07	Revisions Per Comments/DCI Final Approval Sheet

Date:

January 31, 2007

Project No.:

060092.00

Sheet No.:

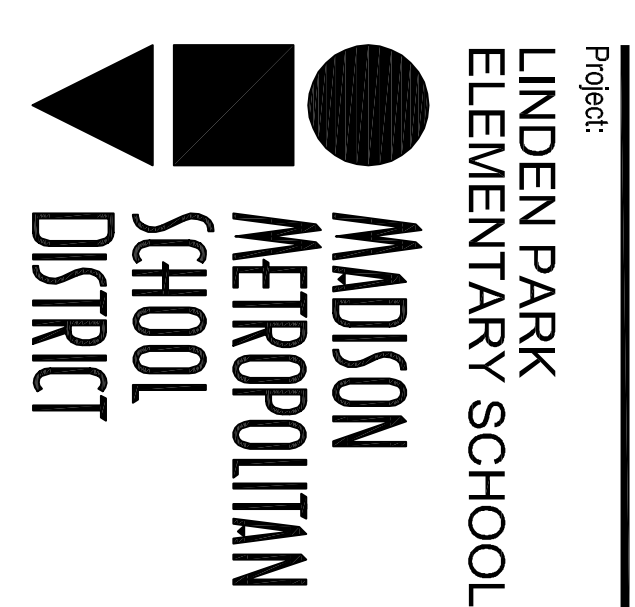


1 Partial Second Floor Plan - Area 'A'  
 1/8" = 1'-0"

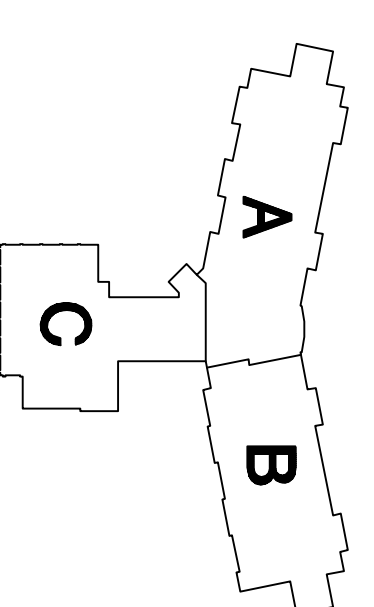


7707 Harwood Avenue | Milwaukee, WI 53213 | zastudios.com

TELEPHONE [414] 476.9500  
 FACSIMILE [414] 476.8582



Project: LINDEN PARK ELEMENTARY SCHOOL  
 Consultant: ZIMMERMAN ARCHITECTURAL STUDIOS, INC.



Location: 801 Redden Drive  
 Madison, WI 53593  
 Key Plan: [North Arrow]

Scale: 1/8" = 1'-0"

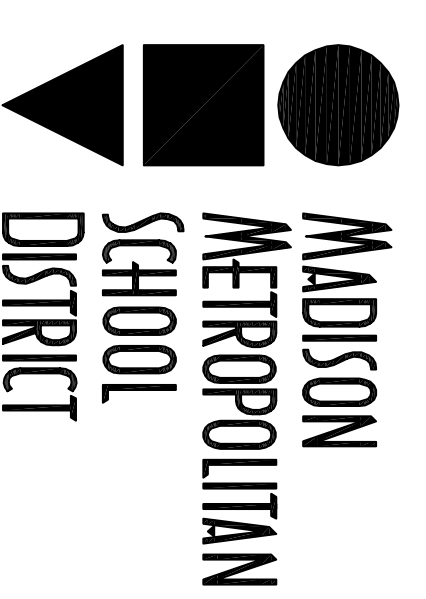
No.	Date	Description
11/29/06	Revised	Revised Schedule
1/29/07	Revised	Revised Schedule
1/29/07	Revised	Revised Schedule

Sheet No.: A2.1a  
 Project No.: 060092.00  
 Date: January 31, 2007



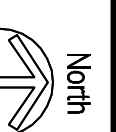
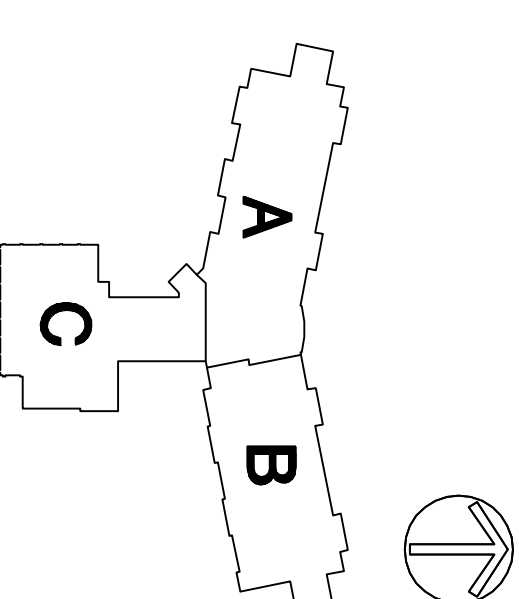
Consultant:

Project:  
LINDEN PARK  
ELEMENTARY SCHOOL



Location:  
801 Redden Drive  
Madison, WI 53593

Key Plan:



Sheet:  
Partial First Floor Plan-  
Area C'

Scale:  
1/8" = 1'-0"

Revisions:

No.	Date	Description
11/2/06	Madison City	Madison School District
1/2/07	Madison City	Madison City
1/2/07	Madison City	Madison City

Date:

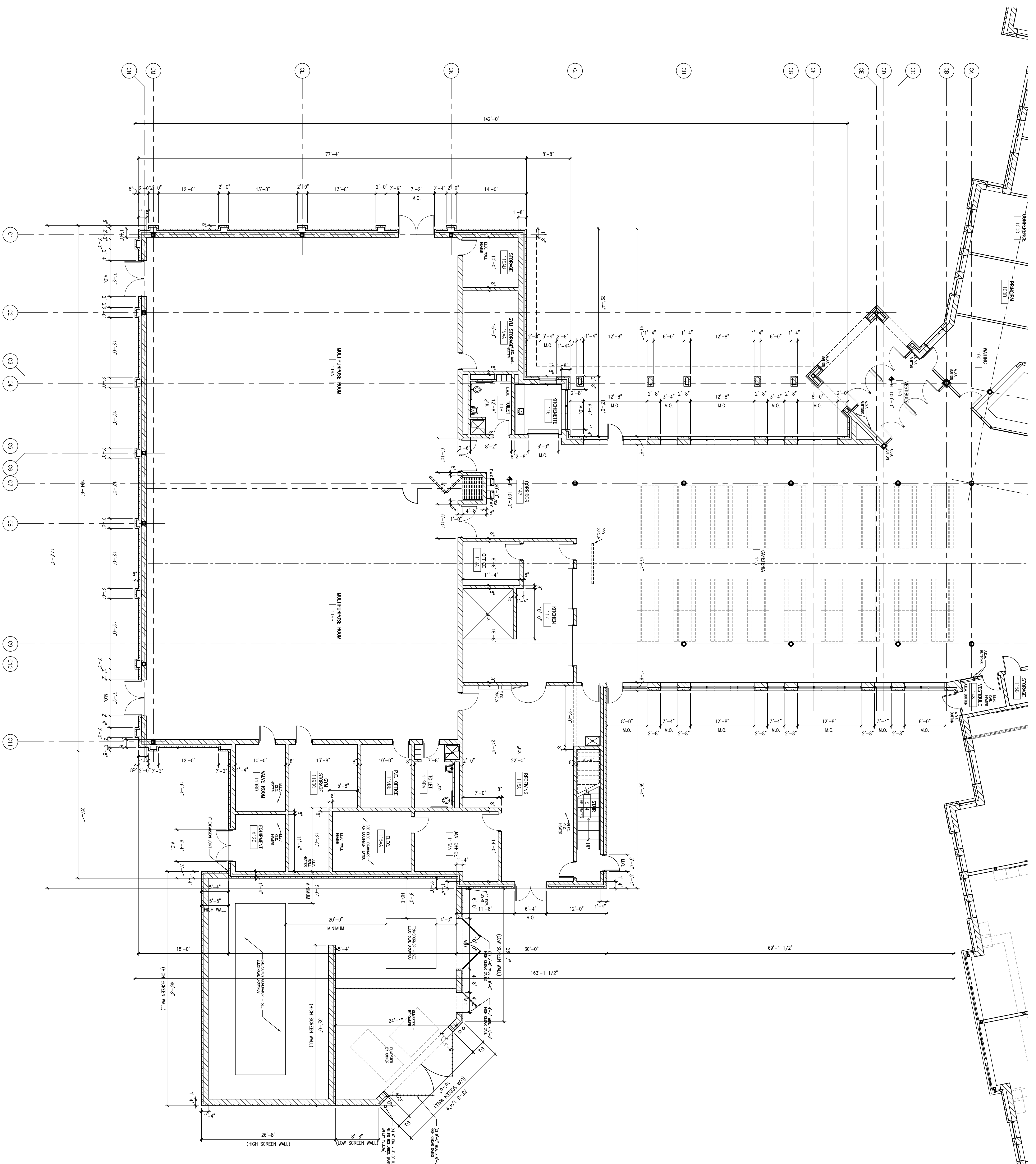
January 31, 2007

Project No.:

060092.00

Sheet No.:

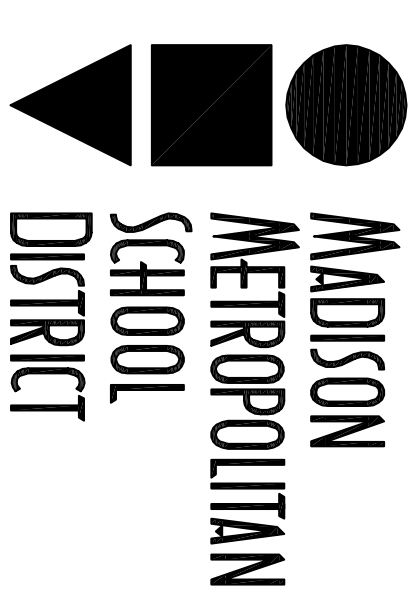
A2.0c



1 Partial First Floor Plan - Area C'  
1/8" = 1'-0"

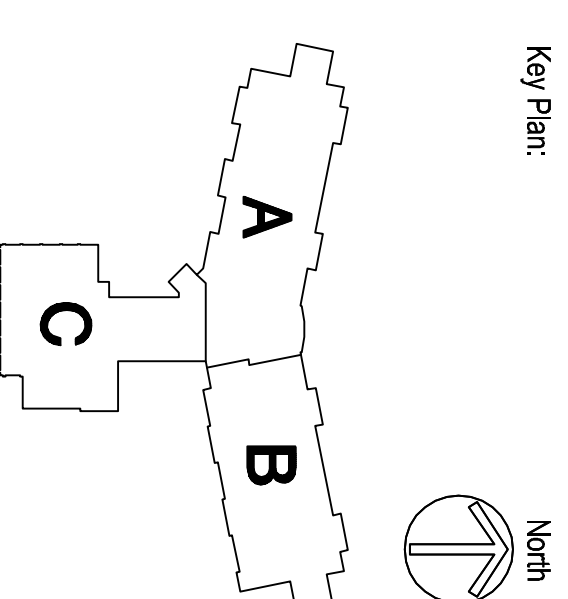
Consultant

Project:  
LINDEN PARK  
ELEMENTARY SCHOOL



Location:  
801 Redden Drive  
Madison, WI 53593

Key Plan:



**1** Partial First Floor Plan - Area B  
1/8" = 1'-0"



Scale:  
1/8" = 1'-0"

Revisions:

No.	Date	Description
11/29/06	Madison, WI: Mechanical Schedule	
1/2/07	Madison, WI: Corrected/OK: Final Approval Sheet	
1/29/07	Madison, WI: Corrected/OK: Final Approval Sheet	

Date:

January 31, 2007

Project No.:

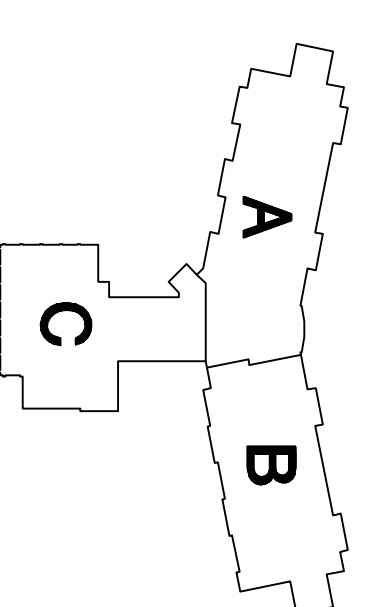
060092.00

Sheet No.:

**A2.0b**

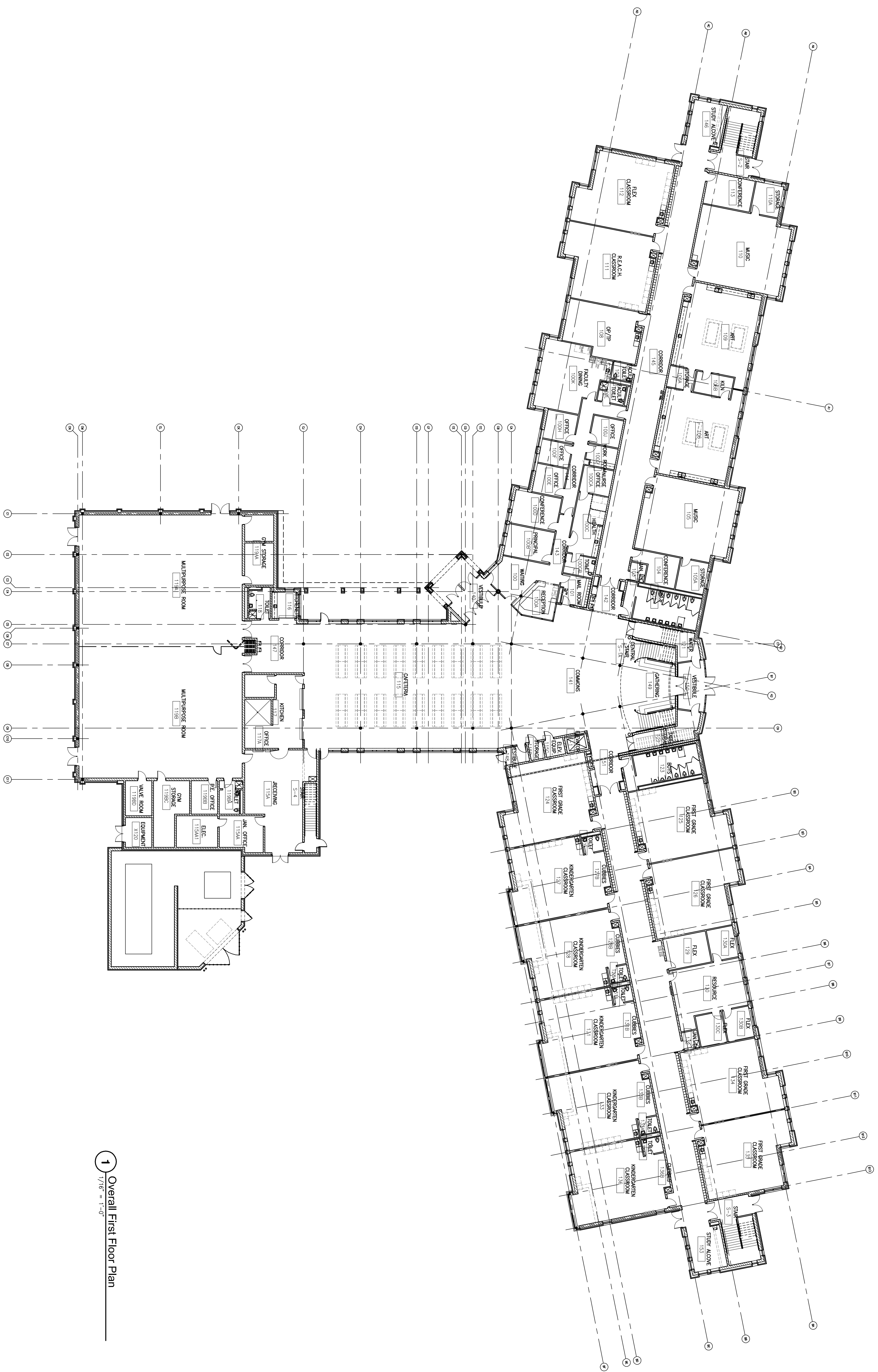


1 Partial First Floor Plan - Area 'A'

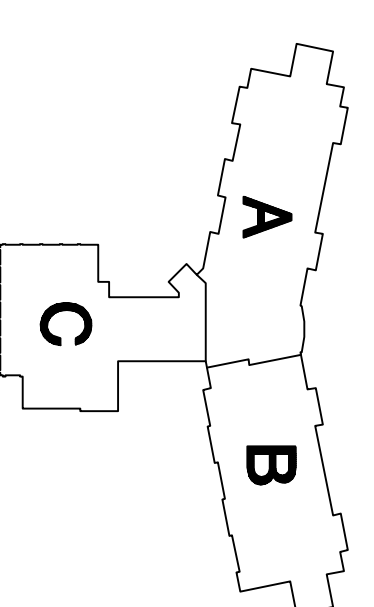
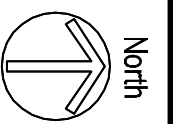


Revisions:

No.	Date	Description
11/29/06		Issue: OAC Remedial Solution
1/2/07		Issue: Final Construction/DCI Final Approval Sheet
1/29/07		Issue: Final Construction/DCI Final Approval Sheet



1 Overall First Floor Plan  
1/16" = 1'-0"



Scale: 1/16" = 1'-0"

No.	Date	Description
11/2/06		Madison DCI Remedial Solution
1/2/07		Madison DCI Remedial/DCI Final Approval Sheet
1/29/07		Madison DCI Remedial/DCI Final Approval Sheet

Revisions:

No. Date Description

11/2/06 Madison DCI Remedial Solution

1/2/07 Madison DCI Remedial/DCI Final Approval Sheet

1/29/07 Madison DCI Remedial/DCI Final Approval Sheet

Date: January 31, 2007

Project No.: 060092.00

Sheet No.:

# Zimmerman

ARCHITECTURAL STUDIOS, INC.

ARCHITECTURE | ENGINEERING | INTERIORS | PLANNING | LANDSCAPE ARCHITECTURE

7707 Harwood Avenue | Milwaukee, WI 53213 | [zastudios.com](http://zastudios.com)

TELEPHONE [414] 476-9500

FACSIMILE [414] 476-8582

## TRANSMITTAL

TO	<b>Secretary</b>
COMPANY	<b>Planning &amp; Development Office</b> 215 Martin Luther King Jr. Blvd Rm. LL100 Madison, WI 53703
PROJECT NAME	Madison Metropolitan School District Linden Park Elementary School 801 Redan Drive Verona, WI 53593
PROJECT NUMBER	060092.00
DATE	January 31, 2007

URGENT   
FOR REVIEW   
FOR COMMENT   
FOR YOUR USE   
AS REQUESTED   
FOR YOUR FILES

### NOTES / COMMENTS

Secretary,

Please find attached our Final Approval submittal for the February 7<sup>th</sup> UDC meeting. This submittal includes:

- (1) Copy - UDC Application Form
- (14) Copies – Letter of Intent
- (14) Copies - 11x17 Presentation drawings
- (14) Copies – Exterior Light Fixture Cut Sheets)
- (1) Disk - .PDF files of 11x17 presentation drawings

VERY TRULY YOURS;

Mark Wershay  
Project Manager

Direct Phone: 414.918.1331

THE INFORMATION CONTAINED IN THIS FACSIMILE MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS NAMED ABOVE. THIS MESSAGE MAY BE AN ATTORNEY/CLIENT COMMUNICATION, AND AS SUCH IS PRIVILEGED AND CONFIDENTIAL. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT OR ANY AGENT RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT YOU HAVE RECEIVED THE DOCUMENT IN ERROR, AND THAT ANY REVIEW, DISSEMINATION OR COPYING OF THIS MESSAGE IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US BY MAIL. THANK YOU.



Letter of Intent For:

Linden Park Elementary School  
801 Redan Drive  
Madison, WI

January 31, 2007

**Summary**

Linden Park Elementary will be a newly constructed school within the Veridian Homes Neighborhood Development of the same name. The school will be home to 650 students in five classes per grades K-5. This project will utilize sustainable energy in the form of cool daylighting, geothermal heating/cooling and wind generation that will contribute to a LEED Silver Certification.

<b>Legal Description of Property:</b>	Outlot 22 of Linden Park Development
<b>Construction Schedule:</b>	April 2007 thru August 2008
<b>Project Contacts:</b>	<i>Following Page</i>
<b>Building Use:</b>	New Elementary School
<b>Total Building Gross Sq. Ft.:</b>	
<i>First Floor</i>	50,161 s.f.
<i>Second Floor</i>	39,688 s.f.
<i>Total</i>	89,849 s.f.
<b>Total Building Occupants:</b>	
<i>Students</i>	650
<i>Staff</i>	90
<i>Total</i>	740
<b>Bicycle Parking (1 Per 10 Staff &amp; Students above the 2nd grade):</b>	
<i>Spaces Required</i>	42 (330 Students, 90 Staff)
<i>Spaces Provided</i>	59 (48 Students, 11 Staff)
<b>Parking Spaces (One parking space for every two (2) employees):</b>	
<i>Spaces Required</i>	45
<i>Spaces Provided</i>	117
<i>Faculty/Staff</i>	95 (5 accessible, including 1 van)
<i>Visitor</i>	22 (1 accessible)
<b>Hours of Operation:</b>	M-F 6:00 a.m. to 10:00 p.m.
<b>Site Acreage:</b>	8.3 acres

Trash removal will be via garbage/recycling service.

Snow will be plowed and remain on site.

Maintenance equipment will be stored within the building proper.

Project Contacts

Owner

Madison Metropolitan School District  
545 West Dayton Street  
Madison, WI 53718

*Owner Representative*

Doug Pearson, CFM, CEM  
Director of Building Services  
4711 Pflaum Road  
Madison, WI 53718

*Owner Project Manager*

608.204.7909 fax 608.204.0373  
Rick Hopke, P.E.  
Coordinator of Facilities Engineering  
608.204.7912 fax 608.204.0373

Surveyor

STS Consultants  
2821 Dairy Drive, Suite 5  
Madison, WI 53718  
608.222.7231 fax 608.222.3765

*Project Engineer*

Matthew D.Emrick, P.E.

Architect

Zimmerman Architectural Studios  
7707 Harwood Avenue  
Milwaukee, WI 53213  
414.476.9500 fax 414.476.8582

*Project Architect*

Doug Barnes, AIA, REFP  
414.918.1461

*Project Manager*

Mark Wershay  
414.918.1331

*Landscape Architect*

Tom DiSalvo, ASLA  
414.918.1454

Engineer

Harwood Engineering Consultants, Ltd.  
7420 W. State Street  
Wauwatosa, WI 53213  
414.475.5554 fax 414.475.5698

*Civil*

Thomas B. Olejniczak, P.E., LEED AP  
414.918.1240

*Structural*

Conrad Etmayer, P.E.  
414.918.1220

*Plumbing*

Patrick Geraghty, D.E., CIPE  
414.918.1232

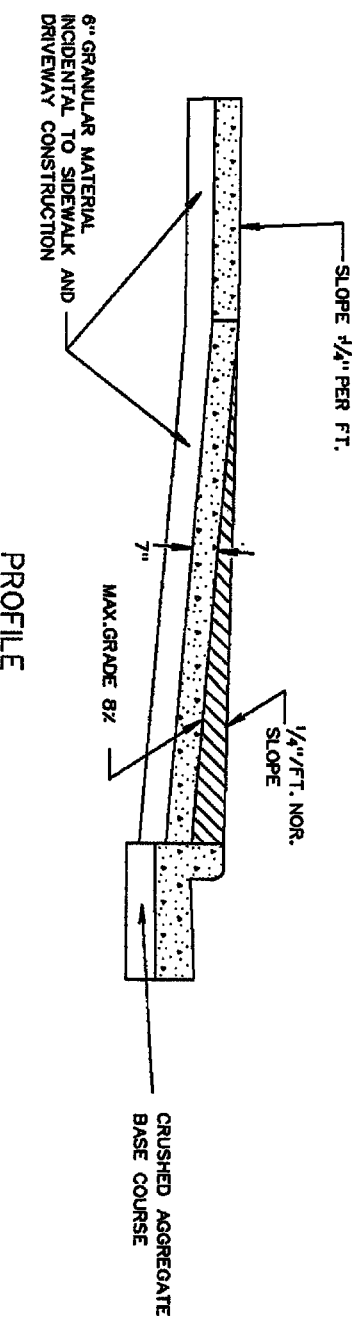
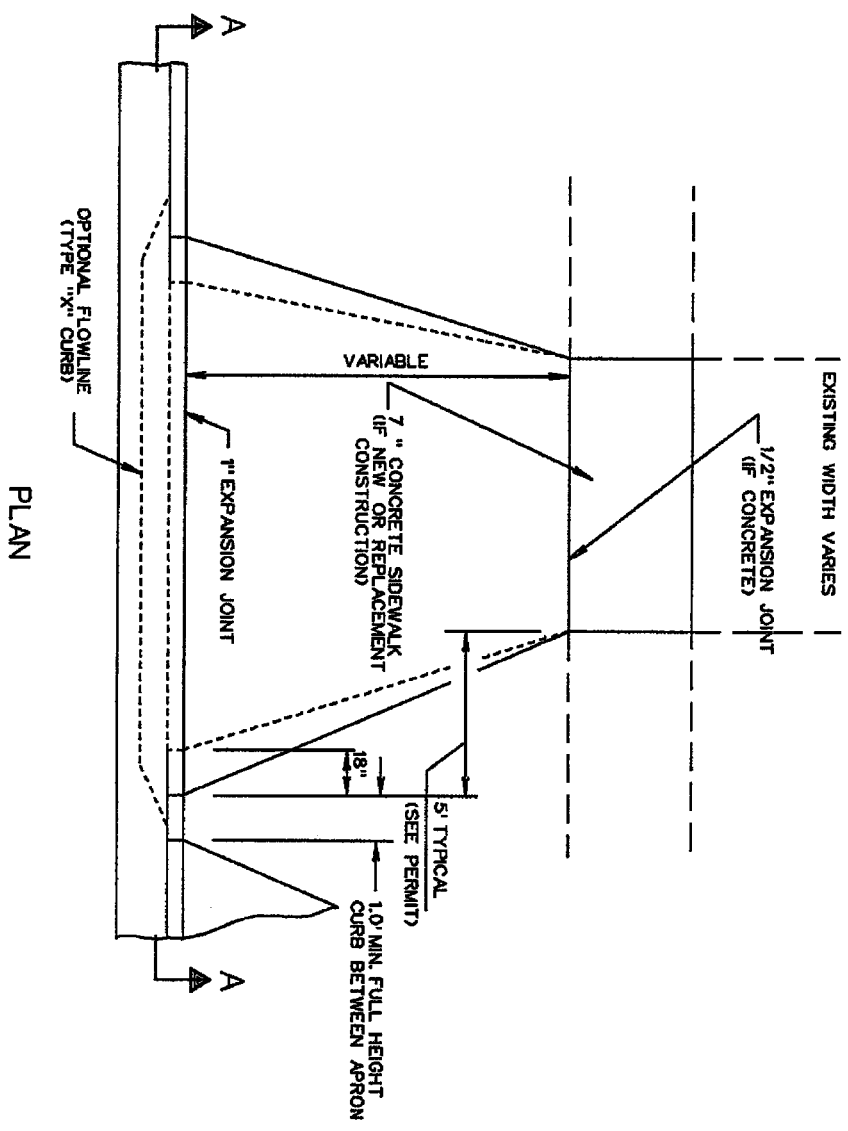
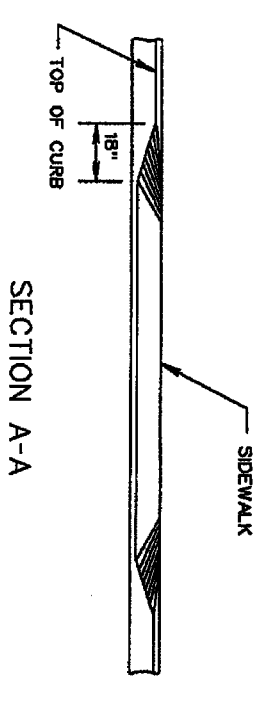
*Mechanical*

Robert Bueches, D.E., LEED AP  
414.918.1237

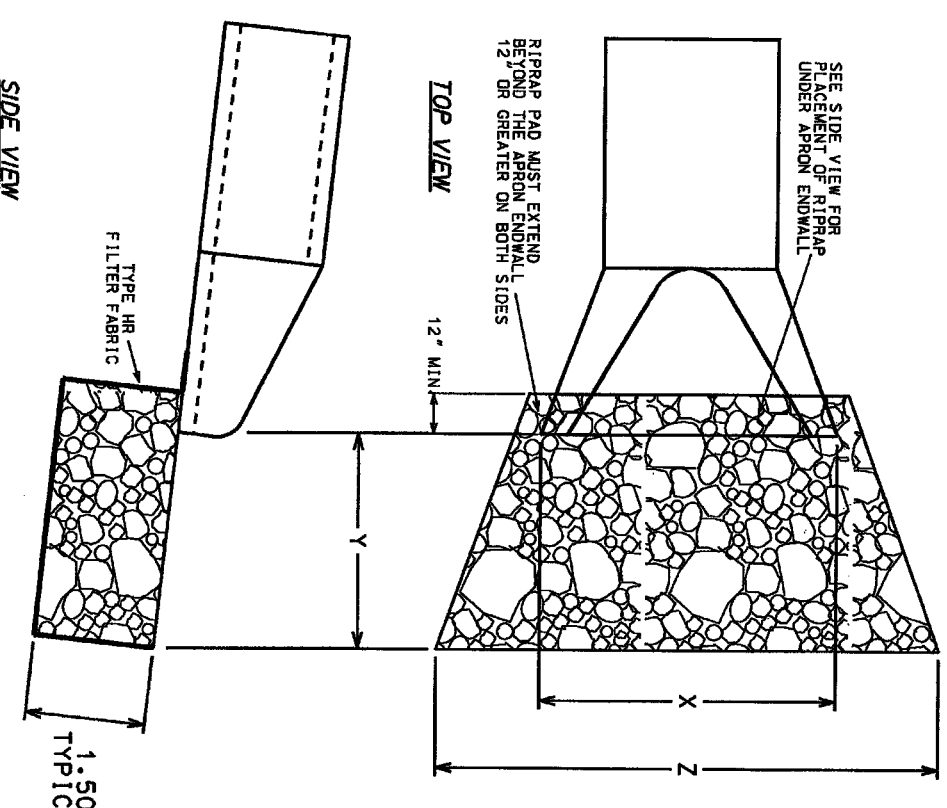
*Electrical*

Tom Peterson, P.E.  
414.918.1225

COMMERCIAL DRIVEWAY DETAIL



13 DRIVE APRON  
N/S

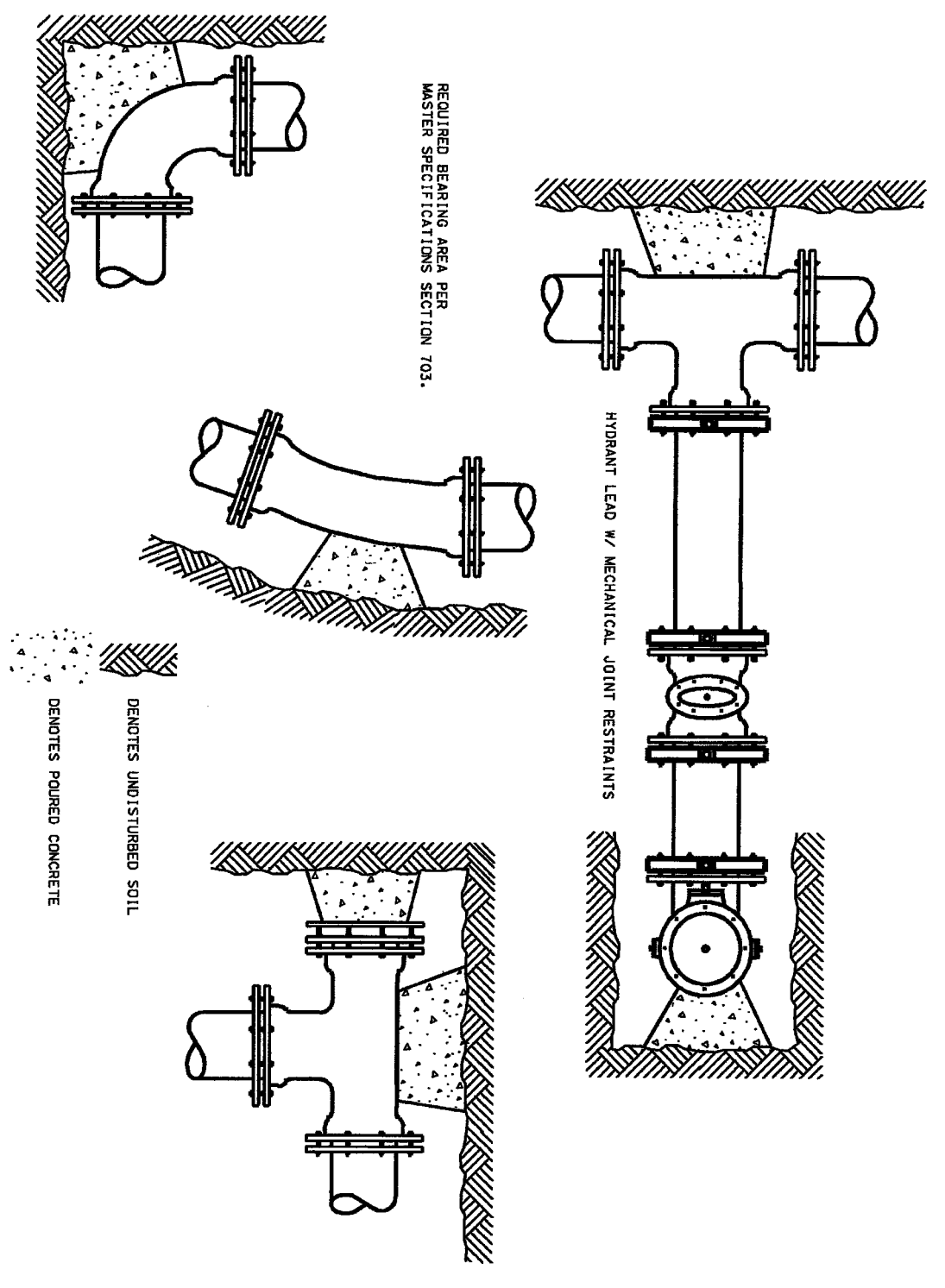


NOTES:

- 1) SCALE OF DRAWING IS AS SHOWN UNLESS OTHERWISE NOTED.
- 2) ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- 3) ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
- 4) ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

STA.	X	Y	Z	DEPTH
11	20	60	60	2.00
12	20	60	60	2.00
13	20	60	60	2.00
14	20	60	60	2.00
15	20	60	60	2.00
16	20	60	60	2.00
17	20	60	60	2.00
18	20	60	60	2.00
19	20	60	60	2.00
20	20	60	60	2.00
21	20	60	60	2.00
22	20	60	60	2.00
23	20	60	60	2.00
24	20	60	60	2.00
25	20	60	60	2.00
26	20	60	60	2.00
27	20	60	60	2.00
28	20	60	60	2.00
29	20	60	60	2.00
30	20	60	60	2.00
31	20	60	60	2.00
32	20	60	60	2.00
33	20	60	60	2.00
34	20	60	60	2.00
35	20	60	60	2.00
36	20	60	60	2.00
37	20	60	60	2.00
38	20	60	60	2.00
39	20	60	60	2.00
40	20	60	60	2.00
41	20	60	60	2.00
42	20	60	60	2.00
43	20	60	60	2.00
44	20	60	60	2.00
45	20	60	60	2.00
46	20	60	60	2.00
47	20	60	60	2.00
48	20	60	60	2.00
49	20	60	60	2.00
50	20	60	60	2.00
51	20	60	60	2.00
52	20	60	60	2.00
53	20	60	60	2.00
54	20	60	60	2.00
55	20	60	60	2.00
56	20	60	60	2.00
57	20	60	60	2.00
58	20	60	60	2.00
59	20	60	60	2.00
60	20	60	60	2.00
61	20	60	60	2.00
62	20	60	60	2.00
63	20	60	60	2.00
64	20	60	60	2.00
65	20	60	60	2.00
66	20	60	60	2.00
67	20	60	60	2.00
68	20	60	60	2.00
69	20	60	60	2.00
70	20	60	60	2.00
71	20	60	60	2.00
72	20	60	60	2.00

14 RIP RAP AT FLARED END SECTION  
N/S

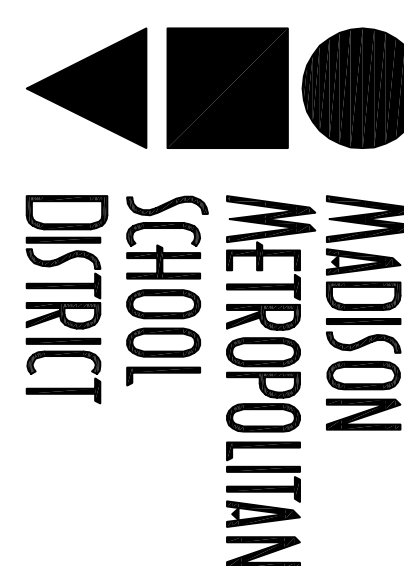


15 STANDARD THRUST BLOCKING  
N/S

7707 Harwood Avenue 205 W. Highland Ave  
Milwaukee, WI 53213 Suite 4  
Telephone 414 476 9500  
Fax 414 476 8582  
Milwaukee, WI 53213  
Telephone 414 276 2116  
Fax 414 769 8581

**HARWOOD**  
ENGINEERING  
CONSULTANTS, LTD.

Project: LINDEN PARK ELEMENTARY SCHOOL  
MADISON METROPOLITAN SCHOOL DISTRICT



Location: 801 Redan Drive  
Madison, WI 53693

Key Plan:

**PROGRESS SET**  
NOT FOR CONSTRUCTION  
DATE: 01-31-07

Sheet: DETAILS

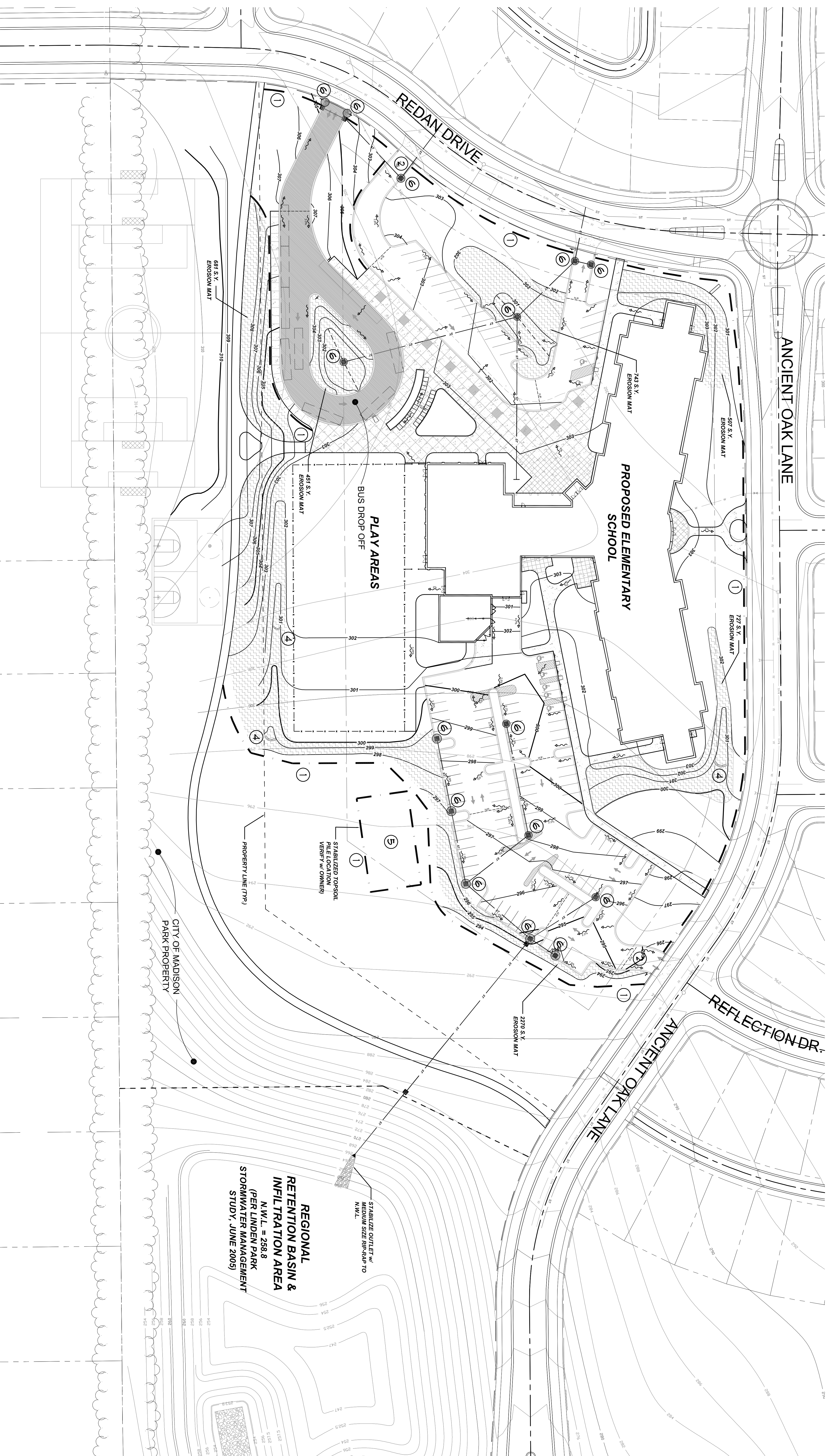
Scale:

Revisions:

No.	Date	Description
1/01		As Issued
1/02		As Issued
1/03		As Issued
1/04		As Issued
1/05		As Issued
1/06		As Issued
1/07		As Issued
1/08		As Issued
1/09		As Issued
1/10		As Issued
1/11		As Issued
1/12		As Issued
1/13		As Issued
1/14		As Issued
1/15		As Issued
1/16		As Issued
1/17		As Issued
1/18		As Issued
1/19		As Issued
1/20		As Issued
1/21		As Issued
1/22		As Issued
1/23		As Issued
1/24		As Issued
1/25		As Issued
1/26		As Issued
1/27		As Issued
1/28		As Issued
1/29		As Issued
1/30		As Issued
1/31		As Issued

Date: January 31, 2007  
Project No.: 0690992.00  
Sheet No.:





**EROSION CONTROL NOTES AND SPECIFICATIONS**

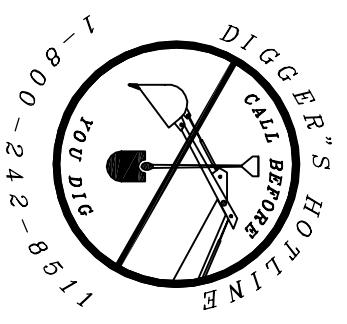
1. THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY THE OWNER CONORR KOTTE AND ASSOCIATES. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY OF THE SURVEY INFORMATION. THE ENGINEER HAS CONDUCTED VISUAL VERIFICATION OF THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND ADJACENT PROPERTY LINES. THE ENGINEER HAS CONDUCTED VISUAL VERIFICATION AND ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK.
2. ESTIMATED CONSTRUCTION TIMETABLES:  
 BEGINNING CONSTRUCTION = APRIL, 2007  
 READING AND REVISIONS = APRIL - JUNE 2007  
 BEGINNING CONSTRUCTION = APRIL, 2007  
 READING AND REVISIONS = APRIL - JUNE 2007  
 COMPLETE BUILDING CONSTRUCTION = JUNE 2008
3. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL CONSTRUCTION ENTRANCES AND SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE PROJECT.
4. THE PROPOSED SITE LOCATION AND SURROUNDING STREETS MUST BE KEPT DEBRIS FREE. SWEEP STREETS AS NEEDED TO MAINTAIN CLEAN STREETS.
5. ALL EXCAVATED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING DIRECTED BY THE OWNER.
6. ALL DISTURBED GRASS AREAS SHALL BE STABILIZED PER OUR BEST PRACTICES. ALL DISTURBED GRASS AREAS SHALL BE TOPSOILED (1"), RESEEDED, FERTILIZED AND MULCHED ACCORDING TO THE CITY SPECIFICATIONS. AREAS INDICATED ON PLANS SHALL BE COVERED WITH AN EROSION FABRIC (CLASS 1, TYPE A).
7. RIP RAP SHALL BE PLACED AT STORM OUTLETS WHERE INDICATED ON THE PLANS AT THE SAME TIME THE STORM SEWER IS INSTALLED.
8. INLET FILTERS ARE TO BE PLACED IN NEW STRUCTURES AS SOON AS THEY ARE CONSTRUCTED. INLET FILTERS MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE PROJECT.
9. STORMWATER TRENCHES SHALL RECEIVE AN APPLICATION OF POLYMER WITH LIME (SANDY SLEET) PER THE PLAN TO REDUCE EROSION (PER 19.05.01).
10. THE CONTRACTOR SHALL MINIMIZE SITE DISTURBANCE TO LIMIT THE AMOUNT OF TOPSOIL REMOVED FROM THE SITE. STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE BEFORE WORKING TO NEXT AREAS.
11. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL EROSION CONTROL SHALL BE COMPLETED AND DOCUMENTED WEEKLY OR AFTER WITHIN 24 HOURS.
12. SITE INSPECTIONS SHALL BE COMPLETED AND DOCUMENTED WEEKLY OR AFTER WITHIN 24 HOURS.
13. PROJECT SAFETY ON SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
14. ALL TEMPORARY EROSION CONTROL METHODS SHALL BE REMOVED FROM THE PROJECT AS SOON AS THE ENTIRE SITE HAS BEEN STABILIZED BY NATURE.

**SITE UTILITY LEGEND**

SYMBOL	DESCRIPTION
W	PROPOSED WATER MAIN
E	EXISTING WATER MAIN
G	PROPOSED ELECTRICAL LINE
S	EXISTING ELECTRICAL LINE
ST	EXISTING GAS MAIN
ST	PROPOSED GAS MAIN
ST	EXISTING SANITARY SEWER
ST	PROPOSED SANITARY SEWER
ST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
ST	PROPOSED SILT FENCE
ST	SANITARY MANHOLE
ST	FIRE HYDRANT
ST	EXISTING WATER VALVE
ST	PROPOSED WATER VALVE
ST	STORM STRUCTURE

**EROSION CONTROL LEGEND**

- 1 SILT FILTER FENCE
- 2 CONSTRUCTION ENTRANCE
- 3 EROSION MAT
- 4 DITCH CHECK
- 5 STABILIZED TOPSOIL PILE
- 6 INLET SEDIMENT GUARD



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNER PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND PARTIES SHALL BE RESPONSIBLE TO MAINTAIN THE STABILITY OF THE WORK. THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

**7707 Harwood Avenue** Milwaukee, WI 53213  
 205 W. Highland Ave. Milwaukee, WI 53213  
 Telephone: 414.476.9500  
 Fax: 414.476.9501  
 Website: www.zastudios.com

**HARWOOD ENGINEERING CONSULTANTS, LTD.**  
 7700 West Stone Street, Milwaukee, Wisconsin 53213  
 414.753.5544, 414.425.8488 fax: 414.753.5544  
 REG. PROFESSIONAL ENGINEERS (06/07/200)

**PROJECT:** LINDEN PARK ELEMENTARY SCHOOL

**LOCATION:** 801 Redan Drive Madison, WI 53593

**KEY PLAN:**

**zimmerman** ARCHITECTURAL STUDIOS, INC.  
 7707 Harwood Avenue | Milwaukee, WI 53213 | zastudios.com  
 TELEPHONE [414] 476.9500  
 FACSIMILE [414] 476.8582

**PROGRESS SET**  
 NOT FOR CONSTRUCTION  
 DATE: 01-31-07

Scale: 1" = 40'-0"

Revisions:

No.	Date	Description
1/01	01-31-07	Issue - CD - Initial Project Meeting
1/02	01-31-07	Issue - Final Conditions Schedule

Date: January 31, 2007  
 Project No.: 0690922.00  
 Sheet No.: C13

ANCIENT OAK LANE

PROPOSED 21" x 2' PVC SANITARY SEWER @ 2' DIA. MIN. (CONNECT TO EXIST. STUB)

DEMOTES EXISTING RIGHT-OF-WAY (TYP.) SETBACK LINE

DEMOTES EXISTING SETBACK LINE

MUNICIPAL UTILITIES TO BE DESIGNED & INSTALLED BY OTHERS

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

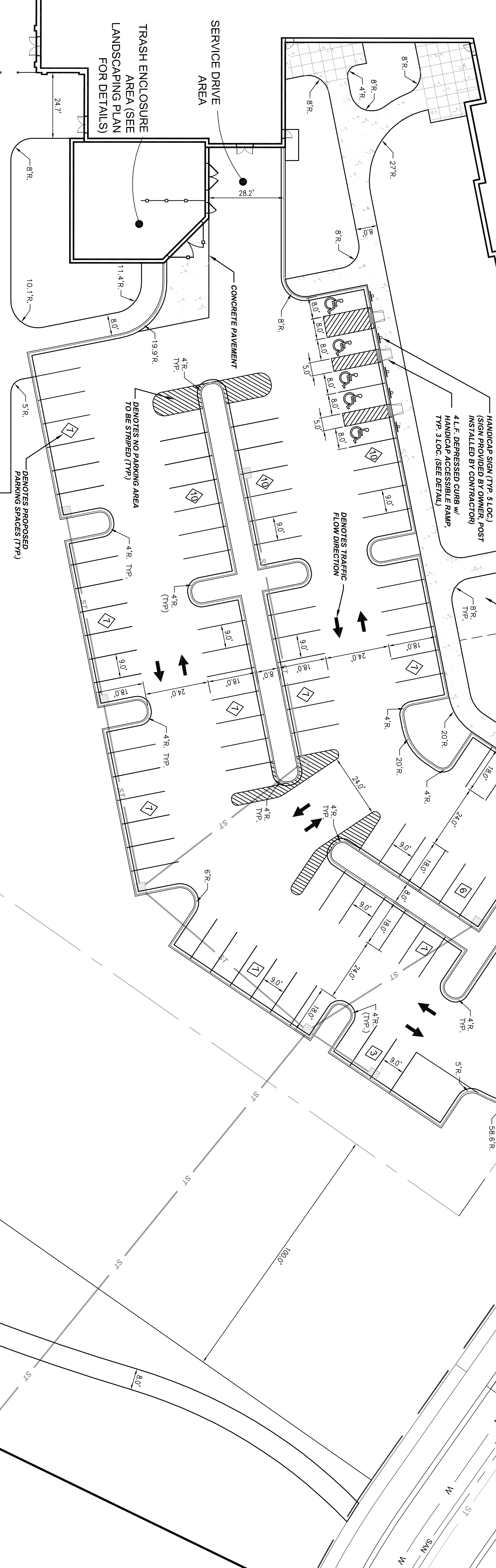
DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

DEMOTES EXISTING SETBACK LINE

REFLECTION DRIVE

PROPOSED ELEMENTARY SCHOOL



PLAY AREAS (SEE LANDSCAPING PLAN)

FENCING (SEE LANDSCAPE PLANS FOR DETAILS)

CITY OF MADISON PARK PROPERTY

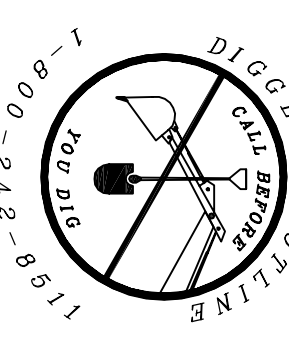
EXISTING REGIONAL RETENTION BASIN & INFILTRATION AREA

GENERAL NOTES AND SPECIFICATIONS

- THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY THE OWNER AND DONORIO KOTTKE AND ASSOCIATES, INC. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY OR COMPLETENESS OF ANY EXISTING CONDITIONS NOTED ON THIS PLAN. THE ENGINEER HAS CONDUCTED VISUAL GENERAL VERIFICATION OF THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND EXISTING OR ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK.
- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, CONTRACTOR SHALL VERIFY THE LOCATION AND SIZE OF ALL EXISTING UTILITIES AND SHALL BE AS INDICATED ON THE PLAN. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR EVALUATION.
- ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003) AS WELL AS THE CITY'S CONSTRUCTION STANDARDS AND THE DEPT. OF COMMERCE SEC. 82.87.
- ALL PROPOSED CONNECTIONS TO EXISTING UTILITIES/STRUCTURES SHALL BE CORDED.
- ALL UTILITY PERMITS WILL NEED TO BE RECEIVED FROM THE CITY PRIOR TO THE START OF CONSTRUCTION.
- NOTIFY THE CITY PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
- BACKFILL REQUIREMENTS AND ROADWAY/SIDEWALK RESTORATION SHALL ADHERE TO THE CITY'S STANDARDS. GRANULAR BACKFILL UNDER OR WITHIN 5" OF CURBS, SIDEWALK, OR PAVEMENT, SOIL MAY BE USED ELSEWHERE. SLURRY BACKFILL WILL BE REQUIRED IN PUBLIC ROADWAYS.
- ALL BUILDING UTILITIES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- ALL PROPOSED WATERMAIN SHALL BE CLASS 50 DUCTILE IRON WITH ELASTOMERIC JOINTS AMVA C-111 OR PVC SDR 18, CLASS 150, AWWA C900, ELASTOMERIC JOINTS, PROPOSED SANITARY SEWERS PIPE SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM D-2722.
- PROPOSED STORM SEWERS SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS TO CONFORM TO ASTM D-2722 (UNLESS OTHERWISE NOTED).
- UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SITE FENCE AND ALL OTHER PROVISION CONTROL METHODS MUST BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALSO, CONTRACTOR IS RESPONSIBLE FOR REMOVING PROVISION CONTROL METHODS ONCE THE SITE IS STABILIZED.
- THE PROPOSED SITE LOCATION AND SURROUNDING STREETS MUST BE KEPT CLEAR. FREE, SWEEP STREETS AS NEEDED TO MAINTAIN CLEAN STREETS.
- ALL EXCAVATED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE. UNLESS OTHERWISE DIRECTED BY THE OWNER.
- SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
- ALL CONCRETE CURB AND GUTTER TO BE 4" VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB DENOTED ON PLANS.
- ALL CURB RADIUS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
- REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
- ALL CONCRETE FOR CURB AND GUTTER, SIDEWALK AND SIGNATURE MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE, MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 5000 PSI.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PROPERTY CORNERS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE RESPONSIBLE FOR TO EXISTING UTILITIES OR SITE IMPROVEMENTS. CONTRACTOR SHALL DOCUMENT ALL DAMAGE TO EXISTING UTILITIES AND/OR PROPERTY CORNERS AND NOTIFY CONSTRUCTION MANAGER OF ANY FINDINGS.
- PROJECT SAFETY ON-SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING SOIL CONDITIONS.
- CONSTRUCTION MANAGER MAY HAVE SOILS REPORT FOR MORE INFO.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED UP PLANS (AS-BUILTS) SHOWING ANY CHANGES DURING CONSTRUCTION.

SITE UTILITY LEGEND

SYMBOL	DESCRIPTION
W	PROPOSED WATER MAIN
W	EXISTING WATER MAIN
E	EXISTING ELECTRICAL LINE
E	PROPOSED ELECTRICAL LINE
GAS	EXISTING GAS MAIN
GAS	PROPOSED GAS MAIN
SAW	EXISTING SANITARY SEWER
SAW	PROPOSED SANITARY SEWER
ST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
OH-W	OVERHEAD WIRES
⊕	SANITARY MANHOLE
⊕	FIRE HYDRANT
⊕	EXISTING WATER VALVE
⊕	PROPOSED WATER VALVE
⊕	STORM STRUCTURE



IN ACCORDANCE WITH WISCONSIN STATUTE, §§ 193.075, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED PERSONNEL OF THE CITY OF MADISON, IN WRITING, PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO EXCAVATE OR REPAIR TRANSMISSION FACILITIES. THE CITY ENGINEER'S SIGNATURE AND SEAL SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF THIS STAFF WORK RELATIVE TO EXCAVATOR'S WORK.



7707 Harwood Avenue | Milwaukee, WI 53213 | zstudio.us  
 TELEPHONE [414] 476.9500  
 FACSIMILE [414] 476.8582

**HARWOOD ENGINEERING CONSULTANTS, LT.**  
 7720 West 20th Street, Milwaukee, Wisconsin 53222  
 414.752.5554 • 414.752.5488 fax • harwood@harc.com  
 REG. ENGINEER: WISCONSIN 06/07/2010

**MADISON METROPOLITAN SCHOOL DISTRICT**

**LINDEN PARK ELEMENTARY SCHOOL**

Project: 7720 West 20th Street, Milwaukee, Wisconsin 53222

Location: 801 Redden Drive, Madison, WI 53703

Key Part: \_\_\_\_\_

North

**PROGRESS SET NOT FOR CONSTRUCTION**  
 DATE: 01-31-07

SHEET: SITE AND UTILITY PLAN - EAST AREA

Location: 801 Redden Drive, Madison, WI 53703

Key Part: \_\_\_\_\_

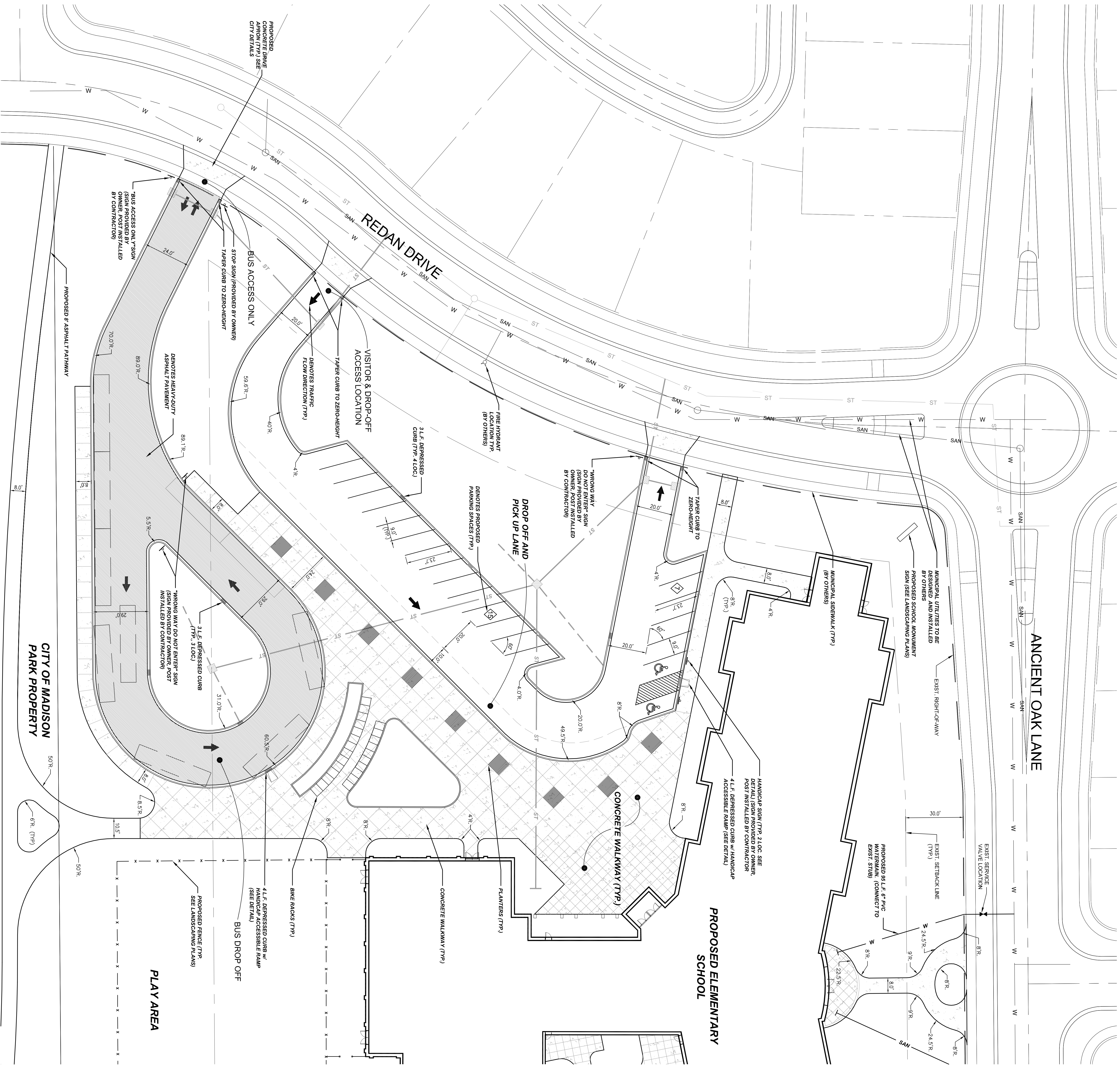
North

Scale: 1" = 20'-0"

Project No.: 0600922.00

Date: January 31, 2007

Sheet No.: C122

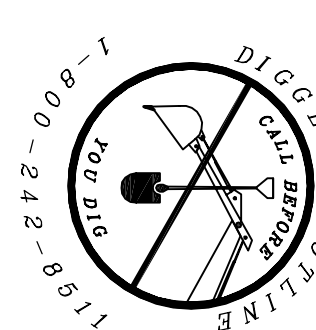


**GENERAL NOTES AND SPECIFICATIONS**

- THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY THE OWNER AND DONORHO KOTTE AND ASSOCIATES, INC. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY OF THE INFORMATION PROVIDED BY THE SURVEYOR OR THE INFORMATION PROVIDED BY THE OWNER. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS OF THE SITE AND HAS OBSERVED THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND EXISTING OR ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK.
- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY OF MADISON. CONTRACTOR SHALL OBTAIN AND REVIEW ALL CITY STANDARDS AND SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003) AS WELL AS THE CITY'S CONSTRUCTION STANDARDS AND THE DEPT. OF COMMERCE SEC. 82.87.
- ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003) AS WELL AS THE CITY'S CONSTRUCTION STANDARDS AND THE DEPT. OF COMMERCE SEC. 82.87.
- ALL PROPOSED CONNECTIONS TO EXISTING UTILITIES/STRUCTURES SHALL BE CORDED.
- ALL UTILITY PERMITS WILL NEED TO BE RECEIVED FROM THE CITY PRIOR TO THE START OF CONSTRUCTION.
- NOTIFY THE CITY PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
- BACKFILL REQUIREMENTS AND ROADWAYS/SIDEWALK RESTORATION SHALL ADHERE TO THE CITY'S STANDARDS (GRANULAR BACKFILL UNDER OR WITHIN 5' OF CURBS, SIDEWALK, OR PAVEMENT). SOIL MAY BE USED ELSEWHERE. SLURRY BACKFILL WILL BE REQUIRED IN PUBLIC ROWS (MANSIONS).
- ALL BUILDING UTILITIES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- ALL PROPOSED WATERMAIN SHALL BE CLASS 50 DUCTILE IRON WITH ELASTOMERIC JOINTS (AWWA C-111 OR PVC SDR 18 CLASS 150 AWWA C900 ELASTOMERIC JOINTS, GASPERET JOINTS CONFORMING TO ASTM D-2722).
- PROPOSED SANITARY SEWERS PRE SHALL BE PVC (ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS) CONFORMING TO ASTM D-2722 (UNLESS OTHERWISE NOTED).
- UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SITE FENCE AND ALL OTHER EROSION CONTROL METHODS MUST BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALSO, CONTRACTOR IS RESPONSIBLE FOR REMOVING EROSION CONTROL METHODS ONCE THE SITE IS STABILIZED.
- THE PROPOSED SITE LOCATION AND SURROUNDING STREETS MUST BE KEPT CLEAR FREE. SWEEP STREETS AS NEEDED TO MAINTAIN CLEAR STREETS.
- ALL EXCAVATED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
- SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
- ALL CONCRETE CURB AND GUTTER TO BE 4" VERTICAL FACE, UNLESS OTHERWISE NOTED. REFER TO REGULAR STYLE CURB DENOTED ON PLANS.
- ALL CURB RADIUS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
- REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
- ALL CONCRETE FOR CURB AND GUTTER, SIDEWALK AND PAVEMENT MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE, MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 5000 PSI.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PROPERTY CORNERS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE RESPONSIBLE FOR TO EXISTING UTILITIES OR SITE IMPROVEMENTS. CONTRACTOR SHALL DOCUMENT ALL DAMAGE TO EXISTING UTILITIES AND/OR CONSTRUCTION AND/OR CONSTRUCTION MANAGER OF ANY FINDINGS.
- PROJECT SAFETY ON-SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING SOIL CONDITIONS.
- CONSTRUCTION MANAGER MAY HAVE SOILS REPORT FOR MORE INFO.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED UP PLANS (AS-BUILTS) SHOWING ANY CHANGES DURING CONSTRUCTION.

**SITE UTILITY LEGEND**

SYMBOL	DESCRIPTION
W	PROPOSED WATER MAIN
E	EXISTING WATER MAIN
E	EXISTING ELECTRICAL LINE
E	EXISTING TELEPHONE LINE
GAS	PROPOSED GAS MAIN
GAS	EXISTING GAS MAIN
SAN	PROPOSED SANITARY SEWER
ST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
OH-W	SANITARY MANHOLE OVERHEAD WIRES
⊕	FIRE HYDRANT
⊕	EXISTING WATER VALVE
⊕	PROPOSED WATER VALVE
⊕	STORM STRUCTURE



IN ACCORDANCE WITH WISCONSIN STATUTE, §§2.07Z, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED PERSONNEL OF THE CITY OF MADISON PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO EXCAVATE OR REPAIR EXISTING UTILITIES, AND ADVISE THE CITY OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK. THIS STATUTE RELATES TO EXCAVATOR'S WORK.

**zimmerman**  
ARCHITECTURAL STUDIOS, INC.

7707 Harwood Avenue | Milwaukee, WI 53213 | zstudies.com

7707 Harwood Avenue 205 W. Highland Ave  
Milwaukee, WI 53213

Harwood Engineering Consultants, LT  
7702 West Stone Street Milwaukee Wisconsin 532  
414.753.5544 414.425.2488 fax harwood@hrc.com  
HRC Project Number: 06-097-20

Project: LINDEN PARK ELEMENTARY SCHOOL

MADISON METROPOLITAN SCHOOL DISTRICT

Location: 801 Redan Drive Madison, WI 53593

Key Part: North

**PROGRESS SET**  
NOT FOR CONSTRUCTION

DATE: 01-31-07

Sheet: SITE AND UTILITY PLAN - WEST SIDE

Location: 801 Redan Drive Madison, WI 53593

Key Part: North

Scale: 1" = 20'-0"

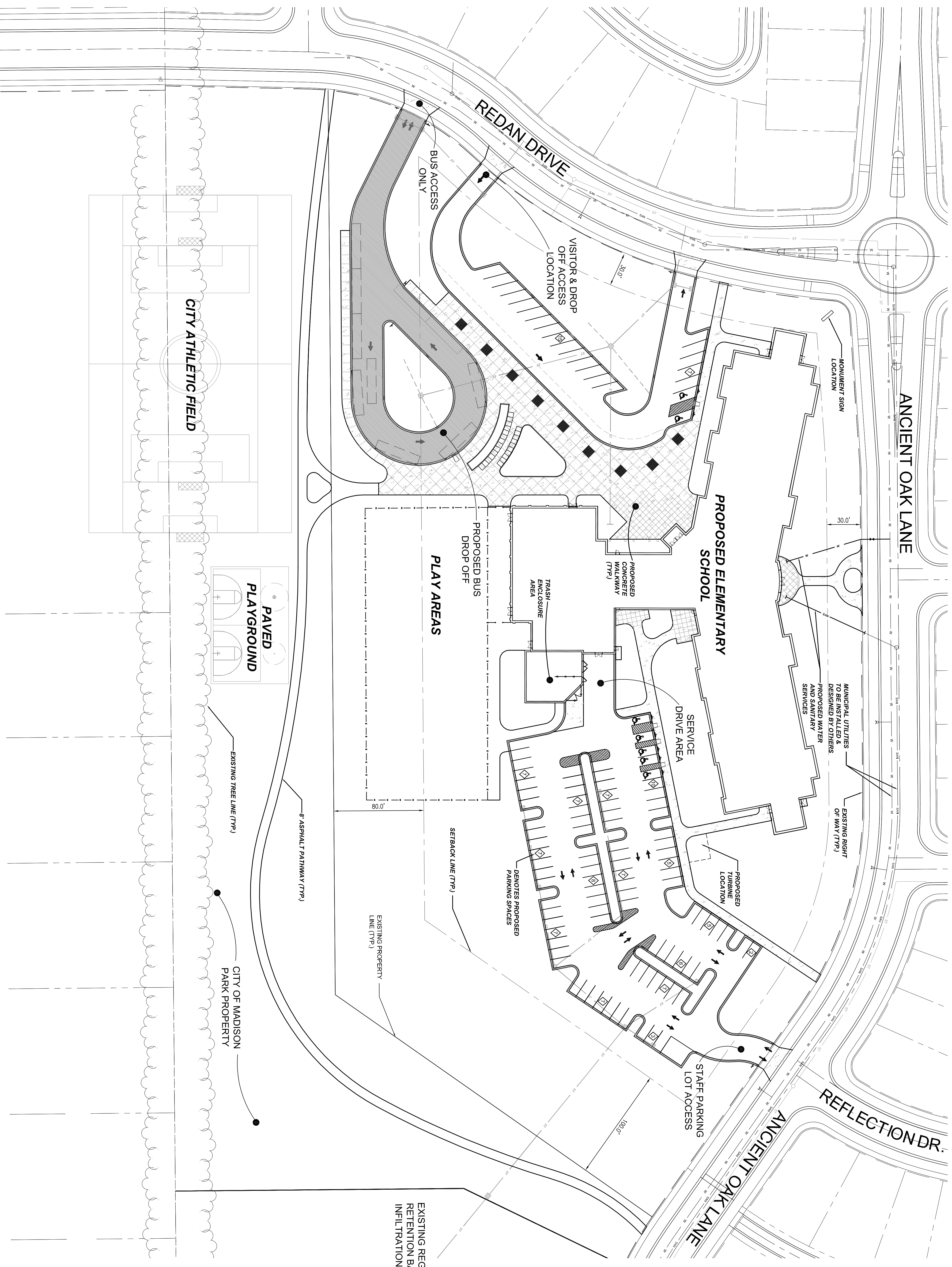
Revisions:

No.	Date	Description
1/02		Issue - 02 - Issue Revised Schedule
1/07		Issue - 07 - Issue Revised Schedule
1/07		Issue - 07 - Issue Revised Schedule

Date: January 31, 2007

Project No.: 0600922.00

Sheet No.: C121



**GENERAL NOTES AND SPECIFICATIONS**

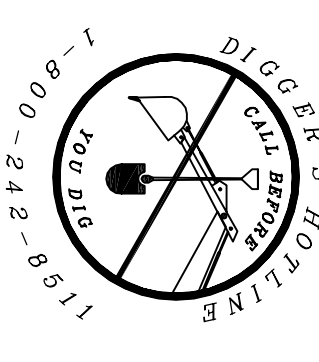
- THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY THE OWNER AND DONOHOO KOTHE AND ASSOCIATES, INC. THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND BUILDING LOCATIONS, THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK.
- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, CONTRACTOR SHALL EXCAVATE EACH EXISTING UTILITY TO BE CONNECTED TO VERIFYING ELEVATION, LOCATION AND SIZE. SHOULD THE EXISTING UTILITY NOT BE AS INDICATED ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR EVALUATION.
- ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003) AS WELL AS THE CITY'S CONSTRUCTION STANDARDS AND THE DEPT OF COMMERCE SEC. 62.57.
- ALL PROPOSED CONNECTIONS TO EXISTING UTILITIES/STRUCTURES SHALL BE CURED.
- ALL UTILITY DEPARTS WILL NEED TO BE RECEIVED FROM THE CITY PRIOR TO THE START OF CONSTRUCTION.
- NOTIFY THE CITY PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
- BACKFILL REQUIREMENTS AND ROADWAY/SIDEWALK RESTORATION SHALL ADHERE TO THE CITY'S STANDARDS GRANULAR BACKFILL UNDER OR WITHIN 5' OF CURBS, BE REQUIRED IN PUBLIC ROWWAYS).
- ALL BUILDING UTILITIES SHALL BE CLASS 55 DUCTILE IRON WITH ELASTOMERIC JOINTS AWMA C-111 OR PVC SDR 18, CLASS 150 AWMA GRDOW ELASTOMERIC JOINTS, GASSETED JOINTS CONFORMING TO ASTM D-3272.
- PROPOSED STORM SEWERS SHALL BE PVC, ASTM D-3034, SDR 35 WITH RUBBER ELASTOMERIC JOINTS CONFORMING TO ASTM D-3272 (UNLESS OTHERWISE NOTED).
- UTILITY TRENCHES SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- SITE FENCE AND ALL OTHER EROSION CONTROL METHODS MUST BE INSTALLED PRIOR TO CONSTRUCTION.
- THE PROPOSED SITE LOCATION AND SURROUNDING STREETS MUST BE KEPT DEBRIS FREE. STREET STREETS AS NEEDED TO MAINTAIN CLEAN STREETS.
- ALL EXCAVATED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
- ALL CONCRETE CURB AND GUTTER TO BE 8" VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB UNLESS OTHERWISE NOTED.
- ALL CURB RADIUS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER SIDEWALK AND PAYEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
- REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAYEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
- ALL CONCRETE FOR CURB AND GUTTER, SIDEWALK AND SIDEWALKS MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE, MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 3000 PSI.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PROPERTY CORNERS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE RESPONSIBLE FOR TO EXISTING UTILITIES AND STRUCTURES PRIOR TO START OF CONSTRUCTION AND NOTIFY CONSTRUCTION MANAGER OF ANY FININGS.
- PROJECT SAFETY ON SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING SOIL CONDITIONS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED UP PLANS (AS-BUILTS) SHOWING ANY CHANGES DURING CONSTRUCTION.

**SITE UTILITY LEGEND**

SYMBOL	DESCRIPTION
W	PROPOSED WATER MAIN
W	EXISTING WATER MAIN
E	PROPOSED ELECTRICAL LINE
E	EXISTING ELECTRICAL LINE
GAS	PROPOSED GAS MAIN
GAS	EXISTING GAS MAIN
SSW	PROPOSED SANITARY SEWER
SSW	EXISTING SANITARY SEWER
ST	PROPOSED STORM SEWER
ST	EXISTING STORM SEWER
OW	OVERHEAD WIRES
OH	SANITARY MANHOLE
⊗	FIRE HYDRANT
⊗	EXISTING WATER VALVE
⊗	PROPOSED WATER VALVE
■	STORM STRUCTURE

**TOTAL SITE CALCULATIONS:**

TOTAL SITE AREA	83 AC.
TOTAL DISTURBED AREA	62 AC.
EXISTING IMPERVIOUS AREA	0 AC.
PROPOSED ADDITIONAL IMPERVIOUS AREA	3.9 AC.
TOTAL IMPERVIOUS AREA	3.9 AC.
GREENSPACE = 4.3 AC. OR 52.7% OF SITE	
REGULAR PARKING SPACES	111
HANDICAP PARKING	6
TOTAL PARKING	117



IN ACCORDANCE WITH WISCONSIN STATUTE 192.07(2), DAMAGE RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS BEFORE WORK BEGINS ON THESE DRAWINGS AND UTILITIES LOCATIONS SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THE STATE OF WISCONSIN.

**zimmerman**  
ARCHITECTURAL STUDIOS, INC.

7707 Harwood Avenue | Milwaukee, WI 53213 | zstudios.com  
TELEPHONE [414] 476.9500  
FACSIMILE [414] 476.8582

7707 Harwood Avenue | 205 W. Highland Ave. | Milwaukee, WI 53213 | Suite 4  
Telephone 414 476.9500 | Telephone 414 276.1636  
Facsimile 414 476.8582 | Facsimile 414 709.8787

**HARWOOD ENGINEERING CONSULTANTS, LT**  
7760 West Stone Street, Milwaukee, Wisconsin 53212  
414.752.5554 | 414.425.2488 fax | harwood@hwd.com  
1825 North Wisconsin | 414.752.2100

**Project:** LINDEN PARK ELEMENTARY SCHOOL

**Location:** 801 Redan Drive, Madison, WI 53953

**Key Part:** MADISON METROPOLITAN SCHOOL DISTRICT

**Progress Set:** NOT FOR CONSTRUCTION  
DATE: 01-31-07

**Sheet:** OVERALL SITE AND UTILITY PLAN

**Scale:** 1" = 40'-0"

No.	Date	Description
1/07	1/2007	As Issued
1/07	1/2007	1st Revision - See General Schedule
1/07	1/2007	2nd Revision - See General Schedule

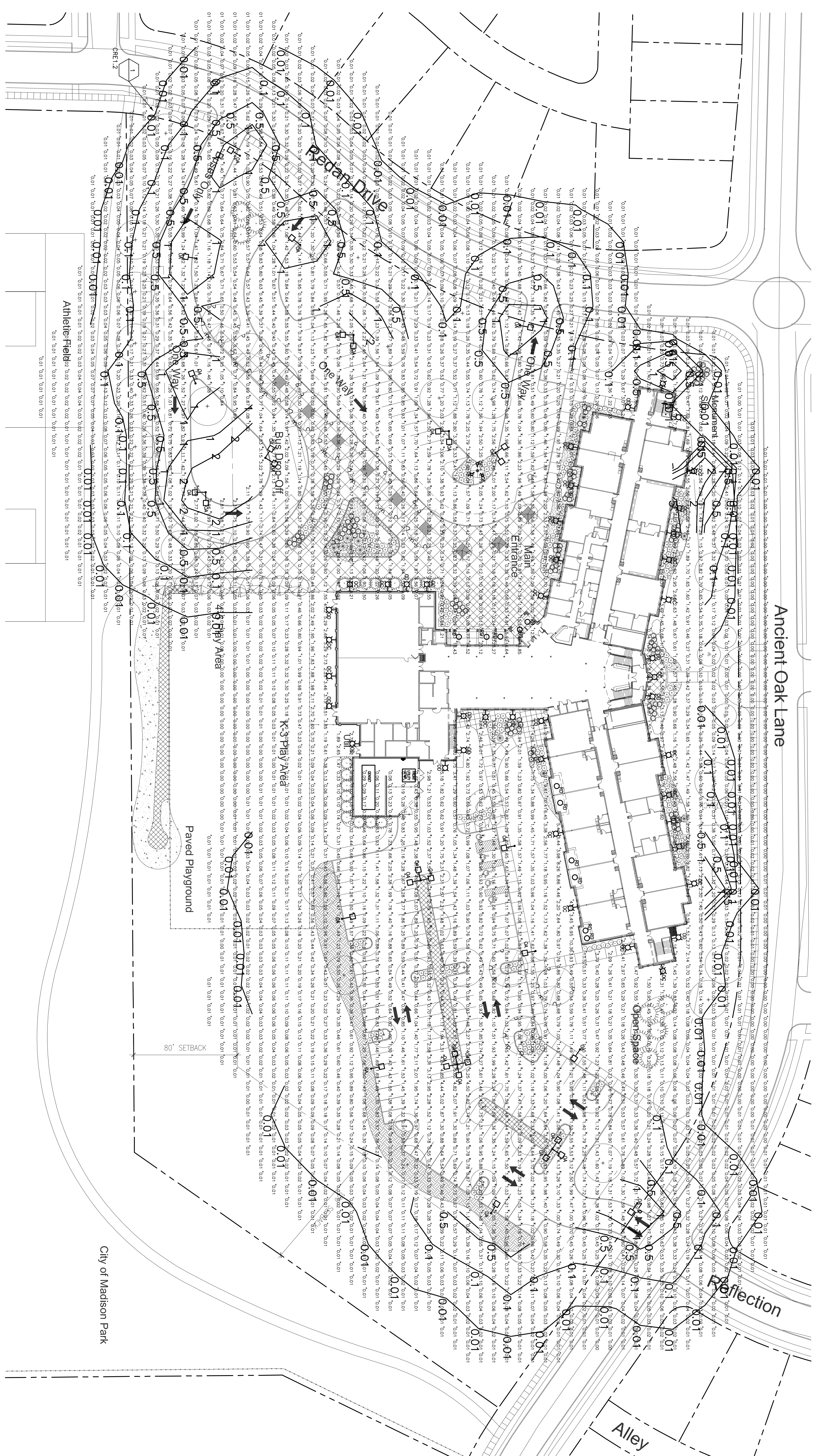
**Revisions:**

**Project No.:** 0609092.00

**Date:** January 31, 2007

**C12**





1 Electrical Site Plan  
1" = 40'-0"

PLAN NOTES  
CONCRETE LIGHT FIXTURE FOOTCANDLE READINGS AT 4'-0" ABOVE FINISHED GRADE

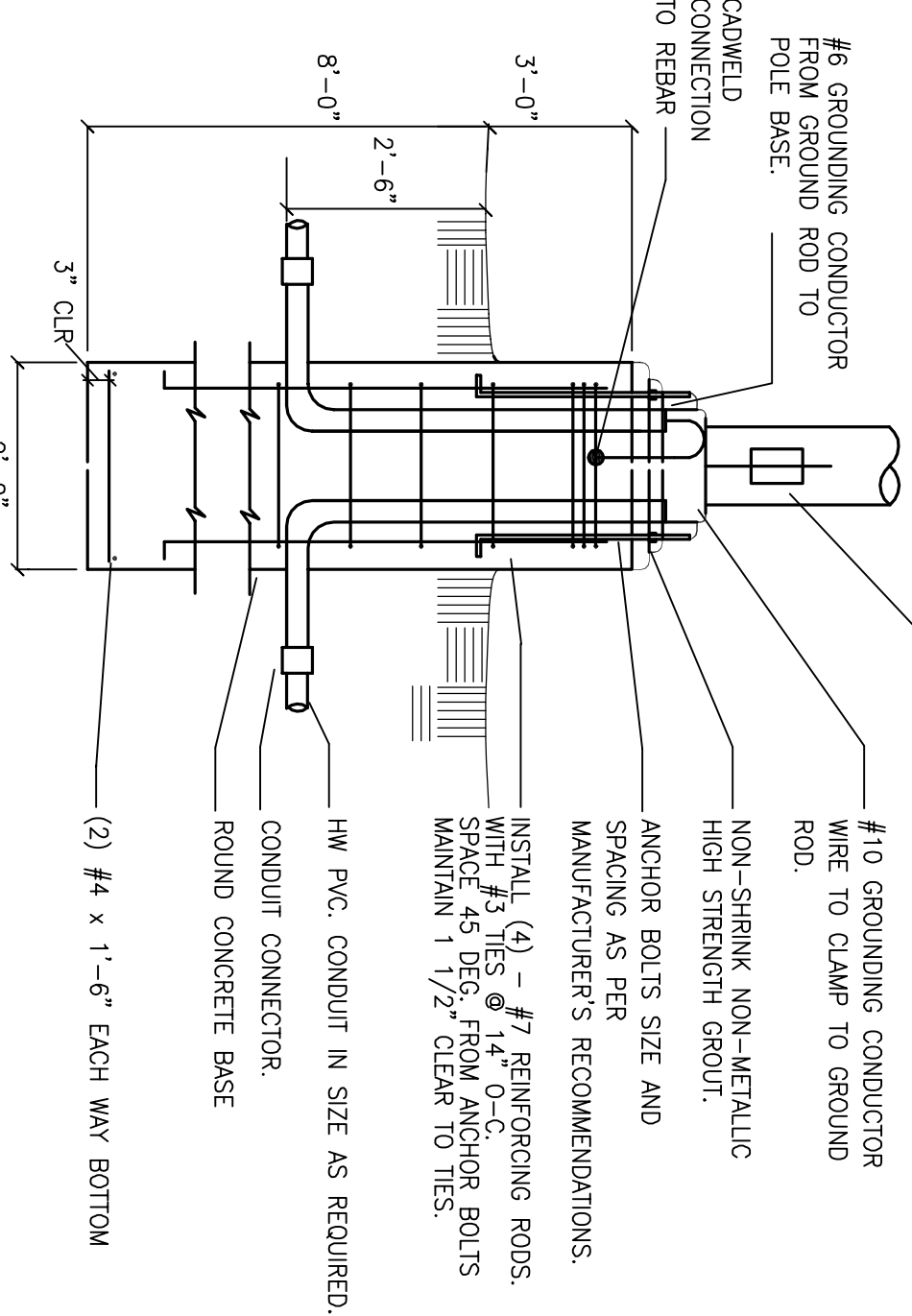
### LIGHTING FIXTURE SCHEDULE

QTY	DESCRIPTION	LAMP DATA	VOLT	DEPTH	MFR.	LIGHTING FIXTURE SERIES	BA SERIES	BALLAST TYPE	MFG. SUFF. LIST
04	HID CLOSET III OUST. 18" S.S. FOLE	175 MH	120	BETA				PS	POLE QND
0C	HID CLOSET WALL MOUNT FORWARD THRU/GLOW	70/66/12	120	INVAE		ENFTG SERIES		E	WALL VERTY 23
0D	FLUORESCENT WALL MOUNT SECTION LIGHTING 60" FLOOR VERTY WINDOW FLOOD	F4T8X	120	INVAE		ENFTG SERIES		E	WALL VERTY 22.23
0F	8" INCH ROUND DOWN LIGHT	F4T8X	120	PORTFOLD				PS	POLE QND
2								REC	VERTY

- REMARKS:**
- 01. 0.15' PATTERN 12 APTIC LENS
  - 02. HOLOPHONE 8246 LENS
  - 03. BANK AFTER FABRICATION
  - 04. FLUSH ALUMINUM DOOR FRAME
  - 05. ELECTRONIC BALLAST TOTAL HARMONIC
  - 06. FLUORESCENT DIMMING BALLAST
  - 07. WHITE TRIM RING
  - 08. S.A.M. RE-LOW-INTENSIFIED CLAR
  - 09. S.A.M. RE-LOW-INTENSIFIED CLAR
  - 10. CUSTOM COLOR
  - 11. PENDANT CHAIN
  - 12. SLOPE ADAPTER
  - 13. EMERGENCY BALLAST
  - 14. EMERGENCY BALLAST
  - 15. EMERGENCY BALLAST
  - 16. EMERGENCY BALLAST
  - 17. TIME DELAY
  - 18. WEI LOCATION LABEL
  - 19. WEI LOCATION LABEL
  - 20. WEI LOCATION LABEL
  - 21. QUARTZ RESISTIVE
  - 22. EMERGENCY BALLAST
  - 23. EMERGENCY BALLAST
  - 24. EMERGENCY BALLAST
  - 25. EMERGENCY BALLAST
  - 26. EMERGENCY BALLAST
  - 27. EMERGENCY BALLAST
  - 28. EMERGENCY BALLAST
  - 29. EMERGENCY BALLAST
  - 30. EMERGENCY BALLAST

### LIGHTING STATISTICS

DESCRIPTION	Avg.	MIN.	Avg./MIN.
DRIVE EAST	1.4	0.42	2.5:1
DRIVE NORTHWEST	0.81	0.45	1.8:1
DRIVE SOUTHWEST	0.95	0.33	2.8:1
PARKING EAST	1.47	0.31	4.7:1
PARKING NORTHWEST	1.15	0.25	4.6:1
PARKING SOUTHWEST	1.20	0.29	4.1:1



2 POLE BASE DETAIL  
E1-1

- NOTES:**
1. DIMENSIONS GIVEN ARE MINIMUM PROVIDE POLE BASE DIMETER AND DEPTH AS REQUIRED IN CONDITIONS WITH LOCAL SOIL AND WIND VELOCITY
  2. ALL LIGHTING POLE CONCRETE BASES SHALL BE LOCATED A MINIMUM OF 12 INCHES OFF THE FACE OF THE CURBING OR CENTERED WITHIN AN ISLAND. IN ALL CASES HOWEVER, POLE LOCATIONS OF LIGHTING POLES SHALL BE MAINTAINED WITH THE PROTECTIVE/SHIELDING FROM TO INSTALLATION.

**CONSULTANT**  
**HARWOOD ENGINEERING CONSULTANTS, LTD**  
2420 West State Street, Milwaukee, Wisconsin 53233  
414.224.2400  
FAX: 414.224.2401  
Project Number: 060092-00  
Drawn By: [Name]  
Checked By: [Name]

**PROJECT:**  
LINDEN PARK ELEMENTARY SCHOOL

**MADISON METROPOLITAN SCHOOL DISTRICT**

**Zimmerman ARCHITECTURAL STUDIOS, INC.**  
7707 Harwood Avenue | Milwaukee, WI 53213 | zstudios.com  
TELEPHONE [414] 476-9500  
FACSIMILE [414] 476-8582

**Location:**  
801 Redden Drive  
Madison, WI 53593

**Key Plan:**

**North**

**Sheet:** Electrical Site Plan

**Revisions:**

No.	Date	Description
1/1/2006	Madison, WI	Madison, WI
1/2/07	Madison, WI	Madison, WI
1/27/07	Madison, WI	Madison, WI

**Project No.:** 060092-00

**Date:** January 31, 2007

### Description

Low brightness 7-3/8" aperture lens downlight for use with (2)26W, 32W, or 42W Triple Tube 4-pin compact fluorescent lamps. The deeply regressed lens provides superb shielding in comparison to shallow lenses. Reflector trim eliminates brightness at higher angles. Choice of lens types for various aesthetics. Standard features include low iridescent finish on all reflectors, and one electronic ballast to operate (2)26/32/42W triple tube 4-pin lamps. Venting ensures maximum lamp life and lumen output. Open downlight, lens, and open wall wash trims are interchangeable within the same housing.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

### SPECIFICATION FEATURES

#### A ... Reflector

Specular clear upper Alzak® reflector for maximum light output. Positive reflector mounting, without tools, pulls trim tight to ceiling. Lower spun parabolic reflector, .050 thick aluminum, available in low iridescent clear, haze, straw, wheat, and warm haze Alzak® or painted white finish. Other finish options available upon request. Also available with white or black baffle.

#### B ... Lens

Choice of tempered fresnel prismatic, diffuse, or clear glass lenses or molded prismatic acrylic, opal diffuser or clear UV stabilized acrylic. Lens is fixed to lower reflector.

#### C ... Trim Ring Options

High impact polymer with satin white finish or self flanged reflector.

#### D ... Socket Connector

One piece die cast aluminum connection allows venting for maximum thermal performance.

#### E ... Housing Mounting Frame

One piece precision die cast aluminum 1-1/2" deep collar accommodates varying dimensions of ceiling materials.

#### F ... Universal Mounting Bracket

Accepts 1/2" EMT, C Channel, T bar fasteners, and bar hangers. Adjusts 5" vertically from above or below ceiling.

#### G ... Conduit Fittings

Die cast screw tight connectors.

#### H ... Junction Box

Listed for eight #12AWG (four in, four out) 90°C conductors feed through branch wiring. 1/2" and two 3/4" pry outs. Positioned to allow straight conduit runs. Access to junction box by removing reflector.

#### I ... Socket Rotary Lock

4 pin GX24q3/4 base with fatigue free stainless steel lamp spring ensures positive lamp retention.

#### J ... Electronic Ballast

Electronic ballast provides full light output and rated lamp life. Provides flicker free and noise free operation and starting. End of life protection is standard.

#### Labels

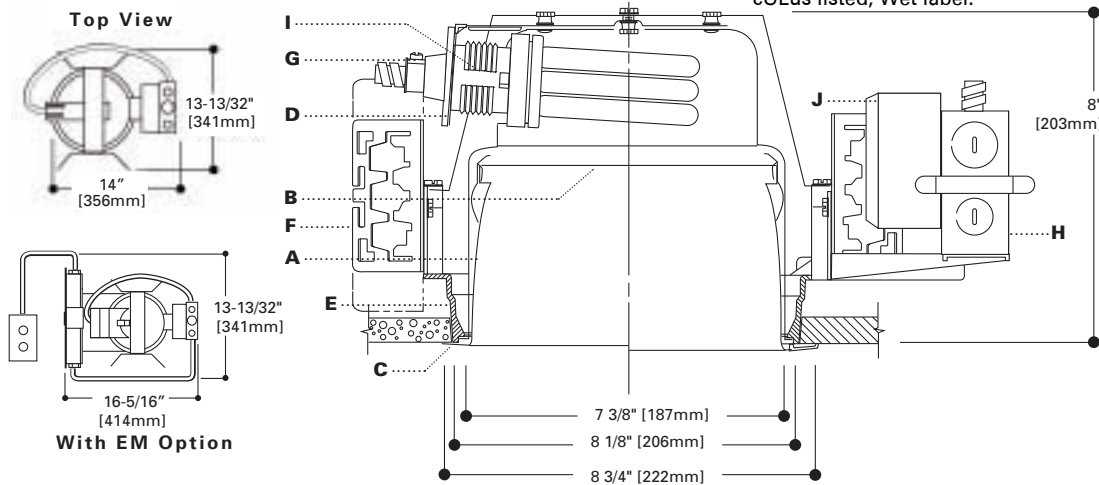
cULus listed, Wet label.



## C7242 7380

(2) 26/32/42W Triple Compact Fluorescent

### 7-3/8" LENS DOWNLIGHT

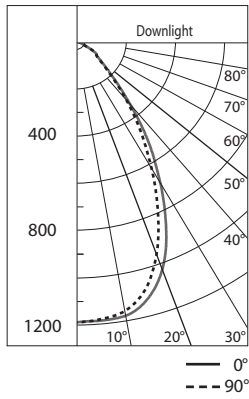


**NOTES:**  
 Accessories should be ordered separately.  
 For additional options please consult your Cooper Lighting Representative. Alzak is a registered trademark of Aluminum Company of America. Hi-Lume is a registered trademark of Lutron Co. Inc.

### ORDERING INFORMATION: Complete unit consists of housing, ballast and trim.

Housing	Ballast	Options	Trims	Finish	Lens	Options	Accessories
C7242=(2) 26W Horizontal TTT Lamp, (2) 32W Horizontal TTT Lamp, (2) 42W Horizontal TTT Lamp	E=120V - 277V 50/60 Hz Electronic 3E=347V 50/60 Hz Electronic 1D26=26W 120V Dimming, Lutron® Compact SE 1D32=32W 120V Dimming, Lutron® Compact SE 1D42=42W 120V Dimming, Lutron® Compact SE 2D26=26W 277V Dimming, Lutron® Compact SE 2D32=32W 277V Dimming, Lutron® Compact SE 2D42=42W 277V Dimming, Lutron® Compact SE EDR26=DeRated Wattage Label, 26W EDR32=DeRated Wattage Label, 32W	CP=Chicago Plenum option 2C=(2) Ballasts for Hi-Low Switching 2CMS=2 Circuit Master Satellite (2 housings, order 2 trims) EM=Emergency module with remote test switch	7380= Reflector, Polymer Trim Ring, White 7381=Reflector, Self Flanged	LI=Low Irdescent Clear H=Haze S=Straw WH=Wheat Haze WMH=Warm Haze W=White BB=Black Baffle (7380 only) WB=White Baffle (7380 only)	1=Prismatic Acrylic 2=Diffuse Acrylic 3=Clear Polycarbonate 1G=Prismatic Glass 2G=Diffuse Glass 3G=Clear Glass 4G=Fresnel Glass	WF=White Painted Flange (Self Flanged only)	HB26=C Channel Bar Hanger, 26" Long, Pair HB50=C Channel Bar Hanger, 50" Long, Pair RMB22=Wood Joist Bar Hanger, 22" Long, Pair HSA7=Slope Adapter for 7" Aperture Housings, Specify Slope FK5=Field Installed Fuse Kit, 5 Amp

Candlepower Distribution Curve



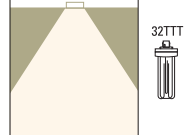
Candelas

Degree	CD
0	1168
5	1166
15	1125
25	904
35	561
45	249
55	116
65	7
75	2
85	0
90	0

Characteristics

Spacing Criteria = 1.0  
Efficiency = 30.4%

Test No. H23498  
C7242 7380L11  
Lamp = 32W TTT  
Lumens = 2400  
26W Multiplier = 0.75  
42W Multiplier = 1.33



Average Luminance

Angle	0°
45°	12350
55°	7093
65°	581
75°	271
85°	0

Cone of Light

Distance Fixture to Lighted Plane	Initial Footcandles at Nadir	Beam Diameter
6'0"	23	6'0"
7'6"	21	7'6"
8'0"	18	8'0"
10'0"	12	10'0"
13'0"	7	13'0"

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0-30	816	17.0	55.8
0-40	1147	23.9	78.5
0-60	1443	30.1	98.8
0-90	1461	30.4	100.0
90-180	0	0.0	0.0
0-180	1461	30.4	100.0

Coefficients of Utilization

Ceiling Wall % RCR	80%			70%			50%			30%			10%			0%	
	70	50	30	70	50	30	70	50	30	70	50	30	70	50	30	0	
Zonal cavity method -- floor reflectance = 20%																	
0	36	36	36	35	35	35	34	34	34	32	32	32	31	31	31	30	
1	34	33	33	32	34	33	32	31	31	31	30	30	30	29	29	29	28
2	32	31	29	28	32	30	29	28	29	28	27	28	27	27	27	26	25
3	30	28	26	25	30	28	26	25	27	26	24	26	25	24	25	24	23
4	29	26	24	22	28	26	24	22	25	23	22	24	23	22	24	22	21
5	27	24	22	20	26	24	22	20	23	21	20	22	21	20	22	21	19
6	25	22	20	19	25	22	20	18	21	20	18	21	19	18	21	19	18
7	24	21	18	17	23	20	18	17	20	18	17	20	18	17	19	18	17
8	22	19	17	16	22	19	17	16	19	17	16	18	17	16	18	17	15
9	21	18	16	15	21	18	16	14	17	16	14	17	16	14	17	15	14
10	20	17	15	13	20	17	15	13	16	15	13	16	15	13	16	14	13