

GYM AMERICA

UNIT 5 STATE STREET BUSINESS PARK

TAX ID# L-12-21-310-005

5555 Hines Drive, Pittsfield Township

SITE PLAN AMENDMENT

PITTSFIELD TOWNSHIP, MICHIGAN

ABBREVIATIONS

A	A.F.F. AC. A/C	ABOVE FINISH FLOOR ACRE AIR CONDITION
B	B/C B.F.F. BLDG.	BOTTOM OF CURB BELOW FINISH FLOOR BUILDING
C	CB C.O. CONC. C.J.	CATCH BASIN CLEAN OUT CONCRETE CONTROL JOINT
D	DIA. D.I.	DIAMETER DUCTILE IRON
E	EA. ELEC. EL./ ELEV. EXIST./ EX.	EACH ELECTRIC ELEVATION EXISTING
F	FT. F.F. F.H.	FEET FINISH FLOOR FIRE HYDRANT
G	GA. GALV.	GAUGE GALVANIZED
H	HT. H.P. H.M. HORIZ.	HEIGHT HIGH POINT HOLLOW METAL HORIZONTAL
I	I.D. INV.	INSIDE DIAMETER INVERT
J	JT.	JOINT
L	L.L. L.P.	LIVE LOAD LOW POINT
M	MH MAS. M.O. MAX. MIL. MIN. MTD	MANHOLE MASONRY MASONRY OPENING MAXIMUM MILLIMETER MINIMUM MOUNTED
N	NOM. NO.	NOMINAL NUMBER
O	O.C. O.D. O.H. OE OTE	ON CENTER OUTSIDE DIAMETER OVERHEAD OVERHEAD ELECTRIC OVERHEAD TELEPHONE & ELECTRIC
P	PSF PSI PEMB	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PRE-ENGINEERED METAL BUILDING
R	RAD. R.O.W. RTU	RADIUS RIGHT OF WAY ROOF TOP UNIT
S	SAN. SCH. S.P.A. SQ. FT./ ST. MH	SANITARY SCHEDULE SITE PLAN APPROVAL S.F. SQUARE FEET STORM MANHOLE
T	TV&S T/C TYP.	TAPPING VALVE & SLEEVE TOP OF CURB TYPICAL
U	UE UTE U.P.	UNDERGROUND ELECTRICAL UNDERGROUND TELEPHONE & ELECTRICAL UTILITY POLE
V	VERT.	VERTICAL
W	W/ W/O	WITH WITHOUT

LEGAL DESCRIPTION

PARCEL ID # L-12-21-310-005
 Unit #5 of the State Street Business Park, A site condominium located in Section 21, T3S, R6E, Pittsfield Township, Washtenaw County, Michigan as recorded in Liber 3117, Pages 254-302, Washtenaw County Records.

UTILITY NOTES

PUBLIC UTILITIES
 The existing utilities shown on the drawings represent the best information available as obtained from existing records and by field surveys. This information does not relieve the contractor of the responsibility to contact Miss Dig or to satisfy himself as to the accuracy of the location shown. These documents were prepared using the best information available from existing documents and records. The contractor/project manager/subcontractor/superintendent is responsible for verifying the existing conditions on the site, and shall notify the engineer of any discrepancies prior to proceeding with work.

SEWER & WATER Utilities Department Pittsfield Township 6201 W. Michigan Ave. Ann Arbor, Michigan 48108 Office (734) 822-2110	ELECTRIC DTE Energy 982 Broadway Ave. Ann Arbor, Michigan 48105 Service Planning (734) 332-3300
TELEPHONE AT&T 5500 South Maple Road Ann Arbor, Michigan 48103 (734) 996-5351	GAS DTE Energy 3150 East Michigan Avenue Ypsilanti, Michigan 48198 (734) 485-8230
PIPELINE Wolverine Pipeline Co. 8075 Creekside Dr., Suite 210 Portage, Michigan 49024 (269) 323-2491 John_Gurrola@wplco.com	

For protection of underground utilities, the contractor shall notify the Miss Dig Utility Location Service a minimum of 72 hours prior to excavation. The improvements covered by these plans shall be done in accordance with Pittsfield Township current standard specifications and supplemental specifications.

GENERAL INFORMATION

OWNER:	Hines Dr. LLC 1342 Darlington Cir. Soline, Michigan 48176
PROPERTY LOCATION:	5555 Hines Drive Ann Arbor, Michigan 48108
PROJECT ENGINEER:	Vanston/O'Brien, Inc. 2375 Bishop Circle West Dexter, Michigan 48130 Ph: (734) 424-0661 Fax: (734) 424-0677
APPLICANT/DEVELOPER:	Vanston/O'Brien, Inc. 2375 Bishop Circle West Dexter, Michigan 48130 Ph: (734) 424-0661 Fax: (734) 424-0677

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A 18,713 SF INDOOR RECREATION FACILITY, WITH 14,350 SF OF GYMNASIUM. THE SITE CONTAINS AN EXISTING STORM WATER BASIN FOR THE BUSINESS PARK. BUILDING SHALL BE LOCATED ADJACENT TO THE CORNER OF STATE STREET AND PAYER ROADS WITH ACCESS TO THE PARKING LOT FROM HINES DRIVE.

SITE INFORMATION

ZONING: PUD, Uses Permitted under Section 37.02 of the Business Park Zoning, and Indoor Recreation and Amusement uses Specific to Unit 5.

LOT AREA: 3.89 Acres (173368.8 SF)
NET LOT AREA: 3.32 Acres (144579.4 SF)
PROPOSED BUILDING AREA: 18,713 Square Feet
PROPOSED FLOOR AREA: 18,713 Square Feet
PROPOSED IMPERVIOUS AREA: 62,261 Square Feet

	REQUIRED	PROPOSED
MIN. LOT AREA	1 ACRE	3.89 ACRES
MIN. LOT WIDTH	150 ft.	725.59 ft.
MAX. NET LOT COVERAGE	30%	12.9%
MAX. FLOOR AREA RATIO	60%	12.9%
IMPERVIOUS AREA RATIO	60%	43.1%
MAX. BUILDING HEIGHT	45 ft. max., 2 stories	25.0 ft., 1 story
FRONT SETBACK	25 ft.	25 ft.
SIDE SETBACK	20 ft. min.	20 ft.

PARKING:
REQUIRED:
 INDOOR RECREATIONAL USES: 1 space per 1000 sf; 1 space per employee
 max shift: 16,600 SF/1000 = 17 spaces; 10 emp/1 = 10 spaces
 FITNESS/DANCE AREA: 1 space per 200 sf: 1400 SF/200 = 7 spaces
 ASSEMBLY VEIWING AREA: 1 space per 2 maximum occupants:
 92 Max Occ./2 = 46 spaces
 TOTAL REQUIRED: 80
PROVIDED: 84 Spaces Provided including (4) barrier-free spaces
 (20 Spaces Deferred)

SOILS DATA:
 BbB: Blount loam 2 to 6 percent slopes.

Soils test pits were dug in the location of the proposed building to the depth of the backhoe approx. 10 ft. Soils consisted on 3 to 5 feet of light brown sandy clay fill, then light brown dense sandy clay soil to bottom. No ground water was encountered.

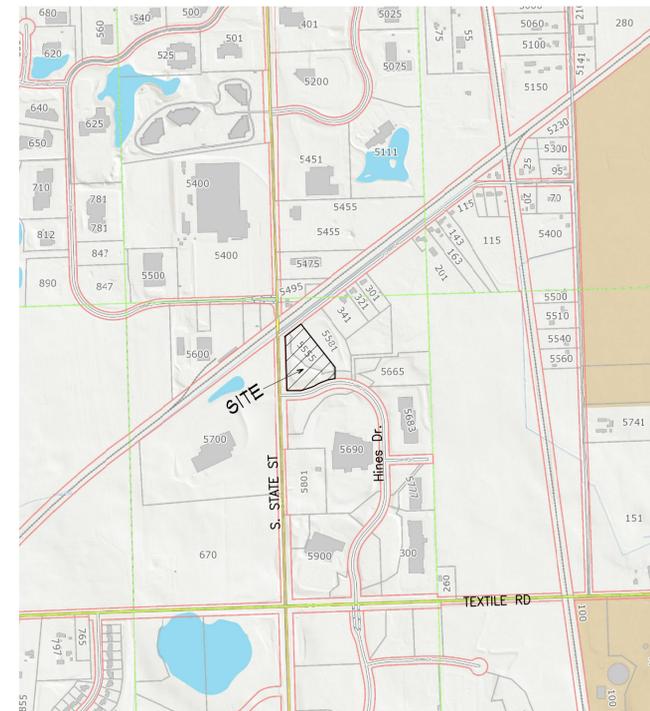
WETLANDS & NATURAL FEATURES:
 There are no wetlands located on site.

There are no "natural features" to be disturbed on this site. This site has been prepared for construction and is covered in temporary grass and weeds with little to no topsoil. There is a functioning wet detention basin on site that shall be used as designed and constructed. A sediment basin forebay will be installed to collect and treat storm water runoff from the proposed parking lot.

BENCHMARKS:
 #1 R.R. SPIKE ON W. SIDE OF UTILITY POLE LOCATED AT THE W
 EDGE OF THE PROPERTY ON STATE STREET
 ELEV=829.56 (USGS NAVD 88 DATUM)

GENERAL NOTES:

- All site work shall meet all applicable codes, laws, and regulations, including ADA Accessibility Guidelines (ADAAG) and Michigan Barrier-Free Design Requirements.
- Provide signs per Michigan Barrier-Free Requirements at all handicapped spaces.
- The Contractor shall call Miss Dig utility location service at least 72 hours prior to any excavation.



VICINITY MAP
 SCALE: NONE

DRAWING INDEX:

C-1	TITLE SHEET
C-2	SITE PLAN
C-3	GRADING PLAN
C-4	LANDSCAPE PLAN
C-5	DRAINAGE AREA PLAN
C-6	LIGHTING PLAN
C-7	DETAILS
C-8	SOIL EROSION & SEDIMENTATION PLAN
C-9	FIRE ACCESS PLAN
C-10	BUILDING FLOOR PLAN
C-11	BUILDING ELEVATIONS



GYM AMERICA
 5555 Hines Drive
 Pittsfield Township, Michigan

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ISSUED FOR: DATE:
 AMEND.SITE PLAN 8-18-14

DRAWN BY: GAH
 JOB NO.:

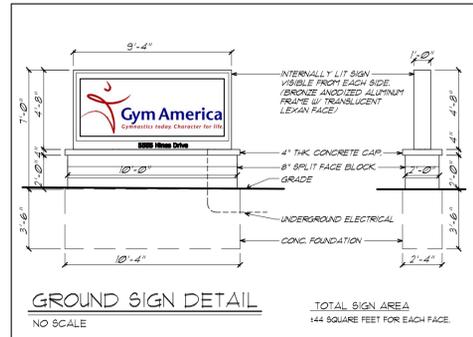
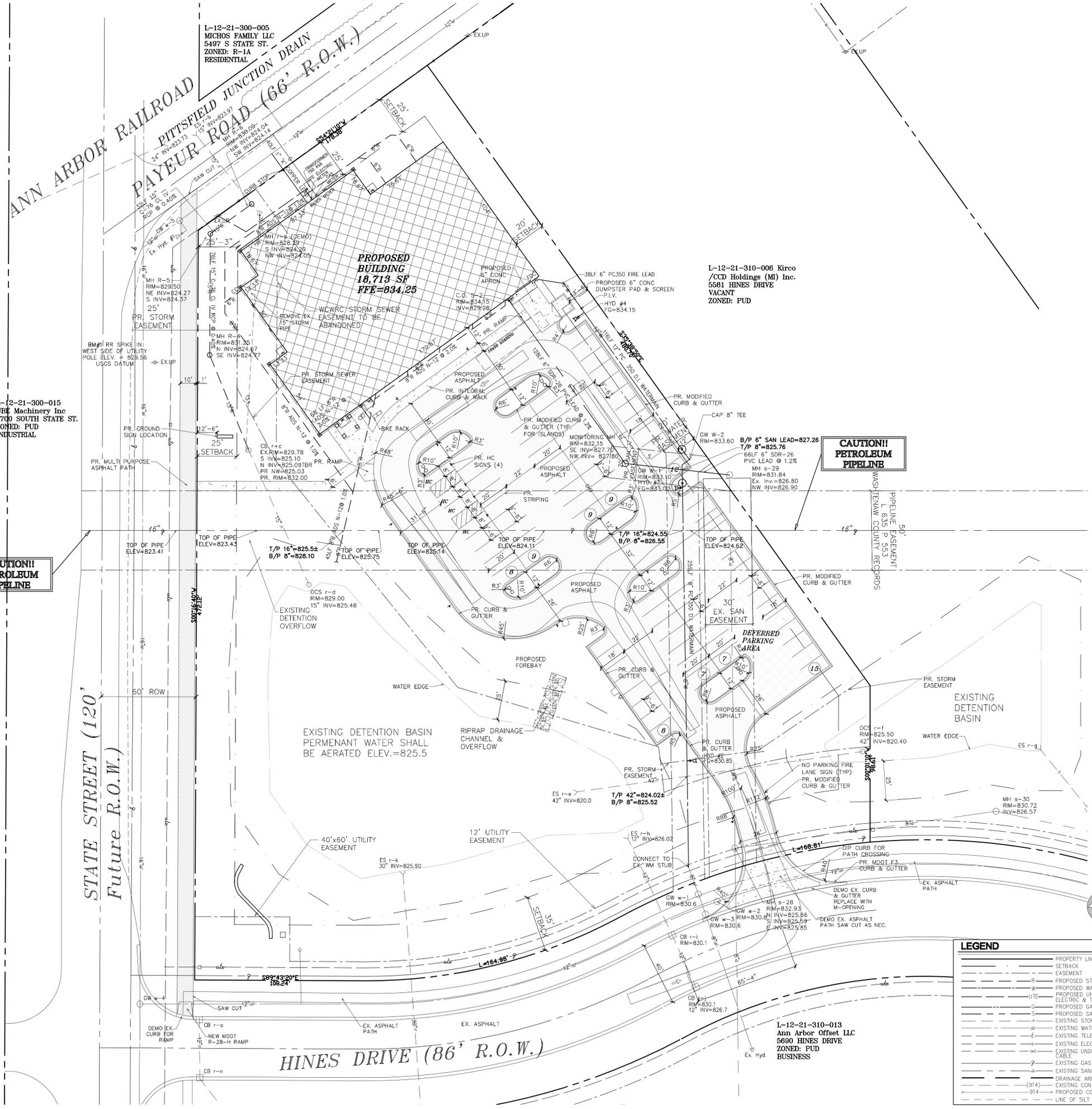
TITLE SHEET

UNIT 5 STATE STREET
 BUSINESS PARK CSPA 13-04
 SHEET NO.

C-1

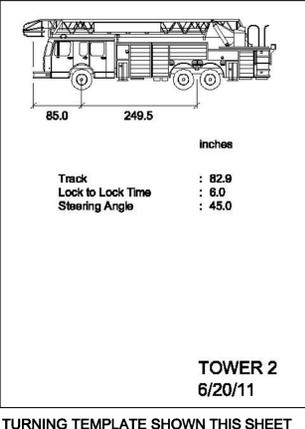


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GENERAL NOTES:

- ANY DAMAGE TO HINES DRIVE DURING EITHER THE REMOVAL OF THE EXISTING CURB AND GUTTER OR THE CONSTRUCTION OF THE PROJECT, SHALL REQUIRE, AT A MINIMUM, THE CONTRACTOR TO MILL OFF THE ENTIRE TRAVEL LANE OF WHERE THE DAMAGE OCCURRED AND RESURFACE THE ROADWAY'S 1.5" HMA TOP COURSE AT THE DIRECTION OF THE WCRC.
- NO REGULATORY SIGNS OR PAVEMENT MARKINGS PROPOSED.
- NO PARKING FIRE LANE SIGNS SHALL BE POSTED ON ENTRANCE DRIVE AND ADJACENT TO THE DROP OFF LANE ALONG THE BUILDING. NO STOPPING/STANDING/PARKING SIGNS SHALL BE POSTED OPPOSITE THE DROP OFF LANE AND ALONG THE CENTER ACCESS AISLE FOR EMERGENCY ACCESS.



SITE PLAN
 SCALE: 1" = 30'-0"

DESIGNERS
Vanston/O'Brien, Inc.
BUILDERS

2375 Bishop Circle West
 Dorr, MI 48130
 Tel: (734) 424-0661
 Fax: (734) 424-0677
 e-mail: sales@vanston.com www.vanston.com

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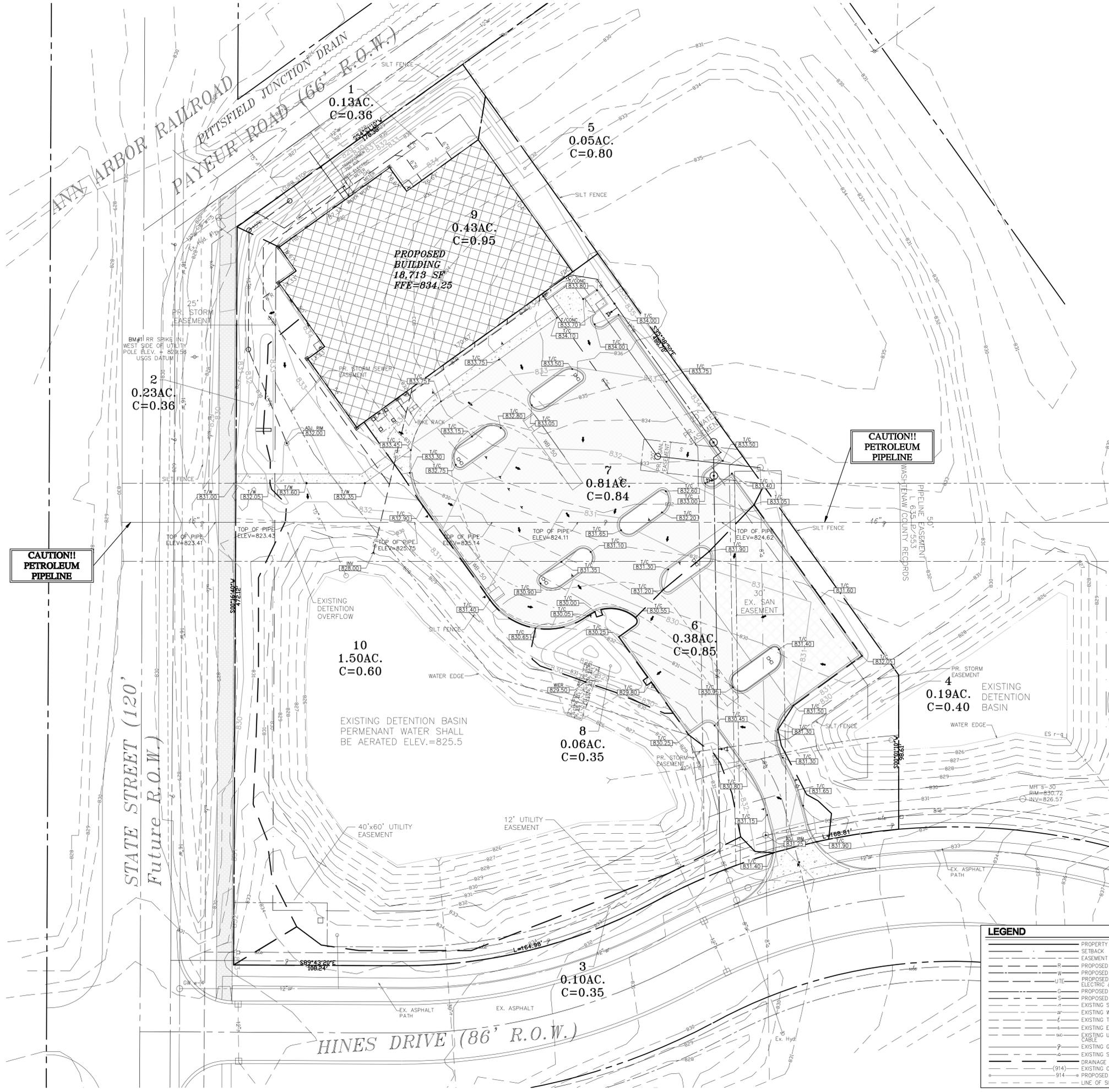
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 JOB NO.:

SITE PLAN

SHEET NO.

C-2



WASHTENAW COUNTY FOREBAY BASIN VOLUME CALCULATIONS FOR PARKING LOT RUNOFF

ACRES	ON-SITE
Impervious Area (0.95)	1.01
Pervious Area (0.25)	0.18
Bankfull Basin(1.0)	0.00
ALLOWABLE RELEASE RATE =	0.15 CFS/AC
$Q_{allowable} = ALLOWABLE RELEASE RATE \times A =$	0.18 CFS

100 YEAR FLOOD DETENTION VOLUME REQUIRED
 $Q_0 = Q_p / (C \times A) = 0.18 \text{ CFS/AC-IMP.}$
 $T_{100} = -25 + (10312.5 / Q_0)^{0.5} = 216.3 \text{ MIN.}$
 $V_{100} = (16500 \times T_{100}) / (25 + T_{100}) - (40 \times Q_p \times T_{100}) = 13258 \text{ CF/AC-IMP.}$
 $V_{100} = 13330 \text{ CF}$

BANKFULL FLOOD VOLUME
 $V_{BF} = 8170 \times A \times C = 8215 \text{ CF}$

FIRST FLUSH VOLUME
 $V_{FF} = 1815 \times A \times C = 8215 \text{ CF}$

STORAGE PROVIDED FOREBAY

ELEV.	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)
830	2182	1	1,629	2,598
829	1075	1	741	969
828	407	1	228	228
827	49	0	0	0

Drainage Area	AREA(ac)	Impervious(ac)	Pervious(ac)	Perm. Water (ac)	C	Value
1	0.13	0.00	0.13	0.00	0.36	0.36
2	0.23	0.00	0.23	0.00	0.36	0.36
Undetained Runoff Total	0.36	0.00	0.36	0.00	0.36	0.36
3	0.10	0.00	0.10	0.00	0.35	0.35
4	0.19	0.00	0.17	0.01	0.40	0.40
5	0.05	0.00	0.05	0.00	0.35	0.35
6	0.38	0.33	0.05	0.00	0.88	0.88
7	0.81	0.67	0.14	0.00	0.84	0.84
8	0.06	0.00	0.06	0.00	0.35	0.35
9	0.43	0.43	0.00	0.00	0.95	0.95
10	1.50	0.01	0.91	0.58	0.60	0.60
Detained Runoff Total	3.52	1.43	1.50	0.59	0.70	0.70
UNIT 5 TOTAL	3.88	1.44	1.86	0.59	0.67	0.67

WASHTENAW COUNTY DETENTION BASIN VOLUME CALCULATIONS UNITS 5-9 ON-SITE

$C = 0.624$
 $A = 16.93 \text{ ACRES}$

ALLOWABLE RELEASE RATE = 0.15 CFS/AC
 $Q_{allowable} = ALLOWABLE RELEASE RATE \times A = 2.54 \text{ CFS}$

100 YEAR FLOOD DETENTION VOLUME REQUIRED FOR UNITS 5, 6, 7, 8 & 9
 $Q_0 = Q_p / (C \times A) = 0.24 \text{ CFS/AC-IMP.}$
 $T_{100} = -25 + (10312.5 / Q_0)^{0.5} = 182.0 \text{ MIN.}$
 $V_{100} = (16500 \times T_{100}) / (25 + T_{100}) - (40 \times Q_p \times T_{100}) = 12756 \text{ CF/AC-IMP.}$
 $V_{100} = 134623 \text{ CF}$

WASHTENAW COUNTY DETENTION BASIN VOLUME CALCULATIONS OVERALL ON-SITE

$C = 0.577$
 $A = 29.79 \text{ ACRES}$

ALLOWABLE RELEASE RATE = 0.15 CFS/AC
 $Q_{allowable} = ALLOWABLE RELEASE RATE \times A = 4.47 \text{ CFS}$

100 YEAR FLOOD DETENTION VOLUME REQUIRED UNITS 5-9
 16.93 AC 134,823
 RIGHT OF WAY 1.74 AC 20,901
 OFF-SITE RESIDENTIAL ANN ARBOR NEWS 2.4 AC 8,128
 21.07 AC 244,852
29.8 ACRES 217,759 CF REQUIRED

BANKFULL FLOOD VOLUME
 $V_{BF} = 8170 \times A \times C = 140503 \text{ CF}$

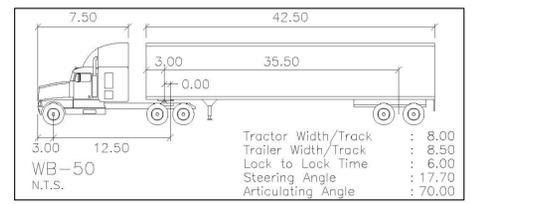
FIRST FLUSH VOLUME
 $V_{FF} = 1815 \times A \times C = 31213 \text{ CF}$

STORAGE EXISTING DETENTION BASIN(NORTH)

ELEV.	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)
830	43410	1	41,052	151,268
829	38794	1	36,624	110,177
828	34484	1	32,369	73,553
827	30284	1	28,311	41,164
826	26237	0.5	12,853	12,853
825.5	25086	0	0	0

STORAGE EXISTING DETENTION BASIN(SOUTH)

ELEV.	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)
830	49755	1	48,653	166,383
829	43551	1	40,558	119,730
828	37565	1	34,963	79,172
827	32360	1	30,441	44,209
826	28222	0.5	13,768	13,768
825.5	26550	0	0	0



TURNING TEMPLATE SHOWN THIS SHEET

GENERAL NOTES:
 1. ANY DAMAGE TO HINES DRIVE DURING EITHER THE REMOVAL OF THE EXISTING CURB AND GUTTER OR THE CONSTRUCTION OF THE PROJECT, SHALL REQUIRE, AT A MINIMUM, THE CONTRACTOR TO MILL OFF THE ENTIRE TRAVEL LANE OF WHERE THE DAMAGE OCCURED AND RESURFACE THE ROADWAY'S 1.5" HMA TOP COURSE AT THE DIRECTION OF THE WRC.

GRADING PLAN
 SCALE: 1" = 30'-0"

LEGEND

—	PROPERTY LINE	⊕	EXISTING WALL MOUNTED LIGHT FIXTURE	▭	EXISTING BUILDING
- - -	EASEMENT	⊕	NEW BUILDING MOUNTED LIGHTING	▨	EXISTING GRAVEL SURFACE
W	PROPOSED STORM	⊕	NEW POLE-MOUNTED LIGHT	▨	EXISTING ASPHALT PAVING
W	PROPOSED WATER	⊕	EXISTING UTILITY POLE	▨	EXISTING ASPHALT PAVING TO BE REMOVED
U	PROPOSED UNDERGROUND UTILITY	⊕	EXISTING MANHOLE	⊕	PROPOSED BUILDING
G	PROPOSED GAS	⊕	EXISTING CLEAN OUT	⊕	PROPOSED ASPHALT PAVING
S	PROPOSED SANITARY	⊕	NEW CATCH BASIN	⊕	PROPOSED CONCRETE
ST	EXISTING STORM	⊕	EXISTING FIRE HYDRANT		
W	EXISTING WATER	⊕	NEW FIRE HYDRANT		
T	EXISTING TELEPHONE	⊕	EXISTING ELEVATION		
E	EXISTING ELECTRIC	⊕	PROPOSED ELEVATION		
U	EXISTING UNDERGROUND CABLE	⊕	PROPOSED DRAINAGE		
G	EXISTING GAS	⊕			
S	EXISTING SANITARY	⊕			
D	DRAINAGE AREA LIMITS	⊕			
914	EXISTING CONTOUR	⊕			
914	PROPOSED CONTOUR	⊕			
---	LINE OF SILT FENCE	⊕			

Vanston/O'Brien, Inc.
 DESIGNERS
 BUILDERS

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 Tel: (734) 424-0661
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ISSUED FOR: DATE:
 AMEND. SITE PLAN 8-18-14

DRAWN BY: GAH
 JOB NO.: -

GRADING PLAN

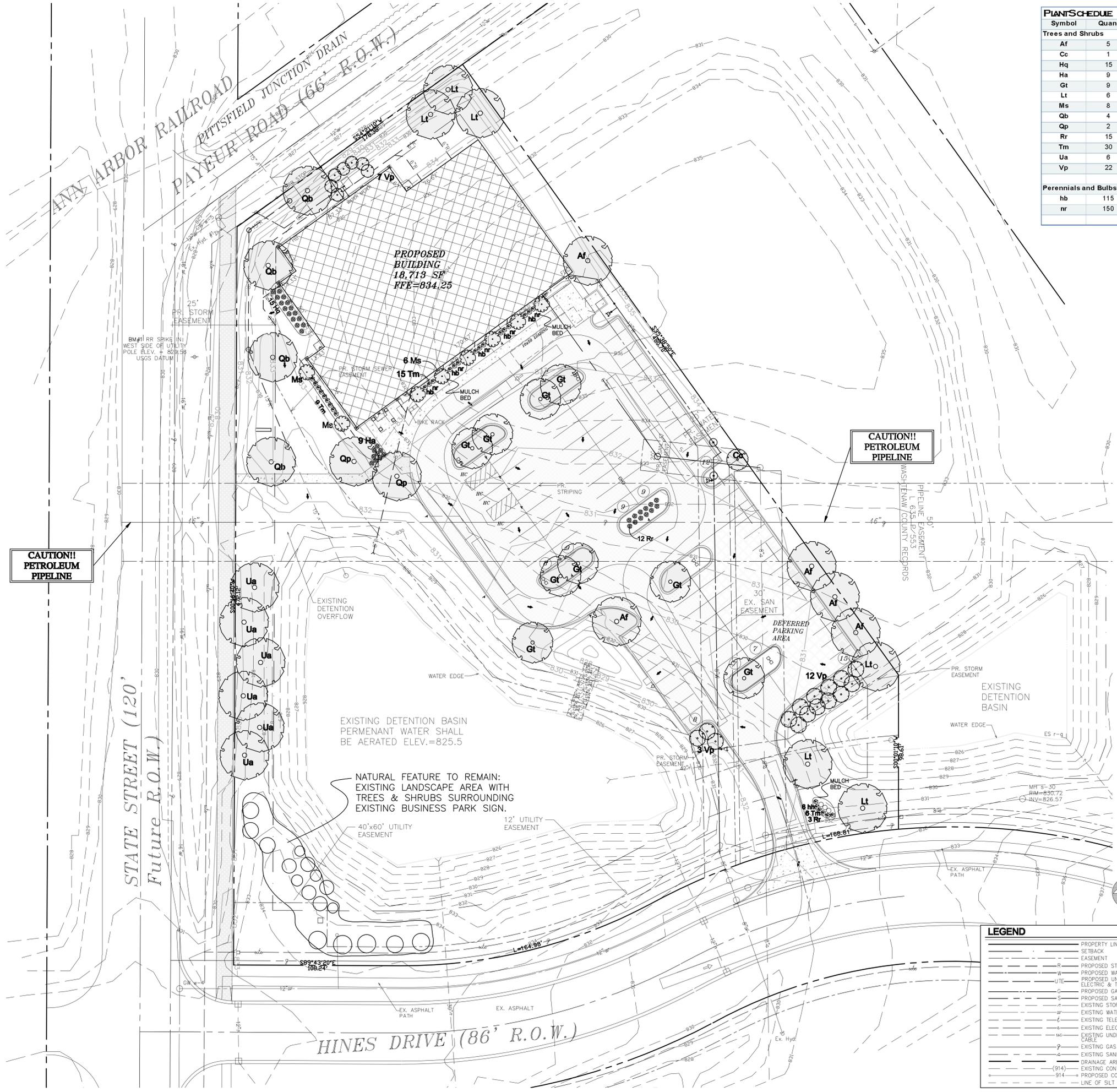
SHEET NO.
C-3

Symbol	Quan.	Botanical Name	Common Name	Size	Root
Trees and Shrubs					
Af	5	<i>Acer x freemani</i> 'Autumn Blaze'	Autumn Blaze Maple	2.5" Cal.	B&B
Cc	1	<i>Cercis canadensis</i>	Red Bud	2"	Multistem
Hq	15	<i>Hydrangea quercifolia</i> 'Snowflake'	Snowflake Oakleaf Hydrangea	5 Gal.	Cont.
Ha	9	<i>Hydrangea</i> sp. 'Annabelle'	Annabelle Hydrangea	5 Gal.	Cont.
Gt	9	<i>Gleditsia tricanthos</i> 'Impcole'	Imperial Honeylocust	2.5" Cal.	B&B
Lt	6	<i>Liriodendron tulipifera</i>	Tulip Tree	2.5" Cal.	B&B
Ms	8	<i>Magnolia stellata</i> 'Royal Star'	Star Magnolia	5' - 6' Ht.	B&B
Qb	4	<i>Quercus borealis</i>	Northern Red Oak	2.5" Cal.	B&B
Qp	2	<i>Quercus palustris</i>	Pin Oak	2.5" Cal.	B&B
Rr	15	<i>Rosa</i> sp. 'Double Knockout'	Double Knockout Rose	1 Gal.	Cont.
Tm	30	<i>Taxus media</i> 'Tautonii'	Taunton Yew	24"	B&B
Ua	6	<i>Ulmus Americana</i> 'Valley Forge'	Valley Forge Elm	2.5" Cal.	B&B
Vp	22	<i>Viburnum plicatum tomentosum</i> 'Shasta'	Shasta Doublefile Viburnum	3'-4' Ht.	Cont.
Perennials and Bulbs					
hb	115	<i>Hemerocallis</i> x 'Little Business'	Daylilies	1 Gal.	Cont.
nr	150	<i>Narcissus</i> 'Rijnveld's Early Sensation'	Daffodils	Top Sz.	Bulb

Gym America - LANDSCAPE REQUIREMENTS		
	REQUIRED	PROPOSED
PARKING (86 Spaces)		
1 Tree per 8 Parking Spaces	11 Trees	11 Trees
PARKING LOT PERIMETER TREES (290 l.f.)		
1 Tree per 40 Lineal Feet	7 Trees	7 Trees
FRONTAGE GREENBELT (650 l.f.) State St. & Payeur Rd.		
1 Tree per 30 Lineal Feet	22 Trees	14 Trees
		8 existing
FRONTAGE GREENBELT (442 l.f.) Hines Dr.		
1 Tree per 50 Lineal Feet - Internal Street	9 Trees	9 existing
EXISTING GREENBELT at Hines Dr. & State St.	-9 Evergreen	
	-8 Trees	
Totals	32 Trees	32 Trees

Hedberg Associates, LLC
 Landscape Architecture
 Reclamation • Land Planning
 Green Building Solutions
 734-747-7234

- Landscape Notes*
- All plant material shall meet current American Association of Nurserymen, Inc. (AAN) standard for nursery stock (ANSI Z601 - 1913).
 - Landscape installation shall be in accordance with the American Association of Nursery standards and with Pittsfield Township's landscape requirements.
 - Planting schedules: 1) Deciduous material shall be planted from March 15 for spring planting and from October 1 until the ground freezes for fall planting; 2) Evergreen material shall be planted from March 1 through May 31 for spring plantings and from August 1 through September 30 for fall planting.
 - Mulch plant beds, individual tree and shrub planting pits uniform depth of 3 inches.
 - Provide weed mat for greenbelt and foundation plantings.
 - All planting beds are to be edged. Recommended either "Rijerson Steel" edging or "Black Diamond" plastic edging.
 - All areas with stone cover shall have weed mat.
 - All landscaping to be continuously maintained.
 - All site improvements detailed on this plan are to be completed prior to issuance of final certificate of occupancy.
 - All construction to conform to Pittsfield Township's latest applicable regulations.
 - ROW areas to be seeded or sod.
 - Tree protection consists on:
 - Yellow ribbon barriers for large areas not disturbed by construction.
 - Stakes 10' on center and wood snow fence around individual and groups of individual trees.
 - Trees to be removed will be tagged with red ribbon. The barrier or fence surrounding the tree or group of trees shall be located no closer to the tree than the tree's drip line. If this is not possible, the barrier shall be no closer than 6 feet from the trunk of the tree or group of trees.
 - There will be no outside storage on site.
 - Seed Mix:
 - Temporary planting mixture for erosion control:
 - Seed Oats 20 pounds per acre
 - Perennial Ryegrass 10 pounds per acre
 - Timothy 2 pounds per acre
 - Permanent planting mixture on all disturbed areas:
 - Scaldis Hard Fescue 12 pounds per acre
 - Danson's Creeping Red Fescue 6 pounds per acre
 - Perennial Ryegrass 20 pounds per acre
 - Buffalo Grass 20 pounds per acre
 - Creeping Bent 20 pounds per acre
 - Little Blue Stem 20 pounds per acre
 - Sheep Fescue 15 pounds per acre
 - Existing soil nutrient levels shall be tested by an independent soil testing laboratory before fertilizers are applied.
 - See sheet C-1 for planting details.

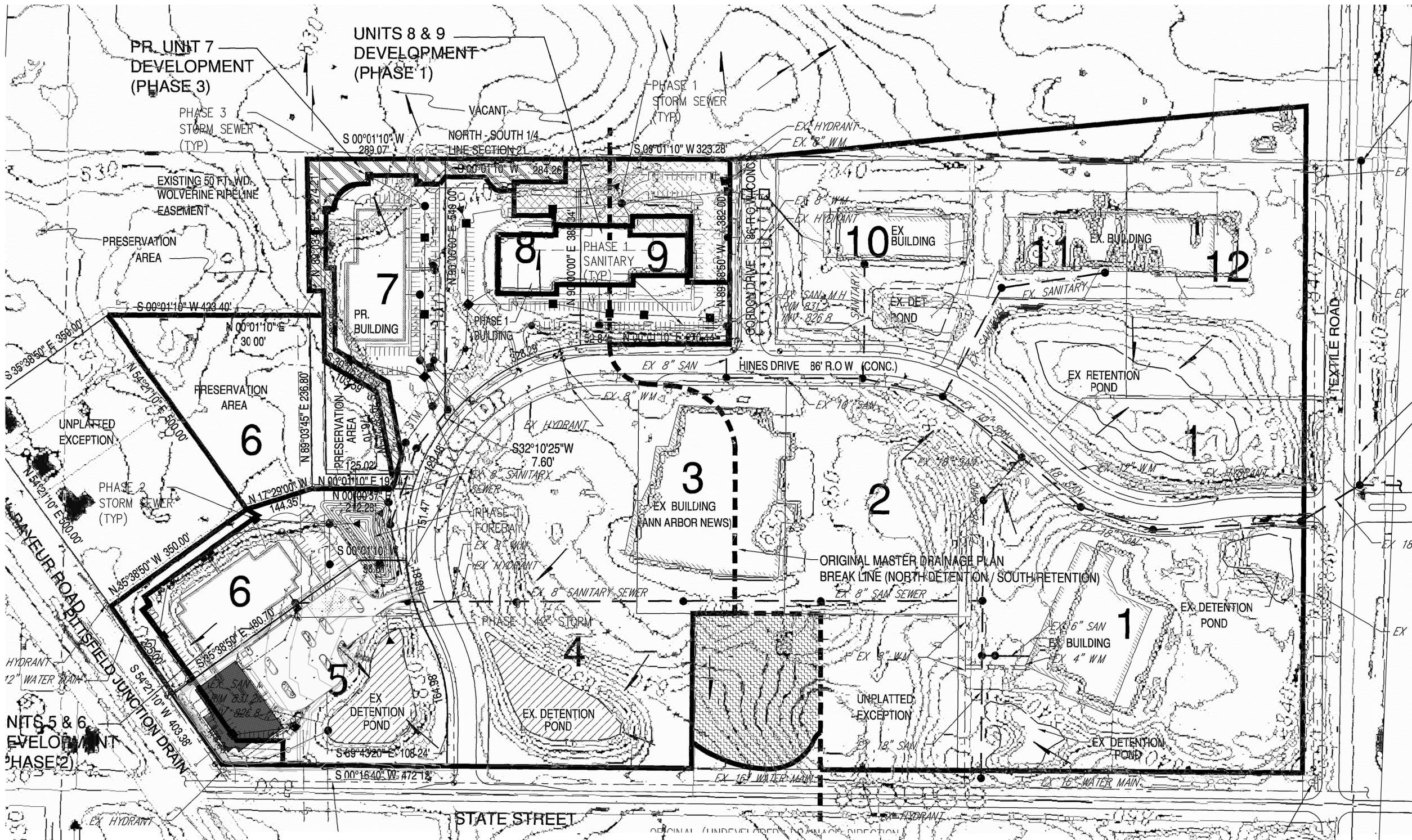


**CAUTION!!
PETROLEUM
PIPELINE**

**CAUTION!!
PETROLEUM
PIPELINE**

LANDSCAPE PLAN
SCALE: 1" = 30'-0"

LEGEND			
—	PROPERTY LINE	—	EXISTING BUILDING
—	EASEMENT	—	EXISTING GRAVEL SURFACE
R	PROPOSED STORM	—	EXISTING ASPHALT PAVING
W	PROPOSED WATER	—	EXISTING ASPHALT PAVING TO BE REMOVED
UTE	PROPOSED UNDERGROUND ELECTRIC & TELEPHONE	—	PROPOSED BUILDING
C	PROPOSED GAS	—	PROPOSED ASPHALT PAVING
S	PROPOSED SANITARY	—	PROPOSED CONCRETE
—	EXISTING STORM	—	
—	EXISTING WATER	—	
—	EXISTING TELEPHONE	—	
—	EXISTING ELECTRIC	—	
—	EXISTING UNDERGROUND CABLE	—	
—	EXISTING GAS	—	
—	EXISTING SANITARY	—	
—	DRAINAGE AREA LIMITS	—	
—	EXISTING CONTOUR	—	
—	PROPOSED CONTOUR	—	
—	LINE OF SILT FENCE	—	
—	EXISTING WALL MOUNTED LIGHT FIXTURE	—	
—	NEW BUILDING MOUNTED LIGHTING	—	
—	NEW POLE-MOUNTED LIGHT	—	
—	EXISTING UTILITY POLE	—	
—	EXISTING MANHOLE	—	
—	EXISTING CLEAN OUT	—	
—	NEW CATCH BASIN	—	
—	EXISTING FIRE HYDRANT	—	
—	NEW FIRE HYDRANT	—	
—	EXISTING ELEVATION	—	
—	PROPOSED ELEVATION	—	
—	PROPOSED DRAINAGE	—	



COMPOSITE C VALUE			
MATERIAL	C VALUE	AMOUNT (FT ²)	AMOUNT (AC)
UNIT 3 & 4	0.48	397287	9.12
UNIT 8 & 9	0.633	180714	4.15
UNIT 7	0.684	146797	3.37
UNIT 7 (preserve) not counted	0.35	24829	0.57
HINES DR. ROW	0.9	75794	1.74
OFF-SITE RESIDENTIAL	0.35	87120	2.00
ABOVE PER MICKALUCH & ASSOC. PREVIOUS DESIGN OF UNITS (8-9)			
ALLOWED UNIT 6			
Direct Runoff	0.35	18007	0.31
POND	1	6672	0.15
IMPERVIOUS	0.95	71500	1.64
PERVIOUS	0.35	144401	3.31
PROPOSED UNIT 6			
Direct Runoff	0.36	15765	0.36
POND	1	25675	0.59
IMPERVIOUS	0.95	62407	1.43
PERVIOUS	0.35	65380	1.50

Totals: 1297499 29.79
 Then, a composite c value for all materials present on site is: 0.577

A MICKALUCH & ASSOC. design error was found during our review which accounted for a 0.57 acre preservation area that was used to calculate the C-factor, but was not included in the detention calculation on M&A plan sheet C-16. The proposed 29.9 acre is:

UNITS 5,6,7,8&9	Totals:	737317	16.93
			0.624
Then, a composite c value for all materials present on site is:			

	MSA	UNIT 7	MSA AND VIO	UNIT 8 & 9	UNIT 5	UNIT 6	5 & 6
UNDERTAINED	337272	78783	24829	12197	18785	11079	337272
PRESERVATION (0.35)	111079						111079
IMPERVIOUS (0.95)	145026	65041		95287	81145	51329	132474
IMPERVIOUS (0.9)	123388	81869		85427	92288	91588	134169
POND (1.0)	36381			24829	6672		33347
TOTAL DETAINED	408875	146850	24829	188714	168428	24829	410007
ACRE	9.41	3.37	0.57	4.15	5.52		9.41
C-FACTOR	0.579	0.684	0.350	0.634	0.670	0.566	0.589
	MSA		0.613	Corrected C-factor			0.624

DRAINAGE NARRATIVE

STORM WATER DETENTION FOR THIS SITE WAS APPROVED AND CONSTRUCTED AS PART OF CSPA 06-06 PITTSFIELD TOWNSHIP SITE PLAN REVIEW. PLANS WERE PREPARED BY MICKALUCH AND ASSOCIATES INC. REVISION DATE 9-6-07. REFERENCE SHEETS C-14 AND C-16 HAVE BEEN ATTACHED. PHASE 1 OF THIS PLAN, LOTS 8 & 9 AND FOREBAY BASIN CONSTRUCTION, HAVE BEEN COMPLETED. LOTS 5 & 6, PHASE 2, HAS NOW BEEN SPLIT INTO TWO PROJECTS, UNIT 6 WILL BE COMPLETED AS A FUTURE PHASE. LOT 7, PHASE 3, HAS NOT BEEN COMPLETED. UNIT 5 DRAINAGE AREA AND COEFFICIENT WERE COMBINED IN PHASE 2 WITH UNIT 6 PER THE PRIOR DEVELOPMENT. DRAINAGE FROM UNITS 4 & 5 AND HINES DR. R.O.W. AND 2 ACRES OF OFFSITE AREA ARE ALSO DETAINED IN THIS SYSTEM AND WILL CARRY THROUGH IN CALCULATIONS AS PREVIOUSLY DESIGNED.

THE AREA OF 16.93 ACRES WITH A DESIGN C-FACTOR OF 0.635 (0.605 CALCULATED USING 17.5 AC) WAS USED IN THE PREVIOUS DETENTION CALCULATIONS FOR UNITS 5, 6, 7, 8, & 9. THE 17.5 ACRES INCLUDED ALL OF THE LOT AREA FOR UNITS 5, 6, 7, 8, & PART OF 9, WHEREAS THE 16.93 ACRES HAS EXCLUDED THE 0.57 ACRE PRESERVATION AREA OF UNIT 7. ALL EXISTING RUNOFF DIRECTED OFF-SITE (1.5 ACRES) AND THE PRESERVATION AREA OF UNIT 6 (2.55 ACRES) ARE INCLUDED IN THE 16.93 ACRES. EXTRA CAPACITY WAS BUILT IN TO THE DETENTION CALCULATION BY USING C=0.635, NOT THE CALCULATED C=0.605. SOME OF THIS ADDITIONAL CAPACITY IS USED BY CORRECTING THE C-FACTOR CALCULATION FOR UNIT 7 TO 0.684 BASED ON THE IMPERVIOUS DATA PROVIDED. SOME OF THE REMAINING CAPACITY SHALL BE UTILIZED BY UNIT 5 & 6 WITH THE INCREASE TO C=0.598 FROM C=0.579. SINCE UNITS 8 & 9 ARE DEVELOPED THOSE C-FACTORS SHALL REMAIN AS DESIGNED.

UNITS 5 & 6 WERE COMBINED FOR THE PURPOSE OF CALCULATING THE PREVIOUS C-FACTOR. THE PREVIOUSLY PROPOSED IMPERVIOUS DATA FOR UNITS 5 & 6 AND THE CURRENTLY PROPOSED DATA FOR LOT 5 HAS BEEN TABULATED TO DETERMINE THE DESIGN VALUE FOR UNIT 6 (5.52 ACRES AT C=0.546).

LOT 5 IS CURRENTLY DESIGNED WITH AN AREA OF 3.52 ACRES AT C=0.70 DIRECTED TO THE BASIN. A DIRECT RUNOFF OF 0.36 ACRE AT C=0.36, FOR A TOTAL OF 3.89 ACRES AT C=0.670. THE STORAGE VOLUME REQUIRED FOR THE REDESIGNED UNITS 5-9 FOR 16.93 ACRES AT C=0.624, INCLUDING THE PRESERVE AREAS AND DIRECT RUNOFF, EQUALS 134,557 CF, LESS THAN THE PREVIOUS DESIGN OF 137,489 CF. THE COMBINED C VALUE, OF THE ENTIRE DEVELOPMENT TRIBUTARY TO THIS NORTH FACILITY, WAS DESIGNED AS C=0.59 OVER 29.8 ACRES AND IS PROPOSED TO BE C=0.577 OVER 29.8 ACRES, LEAVING ADDITIONAL CAPACITY FOR FUTURE DEVELOPMENT.

THE PARKING AREA SHALL SHEET DRAIN TO THE SOUTHWEST AND ENTER THE NEWLY CONSTRUCTED FOREBAY THROUGH TWO CURB CUTS AND THE ROOF WATER WILL BE DISCHARGED DIRECTLY TO THE DETENTION BASIN VIA ROOF WATER COLLECTION SYSTEM. THE STORM SEWER DOWNSTREAM OF THE OUTLET WILL BE RELOCATED TO CONSTRUCT THE PROPOSED BUILDING. NO MODIFICATIONS ARE REQUIRED TO THE OUTLET CONTROL STRUCTURE.

DRAINAGE AREA PLAN

SCALE: 1" = 100'-0"

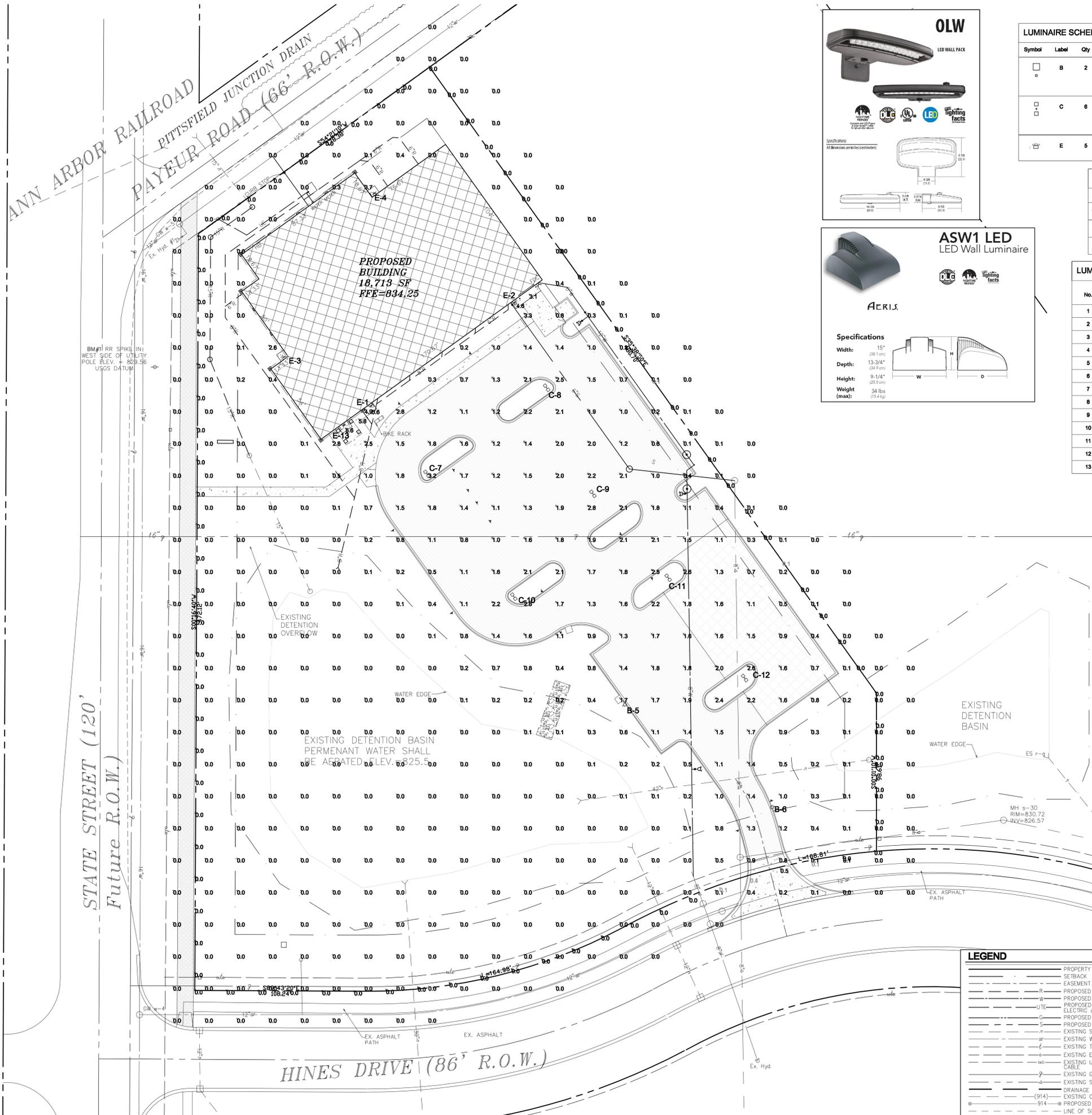
- ORIGINAL (UNDEVELOPED) DRAINAGE DIRECTION
- PRESERVE AREA DRAINAGE MAY BE CONTAINED WITHIN ITS OWN BOUNDARIES
- AREA PROPOSED TO DRAIN INTO EX RETENTION BASIN (ORIGINAL MASTER PLAN AREA 2.2AC)
- AREA THAT CURRENTLY DRAIN INTO THE PRESERVE AREAS WILL CONTINUE TO DO SO POST DEVELOPMENT AT AGRICULTURAL RATE
- ON-SITE AREA WHICH WILL DRAIN TO THE NORTH DETENTION BASINS PER THE PROPOSED/EXISTING STORM SYSTEM
- OFF-SITE DRAINAGE AREA THAT CURRENTLY DRAINS INTO DETENTION PONDS
- AREA WHICH CURRENTLY DRAINS OFF-SITE & WILL CONTINUE TO DRAIN OFF-SITE POST DEVELOPMENT @ AGRICULTURAL RATE

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 ISSUED FOR: DATE:
 AMEND. SITE PLAN 8-18-14

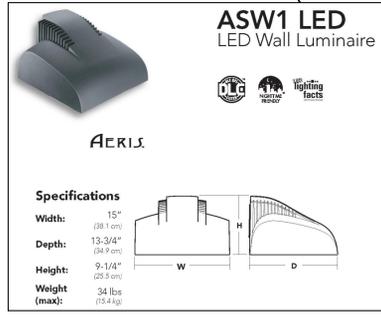
DRAWN BY: GAH
 JOB NO.: XXX
DRAINAGE AREA PLAN
 SHEET NO.
C-5



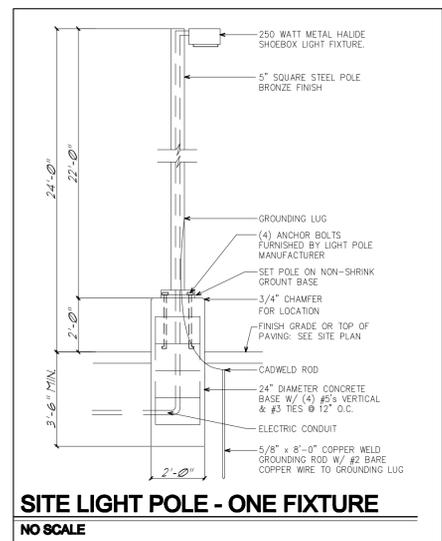
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
□	B	2	ASW1 LED 1 638350/40K SR3	ASW1 LED WITH HLM MODULE, 63 LED's, 350mA DRIVER, 4000K COLOR TEMPERATURE, TYPE 3 LENS	ONE 75-WATT LED, AIMED DOWN POS.	ASW1_LED_1_638350_40K_SR3.ies	Absolute	0.92	75
□	C	6	ASW1 LED 1 638350/40K SR3	ASW1 LED WITH HLM MODULE, 63 LED's, 350mA DRIVER, 4000K COLOR TEMPERATURE, TYPE 3 LENS	ONE 75-WATT LED, AIMED DOWN POS.	ASW1_LED_1_638350_40K_SR3.ies	Absolute	0.92	150
□	E	5	OLW 23 (updated Dec 2013)	Wall mounted LED updated optics	LED	OLW_23_(updated_Dec_2013).ies	Absolute	0.92	32.98

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.4 fc	4.9 fc	0.0 fc	N/A	N/A
PARKING	x	1.6 fc	3.2 fc	0.4 fc	8.0:1	4.0:1
PROPERTY LINE	x	0.0 fc	0.5 fc	0.0 fc	N/A	N/A

No.	Label	X	Y	Z	MH	Orientation	Tilt	X	Y	Z
1	E	82.8	323.3	9.0	9.0	149.1	0.0	82.8	323.3	0.0
2	E	173.0	388.5	9.0	9.0	144.6	0.0	173.0	388.5	0.0
3	E	28.0	352.0	9.0	9.0	-38.6	0.0	28.0	352.0	0.0
4	E	85.0	453.7	9.0	9.0	-39.2	0.0	85.0	453.7	0.0
5	B	241.0	134.9	24.0	24.0	49.5	0.0	241.9	135.7	0.0
6	B	338.1	72.2	24.0	24.0	255.1	0.0	335.0	71.9	0.0
7	C	119.0	280.1	24.0	24.0	145.5	0.0			
8	C	192.0	332.4	24.0	24.0	143.9	0.0			
9	C	223.4	267.1	24.0	24.0	-37.0	0.0			
10	C	175.0	204.0	24.0	24.0	-35.9	0.0			
11	C	289.9	215.6	24.0	24.0	144.5	0.0			
12	C	315.2	150.9	24.0	24.0	-35.5	0.0			
13	E	65.7	311.0	9.0	9.0	145.4	0.0	65.7	311.0	0.0



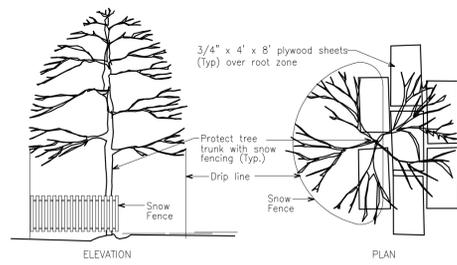
Specifications
 Width: 15" (381 mm)
 Depth: 13-3/4" (349 mm)
 Height: 9-1/4" (235 mm)
 Weight (max): 34 lbs (15.4 kg)



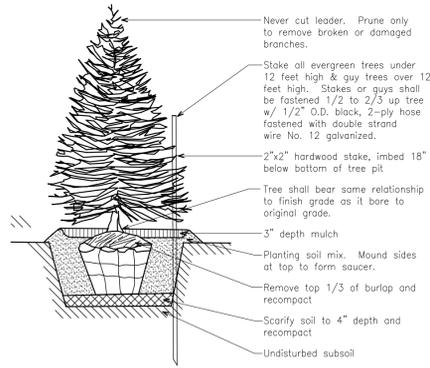
SITE LIGHT POLE - ONE FIXTURE
NO SCALE

LIGHTING PLAN
SCALE: 1" = 30'-0"

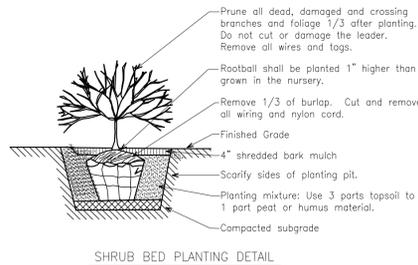
LEGEND	
—	PROPERTY LINE
- - -	EASEMENT
R	PROPOSED STORM
W	PROPOSED WATER
U-T-E	PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
C	PROPOSED GAS
S	PROPOSED SANITARY
—	EXISTING STORM
—	EXISTING WATER
—	EXISTING TELEPHONE
—	EXISTING ELECTRIC
—	EXISTING UNDERGROUND CABLE
—	EXISTING GAS
—	EXISTING SANITARY
—	DRAINAGE AREA LIMITS
(914)	EXISTING CONTOUR
914	PROPOSED CONTOUR
—	LINE OF SILT FENCE
□	EXISTING WALL MOUNTED LIGHT FIXTURE
□	NEW BUILDING MOUNTED LIGHTING
□	NEW POLE-MOUNTED LIGHT
—	EXISTING UTILITY POLE
—	EXISTING MANHOLE
—	EXISTING CLEAN OUT
—	NEW CATCH BASIN
—	EXISTING FIRE HYDRANT
—	NEW FIRE HYDRANT
—	EXISTING ELEVATION
—	PROPOSED ELEVATION
—	PROPOSED DRAINAGE
□	EXISTING BUILDING
□	EXISTING GRAVEL SURFACE
□	EXISTING ASPHALT PAVING
□	EXISTING ASPHALT PAVING TO BE REMOVED
□	PROPOSED BUILDING
□	PROPOSED ASPHALT PAVING
□	PROPOSED CONCRETE



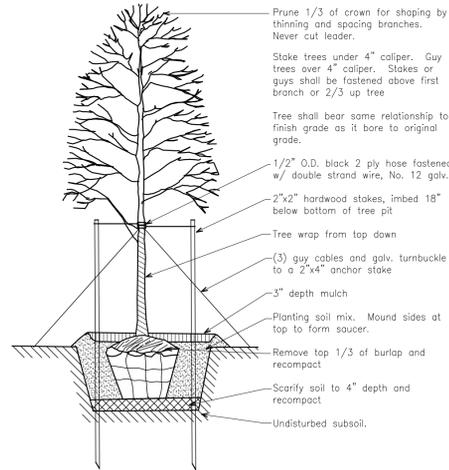
STANDARD TREE PROTECTION
NOTE: Pull back fencing to install plywood when access in root zone is necessary.



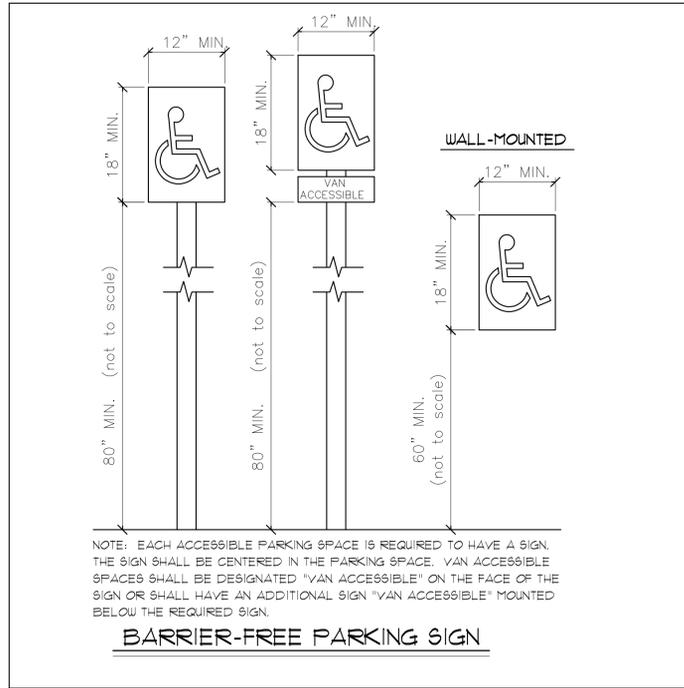
EVERGREEN TREE PLANTING DETAIL



SHRUB BED PLANTING DETAIL

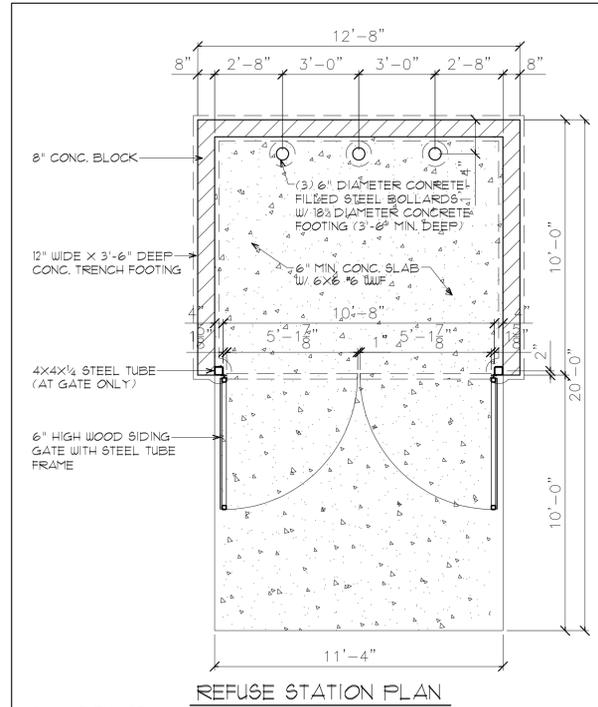


DECIDUOUS TREE PLANTING DETAIL

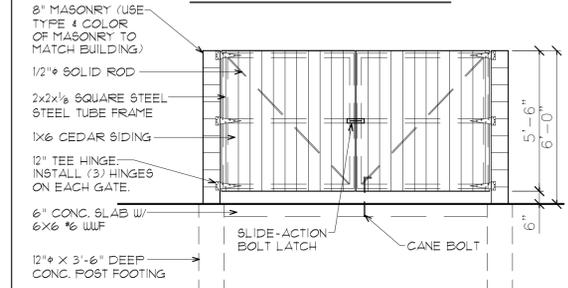


NOTE: EACH ACCESSIBLE PARKING SPACE IS REQUIRED TO HAVE A SIGN. THE SIGN SHALL BE CENTERED IN THE PARKING SPACE. VAN ACCESSIBLE SPACES SHALL BE DESIGNATED "VAN ACCESSIBLE" ON THE FACE OF THE SIGN OR SHALL HAVE AN ADDITIONAL SIGN "VAN ACCESSIBLE" MOUNTED BELOW THE REQUIRED SIGN.

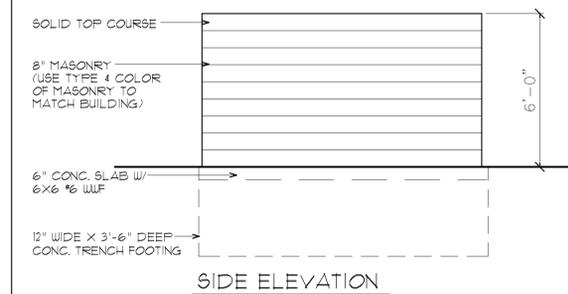
BARRIER-FREE PARKING SIGN



REFUSE STATION PLAN

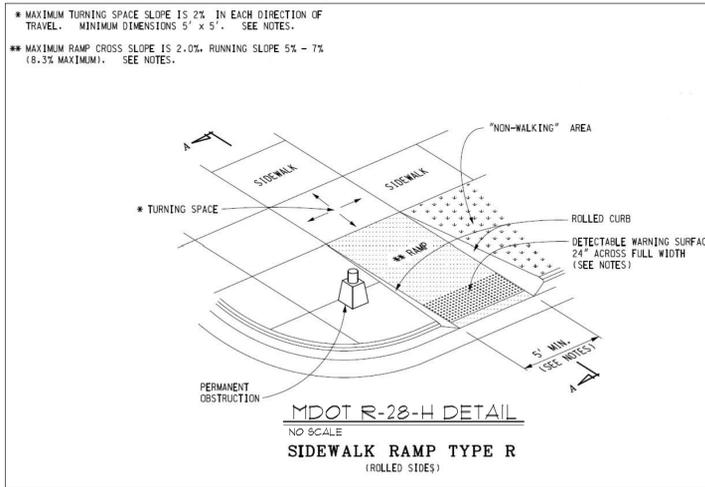


FRONT ELEVATION

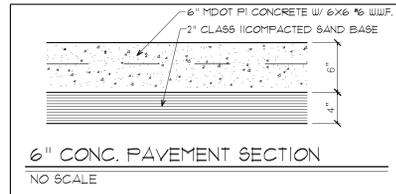


SIDE ELEVATION

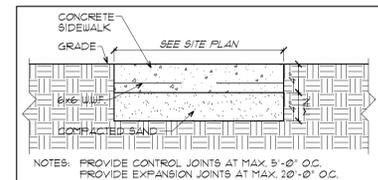
MASONRY DUMPSTER DETAIL
NO SCALE



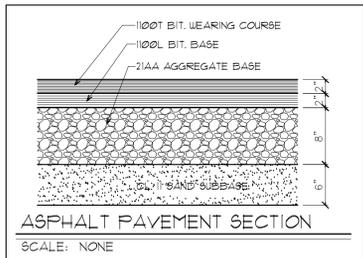
MDOT R-28-H DETAIL
NO SCALE
SIDEWALK RAMP TYPE R
(ROLLED SIDES)



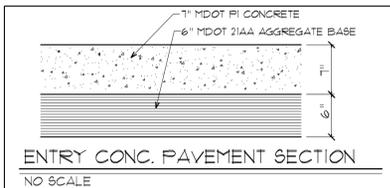
6\"/>



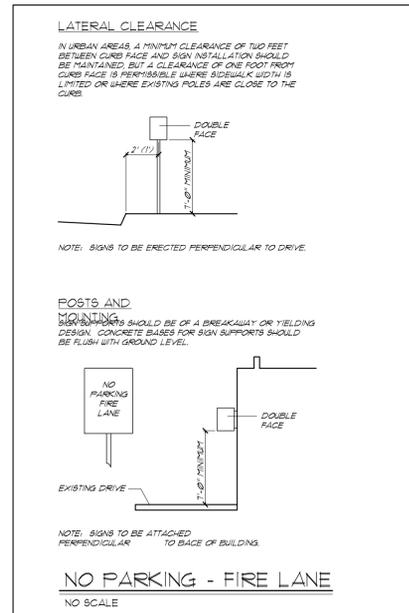
CONCRETE SIDEWALK DETAIL
NO SCALE



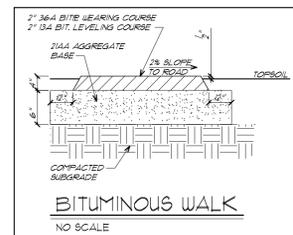
ASPHALT PAVEMENT SECTION
SCALE: NONE



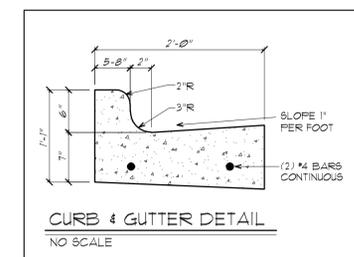
ENTRY CONC. PAVEMENT SECTION
NO SCALE



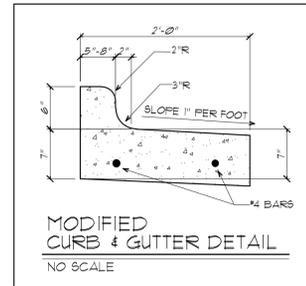
NO PARKING - FIRE LANE
NO SCALE



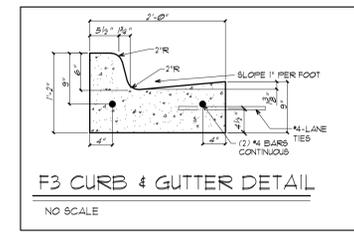
BITUMINOUS WALK
NO SCALE



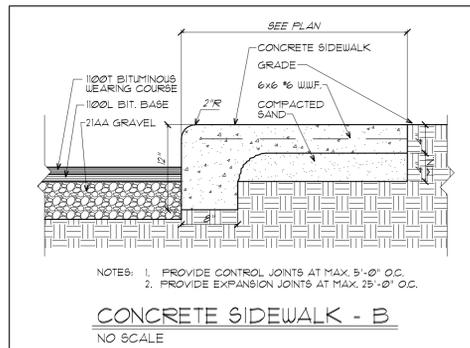
CURB & GUTTER DETAIL
NO SCALE



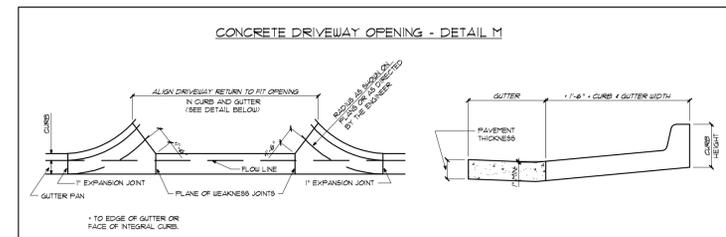
MODIFIED CURB & GUTTER DETAIL
NO SCALE



F3 CURB & GUTTER DETAIL
NO SCALE



CONCRETE SIDEWALK - B
NO SCALE



CONCRETE DRIVEWAY OPENING - DETAIL M

P:\2178 Gym America-5555 Hines Dr\AUTOCAD\Drawings\AMEND-SP\C-7.dwg, 8/20/2014 1:06:34 PM

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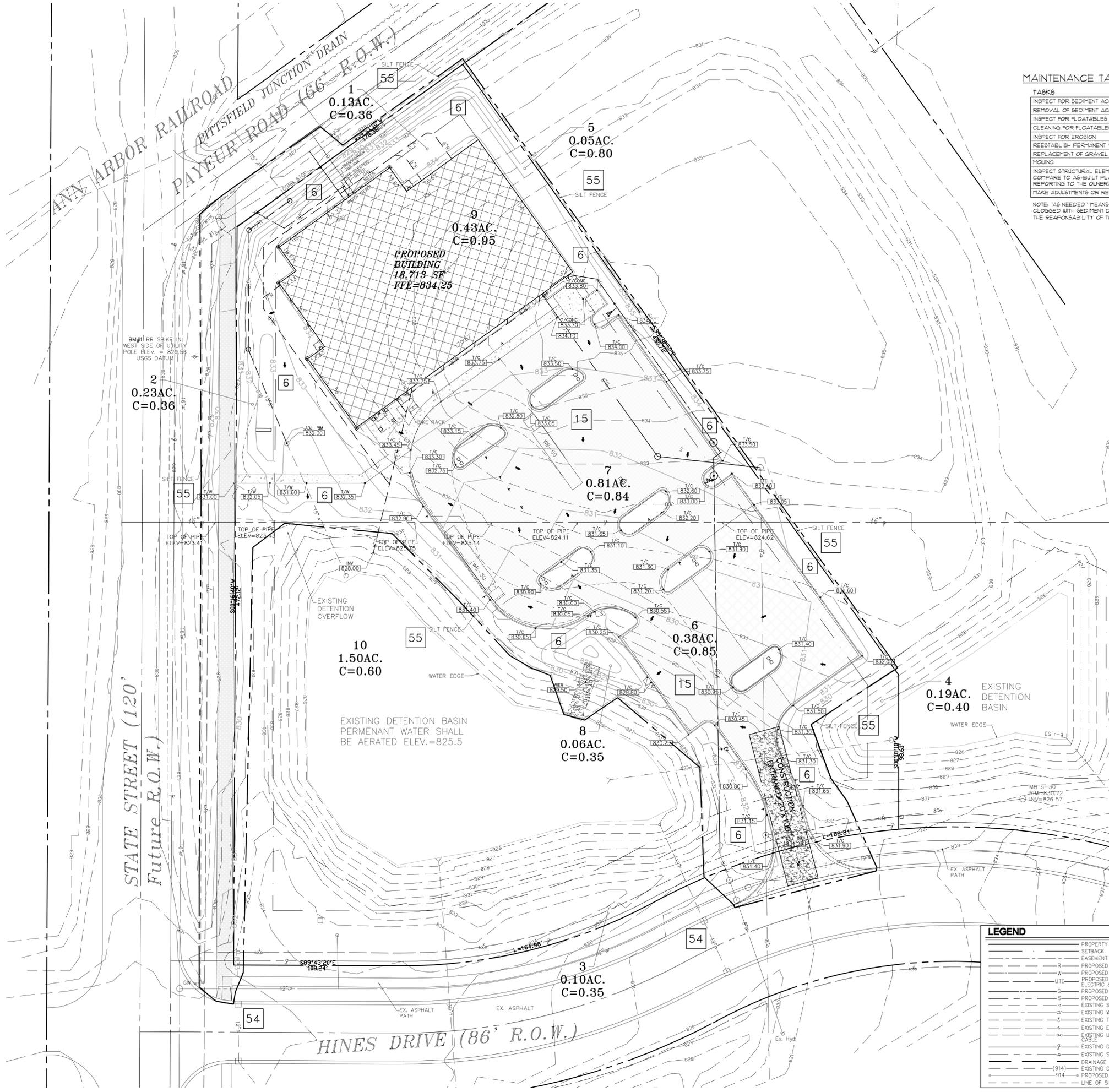
ISSUED FOR: DATE:
AMEND. SITE PLAN 8-18-14

DRAWN BY: GAH
JOB NO.:

DETAILS

SHEET NO.

C-7



MAINTENANCE TASKS & SCHEDULE:

TASKS	STORM DRAINAGE SYSTEM	CATCH BASIN SUMPS	CATCH BASIN INLET CASTINGS	CHANNELS	OUTFALL CONTROL STRUCTURES	REFURBISHMENT	STORM DRAINAGE BASIN	DEFLECTION AREAS	DEFLECTION OVERFLOW	SCHEDULE
INSPECT FOR SEDIMENT ACCUMULATION	X	X	X	X	X	X	X	X	X	WEEKLY
REMOVAL OF SEDIMENT ACCUMULATION	X	X	X	X	X	X	X	X	X	AS NEEDED (SEE NOTE) 4 PRIOR TO TURNOVER
INSPECT FOR FLOATABLES AND DEBRIS	X	X	X	X	X	X	X	X	X	QUARTERLY
CLEANING FOR FLOATABLES AND DEBRIS	X	X	X	X	X	X	X	X	X	QUARTERLY 4 AT TURNOVER
INSPECT FOR EROSION	X	X	X	X	X	X	X	X	X	WEEKLY
REESTABLISH PERMANENT VEGETATION ON ERODED SLOPES	X	X	X	X	X	X	X	X	X	AS NEEDED (SEE NOTE) 4 PRIOR TO TURNOVER
REPLACEMENT OF GRAVEL JOINTS	X	X	X	X	X	X	X	X	X	AS NEEDED (SEE NOTE)
MOWING	X	X	X	X	X	X	X	X	X	ONE TIME PER YEAR
INSPECT STRUCTURAL ELEMENTS DURING WET WEATHER AND COMPARE TO AS-BUILT PLANS (BY PROFESSIONAL ENGINEER REPORTING TO THE OWNER)	X	X	X	X	X	X	X	X	X	ANNUALLY 4 AT TURNOVER
MAKE ADJUSTMENTS OR REPLACEMENTS AS DETERMINED	X	X	X	X	X	X	X	X	X	AS NEEDED (SEE NOTE)

NOTE: "AS NEEDED" MEANS WHEN SEDIMENT HAS ACCUMULATED TO A MAXIMUM OF 50% FULL OR ONE FOOT DEPTH OR THE JACKET HAS BEEN CLOGGED WITH SEDIMENT DUE TO CONSTRUCTION ACTIVITIES. MAINTENANCE OF PERMANENT SOIL EROSION MEASURES SHALL BE THE RESPONSIBILITY OF THE OWNER AND THE ASSOCIATION.

- SOIL EROSION CONTROL SEQUENCE:**
1. Install all temporary perimeter erosion and sedimentation control measures. Install reconstruction entrance. 6-14
 2. Install silt fence complete with topsoil, seed, and mulch. 6-14
 3. Install storm drainage system, including outlet storm sewer, removal of existing storm sewer. 6-14
 4. Rough grade site, stock pile top soil in location approved by owner and engineer. 6-14
 5. Install catch basin and sewer lines. 6-14
 6. Construct building pad 4 install foundations. 6-14
 7. Maintain Erosion and Sedimentation control measures, as required.
 8. Install public path and sidewalks. 7-14
 9. Install curb 4 gutter and pavement. 7-14
 10. Install landscaping materials. 9-14
 11. Finish grade, redistribute top soil, seed and mulch in all disturbed areas. 9-14
 12. Complete construction of building. 11-14
 13. Remove all temporary soil erosion and sedimentation control measures. Restoring any disturbed areas as necessary. 11-14

- SOIL EROSION CONTROL NOTES**
1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF PITTSFIELD TOWNSHIP. SEE SHEET C-12.
 2. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES AND WHEN NECESSARY, REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
 3. EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS, WHICH INCLUDE BOTH NATURAL AND MANMADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
 4. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SOIL OFF THIS SITE.
 5. THE OWNER SHALL OBTAIN OR CAUSE HIS CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS PAY ALL FEES AND POST ALL BONDS TO EACH AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER EROSION CONTROL MEASURES ON THIS PROJECT.
 6. THE CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THIS PLAN. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER CHANGES HAVE BEEN ACCOMPLISHED.
 7. SILT BAGS SHALL BE USED OVER ALL CATCH BASINS AND INLETS IN THE CONSTRUCTION AREA. CURB TYPE INLETS SHALL ALSO HAVE BEAVER DAMS.
 8. THE CONTRACTOR IS TO PROTECT AS MUCH EXISTING VEGETATION AS POSSIBLE. WHERE EXCAVATION HAS BEEN THROUGH LAWN AREAS THE CONTRACTOR SHALL RESEED THE DISTURBED AREA BY PLACING TOPSOIL AND SEEDING OR SODDING OVER FINAL GRADE MATERIAL.
 9. ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS FROM THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR AND/OR BUILDER. ALL MUD DIRT AND DEBRIS TRACKED OR SPILLED ONTO PAVED SURFACES WITHIN THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR AND/OR BUILDER.
 10. ANY SOIL EROSION CONTROL MEASURES DAMAGED BY THEIR CONTRACTOR'S OPERATION SHALL BE REPLACED THE SAME DAY.
 11. THE CONTINUED MAINTENANCE OF THE PERMANENT EROSION CONTROL DEVICES WILL INCLUDE REMOVAL OF ANY SEDIMENT IN THE CATCH BASIN SUMPS AND IN THE SEDIMENTATION BASIN ON A WEEKLY BASIS OR AS REQUIRED. THE MAINTENANCE WILL BE PERFORMED BY THE OWNER OR EMPLOYEES ONCE THE VEGETATIVE COVER IS ESTABLISHED THAT LITTLE IF ANY, MAINTENANCE OF THE PERMANENT EROSION CONTROL DEVICES WILL BE REQUIRED.
 12. THE STORM WATER MANAGEMENT SYSTEM SHALL BE PRIVATELY OWNED OPERATED AND MAINTAINED. MAINTENANCE OF PERMANENT EROSION CONTROL DEVICES SHALL BE THE OWNER'S OR THE ASSOCIATION'S RESPONSIBILITY.
 13. ALL SLOPES STEEPER THAN 4:1 SHALL HAVE EROSION CONTROL BLANKETS STAKED IN PLACE. STEEP SLOPES THAT DO NOT TAKE INITIAL SEEDING MUST BE RESEED AND STABILIZED WITH EROSION CONTROL BLANKETS.
 14. SILT FENCE SHALL BE INSTALLED 4 MAINTAINED AROUND THE PERIMETER OF TOP SOIL STOCK PILE. IF STOCK PILE WILL BE LARGE AND IS EXPECTED TO BE ON-SITE FOR A PERIOD OF TIME.
 15. SEDIMENT SHALL BE REMOVED FROM BASINS WHEN REACHING 40-50% FILLED.
 16. DETENTION BASIN SHALL BE SEEDED AND STABILIZED IMMEDIATELY UPON ACHIEVING FINAL GRADE AND FOLLOW LOCAL APPROVED SPECIFICATIONS.
 17. DEWATERING IS NOT NECESSARY.
 18. STABILIZATION MUST BE STARTED WITHIN FIVE DAYS OF FINAL GRADE W/ 4" TOPSOIL. MIN. CONTRACTOR SHALL RESTORE DISTURBED AREAS W/ TOPSOIL, SEED, 4 MULCH OR SOO.

SOIL EROSION & SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
6	Seeding with Mulch and/or Matting	Facilitates establishment of vegetative cover. Effective for drainage with low velocity. Easily placed in small quantities by inexperienced personnel. Should include prepared topsoil bed.
15	Paving	Protects areas which cannot otherwise be protected but increases runoff volume and velocity. Irregular surface will help slow velocity.
55	Geotextile Silt Fence	Uses geotextile and posts or poles. May be constructed or pre packaged. Easy to construct and locate as necessary.
54	Inlet Filter	Inexpensive and easy to construct. Filters sediment from runoff. May be repaired if damaged. Silt sack with beaver dam for curb inlets.

SOIL EROSION & SEDIMENTATION PLAN
SCALE: 1" = 30'-0"

LEGEND

—	PROPERTY LINE	—	EXISTING BUILDING
—	SETBACK	—	EXISTING GRAVEL SURFACE
—	EASEMENT	—	EXISTING ASPHALT PAVING
R	PROPOSED STORM	—	EXISTING ASPHALT PAVING TO BE REMOVED
W	PROPOSED WATER	—	PROPOSED BUILDING
—	PROPOSED UNDERGROUND ELECTRIC & TELEPHONE	—	PROPOSED ASPHALT PAVING
C	PROPOSED GAS	—	PROPOSED CONCRETE
S	PROPOSED SANITARY	—	
—	EXISTING STORM	—	
—	EXISTING WATER	—	
—	EXISTING TELEPHONE	—	
—	EXISTING ELECTRIC	—	
—	EXISTING UNDERGROUND CABLE	—	
—	EXISTING GAS	—	
—	EXISTING SANITARY	—	
—	DRAINAGE AREA LIMITS	—	
—	EXISTING CONTOUR	—	
—	PROPOSED CONTOUR	—	
—	LINE OF SILT FENCE	—	
—	NEW BUILDING MOUNTED LIGHT FIXTURE	—	
—	NEW POLE-MOUNTED LIGHT	—	
—	EX. UP EXISTING UTILITY POLE	—	
—	EX. MH EXISTING MANHOLE	—	
—	EX. CO EXISTING CLEAN OUT	—	
—	CB R-1 NEW CATCH BASIN	—	
—	EX. FH EXISTING FIRE HYDRANT	—	
—	NEW FH #3 NEW FIRE HYDRANT	—	
—	x 660.90 EXISTING ELEVATION	—	
—	(832.95) PROPOSED ELEVATION	—	
—	PROPOSED DRAINAGE	—	

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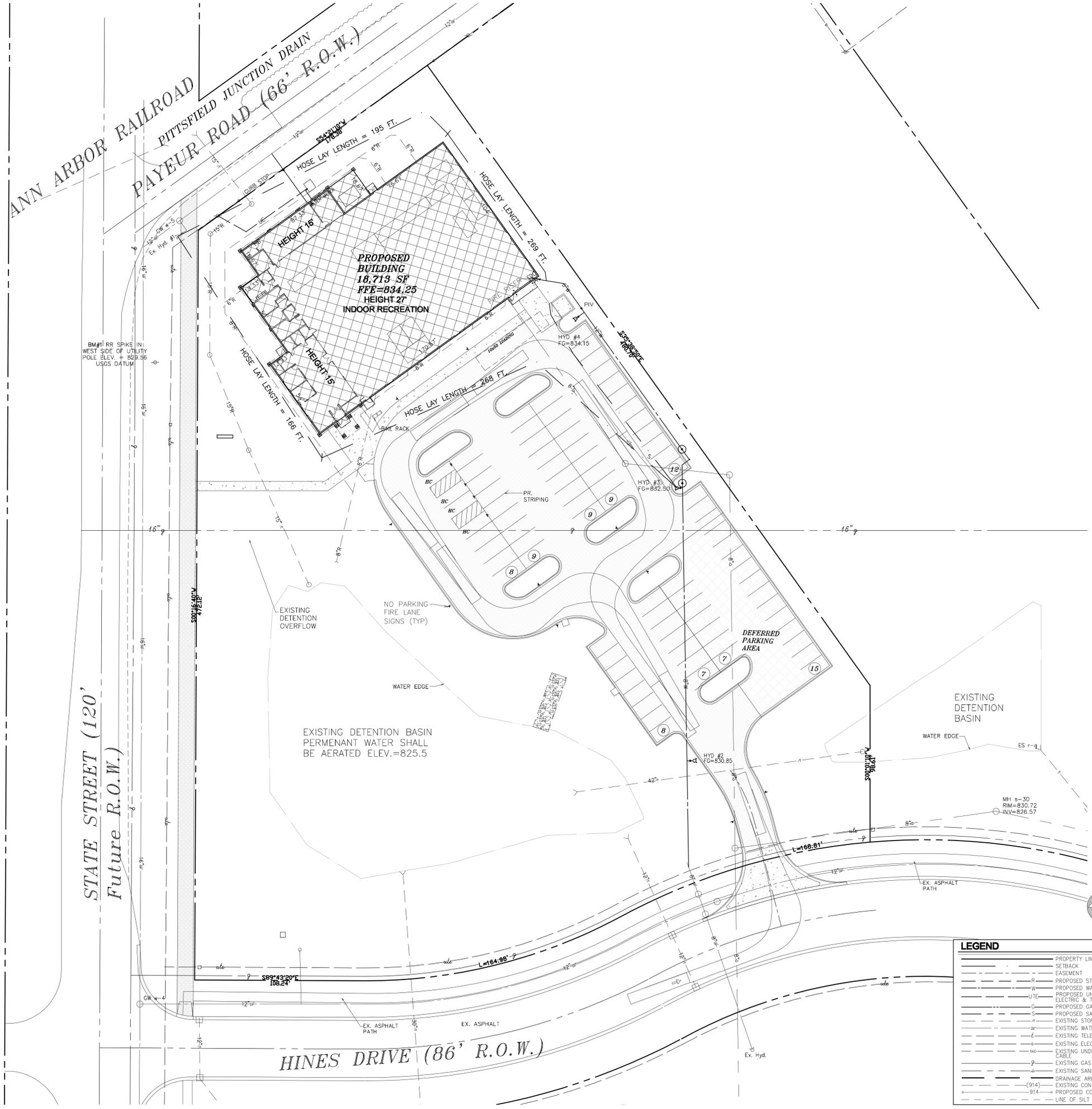
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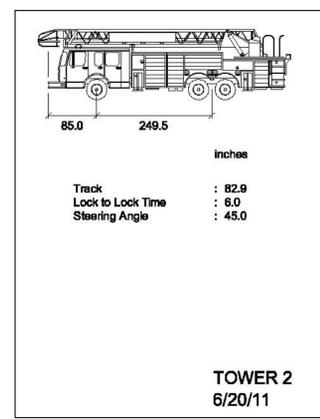
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AMEND. SITE PLAN 8-18-14

DRAWN BY: GAH
JOB NO.:
SOIL EROSION & SEDIMENTATION PLAN
SHEET NO.
C-8

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GENERAL NOTES:
 1. NO REGULATORY SIGNS OR PAVEMENT MARKINGS PROPOSED.
 2. NO PARKING FIRE LANE SIGNS SHALL BE POSTED ON ENTRANCE DRIVE AND ADJACENT TO THE DROP OFF LANE. NO STOPPING/STANDING/PARKING SIGNS SHALL BE POSTED OPPOSITE THE DROP OFF LANE ADJACENT TO THE BUILDING AND ALONG THE CENTER ACCESS AISLE FOR EMERGENCY ACCESS.



TURNING TEMPLATE SHOWN THIS SHEET

FIRE ACCESS PLAN
 SCALE: 1" = 30'-0"

LEGEND	
—	PROPERTY LINE
- - -	EASEMENT
R	PROPOSED STORM
W	PROPOSED WATER
U-T-E	PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
C	PROPOSED GAS
S	PROPOSED SANITARY
—	EXISTING STORM
—	EXISTING WATER
—	EXISTING TELEPHONE
—	EXISTING ELECTRIC
—	EXISTING UNDERGROUND CABLE
—	EXISTING GAS
—	EXISTING SANITARY
—	DRAINAGE AREA LIMITS
(914)	EXISTING CONTOUR
914	PROPOSED CONTOUR
- - -	LINE OF SILT FENCE
⊕	EXISTING WALL MOUNTED LIGHT FIXTURE
⊕	NEW BUILDING MOUNTED LIGHTING
⊕	NEW POLE-MOUNTED LIGHT
⊕	EXISTING UTILITY POLE
⊕	EXISTING MANHOLE
⊕	EXISTING CLEAN OUT
⊕	NEW CATCH BASIN
⊕	EXISTING FIRE HYDRANT
⊕	NEW FIRE HYDRANT
⊕	EXISTING ELEVATION
⊕	PROPOSED ELEVATION
→	PROPOSED DRAINAGE
▭	EXISTING BUILDING
▭	EXISTING GRAVEL SURFACE
▭	EXISTING ASPHALT PAVING
▭	EXISTING ASPHALT PAVING TO BE REMOVED
▭	PROPOSED BUILDING
▭	PROPOSED ASPHALT PAVING
▭	PROPOSED CONCRETE

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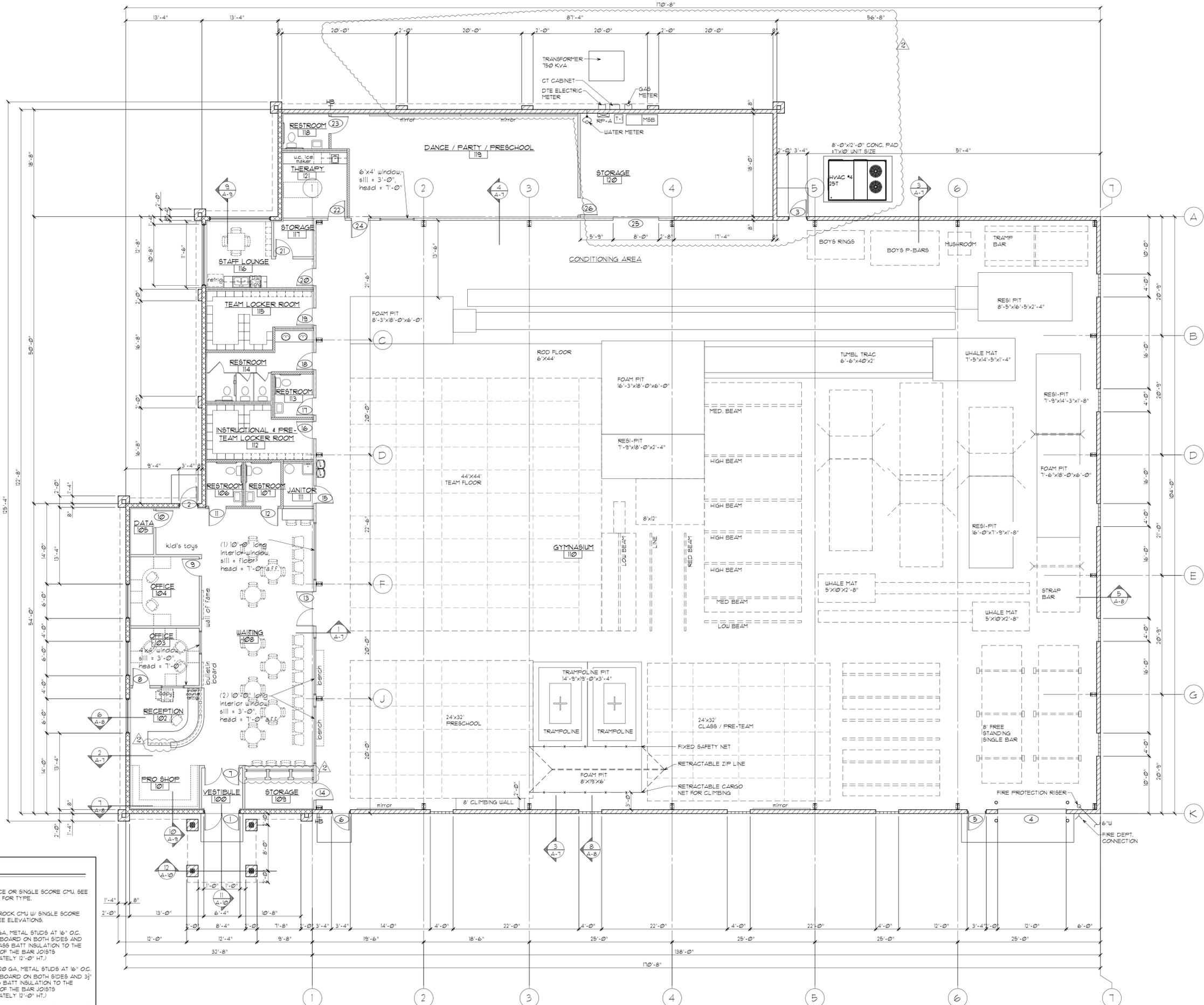
FIRE ACCESS PLAN

SHEET NO.

C-9

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WALL LEGEND	
	8" SPLIT FACE OR SINGLE SCORE CMU. SEE ELEVATIONS FOR TYPE.
	8" CASTLE-ROCK CMU w/ SINGLE SCORE ACCENTS. SEE ELEVATIONS.
	NEW 6" 20 GA. METAL STUDS AT 16" O.C. w/ 1/2" GYP. BOARD ON BOTH SIDES AND 6" FIBERGLASS BATT INSULATION TO THE UNDERSIDE OF THE BAR JOISTS (APPROXIMATELY 12'-0" HT.)
	NEW 3-5/8" 20 GA. METAL STUDS AT 16" O.C. w/ 1/2" GYP. BOARD ON BOTH SIDES AND 3" FIBERGLASS BATT INSULATION TO THE UNDERSIDE OF THE BAR JOISTS (APPROXIMATELY 12'-0" HT.)
	NEW 3-5/8" 20 GA. METAL STUDS AT 16" O.C. w/ 1/2" GYP. BOARD ON BOTH SIDES TO UNDERSIDE OF ROOF DECK/SUPPORT BEAM
	NEW 3-5/8" 20 GA. METAL STUDS AT 16" O.C. w/ 1/2" GYP. BOARD ON BOTH SIDES TO 10'-0"



FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"
18,340 square feet total

GYM AMERICA

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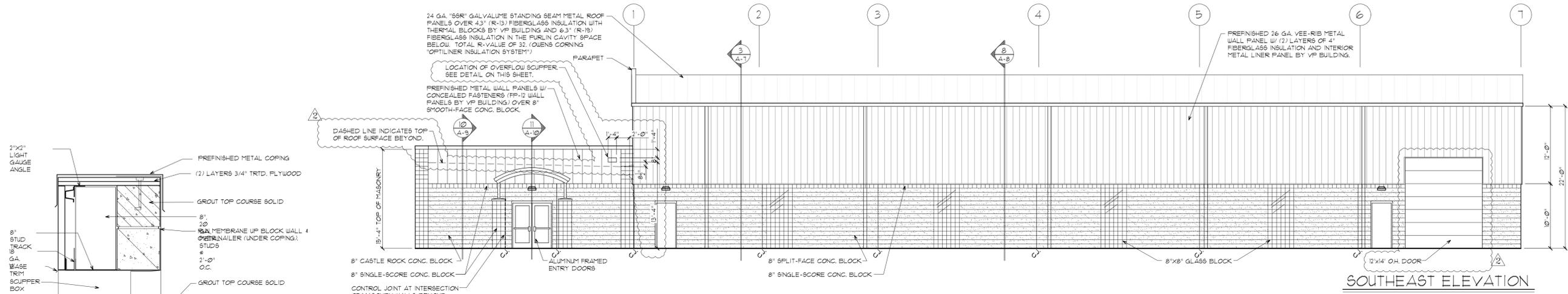
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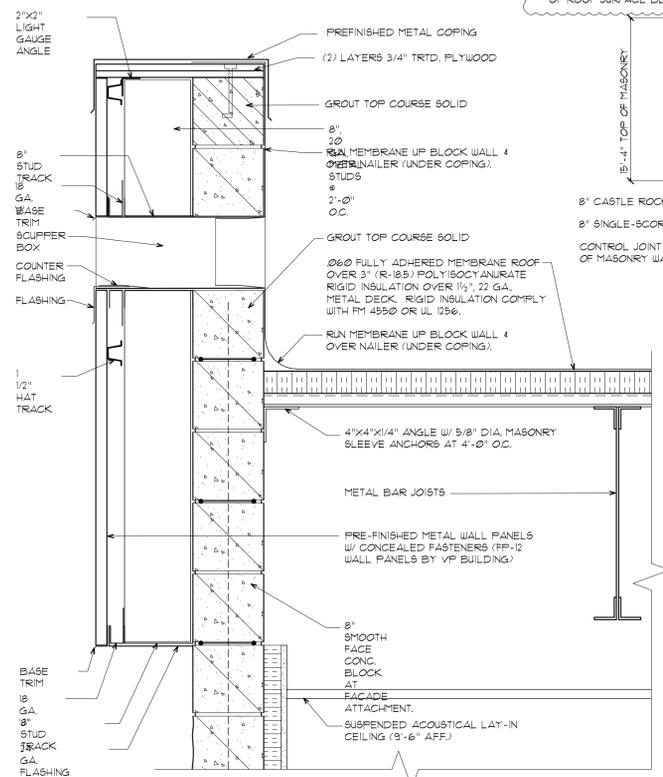
ISSUED FOR: DATE: 5-2-14
 BUILDING PERMIT: 5-2-14
 REVISED: 7-21-14

DRAWN BY: CLN/SA
 JOB NO.: ---
FLOOR PLAN
 SHEET NO.
C-10

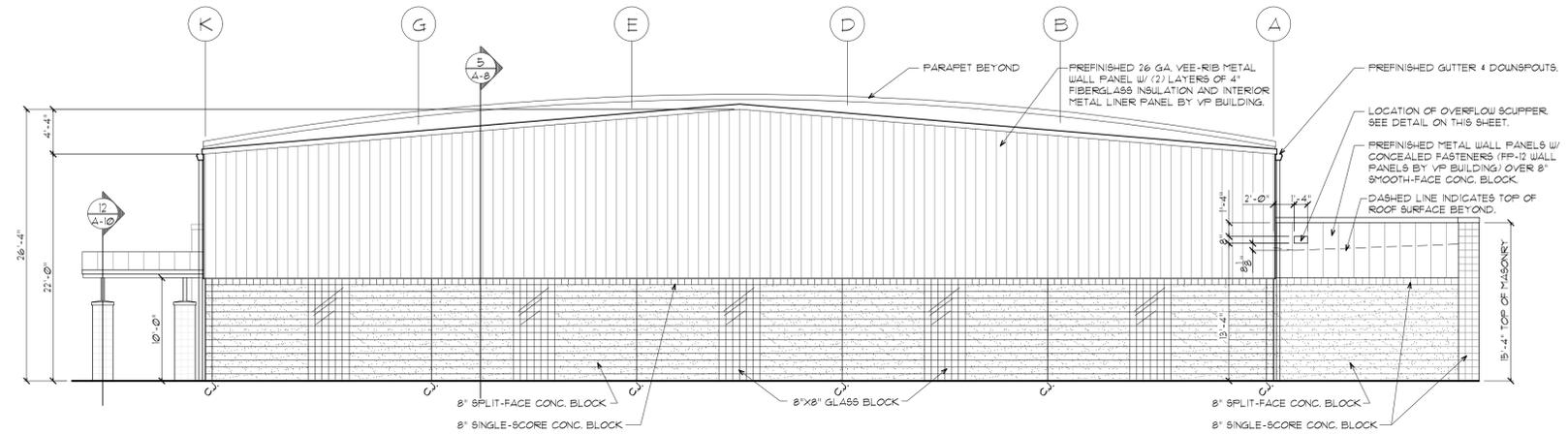
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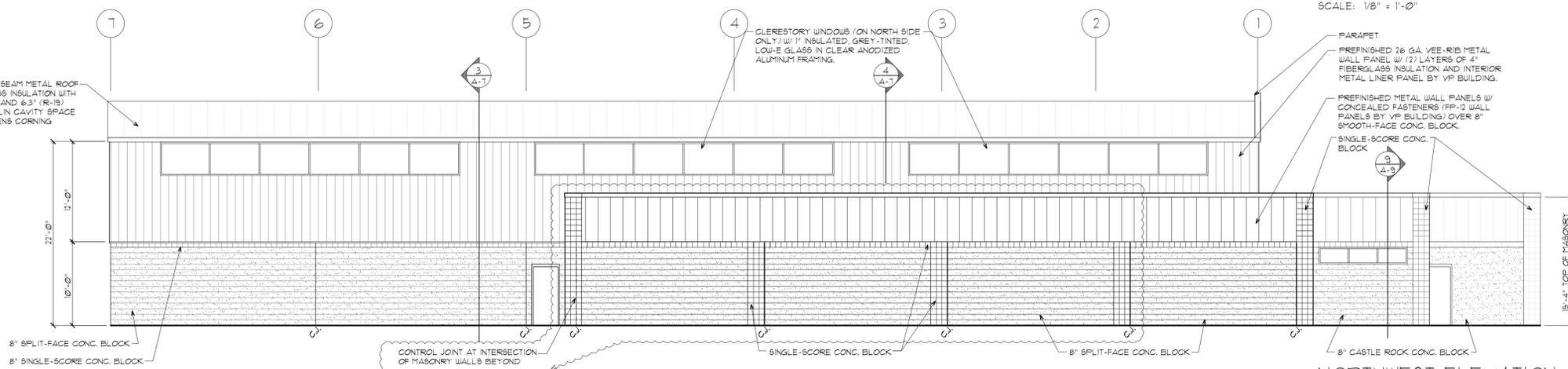
SOUTHEAST ELEVATION
SCALE: 1/8" = 1'-0"



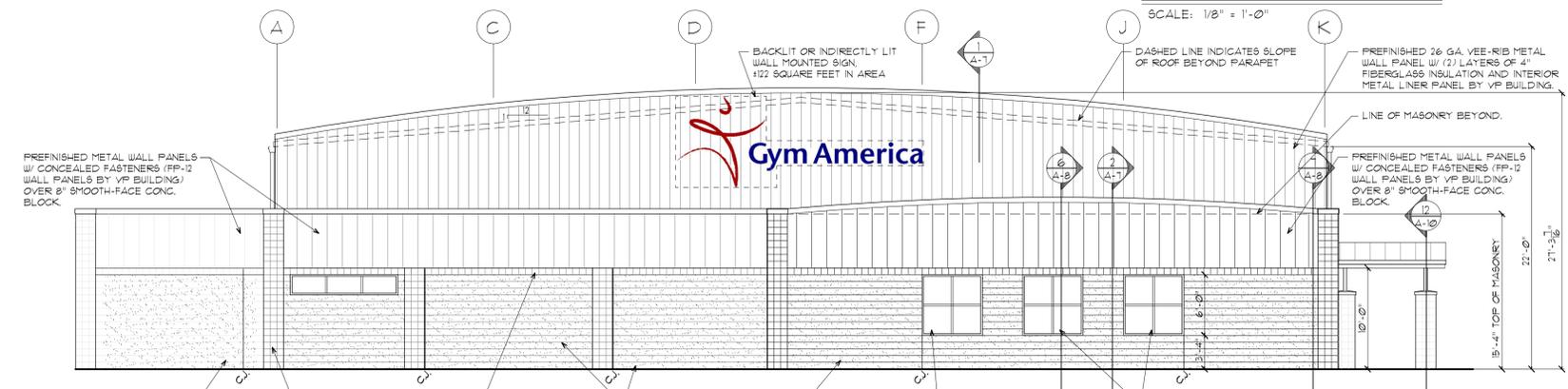
SCUPPER DETAIL
NO SCALE



NORTHEAST ELEVATION
SCALE: 1/8" = 1'-0"



NORTHWEST ELEVATION
SCALE: 1/8" = 1'-0"



SOUTHWEST ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR MATERIALS:

	AREA (S.F.)	SIDING (S.F.)
SOUTHEAST	3,561	1,624
NORTHEAST	2,830	1,473
NORTHWEST	3,561	841
SOUTHWEST	3,078	993
TOTAL	12,982	4,931

4,931/12,982 = 38% of the exterior wall is P.E.M.B. Siding

GYM AMERICA

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UNIT 5 STATE STREET BUSINESS PARK
5555 Hines Drive
Pittsfield Township, Michigan

ELEVATIONS
SHEET NO.
C-11

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ISSUED FOR: DATE:
BUILDING PERMIT 5-2-14

BUILDING PERMIT 5-12-14
REVISED

REVISED 7-21-14

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