Premier Academy

New Construction
974 North Adams Road
Rochester Hills, MI 48309

General Scope of Work

1. New construction of a two story private school for early childhood education.

2. General site improvements

Owner/General Contractor

J.S. Capitol Group
(Jeff Schmitz)
945 Rochester Road
Suite #103
Rochester Hills, MI 48307

Architect

Krieger | Klatt Architects Inc.
(Jeff Klatt, R.A.)
1412 E. 11 Mile Rd.
Royal Oak, MI 48067
P.248.414.9270 F.248.414.9275

Civil Engineer

Nowak & Fraus Engineers
(Mike Peterson, P.E.)
46777 Woodward Ave.
Pontiac, MI 48342
P.248.332.8257 F.248.332.8257

Building Code Notes

All work is to comply with the follow codes:

Building:	2015 Michigan Building Code
Mechanical:	2015 Michigan Mechanical Code
Plumbing:	2015 Michigan Plumbing Code
Electrical:	Michigan Electrical Code based on 2014 N.E.C. W/ Part 8 State Amendments
Energy:	MBC 2015 - Chapter 13 & MUEC 2009 (Michigan Uniform Energy Code 2009) - Chapter 5 & Michigan Uniform Energy Code, Part 10a Rules (ANSI/ASHRAE/IENSA Standard 90.1-2007)
Fire:	IFC 2015 (International Fire Code 2012), as referenced in the 2015 Michigan Building Code
Fire Alarm:	NFPA 72 (2010)
Fire Suppression:	NFPA 13 (2010)
Barrier Free:	P.A.1 of 1966 as amended, Chapter 11 of the Michigan Building Code, ICC/ANSI A117.1 – 2009 Standard as referenced from Chapter 11.

1

Project Area:	15,078 Sq. Ft.
Building Area:	15,078 Sq. Ft.
Type of Construction:	IIB
Use Group:	E - Day Care Facility
Occupancy:	Non-separated (Tbl. 508.3)
Sprinkled:	Yes
Fire Alarm System:	Yes
Jurisdiction City:	Rochester Hills, MI

1

Allowable Height (Tbl. 504.3 & 504.4):	3 Stories (75'-0")
Allowable Bldg. Area/Floor:	43,500 Sq. Ft.

Proposed Floor Areas:

First Floor w/canopy:	10,164 Sq. Ft.
Second Floor:	7,009 Sq. Ft.
Total:	17,173 Sq. Ft.

1

Zoning Information (City of Rochester Hills)

LOTS: PART OF LOTS 974 & 2965 (SIDWELL #15-08-100-021 & #15-08-100-022
ZONED: R1, RESIDENTIAL
LOT AREA: 38,989.98 SQ. FT. + 23,468.27 SQ. FT. = 62,458.25 SQ. FT.
MAXIMUM LOT COVERAGE ALLOWED: 25.0%

LOT COVERAGE (FOOTPRINTS)

1. MAIN BUILDING	8,069 SQ. FT.
TOTAL:	8,069 SQ. FT.

8,069 SQ. FT. / 62,458.25 SQ. FT. = **12.9%** < 25.0%

MAXIMUM BUILDING HEIGHT (FOR HIP ROOFS-MOST RESTRICTIVE): 35.00' / 2 STORIES

PROPOSED ROOF HEIGHT (FOR HIP ROOFS): 35' - 0"

SETBACK INFORMATION

1. FRONT YARD REQUIRED (ADAM'S ROAD): 40.00'
   - FRONT YARD PROPOSED: 40.00'

2. SIDE YARD REQUIRED (NORTH/SOUTH): 25.00'/15'.00
   - PROPOSED SIDE YARD : 67.66' + 30.00' = 97.66'

3. REAR YARD REQUIRED (EAST): 35.00'
   - REAR YARD PROPOSED: 89.00'

PARKING REQUIREMENTS

REQUIRED: 162 STUDENTS: 1 SPACE PER 10 PUPILS
22 EMPLOYEES: 1 SPACE PER EMPLOYEE
= 16 PUPIL SPACES
+ 22 EMPLOYEE SPACES
+ 5 STACKING SPACES FOR DROP OFF AND PICK-UP
= 38.5 SPACES + 5 STACKING SPACES

PROPOSED: 35 STANDARD SPACES
+2 ACCESSIBLE PARKING SPACES
+5 STACKING SPACES FOR DROP OFF AND PICK-UP
= 37 TOTAL SPACES + 5 STACKING SPACES

2

LANDSCAPE REQUIREMENTS

REQUIRED:
1. 5% TOTAL PARKING LOT INTERIOR AREA
   LOT SIZE = 18,291 S.F. * 5% = 914.55 S.F. REQUIRED LANDSCAPING
2. TERMINAL LANDSCAPE ISLANDS AT END OF EACH ROW OF PARKING SPACES, MUST BE CURBED, 144 SQ. FT. IN AREA, & 18' LONG FOR EACH SINGLE ROW OF PARKING.
3. PLANTING AREA MINIMUM = 160 S.F. NOT LESS THAN 8' IN ANY DIMENSION
4. ONE CANOPY TREE FOR EACH 160 S.F. OF PLANTING AREA

PROPOSED:
809 S.F.
+350 S.F.
+230 S.F.
+247 S.F.
=1,636 S.F. TOTAL

1,636 S.F. / 18,291 S.F. = **8.94% TOTAL LANDSCAPING**

PLAY AREA REQUIREMENTS

REQUIRED: MINIMUM 1,200 SQ. FT.

PROPOSED: **2,775 SQ. FT.**

SIGNAGE REQUIREMENTS

ALL SIGNAGE TO MEET CHAPTER 134 OF THE CITY CODE OF ORDINANCES AND BE APPROVED UNDER A SEPARATE PERMIT ISSUED BY THE BUILDING PERMIT OF ROCHESTER HILLS, MI. SIGNAGE HAS NOT BEEN INCLUDED WITHIN THIS SUBMITTAL.

*** REFER TO CIVIL DOCUMENTS FOR ADDITIONAL ZONING INFORMATION***

Sheet Index

Sheet No	Title
G.001	Cover Sheet
C.1	Boundary / Topographic / Tree Survey
C.2	Demolition Plan
C.3	Paving and Grading Plan
C.3.1	Paving and Grading Details Plan
C.4	Utility Plan
C.7	Fire Plan
L1	Tree Preservation Plan
L2	Landscape Plan
C.101	Photometric Plan
C.102	Photometric Cut Sheets
A.100	First Floor Plan
A.101	Second Floor Plan
A.200	Exterior Elevations
A.201	Exterior Elevations
A.300	Site Details
A.301	Site Details
A.400	Exterior Renderings

2

View of Front Approach

North
Location Map
NTS

North
Aerial Map
NTS

krieger klatt
ARCHITECTS
architecture interiors consulting
1412 E. 11 Mile Rd. | Royal Oak, MI 48067
P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:
JS Capitol Group
945 Rochester Road
Suite #103
Rochester Hills, MI,
48307

Project:
Premier Academy
974 N. Adams Rd.
Rochester Hill, MI, 48307

Issued	Description	By
11.01.16	Preliminary Design	
01.13.17	Concept Plan	
02.08.17	Pre-SPA	
06.01.17	SPA	
07.07.17	SPA Revise	
07.25.17	SPA Revise (Parking)	

Seal:

Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

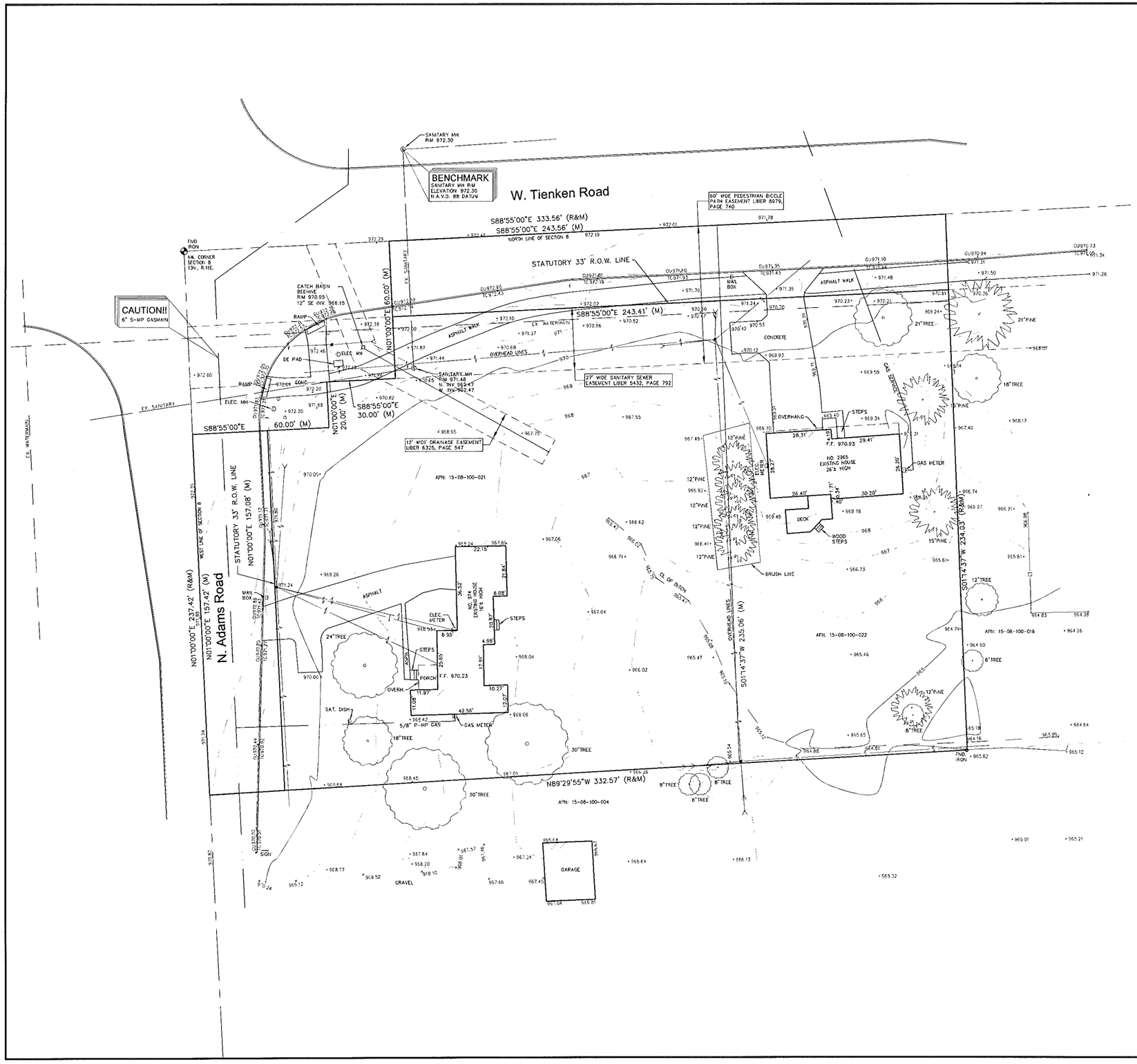
North Arrow:

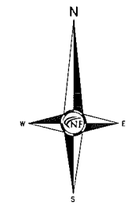
Sheet Title:
Cover Sheet

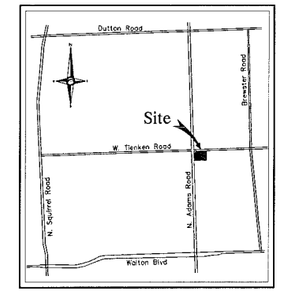
Project Number:
16-186

Sheet Number:
G.001

1
City File Number
17-018







Location Map
N.T.S.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL

PROJECT
Premier Academy

CLIENT
JS Capitol Group
945 S. Rochester Road
Rochester Hills, MI 48308
Contact: Paul Dunn
Phone: (248) 249-4911

PROJECT LOCATION
Part of the NE ¼
of Section 8
T.3N. , R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Boundary / Topographic /
Tree Survey

811
Know what's below
Call before you dig.

REVISIONS
7-7-17 SPA

LEGAL DESCRIPTION: PER TITLE COMMITMENT

Land situated in the City of Rochester Hills, County of Oakland, State of Michigan, more particularly described as:

PARCEL 1: Part of the Northwest 1/4 of Section 8, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, beginning at Northwest Section corner; thence South 88 degrees 59 minutes 00 seconds East 333.56 feet; thence South 01 degrees 14 minutes 37 seconds West 234.03 feet; thence North 89 degrees 29 minutes 00 seconds West 332.57 feet; thence North 01 degrees 00 minutes 00 seconds East 237.42 feet to beginning, except the Easterly 100 feet, also except North 60 feet of the West 90 feet and the South 20 feet of North 80 feet of West 60 feet taken for road.

APN: 15-08-100-021

PARCEL 2: Part of the Northwest 1/4 of Section 8, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, being the Easterly 100 feet of the following described parcel: beginning at Northwest Section corner; thence South 88 degrees 59 minutes 00 seconds East 333.56 feet; thence South 01 degrees 14 minutes 37 seconds West 234.03 feet; thence North 89 degrees 29 minutes 00 seconds West 332.57 feet; thence North 01 degrees 00 minutes 00 seconds East 237.42 feet to beginning.

APN: 15-08-100-022

LEGAL DESCRIPTION: TOTAL PARCEL AS SURVEYED

PART OF THE NW. 1/4 OF SECTION 8, T.3N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN; BEING DESCRIBED AS BEGINNING AT THE NW CORNER OF SAID SECTION 8; THENCE S. 88° 55' 00" E., 333.56 FEET ALONG THE NORTH LINE OF SAID SECTION 8; THENCE S. 01° 14' 37" W., 234.03 FEET; THENCE N. 89° 29' 55" W., 332.57 FEET; THENCE N. 01° 00' 00" E., 237.42 FEET TO THE POINT OF BEGINNING, EXCEPT THE EAST 100.00 FEET, ALSO EXCEPT THE NORTH 60.00 FEET OF THE WEST 90.00 FEET AND THE SOUTH 20.00 FEET OF THE NORTH 80.00 FEET TAKEN FOR ROAD PURPOSES. CONTAINING NET 58,686 SQUARE FEET OR 1.347 ACRES.

ADDRESS: 974 N. ADAMS ROAD, ROCHESTER HILLS, MI 48309-1305
APN: 15-08-100-021 & 15-08-100-022

SNOW NOTE

SURVEY COMPLETED UNDER EXTREME SNOW CONDITIONS, AND EXACT LOCATION OF PAVEMENT, CURBS, AND SURFACE STRUCTURES CANNOT BE GUARANTEED.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

LEGEND

MANHOLE	EXISTING SANITARY SEWER
	EXISTING SAN. CLEAN OUT
HYDRANT / GATE VALVE	EXISTING WATER MAIN
MANHOLE / CATCH BASIN	EXISTING STORM SEWER
	EX. R.Y. CATCH BASIN
	EXISTING BURIED CABLES
UTILITY POLE / GUY POLE / GUY WIRE	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN

DRAWN BY:
N. Naoum

DESIGNED BY:

APPROVED BY:
K. Navaroli

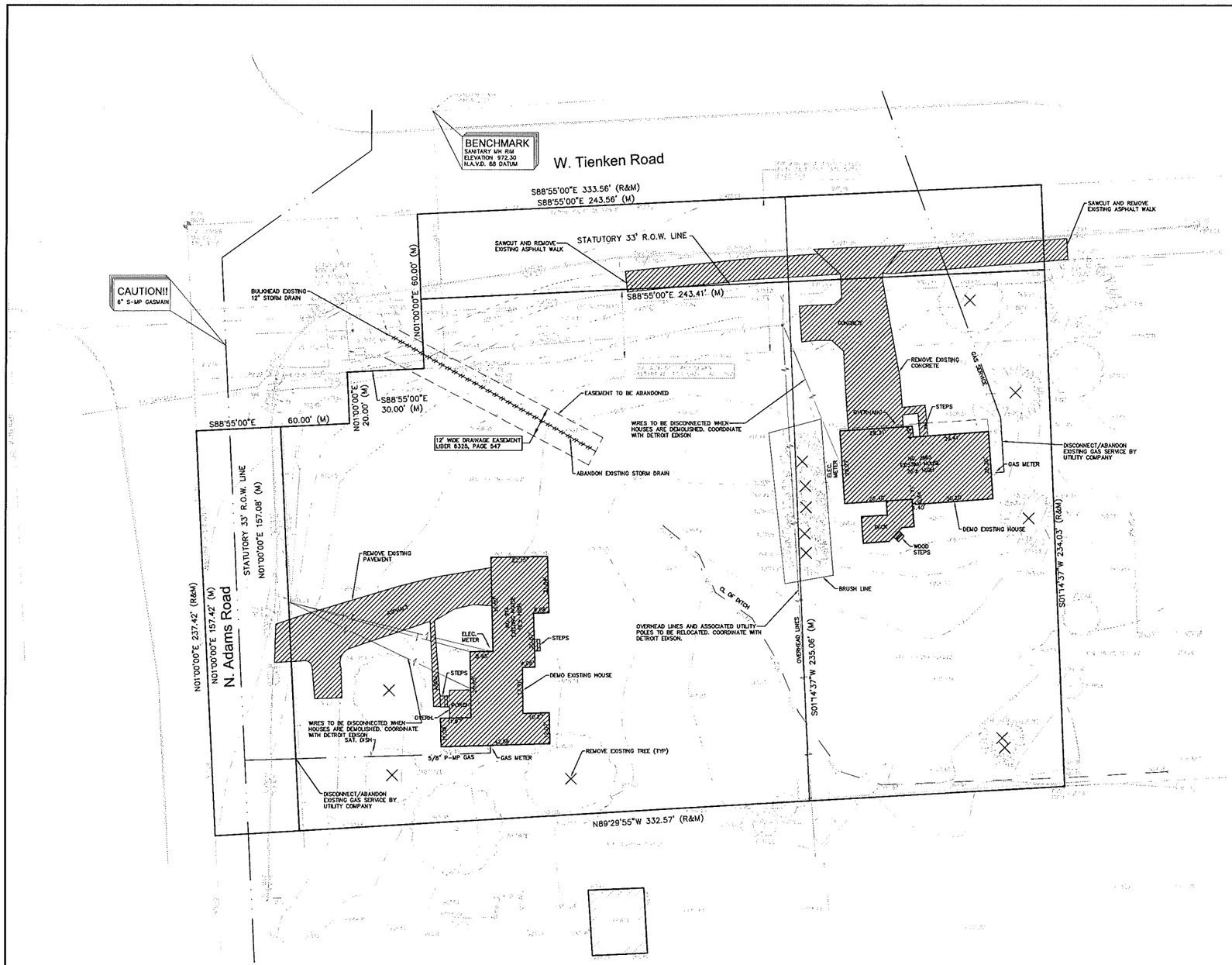
DATE:
06-02-2017

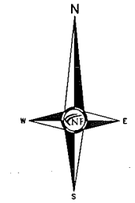
SCALE: 1" = 20'
20 10 0 10 20 30

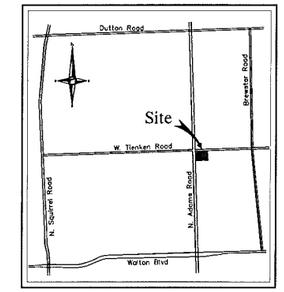
NFE JOB NO. J580

SHEET NO. C1

City File #17-018







Location Map
N.T.S.

DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE DETROIT EDISON COMPANY. REMOVAL OF DETROIT EDISON ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF DETROIT EDISON.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH CONSUMERS ENERGY/MICHCON. REMOVAL OF CONSUMERS ENERGY/ MICHCON GAS SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF CONSUMERS ENERGY/MICHCON.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH AMERITECH. REMOVAL OF AMERITECH COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF AMERITECH.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MDOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.

TOPOGRAPHIC SURVEY NOTES

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LEGEND

MANHOLE	EXISTING SANITARY SEWER
HYDRANT / GATE VALVE	EXISTING SAN. CLEAN OUT
	EXISTING WATER MAIN
MANHOLE / CATCH BASIN	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
UTILITY POLE / GUY POLE / GUY WIRE	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
XXXXXXXXXXXXXX	EXISTING UTILITY TO BE REMOVED
////////////////	EXISTING UTILITY TO BE ABANDONED
	INDICATES EXISTING TREE TO BE REMOVED
	INDICATES AREAS OF PAVEMENT, BUILDINGS, ETC. TO BE REMOVED

City File #17-018

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL

STATE OF MICHIGAN
MICHAEL J. KURMAS
ENGINEER NO. 620106413
PROFESSIONAL ENGINEER

PROJECT
Premier Academy

CLIENT
JS Capitol Group
945 S. Rochester Road
Rochester Hills, MI 48308
Contact: Paul Dunn
Phone: (248) 249-4911

PROJECT LOCATION
Part of the NE ¼
of Section 8
T.3N. , R.11E.
City of Rochester Hills,
Oakland County, Michigan

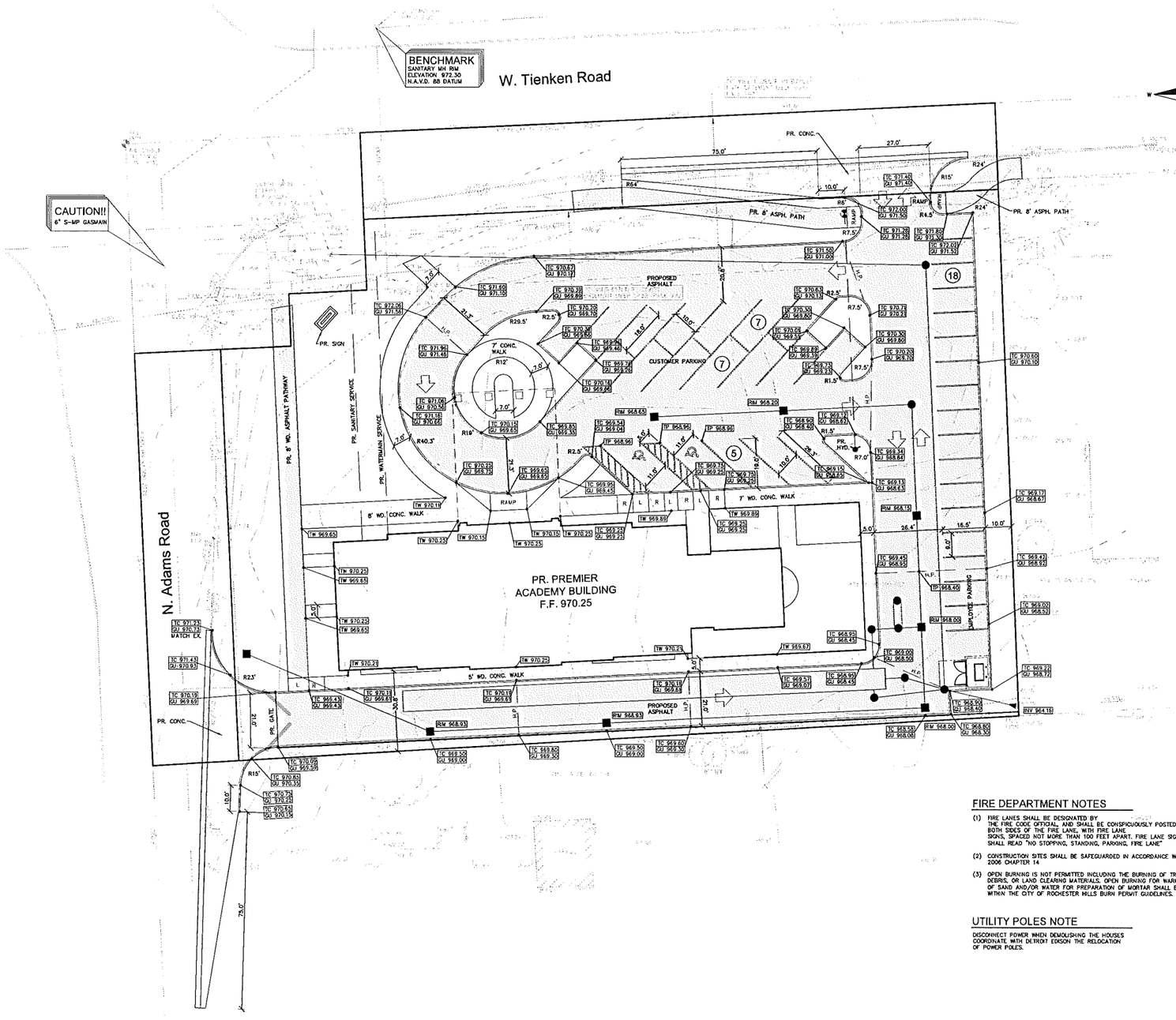
SHEET
Demolition Plan

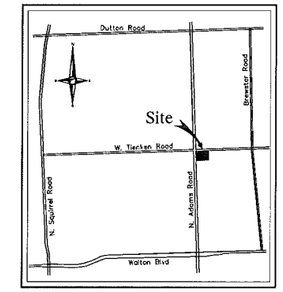
811
Know what's below
Call before you dig.

REVISIONS
7-7-17 SPA

DRAWN BY:
M. Kurmas
DESIGNED BY:
M. Kurmas
APPROVED BY:
M. Peterson
DATE:
07-07-2017
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. J580
SHEET NO. C2





Location Map
N.T.S.

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE NO. 1100L, 20AA; SURFACE COURSE – MDOT BITUMINOUS MIXTURE NO. 1100T, 20AA; ASPHALT CEMENT PENETRATION GRADE 85-100, BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD; MAXIMUM 2 INCH LIFT.

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES THICK TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

FIRE DEPARTMENT NOTES

(1) FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS, SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE"

(2) CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14

(3) OPEN BURNING IS NOT PERMITTED INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES.

UTILITY POLES NOTE

DISCONNECT POWER WHEN DEMOLISHING THE HOUSES. COORDINATE WITH DETROIT EDISON THE RELOCATION OF POWER POLES.

ESTIMATED QUANTITIES

PAVING

DESCRIPTION	QUANTITY	UNITS
4" ASPHALT ON 8" 21AA BASE	2,785	S.Y.
4" ASPHALT ON 4" 21AA BASE	248	S.Y.
4" CONCRETE SIDEWALK	5,550	S.F.
8" NON-REINFORCED CONCRETE	22	S.Y.
6" CONCRETE CURB & GUTTER	1,602	L.F.
8" CONCRETE APPROACH	298	S.Y.
M.D.O.T. DRIVEWAY OPENING DETAIL "M"	277	L.F.

PAVING LEGEND

PROPOSED CONCRETE PAVEMENT

PROPOSED ASPHALT PAVEMENT

LEGEND

MANHOLE	EXISTING SANITARY SEWER
	SAN. CLEAN OUT
HYDRANT / GATE VALVE	EXISTING WATERMAIN
MANHOLE / CATCH BASIN	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
UTILITY POLE / GUY POLE / GUY WIRE	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
C.O. / MANHOLE	PR. SANITARY SEWER
HYDRANT / GATE VALVE	PR. WATER MAIN
INLET / C.B. / MANHOLE	PR. STORM SEWER
	PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE
TC 600.00	PR. TOP OF CURB ELEVATION
GU 600.00	PR. GUTTER ELEVATION
TW 600.00	PR. TOP OF WALK ELEVATION
TP 600.00	PR. TOP OF PVMT. ELEVATION
FG 600.00	FINISH GRADE ELEVATION

City File #17-018

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL

STATE OF MICHIGAN
MICHAEL P. KURMAS
ENGINEER NO. 6201064137
LICENSED PROFESSIONAL ENGINEER

PROJECT
Premier Academy

CLIENT
JS Capitol Group
945 S. Rochester Road
Rochester Hills, MI 48308
Contact: Paul Dunn
Phone: (248) 249-4911

PROJECT LOCATION
Part of the NE ¼
of Section 8
T.3N. , R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Paving and Grading Plan

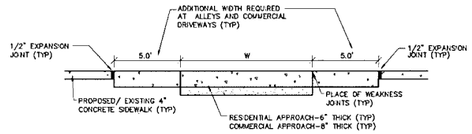
811
Know what's below
Call before you dig.

REVISIONS
7-7-17 SPA

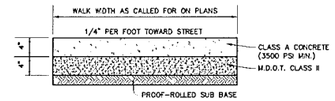
DRAWN BY: M. Kurmas
DESIGNED BY: M. Kurmas
APPROVED BY: M. Peterson
DATE: 07-07-2017
SCALE: 1" = 20'

NFE JOB NO. J580
SHEET NO. C3

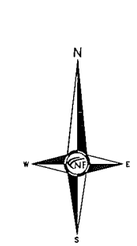
TYPICAL R7-8 BARRIER FREE PARKING SIGN DETAIL

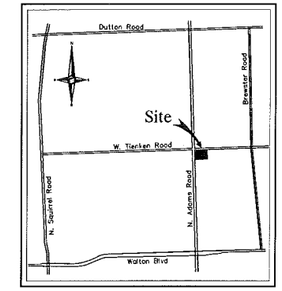


COMMERCIAL CONCRETE SIDEWALK DETAIL
N.T.S.



CONCRETE SIDEWALK SECTION
N.T.S.





Location Map
N.T.S.

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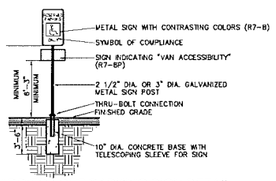
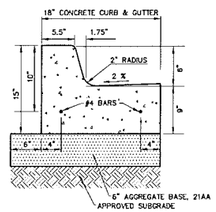
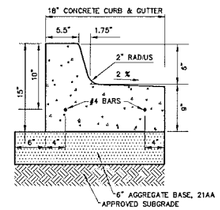


BARRIER FREE PARKING SIGN DETAIL
N.T.S.
Provide (1) for each accessible parking space



CONCRETE CURB DETAIL 'A'
N.T.S.



CONCRETE CURB DETAIL 'B'
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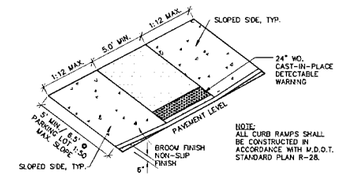
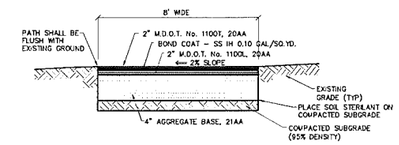
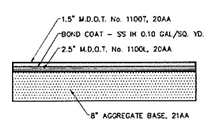


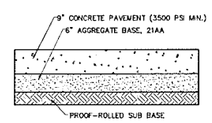
BARRIER FREE RAMP DETAIL
N.T.S.



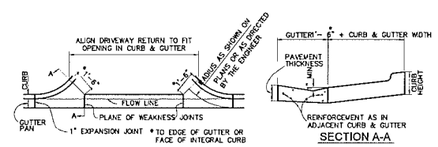
4" ASPHALT SAFETY PATH SECTION
N.T.S.



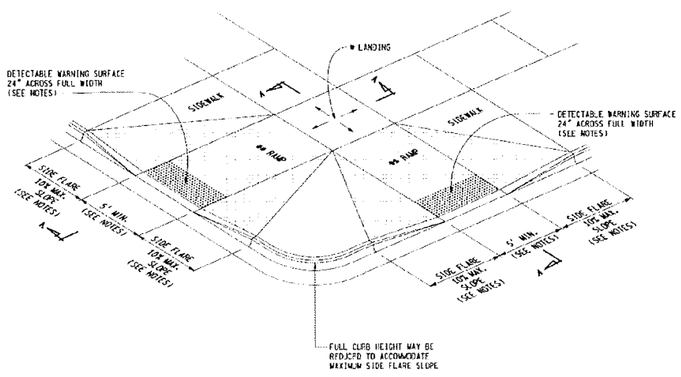
ASPHALT PAVEMENT SECTION
(DRIVE AND PARKING)



CONCRETE PAVEMENT SECTION
N.T.S.



MDOT DRIVEWAY OPENING DETAIL 'M'
N.T.S.



SIDEWALK RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%. RUNNING SLOPE 5% – 7% (8.3% MAXIMUM). SEE NOTES.

SEAL

STATE OF MICHIGAN
MICHAEL P. KURMAS
ENGINEER NO. 6201064137
PROFESSIONAL ENGINEER

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JS Capitol Group
945 S. Rochester Road
Rochester Hills, MI 48308
Contact: Paul Dunn
Phone: (248) 249-4911

PROJECT LOCATION
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of Section 8
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City of Rochester Hills,
Oakland County, Michigan

SHEET
Paving and Grading
Details Plan

811
Know what's below
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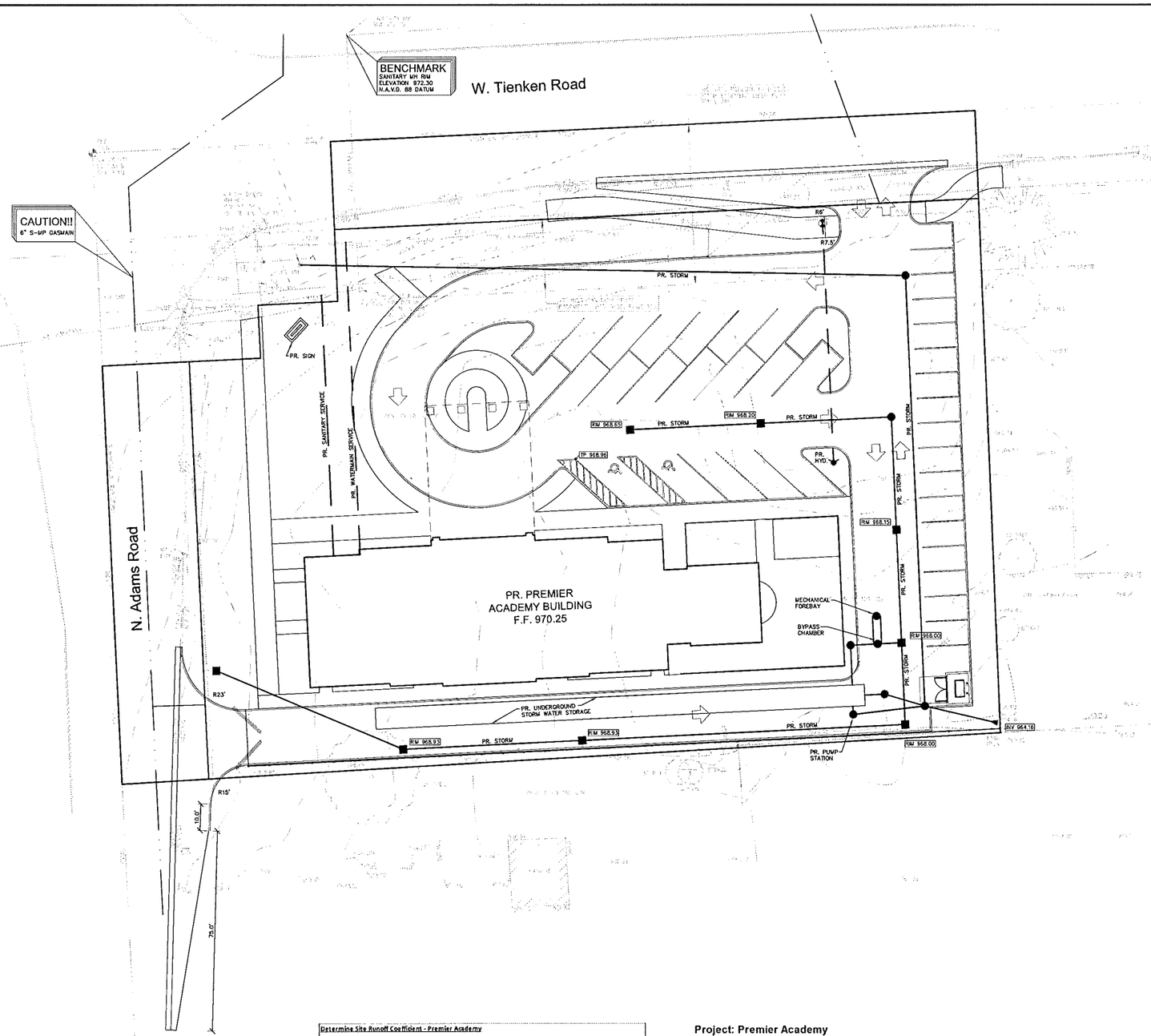
REVISIONS
7-7-17 SPA

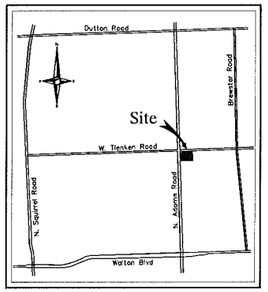
DRAWN BY:
M. Kurmas
DESIGNED BY:
M. Kurmas
APPROVED BY:
M. Peterson
DATE:
07-07-2017
SCALE: N.T.S.

City File #17-018

NFE JOB NO.
J580

SHEET NO.
C3.1





Location Map
N.T.S.

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PONTIAC, MI 48342-5032
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SEAL

STATE OF MICHIGAN
MARK P. KURMAS
ENGINEER NO. 6201064137
PROFESSIONAL ENGINEER

PROJECT
Premier Academy

CLIENT
JS Capitol Group
945 S. Rochester Road
Rochester Hills, MI 48308
Contact: Paul Dunn
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City of Rochester Hills,
Oakland County, Michigan

SHEET
Utility Plan

811
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REVISIONS
7-7-17 SPA

DRAWN BY:
M. Kurmas
DESIGNED BY:
M. Kurmas
APPROVED BY:
M. Peterson
DATE:
07-07-2017
SCALE: 1" = 20'
20 10 0 10 20 30

NFE JOB NO. J580
SHEET NO. C4

ESTIMATED QUANTITIES

STORM SEWER

DESCRIPTION	QUANTITY	UNITS
12" C-76, CLASS IV, SEWER PIPE	949	L.F.
96" CORRUGATED METAL PIPE	185	L.F.
MECHANICAL FOREBAY	1	EA.
BYPASS CHAMBER	1	EA.
PUMP STATION	1	EA.
4' DIA. CATCH BASIN W/ 2' SUMP	7	EA.
4' DIA. MANHOLE	6	EA.
2' DIA. INLET	1	EA.
SEWER TAP/CONNECTION	1	EA.

SANITARY SEWER

DESCRIPTION	QUANTITY	UNITS
6" PVC, SDR 23.5, BUILDING LEAD	98	L.F.
SEWER TAP/CONNECTION	1	EA.

WATER MAIN

DESCRIPTION	QUANTITY	UNITS
6" D.I., CLASS 54, WATER MAIN	91	L.F.
2" "K" COPPER BUILDING SERVICE	118	L.F.
6" HYDRANT ASSEMBLY	1	EA.
8x6" TAPPING SLEEVE G.V. & WELL	1	EA.
WATER MAIN CONNECTION	1	EA.

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- SAN. CLEAN OUT
- HYDRANT, GATE VALVE — EXISTING WATER MAIN
- MANHOLE, CATCH BASIN — EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- UTILITY POLE, GUY POLE, GUY WIRE — OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O., MANHOLE — PR. SANITARY SEWER
- HYDRANT, GATE VALVE — PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- SAND BACKFILL (95 % DENSITY)
- PROPOSED LIGHT POLE

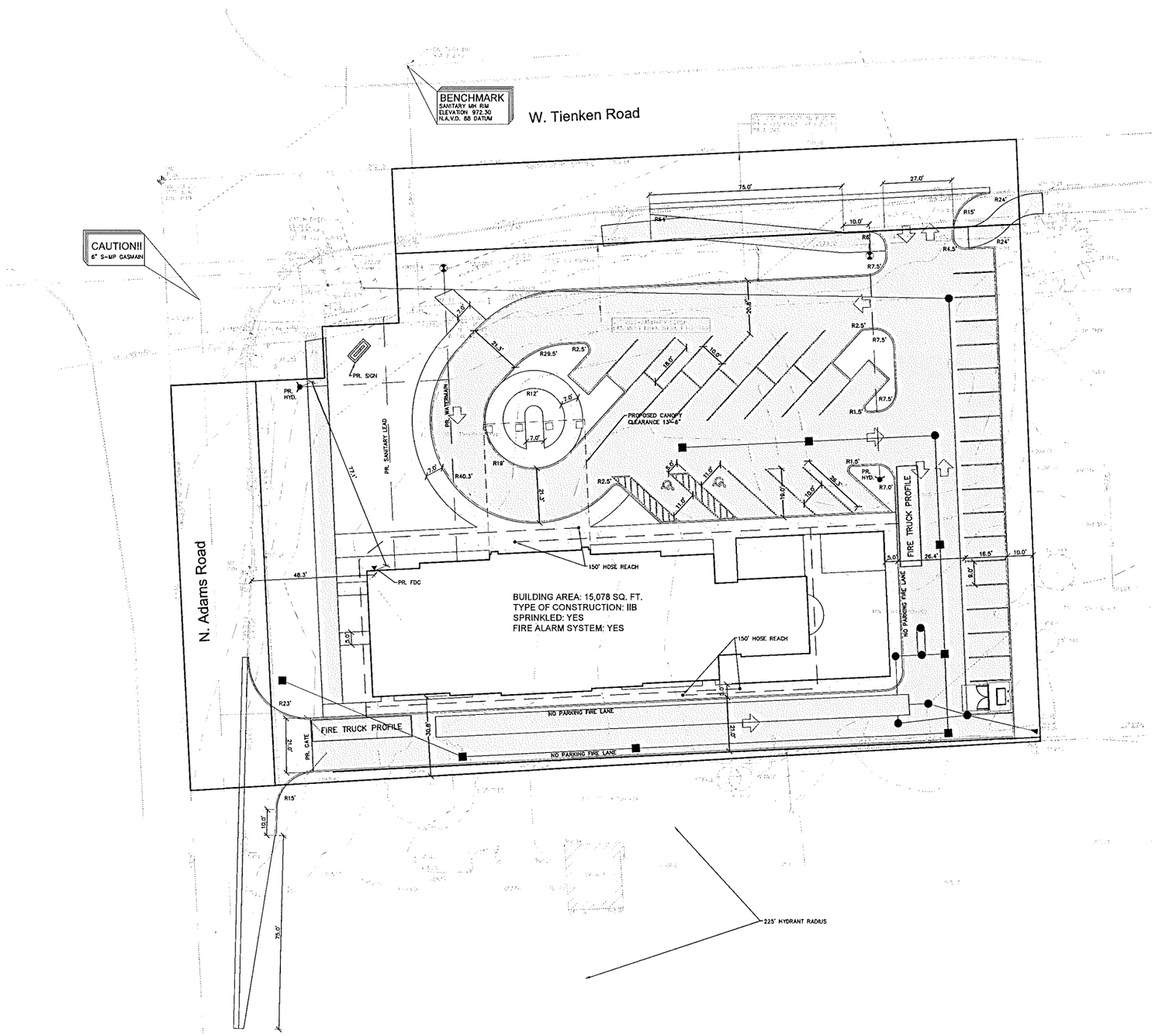
Determine Site Runoff Coefficient - Premier Academy			
Proposed Land Use:	Runoff Coefficient:	Drainage Area:	
Pavement	0.95	0.760	Acres
Building	0.95	0.190	Acres
Landscape / Open Space:	0.20	0.397	Acres
Detention Basin	1.00	0.000	Acres
Total Acreage:		1.347	Acres
Weighted Runoff Coefficient "C" Factor =		0.729	

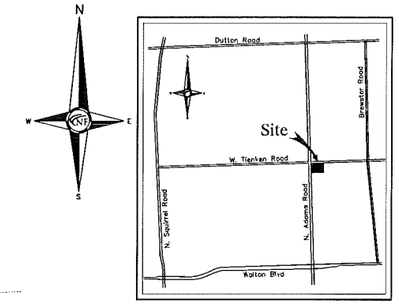
Project: Premier Academy
Date: 07/05/17

DETENTION CALCULATION 25 YEAR STORM PER OAKLAND COUNTY STANDARDS

ALLOWABLE DISCHARGE	C1 =	0.20 CFS/ACRE
AREA	A =	1.347 ACRES
RUNOFF COEFF	C =	0.729
TOTAL ALLOWABLE DISCHARGE	QA = C1 x A =	0.27 CFS
ALLOWABLE OUTFLOW	Q0 = QA / (A x C) =	0.27 CFS/ACRE
PEAK STORAGE TIME	T=-25+(SQR(8062.5/ Q0)) =	146.43 MINUTES
MAX. STORAGE VOLUME/ACRE	VS = (12900 x T / (T + 25)) - (40 x Q0 x T) =	9411.85 CU.FT./ACRE
TOTAL STORAGE REQUIRED	VT = VS x A x C =	9242.09 CU.FT.
TOTAL STORAGE PROVIDED		9299.00 CU.FT.

City File #17-018





Location Map
N.T.S.

FIRE DEPARTMENT NOTES

(1) FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS, SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE"

(2) CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14

(3) OPEN BURNING IS NOT PERMITTED INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES.

(4) A KNOX KEY SYSTEM SHALL BE INSTALLED, IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT KNOXBOX.COM.

(5) PROVIDE A "NO PARKING FIRE DEPARTMENT CONNECTION" SIGN OVER THE FIRE DEPARTMENT CONNECTION.

(6) A KNOX PAD LOCK SHALL BE INSTALLED ON PROPOSED GATE.

(7) SEE SHEET C3.1 FOR UNDERGROUND DETENTION STRUCTURAL CHECK.

(8) PROVIDE A "NO PARKING FIRE DEPARTMENT CONNECTION" SIGN OVER THE FIRE DEPARTMENT CONNECTION.

(9) A KNOX PADLOCK SHALL BE INSTALLED ON PROPOSED GATE.

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

MANHOLE	EXISTING SANITARY SEWER
	SAN. CLEAN OUT
HYDRANT / GATE VALVE	EXISTING WATERMAIN
MANHOLE / CATCH BASIN	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
UTILITY POLE / GUY POLE	EXISTING BURIED CABLES
GUY WIRE	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
C.O. / MANHOLE	PR. SANITARY SEWER
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GU 600.00	PR. GUTTER ELEVATION
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City File #17-018

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SHEET
Fire Plan

811
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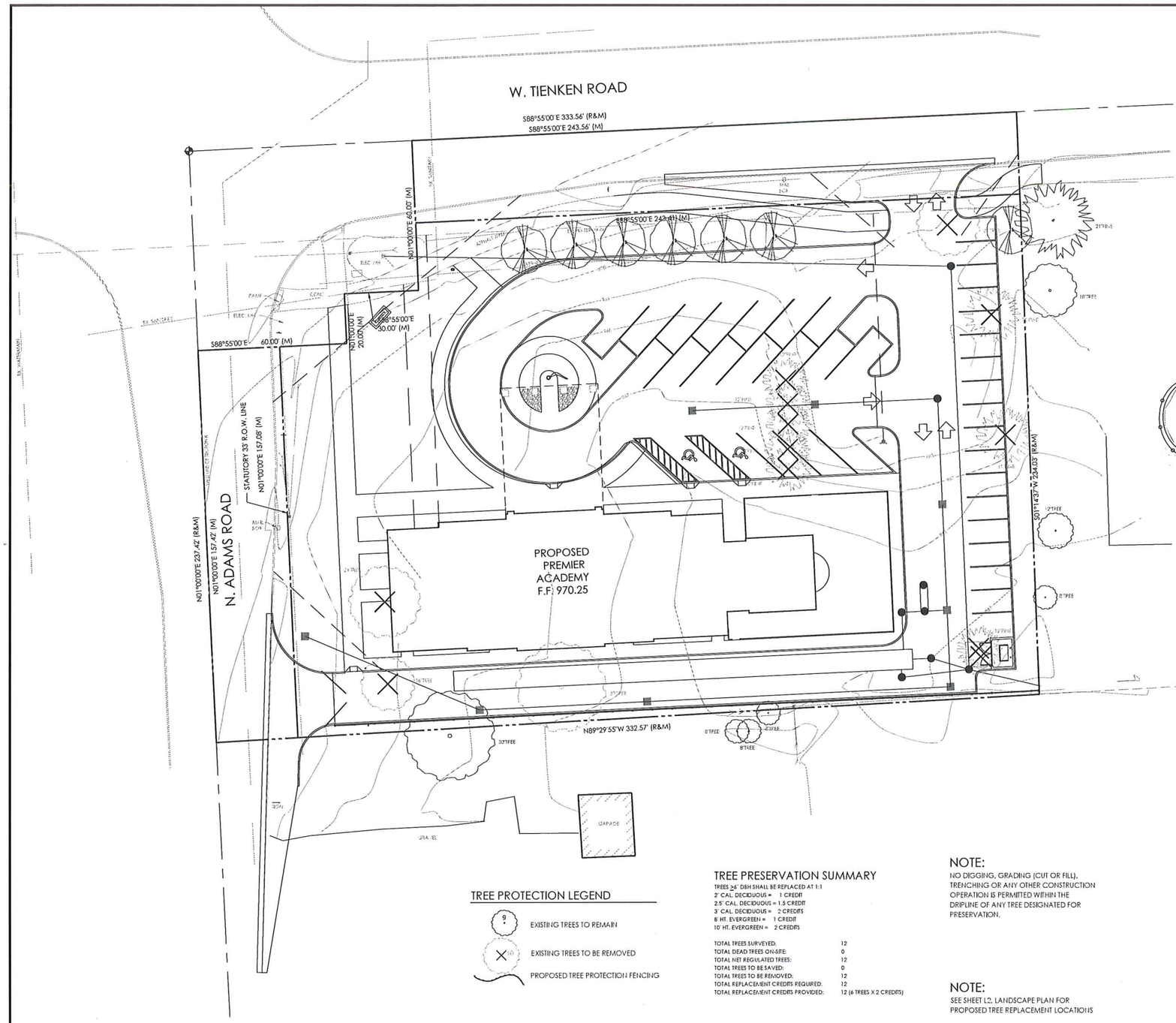
REVISIONS
7-7-17 SPA
7-21-17 SPA

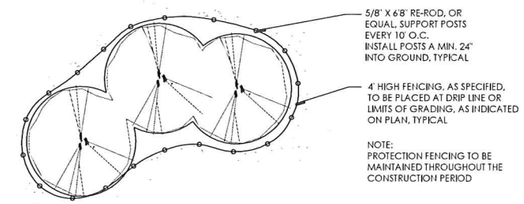
DRAWN BY:
M. Kurmas
DESIGNED BY:
M. Kurmas
APPROVED BY:
M. Peterson
DATE:
07-21-2017
SCALE: 1" = 20'

NFE JOB NO. J580
SHEET NO. C7



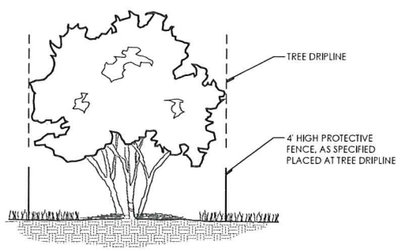
LOCATION MAP

N.T.S.



TREE PROTECTION DETAIL-PLAN

NTS



TREE PROTECTION DETAIL-SECTION

NTS

TREE PROTECTION LEGEND

- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- PROPOSED TREE PROTECTION FENCING

TREE PRESERVATION SUMMARY

TREES ≥6" DBH SHALL BE REPLACED AT 1:1
2" CAL. DECIDUOUS = 1 CREDIT
2.5" CAL. DECIDUOUS = 1.5 CREDIT
3" CAL. DECIDUOUS = 2 CREDITS
8' HT. EVERGREEN = 1 CREDIT
10' HT. EVERGREEN = 2 CREDITS

TOTAL TREES SURVEYED:	12
TOTAL DEAD TREES ON-SITE:	0
TOTAL NET REGULATED TREES:	12
TOTAL TREES TO BE SAVED:	0
TOTAL TREES TO BE REMOVED:	12
TOTAL REPLACEMENT CREDITS REQUIRED:	12
TOTAL REPLACEMENT CREDITS PROVIDED:	12 (6 TREES X 2 CREDITS)

NOTE:

NO DIGGING, GRADING (CUT OR FILL), TRENCHING OR ANY OTHER CONSTRUCTION OPERATION IS PERMITTED WITHIN THE DRIPLINE OF ANY TREE DESIGNATED FOR PRESERVATION.

NOTE:

SEE SHEET L2, LANDSCAPE PLAN FOR PROPOSED TREE REPLACEMENT LOCATIONS

GENERAL TREE PROTECTION NOTES

1. APPROVED TREE PROTECTION SHALL BE ERECTED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL THE IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
2. ALL UNDERSTORY VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE PRESERVED.
3. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN THE DRIP LINE.
4. WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
5. DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY TREE SCHEDULED TO REMAIN.
6. ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
7. SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINES OF PROTECTED TREES.
8. TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
9. ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH RIGIDLY STAKED FENCING.
10. THE PARKING OF IDLE AND RUNNING EQUIPMENT SHALL BE PROHIBITED UNDER THE DRIP LINE OF PROTECTED TREES.
11. THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
12. ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
13. THE GRUBBING OF UNDERSTORY VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE CLEARED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MINIMALLY WITH A HYDRO-AXE.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT PER ORDINANCE GUIDELINES, FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
15. TREES TO BE REMOVED SHALL BE FIELD VERIFIED, EVALUATED AND FLAGGED FOR REMOVAL, BY THE LANDSCAPE ARCHITECT OR FORESTER, ONLY AS DIRECTED BY THE OWNER OR OWNERS REPRESENTATIVE.

City File #17-018

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SEAL

STATE OF MICHIGAN — REGISTERED LANDSCAPE ARCHITECT

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City of Rochester Hills,
Oakland County, Michigan

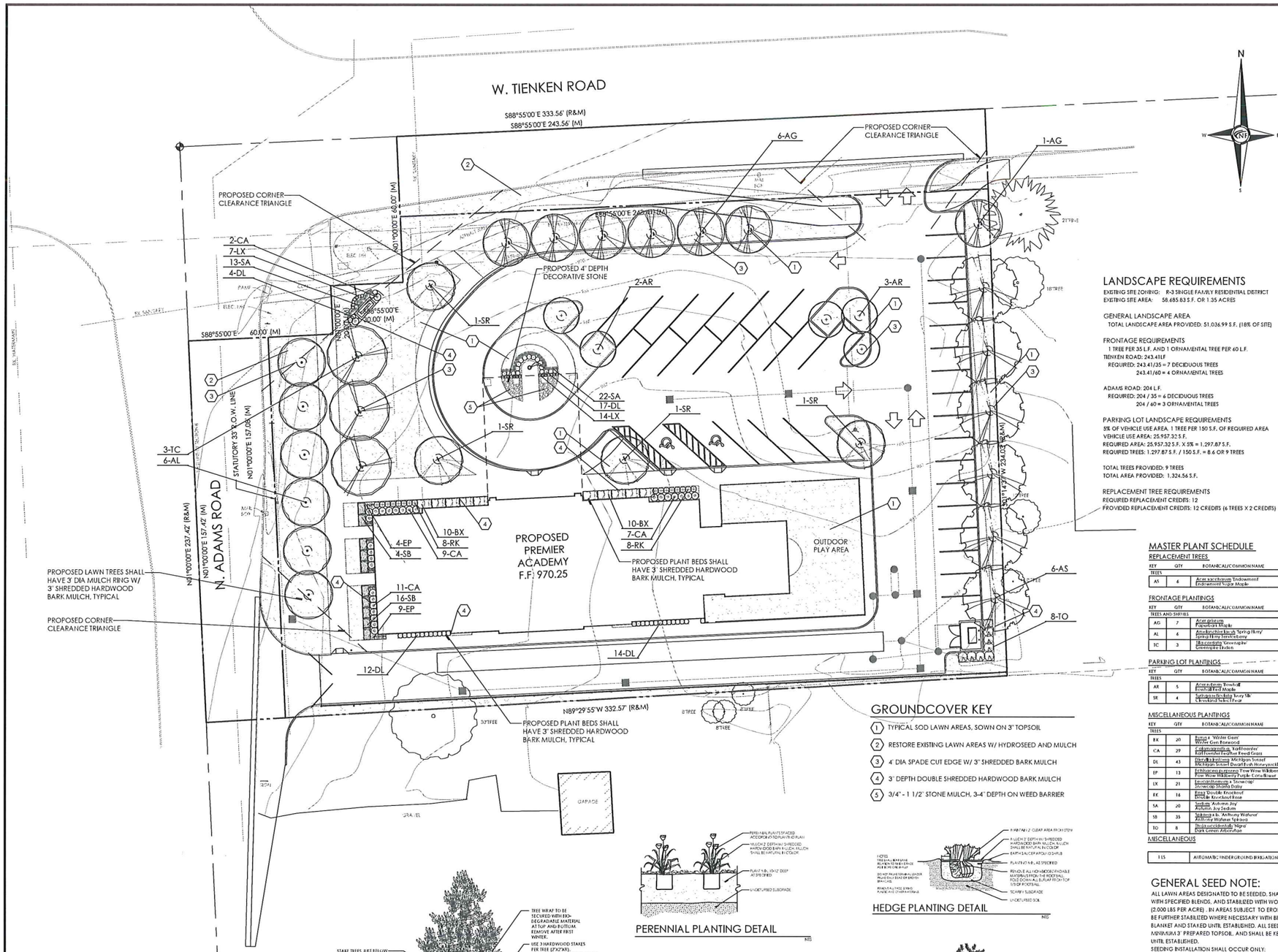
SHEET
Tree Preservation Plan

811 Know what's below Call before you dig.

REVISIONS

DRAWN BY: G. Ostrowski
DESIGNED BY: G. Ostrowski
APPROVED BY: G. Ostrowski
DATE: 06-01-2017
SCALE: 1" = 20'

NFE JOB NO. J580
SHEET NO. L1



LOCATION MAP
N.T.S.

LANDSCAPE REQUIREMENTS

EXISTING SITE ZONING: R-3 SINGLE FAMILY RESIDENTIAL DISTRICT
EXISTING SITE AREA: 58.685 83 S.F. OR 1.35 ACRES

GENERAL LANDSCAPE AREA
TOTAL LANDSCAPE AREA PROVIDED: 51,036.99 S.F. (18% OF SITE)

FRONTAGE REQUIREMENTS
1 TREE PER 35 L.F. AND 1 ORNAMENTAL TREE PER 60 L.F.
TIENKEN ROAD: 243.41LF
REQUIRED: 243.41/35 = 7 DECIDUOUS TREES
243.41/60 = 4 ORNAMENTAL TREES

ADAMS ROAD: 204 L.F.
REQUIRED: 204 / 35 = 6 DECIDUOUS TREES
204 / 60 = 3 ORNAMENTAL TREES

PARKING LOT LANDSCAPE REQUIREMENTS
5% OF VEHICLE USE AREA. 1 TREE PER 150 S.F. OF REQUIRED AREA
VEHICLE USE AREA: 25,957.32 S.F.
REQUIRED AREA: 25,957.32 S.F. X 5% = 1,297.87 S.F.
REQUIRED TREES: 1,297.87 S.F. / 150 S.F. = 8.6 OR 9 TREES

TOTAL TREES PROVIDED: 9 TREES
TOTAL AREA PROVIDED: 1,324.56 S.F.

REPLACEMENT TREE REQUIREMENTS
REQUIRED REPLACEMENT CREDITS: 12
PROVIDED REPLACEMENT CREDITS: 12 CREDITS (6 TREES X 2 CREDITS)

CITY OF ROCHESTER HILLS NOTES

1. PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT MUST INSPECT ALL LANDSCAPE PLANTS FOR COMPLIANCE BUT NOT LIMITED TO DEAD TREES, REPLACEMENT TREES, IN-PERT PLANTINGS, AND PLANTS AS LISTED ON THE APPROVED PLAN. ON SITE INSPECT ALL PROPOSED PLANTS TO IDENTIFY ANY PLANTS IDENTIFIED AS INVASIVE OR EXHIBITING PEST PROBLEMS. A HAZARD TO THE SAFE USE OF THE PROPOSED PLANT. A PROPERTY MAY REQUIRE THE DEVELOPER TO REMOVE AND POSSIBLY REPLACE ANY SUCH TREES.
2. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF A PUBLIC ROADWAY. SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF A PUBLIC PATHWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF A PUBLIC PATHWAY. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM ANY FIRE HYDRANT. SHADE AND EVERGREEN TREES MUST BE PLANTED AT LEAST 10' FROM THE NEAREST CURB AND WALK AND AT LEAST 5' FROM THE NEAREST UNDERGROUND UTILITY.
3. NO TREE OR SHRUB MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET RIGHT-OF-WAY AT A DISTANCE OF 25' FROM THEIR POINT OF INTERSECTION. NO TREE OR SHRUB MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITH A PUBLIC SIDEWALK AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION.
4. PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB IN THE PUBLIC RIGHT-OF-WAY.
5. NO SUBSTITUTIONS OR CHANGES OF LOCATION FOR PLANT MATERIALS SHALL BE MADE WITHOUT THE APPROVAL OF THE DEVELOPER AND/OR CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT.
6. THE DEVELOPER AND/OR THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT AT ANY STAGE OF THE INSTALLATION TO REJECT ANY NOW OR MATERIALS THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS OR SPECIFICATIONS.
7. REPLACEMENT TREES MAY NOT BE PLANTED IN THE DRIP LINE OF EXISTING TREES.
8. TREES MUST BE AT LEAST 5' FROM ANY DETENTION/RETENTION BASINS AND 15' FROM ALL OVERHEAD UTILITIES.
9. THESE REQUIREMENTS ARE INCORPORATED INTO THE PLANS.

IRRIGATION NOTE:

EXISTING IRRIGATION SYSTEM SHALL BE EXPANDED AND RESTORED TO AS NECESSARY TO INSURE ALL LANDSCAPE AREAS WILL BE IRRIGATED IN CONFORMANCE WITH THE CITY OF ROCHESTER HILLS REQUIREMENTS. WATERING WILL ONLY OCCUR BETWEEN THE HOURS OF 12 AM AND 5AM, AND INCLUDE THOSE AREAS WITHIN THE PUBLIC R.O.W.

MASTER PLANT SCHEDULE

REPLACEMENT TREES

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENT	UNIT/ TOTAL COST
TREES						
AS	6	Acer saccharum 'Endowment' Endowment Sugar Maple	3" CAL	B&B	FULLY BRANCHED HEADS	$325/ $1,950
					REPLACEMENT TOTAL:	$1,950.00

FRONTAGE PLANTINGS

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENT	UNIT/ TOTAL COST
TREES AND SHRUBS						
AG	7	Acer platanoides Pacificam Maple	2.5" CAL	B&B	FULLY BRANCHED HEADS	$300/ $2,100
AL	6	Amelanchier laevis 'Spring Flurry' Spring Flurry Serviceberry	2.5" CAL	B&B	FULLY BRANCHED HEADS	$300/ $1,800
SC	3	Syringa reticulata 'Greenspire' Greenspire Lilac	3" CAL	B&B	FULLY BRANCHED HEADS	$325/ $975
					FRONTAGE TOTAL:	$4,875.00

PARKING LOT PLANTINGS

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENT	UNIT/ TOTAL COST
TREES						
AR	5	Acer rubrum 'Bowhall' Bowhall Red Maple	3" CAL	B&B	FULLY BRANCHED HEADS	$325/ $1,625
SR	4	Salix nigra 'Scholtz' Scholtz Black Willow	3" CAL	B&B	FULLY BRANCHED HEADS	$325/ $1,300
					PARKING LOT TOTAL:	$2,925.00

MISCELLANEOUS PLANTINGS

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	ROOT	COMMENT	UNIT/ TOTAL COST
TREES						
BK	20	Buxus x 'Winter Gem' Winter Gem Boxwood	30" HT	B&B	MAINTAIN AS HEDGE	$50/ $1,000
CA	29	Calamagrostis x. 'Karl Foerster' Karl Foerster Feather Reed Grass	2 GAL	CONT	WELL-ROOTED	$50/ $1,450
DL	43	Diervilla lonicera 'Michigan Sunset' Michigan Sunset Dwarf Bush Honeysuckle	5 GAL	CONT	WELL-ROOTED	$50/ $2,150
EP	13	Echinacea purpurea 'Pow Wow Wildberry' Pow Wow Wildberry Purple Coneflower	2 GAL	CONT	WELL-ROOTED	$50/ $650
LX	21	Leucanthemum x 'Snowcap' Snowcap Shasta Daisy	2 GAL	CONT	WELL-ROOTED	$50/ $1,050
RK	16	Rosa 'Double Knockout' Double Knockout Rose	5 GAL	CONT	WELL-ROOTED	$50/ $800
SA	20	Salvia 'Ashwin Joy' Ashwin Joy Sedum	2 GAL	CONT	WELL-ROOTED	$50/ $1,000
SB	35	Spiraea b. 'Anthony Waterer' Anthony Waterer Spiraea	30" HT	B&B	MAINTAIN AS HEDGE	$50/ $1,750
TO	8	Thuja occidentalis 'Nigra' Dark Green Arborvitae	5' HT	B&B	MAINTAIN AS HEDGE	$50/ $400
MISCELLANEOUS					MISCELLANEOUS TOTAL:	$10,250.00

I 15	AUTOMATIC UNDERGROUND IRRIGATION SYSTEM, COMPLETE	$9,000.00

GENERAL SEED NOTE:

ALL LAWN AREAS DESIGNATED TO BE SEEDED, SHALL BE HYDRO-SEEDED WITH SPECIFIED BLENDS, AND STABILIZED WITH WOOD CELLULOSE FIBER MULCH (2,000 LBS PER ACRE). IN AREAS SUBJECT TO EROSION, SEEDED LAWN SHALL BE FURTHER STABILIZED WHERE NECESSARY WITH BIODEGRADABLE EROSION BLANKET AND STAKED UNTIL ESTABLISHED. ALL SEED SHALL BE APPLIED OVER A MINIMUM 3" PREPARED TOPSOIL, AND SHALL BE KEPT MOIST AND WATERED DAILY UNTIL ESTABLISHED.
SEEDING INSTALLATION SHALL OCCUR ONLY:
SPRING: APRIL1 TO JUNE1
FALL: AUGUST 15 TO OCTOBER 15

GENERAL SOD NOTE:

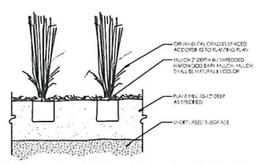
ALL LAWN AREAS DESIGNATED TO BE SODDED, SHALL BE SODDED WITH A BLENDED DURABLE BLUEGRASS SOD, TYPICALLY GROWN IN THE REGION. ALL TURF SHALL BE PLACED ON A MINIMUM 3" PREPARED TOPSOIL, AND WATERED DAILY UNTIL ESTABLISHMENT. IN AREAS SUBJECT TO EROSION, SODDED LAWN SHALL BE STABILIZED WHERE NECESSARY, AND LAID PERPENDICULAR TO SLOPES
SOD INSTALLATION SHALL OCCUR ONLY:
SPRING: APRIL1 TO JUNE1
FALL: AUGUST 15 TO OCTOBER 15

GROUNDCOVER KEY

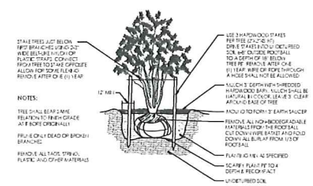
1. TYPICAL SOD LAWN AREAS, SOWN ON 3" TOPSOIL
2. RESTORE EXISTING LAWN AREAS W/ HYDROSEED AND MULCH
3. 4' DIA SPADE CUT EDGE W/ 3" SHREDDED BARK MULCH
4. 3" DEPTH DOUBLE SHREDDED HARDWOOD BARK MULCH
5. 3/4" - 1 1/2" STONE MULCH, 3-4" DEPTH ON WEED BARRIER

PERENNIAL PLANTING DETAIL
NTS

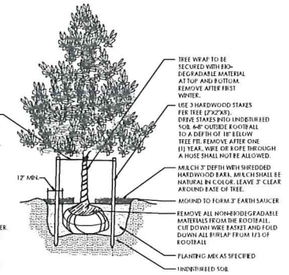
HEDGE PLANTING DETAIL
NTS



ORNAMENTAL GRASS PLANTING DETAIL
NTS



MULTI-STEM TREE PLANTING DETAIL
NTS



DECIDUOUS TREE PLANTING DETAIL
NTS

ROCHESTER HILLS MAINTENANCE NOTES

1. LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
2. PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ALTER PROPER MAINTENANCE OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
3. ALL DEAD, DAMAGED, OR DISEASED PLANT MATERIAL SHALL BE REMOVED IMMEDIATELY AND REPLACED WITHIN: (a) MONTHS AFTER DISCOVERY IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. FOR PURPOSES OF THIS SECTION, THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1, AND FROM OCTOBER 1 UNTIL THE FREEZING SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIALS INSTALLED TO REPLACE DEAD OR DEGRADED MATERIAL SHALL BE ALIGNED AS PRACTICAL TO THE SIZE OF THE PLANT MATERIAL IT IS INTENDED TO REPLACE. THE CITY MAY NOTIFY PROPERTY OWNERS OF THE NEED TO REPLACE DEAD, DAMAGED, OR DEGRADED MATERIAL.
4. THE APPROVED LANDSCAPE PLAN SHALL BE CONSIDERED A PERMANENT RECORD AND INTEGRAL PART OF THE SITE PLAN APPROVAL, UNLESS OTHERWISE APPROVED BY ACCORDANCE WITH THE AMENDMENT AND PROCEDURES. ANY REVISIONS TO OR REMOVAL OF PLANT MATERIALS, OR NON-COMPLIANCE WITH THE MAINTENANCE REQUIREMENTS OF SECTION 138-4.120 WILL PLACE THE PARCEL IN VIOLATION. PROPERTY MEETING THE APPROVED LANDSCAPE PLAN AND BE A VIOLATION OF THE OPERANCE.
5. IF PROTECTED TREES ARE DAMAGED, A FINE SHALL BE ASSESSED AS WELL AS THE MULCH BASE AT A MINIMUM RATE AS DEFINED BY THE FORESTRY DEPARTMENT.

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL

PROJECT
Premier Academy

CLIENT
JS Capitol Group
945 S. Rochester Road
Rochester Hills, MI 48308
Contact: Paul Dunn
Phone: (248) 249-4911

PROJECT LOCATION
Part of the NE ¼
of Section 8
T.3N. , R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Landscape Plan

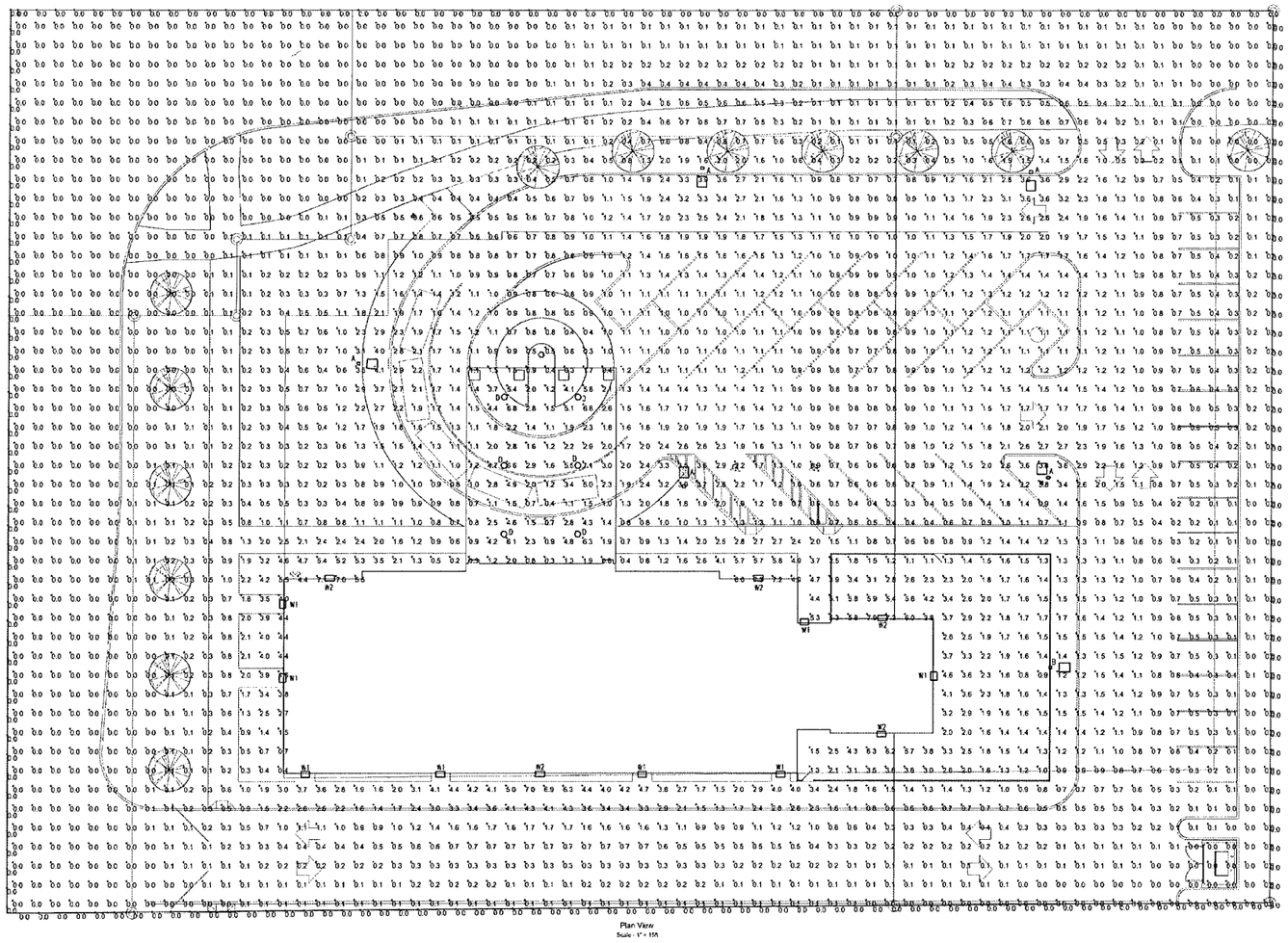
811 Know what's below Call before you dig.

REVISIONS
06/28/17 REVISED PER CITY REVIEW

DRAWN BY: G. Ostrowski
DESIGNED BY: G. Ostrowski
APPROVED BY: G. Ostrowski
DATE: 06-01-2017
SCALE: 1" = 20'
20 10 0 10 20 30

City File #17-018

NFE JOB NO. J580
SHEET NO. L2



Plan View
Scale - 1" = 15ft

Photometric Plan

ANY LIGHTING ASSOCIATED WITH THE FLAGPOLE OR SITE SIGNAGE HAS NOT BEEN INCLUDED IN THE PHOTOMETRIC PLAN AS THEY DO NOT CONTRIBUTE TO THE FOOTCANDLE LEVELS ON THE GROUND

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PERIMETER	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
Site Lighting	+	0.8 fc	7.9 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	5	Lithonia Lighting	DSX1 LED 40C 700 AMBPC T4M MVOLT	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T4M OPTIC, AMBER PC, @ 700mA	LED	1	DSX1_LED_40C_700_AMBPC_T4M_MVOLT.ies	6209	1	89.01
	B	1	Lithonia Lighting	DSX1 LED 40C 530 AMBPC T5M MVOLT	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T5M OPTIC, AMBER PC, @ 530mA	LED	1	DSX1_LED_40C_530_AMBPC_T5M_MVOLT.ies	5176	1	67.74
	D	8	Lithonia Lighting	LDN6 35/05 LO/AR LSS	6IN LDN, 3500K, 500LM, 80CRI, CLEAR, SEMI-SPECULAR REFLECTOR	LED	1	LDN6_35_05_LO/AR_LSS.ies	629	1	7.57
	W1	8	BEGA US	22 383	7.7-BTL, X 9.3-BW, X 4-UPW, WALL WASHER LED LUMINAIRE DIFFUSE LENS		1	22383.IES	1926	1	29.01
	W2	5	BEGA Converted by LUMCalcV 28.04.2015 / M.S	33378	33378	LED 43.2W	1	33378.ies	2539	1	50

krieger klatt
ARCHITECTS
architecture interiors consulting
1412 E. 11 Mile Rd. | Royal Oak, MI 48067
P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:
JS Capitol Group
945 Rochester Road
Suite #103
Rochester Hills, MI,
48307

Project:
Premier Academy
974 N. Adams Rd.
Rochester Hill, MI, 48307

Issued	Description	By
11.01.16	Preliminary Design	
01.13.17	Concept Plan	
02.08.17	Pre-SPA	
06.01.17	SPA	
07.07.17	SPA Revise	

Seal:

Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:

Sheet Title:
Photometric Plan

Project Number:
16-186

Sheet Number:
C.101

City File Number
17-018

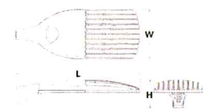
FIXTURE: A & B
- 15'-0" POLE FIXTURE MOUNTING HGT.
- FIXTURE TO BE MOUNTED AT A FIXED ANGLE OF 90 DEGREES TO THE SURFACE

D-Series Size 1
LED Area Luminaire

d^series

Specifications

EPA: 1.01 ft² (0.09 m²)
Length: 33" (83.8 cm)
Width: 13" (33.0 cm)
Height: 7 1/2" (19.1 cm)
Weight (max): 27 lbs (12.2 kg)



Catalog Number
Notes
Type

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for lumina ne to photocontrol interoperability1
- Th s luminaire is part of an A+ Certified solution for ROAM®2 or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background.

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately. Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX1 LED 60C 1000 40K T3M MVOLT SPA DDBXD

DSX1LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** 30C 30 LEDs (one engine) 40C 40 LEDs (two engines) 60C 60 LEDs (two engines) **Rotated optics*** 60C 60 LEDs (two engines)	530 530 mA 700 700 mA 1000 1000 mA (1 A)	30K 3000K 40K 4000K 50K 5000K AMBPC Amber phosphor converted	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium TVS Type V very short TSS Type V short TSM Type V medium TSW Type V wide BLC Backlight control 2 BLCO Left power control 2 BLCO Right power control 2	MVOLT* 347 347V 120* 120V 208* 208V 240* 240V 277* 277V 347* 347V 480* 480V	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adapter RPUMBA Round pole universal mounting adapter **Shipped separately** KMA8DDDBXD U Post top conversion adapter (Specify finish)

Control options		Other options	Finish
Shipped installed PER NEMA® twist-lock receptacle only (no controls) 1 PER5 Five-wire receptacle only (no controls) 1,2 PER7 Seven-wire receptacle only (no controls) 1,2 DMG 0-10V dimming wires pulled out back of housing for external control (no controls) 2 DCR Dusk-to-dawn enable via ROAM® node only 1 DS Dual switching PIR 6-level motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5FC 3,4,5 PIR1FC3V 6-level motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1FC 3,4,5 PIRHFC3V 6-level motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5FC 3,4,5 PIRH1FC3V 6-level motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1FC 3,4,5	PIR6FC3V 6-level motion/ambient sensor, 5-15' mounting height, ambient sensor enabled at 5FC 3,4,5 PIR6FC3V 6-level motion/ambient sensor, 5-15' mounting height, ambient sensor enabled at 1FC 3,4,5 BL30 Bi-level switched dimming, 30% 3,5 BL50 Bi-level switched dimming, 50% 3,5 PIRHTC30Q 7-pin light control ready 1,2 PIRHTC50Q 7-pin light control ready 1,2 PIRTC30Q 7-pin light control ready 1,2 PIRTC50Q 7-pin light control ready 1,2 FAO Field adjustable output	**Shipped installed** HS House side shield 2 NLTAIR2 Air louver installation 2 SF Single fuse (120, 277, 347V) 2 DF Double fuse (208, 240, 480V) 2 L90 Left internal optics 2 R90 Right internal optics 2 BS Bird spikes	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

LITHONIA LIGHTING
One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8441 • www.lithonia.com
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DSX1 LED
Rev. 02/01/17
Page 1 of 7

FIXTURE: D
- SOFFIT MOUNTED
- 13'-6" FIXTURE MOUNTING HGT.

LITHONIA LIGHTING

Catalog Number
Notes
Type

LDN6

6" OPEN and WALLWASH LED
Non-IC
New Construction Downlight

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.
CONSTRUCTION — Galvanized steel mounting plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.
Vertically adjustable mounting brackets with commercial bar hangers provide 3-1/4" total adjustment.
Two combination ½"-3/4" and four ½" knockouts for straight through conduit runs. Capacity: 8 (Max. 4 net). Rx 12 AWG conductors, rated for 90°C.
Accommodates 12"-24" joist spacing.
Passive cooling thermal management for 25 C standard, high ambient (40°C) option available. Light engine and drivers are accessible from above ceiling.
Max ceiling thickness 8-1/2".
OPTICS — LEDs are binned to a 3-step SDCM, 80 CRI minimum.
LED light source concealed with diffusing optical lens.
General illumination lighting with 3 BUG, MH and 55° cutoff to source and source image.
Self-flanged and dual reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.
ELECTRICAL — Multi-volt (120-277V, 50-60Hz) mini LED 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.
0-10V dimming fixture requires two (2) additional low voltage wires to be pulled.
70% lumen maintenance at 50,000 hours.
LISTINGS — Certified to UL and Canadian safety standards. Damp location standard. Wet location, covered ceiling optional. ENERGY STAR® certified product.
WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25°C.
Specifications subject to change without notice.

A+ Capable options indicated by this color background.

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** LDN6 35/15 LO6AR LSS MVOLT EZ10

LDN6 Series	Color temperature	Lumens[1]	Aperture/Trim Color	Finish	Voltage
LDN6 6" round	27/ 2700K 30/ 3000K 35/ 3500K 40/ 4000K	05 500 lumens 08 1000 lumens 15 1500 lumens 20 2000 lumens 25 2500 lumens 30 3000 lumens 40 4000 lumens 50 5000 lumens	LO6 Downlight LD6 Baffle/wall AR Clear AW White BB Black	LSS Semi-specular LM Matte diffuse LS Specular	MVOLT Multi-volt 120 120V 277 277V 347 347V

Driver	Options	
EZ10 eldoLED 10V 0-10V EZ1 eldoLED 1% 0-10V	SF* Single fuse TRW* White painted flange TRBL Black painted flange ELR Battery pack (remote) EL Battery pack EPSR6EZ1* eldoPak® dimming pack controls 0-10V mini LED drivers EPSR6EZ10* eldoPak® dimming pack controls 0-10V mini LED drivers. EM overtrack fixtures on emergency circuit.	HAO High ambient option CP Chicago Plenum VFL Wire location RBL___ RELOC® ready luminaire connectors enable a simple and consistent factory installed opt-ion across all ABL luminaire brands. Refer to RBL for complete nomenclature. Available only in RBL4, RBL8, RBL40, and RBL81LS UGPO10 UL point of manufacture

Accessories: Order as separate catalog number.

EAC DDM 120 Compact interruptible emergency AC power system
EAC DDM 120 Compact interruptible emergency AC power system
GRAB-R Oversized trim ring with 8" outside diameter
SCAG Sloped ceiling adapter. Refer to TECH-SCA for more options.

Notes
1 Overall height varies based on lumen package, refer to dimensional chart on page 3.
2 Not available with Notches.
3 Not available with emergency options.
4 120V only.
5 Available with clear (SF) or frosted (TRW) only.
6 Must specify voltage: 120V or 277V.

DOWNLIGHTING LDN6

FIXTURE: W1
- WALL MOUNTED
- 10'-0" FIXTURE MOUNTING HGT.
- LIGHT FIXTURE TO BE MOUNTED AT A FIXED ANGLE OF 90 DEGREES TO THE SURFACE

BEGA

Photometric Filename: 22383.IES

TEST: L09133203
TEST LAB: LIGHT LABORATORY, INC.
DATE: 9/06/2013
LUMINAIRE: 22.383
LAMP: 25.3W LED

All results in accordance with IESNA LM-79-08

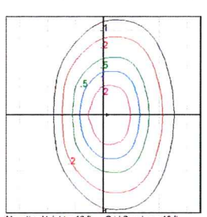
Characteristics

IES Classification	Type II
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1926
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	66
Total Luminaire Watts	29.01
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Max. Cd.	745.01 (60H, 45V)
Max. Cd. (<90 Vert.)	745.01 (60H, 45V)
Max. Cd. (At 90 Deg. Vert.)	0 (0.0%Lum)
Max. Cd. (90 to <90 Deg. Vert.)	153.08 (7.9%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

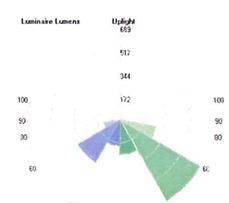
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL(0-30)	258.1	N.A.	13.4
FM(30-60)	688.9	N.A.	35.8
FH(60-80)	270.7	N.A.	14.1
FVH(80-90)	20.9	N.A.	1.1
BL(0-30)	193.0	N.A.	10.0
BM(30-60)	362.5	N.A.	18.8
BH(60-80)	122.4	N.A.	6.4
BVH(80-90)	9.9	N.A.	0.5
UL(90-100)	0.0	N.A.	0.0
UH(100-180)	0.0	N.A.	0.0
Total	1926.4	N.A.	100.0

BUG Rating B1-U0-G1



Mounting Height = 12 ft. Grid Spacing = 10 ft.



In the interest of product improvement, BEGA reserves the right to make technical changes without notice.
BEGA 1000 Bega Way, Carpinteria, CA 93013 (805)684-0533 Fax (805)566-9474 www.bega-us.com
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7/6/2015

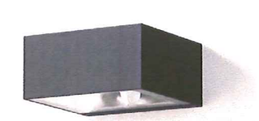
FIXTURE: W2
- WALL MOUNTED
- 10'-0" FIXTURE MOUNTING HGT.
- LIGHT FIXTURE TO BE MOUNTED AT A FIXED ANGLE OF 90 DEGREES TO THE SURFACE

LED wall washers - wide spread light distribution

Housing: Constructed of marine grade, copper free die cast aluminum alloy. The housing uses stainless steel inserts for enclosure attachment. Designed for attachment to a standard recessed 3-1/2" or 4" octagonal wiring box using a mounting bracket (provided). Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.
Enclosure: One piece die-cast aluminum cover frame secured by captive knobed head, stainless steel screws threaded into stainless steel inserts. Semi-specular, anodized aluminum internal reflector. Safety glass lens installed flush with aluminum frame. Fully gasketed for weather tight operation using a molded silicone rubber gasket. Can be installed in upward or downward facing positions.
Electrical: 43.4W LED luminaire, 49.5 total system watts. -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI), add suffix K4 to order.
Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.
Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK), White (WHT), Bronze (BRZ), Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.
CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65
Weight: 11.9 lbs

Luminaire Lumens: 3539

Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



Wide beam light distribution

	Lamp	A	B	C
33378	43.4W LED	12½	5	8½

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architecture interiors consulting
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P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:
JS Capitol Group
945 Rochester Road
Suite #103
Rochester Hills, MI,
48307

Project:
Premier Academy
974 N. Adams Rd.
Rochester Hill, MI, 48307

Issued	Description	By
11.01.16	Preliminary Design	
01.13.17	Concept Plan	
02.08.17	Pre-SPA	
06.01.17	SPA	
07.07.17	SPA Revise	

Seal:

Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:

Sheet Title:
Photometric Cut Sheets

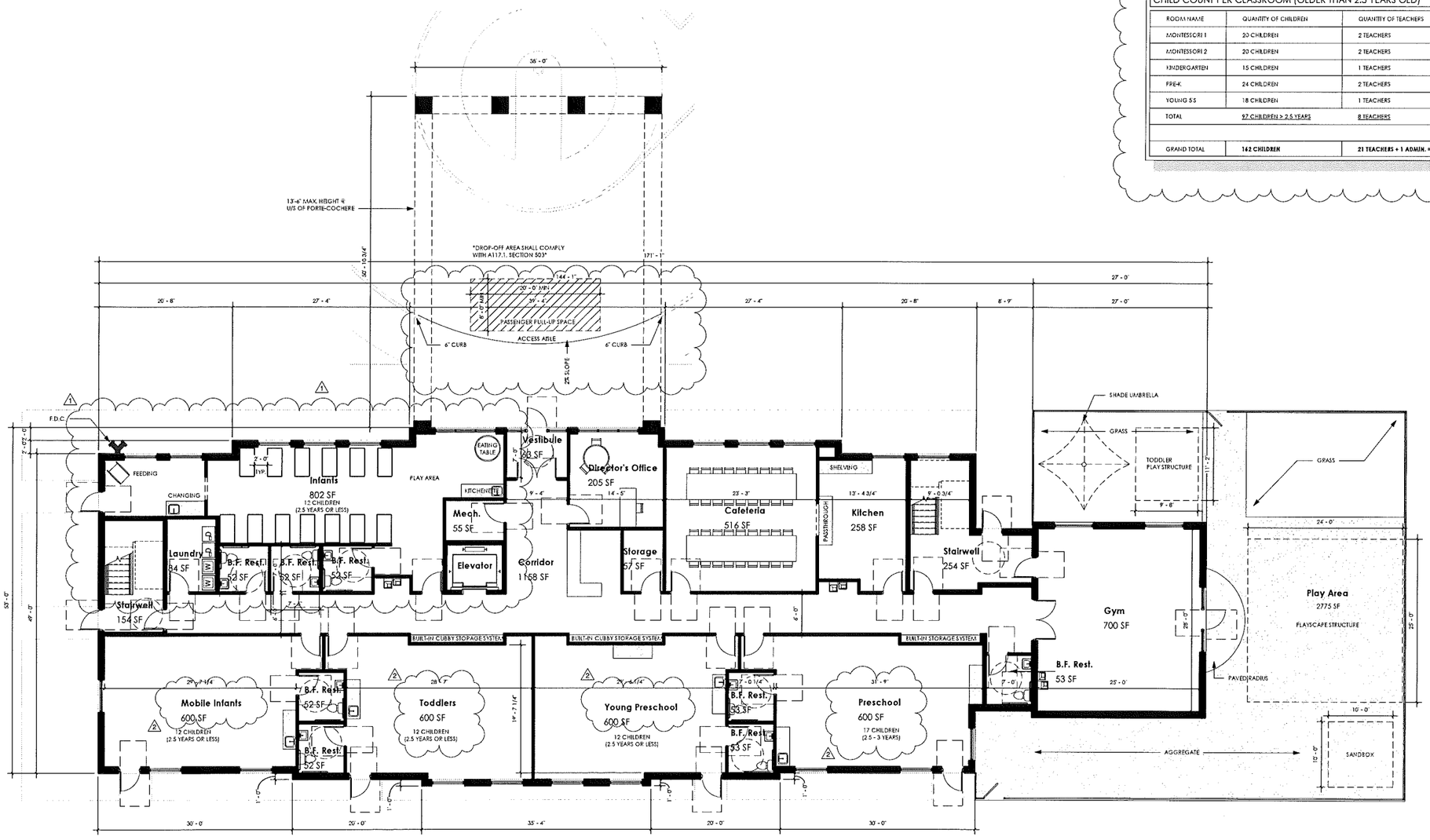
Project Number:
16-186

Sheet Number:
C.102

City File Number
17-018

CHILD COUNT PER CLASSROOM (YOUNGER THAN 2.5 YEARS OLD)		
ROOM NAME	QUANTITY OF CHILDREN	QUANTITY OF TEACHERS
INFANTS	12 CHILDREN	3 TEACHERS
MOBILE INFANTS	12 CHILDREN	3 TEACHERS
TODDLERS	12 CHILDREN	3 TEACHERS
YOUNG PRESCHOOL	12 CHILDREN	2 TEACHERS
PRESCHOOL	17 CHILDREN	2 TEACHERS
TOTAL	65 CHILDREN < 2.5 YEARS	13 TEACHERS

CHILD COUNT PER CLASSROOM (OLDER THAN 2.5 YEARS OLD)		
ROOM NAME	QUANTITY OF CHILDREN	QUANTITY OF TEACHERS
MONTESSORI 1	20 CHILDREN	2 TEACHERS
MONTESSORI 2	20 CHILDREN	2 TEACHERS
KINDERGARTEN	15 CHILDREN	1 TEACHERS
PRE-K	24 CHILDREN	2 TEACHERS
YOUNG 5'S	18 CHILDREN	1 TEACHERS
TOTAL	97 CHILDREN > 2.5 YEARS	8 TEACHERS
GRAND TOTAL	**162 CHILDREN**	**21 TEACHERS + 1 ADMIN. = 22 TOTAL**



First Floor Plan

1/8" = 1'-0"

Floor Area: 8,230 SQ. FT.

Canopy: 1,934 SQ. FT.

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06.01.17	SPA	
07.07.17	SPA Revise	
07.25.17	SPA Revise (Parking)	

Seal:

Note:

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North Arrow:

North

Sheet Title:

First Floor Plan

Project Number:

16-186

Sheet Number:

A.100

City File Number

17-018

CHILD COUNT PER CLASSROOM (YOUNGER THAN 2.5 YEARS OLD)		
ROOM NAME	QUANTITY OF CHILDREN	QUANTITY OF TEACHERS
INFANTS	12 CHILDREN	3 TEACHERS
MOBILE INFANTS	12 CHILDREN	3 TEACHERS
TODDLERS	12 CHILDREN	3 TEACHERS
YOUNG PRESCHOOL	12 CHILDREN	2 TEACHERS
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TOTAL	65 CHILDREN < 2.5 YEARS	13 TEACHERS

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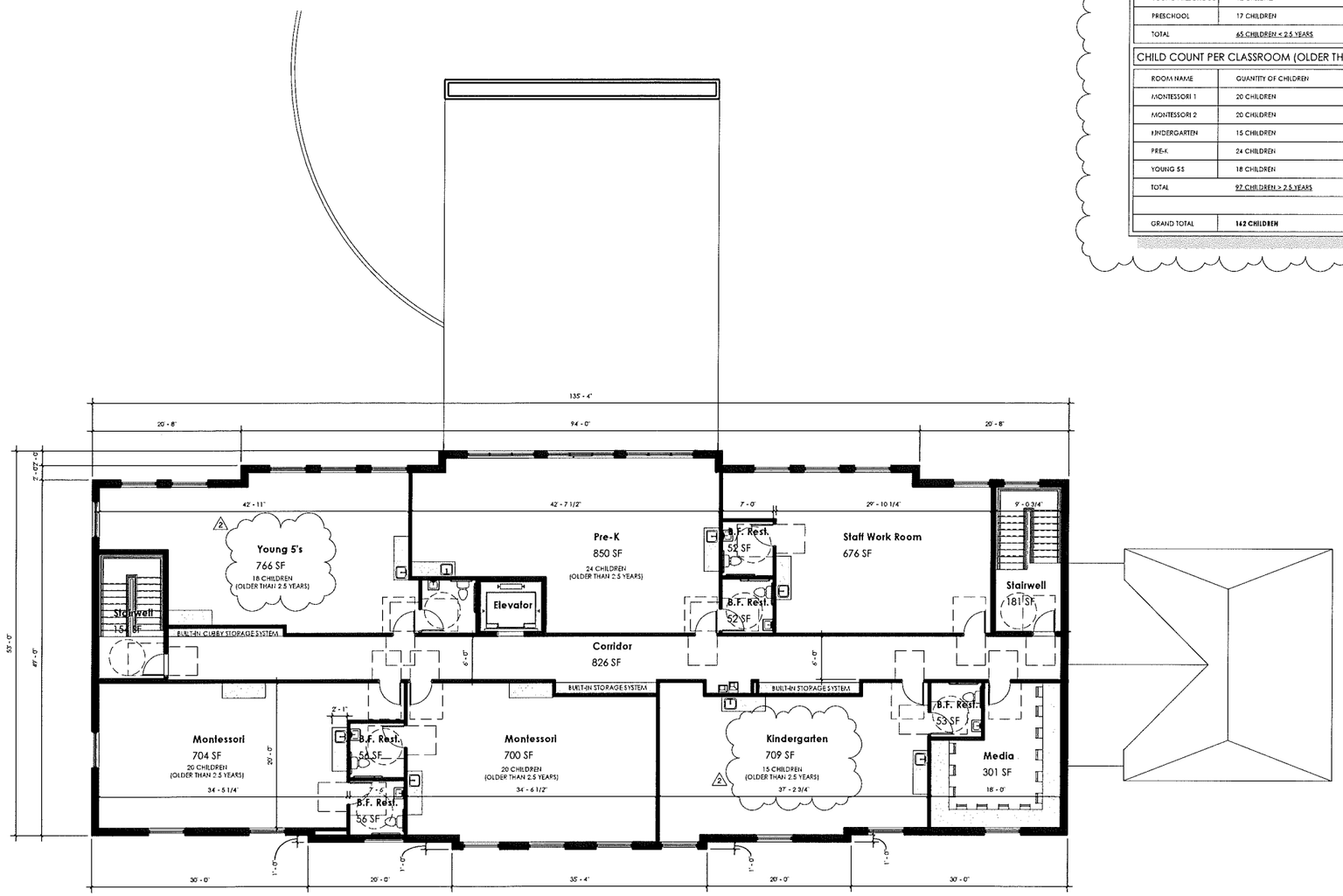
TOTAL	97 CHILDREN > 2.5 YEARS	8 TEACHERS
GRAND TOTAL	**162 CHILDREN**	**21 TEACHERS + 1 ADMIN. = 22 TOTAL**



Second Floor Plan

1/8" = 1'-0"

Floor Area: 7,009 SQ. FT.

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07.07.17	SPA Revise	
07.25.17	SPA Revise (Parking)	

Seal:

Note:

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North Arrow:

Sheet Title:

Second Floor Plan

Project Number:

16-186

Sheet Number:

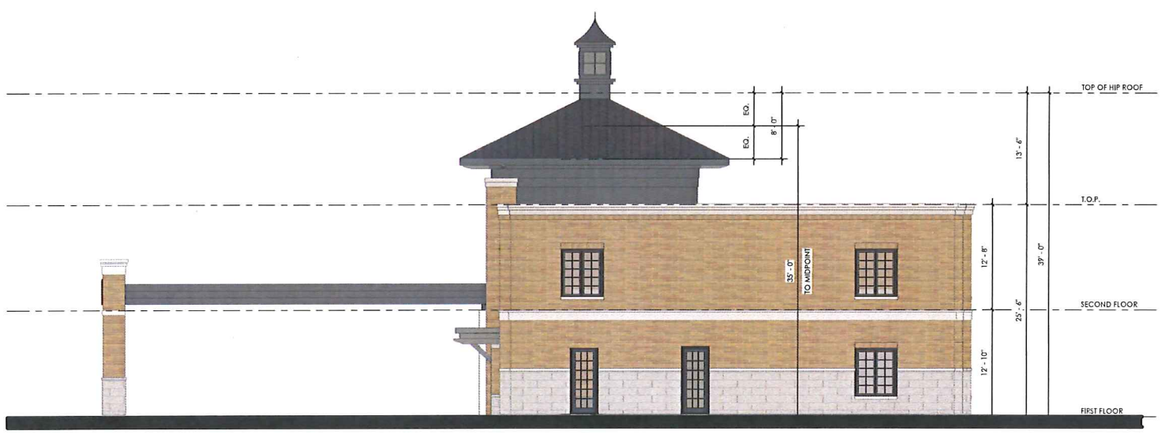
A.101

City File Number

17-018

North (Front) Elevation

1/8" = 1'-0"



West (Side) Elevation

1/8" = 1'-0"

BUILDING HEIGHT NOTE:

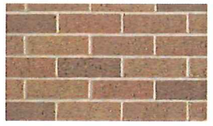
BUILDING HEIGHT IS DIMENSIONED IN ACCORDNACE WITH THE DEFINITION AS PROVIDED IN THE CITY OF ROCHESTER HILLS ZONING ORDINANCE SECTION 138-13.101.

ROOFTOP MECHANICAL EQUIPMENT NOTE:

EXTENT OF MECHANICAL EQUIPMENT ON ROOF IS NOT YET DETERMINED. ANY EQUIPMENT PROPOSED ON THE ROOF SHALL BE SCREENED IN ACCORDANCE TO ORDINANCE REQUIREMENTS

Standing Seam Metal

MANUFACTURER:	PAC-CLAD
TYPE:	SNAP-ON STANDING SEAM PANEL
SIZE:	12" O.C. PANEL - 1" HIGH
FINISH:	PRE-FINISHED ALUMINUM
COLOR:	CHARCOAL



Face Brick Veneer

MANUFACTURER:	INTERSTATE BRICK
DISTRIBUTER:	BRICK TECH ARCHITECTURAL
TYPE:	COMMERICAL
SIZE:	2-1/4" MODULAR
FINISH:	WIRE CUT
COLOR:	CEDAR

Cast Stone Veneer

MANUFACTURER:	CONTINENTAL CAST STONE
TYPE:	DESIGNER COLLECTION
SIZE:	MODULAR
FINISH:	SPLITFACE
COLOR:	WHITESTONE 1100

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Seal:

Note:

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North Arrow:

Sheet Title:

Exterior Elevations

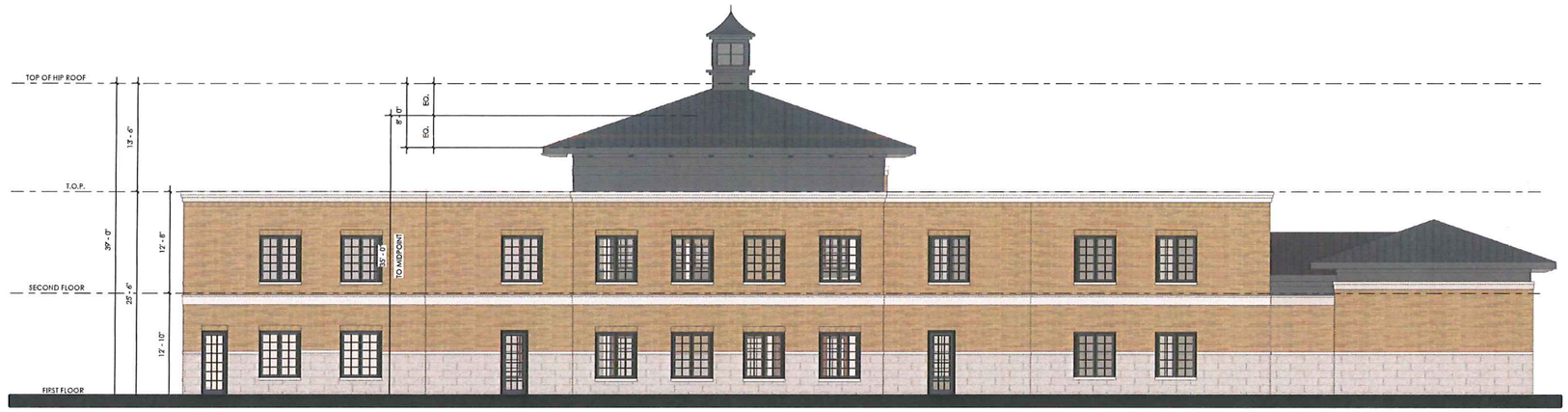
Project Number:

16-186

Sheet Number:

A.200

City File Number
17-018



South (Rear) Elevation

1/8" = 1'-0"

BUILDING HEIGHT NOTE:

BUILDING HEIGHT IS DIMENSIONED IN ACCORDNACE WITH THE DEFINITION AS PROVIDED IN THE CITY OF ROCHESTER HILLS ZONING ORDINANCE SECTION 138-13.101.

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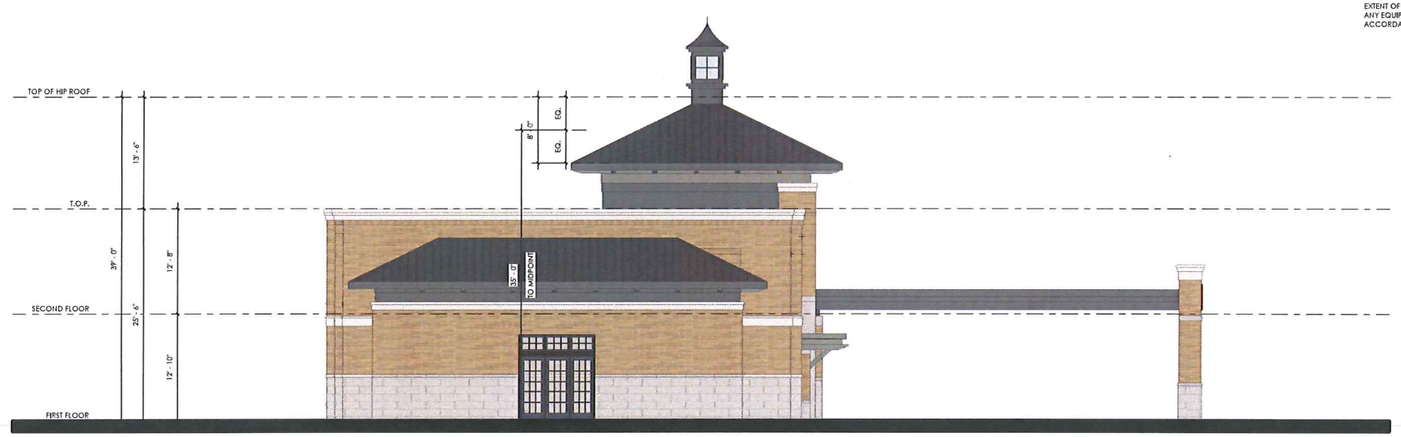

East (Side) Elevation

1/8" = 1'-0"

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07.07.17	SPA Revise	

Seal:

Note:

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North Arrow:

Sheet Title:

Exterior Elevations

Project Number:

16-186

Sheet Number:

A.201

City File Number

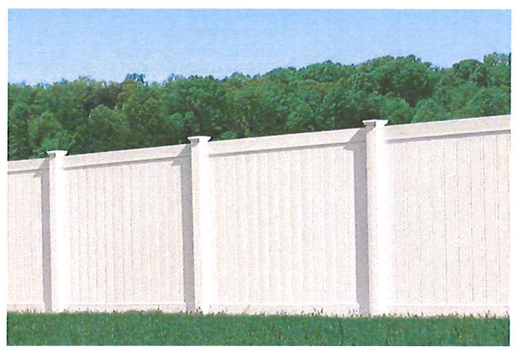
17-018

Playground Fence

MANUFACTURER:	AMERISTAR FENCE
MODEL:	ECHELON PLUS 3 OR 4 MAJESTIC PANEL & GATE
FINISH:	COMMERICAL GRADE POWDER COATED ALUMINUM
COLOR:	BLACK
HEIGHT:	6'-0" HIGH MINIMUM
LENGTH:	8'-0" O.C. NOMINAL SECTIONS

NOTE:
FINAL DESIGN DRAWINGS TO BE PROVIDED AT TIME OF BUILDING PERMIT APPLICATION

ALL MANUFACTERERS' SPECIFICATIONS FOR SPACING, SAFETY & CONSTRUCTION SHALL BE COMPLIED WITH

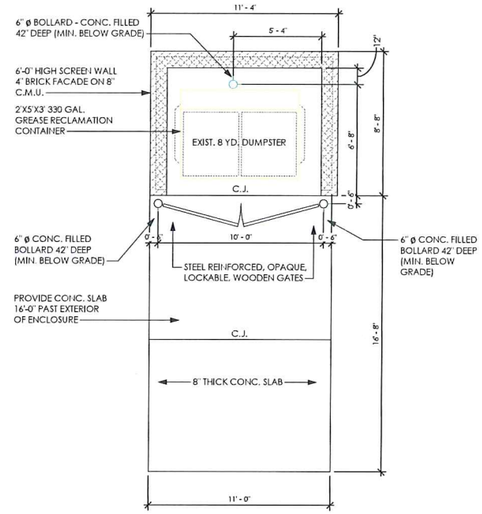


South Property Fence

MANUFACTURER:	VINYL FENCE WHOLESALER
MODEL:	RAINIER PRIVACY FENCE & GATE (COMMERCIAL GRADE T&G)
FINISH:	VINYL
COLOR:	WHITE
HEIGHT:	6'-0" HIGH MINIMUM
LENGTH:	8'-0" O.C. NOMINAL SECTIONS

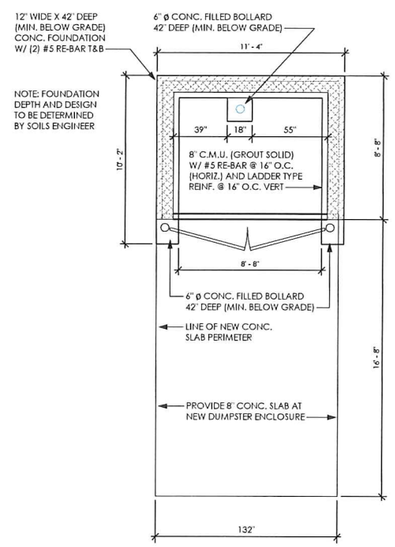
NOTE:
FINAL DESIGN DRAWINGS TO BE PROVIDED AT TIME OF BUILDING PERMIT APPLICATION

ALL MANUFACTERERS' SPECIFICATIONS FOR SPACING, SAFETY & CONSTRUCTION SHALL BE COMPLIED WITH



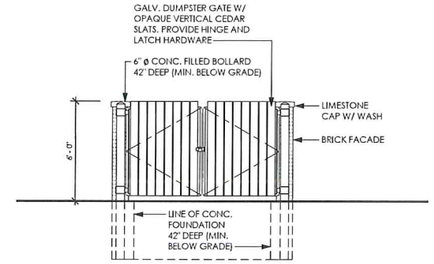
Dumpster Enclosure Plan

1/4" = 1'-0"



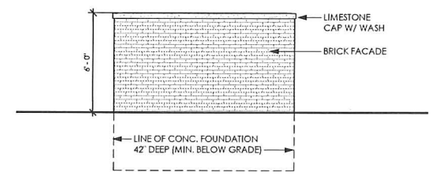
Dumpster Foundation Plan

1/4" = 1'-0"



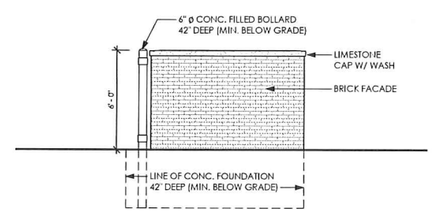
Dumpster Front Elevation

1/4" = 1'-0"



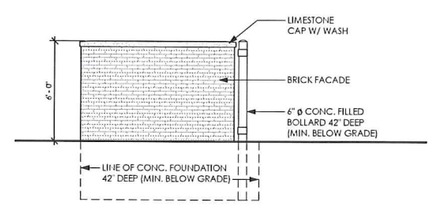
Dumpster Rear Elevation

1/4" = 1'-0"



Dumpster Side Elevation

1/4" = 1'-0"



Dumpster Side Elevation

1/4" = 1'-0"

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architecture interiors consulting
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Seal:

Note:

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North Arrow:

Sheet Title:

Site Details

Project Number:

16-186

Sheet Number:

A.300

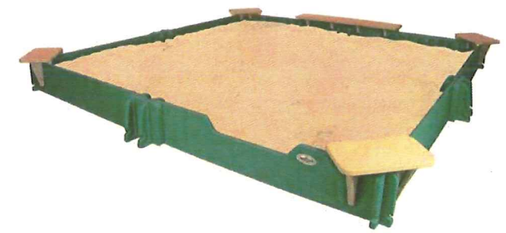
City File Number
17-018

Pre-School Play Structure

MANUFACTURER:	PLAYGROUND DEPOT
MODEL:	BUFFALO | COMMERICAL PLAYGROUND EQUIPMENT
FINISH:	COMMERCIAL GRADE PLASTIC/METAL
COLOR:	VARIES
SIZE:	25'-0" X 24'-0" (USE ZONE)
FALL HEIGHT:	6'-0"
OCCUPANCY:	15-20 CHILDREN
AGE RANGE:	2-12 YEARS
ADA ACCESS:	YES

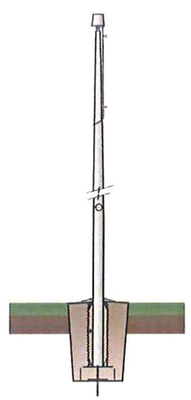
Infant / Toddler Play Structure

MANUFACTURER:	PLAYGROUND DEPOT
MODEL:	CRAWL AND TODDLE | UP132
FINISH:	PLASTISOL DECKING
COLOR:	BROWN / TAN
SIZE:	9'-8" X 11-2' (USE ZONE)
HEIGHT:	3'-8" O.A.



Sandbox Structure

MANUFACTURER:	PLAYGROUND EQUIPMENT.COM
MODEL:	10 FEET X FEET SANDBOX, COVER, SEATS, & BENCH
FINISH:	COMMERICAL GRADE SOLID PLASTIC
COLOR:	GREEN
SIZE:	10'-0" X 10'-0"

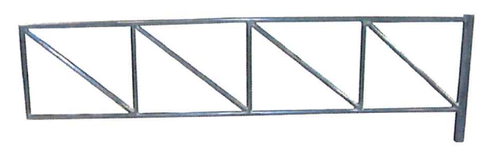


Circular Drive Flagpole

MANUFACTURER:	UNITED STATES FLAG STORE
MODEL:	DELUXE IH SERIES GROUND SET TAPERED FLAGPOLE
FINISH:	SATIN ALUMINUM
HEIGHT:	35'-0"

Playground Shade Umbrella

MANUFACTURER:	SHADE BY SUPERIOR RECREATIONAL PRODUCTS
MODEL:	HYPERBOLIC UMBRELLA
FINISH:	FABRIC & POWDER COATED ALUMINUM
COLOR:	RED
SIZE:	10'-0" X 10'-0"
HEIGHT:	3'-8" O.A.



West Driveway Barrier Gate

MANUFACTURER:	HOOVER FENCE CO.
MODEL:	N-SERIES DOUBLE TUBULAR BARRIER GATE
FINISH:	MILL ALUMINUM FINISH
SIZE:	10'-0" X 10'-0"
HEIGHT:	4'-0"
WIDTH:	24'-0" (1 GATE = 12'-0")

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07.07.17	SPA Revise	

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North Arrow:

Sheet Title:
Site Details

Project Number:
16-186

Sheet Number:
A.301

City File Number
17-018

View of Front

NTS

View of Rear

NTS

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Sheet Title:

Exterior Renderings

Project Number:

16-186

Sheet Number:

A.400

City File Number
17-018