TOWNSHIP OF RADNOR DESIGN REVIEW BOARD

		TOWNSHIP USE ONLY	
	APPLICATION N	IO:	
	FEE PAID:	RECEIVED:	
	AP	PLICATION FORM	
each month at 6:00 P.M meeting!! Application required information a meeting. Incomplete	M. in the Township M n must be filed with t and appropriate fees, a or late applications w Ordinance No 91-14 (S	If the Design Review Board are held the second V Municipal Building. All applicants must attenthe Department of Community Development, also a minimum of twenty-one (21) calendar days poils not be accepted!! Applicants are encourage Sign Code) and/or Ordinance 91-32 (Design Rev Development.	d this ong with all orior to the ed to obtain
Please refer to the Consc current fees.	olidated Fee Schedule,	as amended, on our website at www.radnor.org for	a copy of our
APPLICANT NAME:			
PROPERTY ADDRESS:			
IS THIS BUILDING S	STAND ALONE OR	ATTACHED TO ANOTHER BUILDING?	
MAILING ADDRESS	3: (if different than a	bove):	
TELEPHONE NO: (_			
PROPERTY OWNER:	t		
SIGN MANUFACTU	RER / CONTRACTO	DR / ARCHITECT:	
ADDRESS:			
TELEPHONE: (_)		
Please provide a det	ailed description o	of proposal:	

	G ADDITION / ACCESSORY STRUCTURES: on requirements (All of the following MUST be submitted with application):
	Site plan drawn to scale - 6 copies (max. size 24" X 36")
	Building elevation drawn to scale - 6 copies (max. size 24" X 36")
	Colored rendering - 6 copies
	Landscape plan - 6 copies (max. size 24" X 36")
	Lighting plan - 6 copies
	Current photographs of site – 6 copies
	Material samples
NEW BUI Submission	LDING: on requirements (All of the following MUST be submitted with application):
	Site plan drawn to scale - 6 copies (max. size 24" X 36")
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	Colored rendering - 6 copies
	Landscape plan - 6 copies (max. size 24" X 36")
	Lighting plan - 6 copies
	Current photographs of site – 6 copies
	Material samples to be presented at meeting.
TELECON	MMUNICATION ANTENNAS:
	on requirements (All of the following MUST be submitted with application):
	Site plan drawn to scale - 6 copies (max. size 24" X 36")
	Building elevation - 6 copies (max. size 24" X 36")
	Colored rendering - 6 copies
	Current photographs – 6 copies
	R DINING:
Submissior	requirements (All of the following MUST be submitted with application): A detailed/sketched site plan on $8\frac{1}{2} \times 11$ paper, but not to exceed 24 X 36. All
	sidewalk obstruction shall be noted and detailed dimensions shall be clearly shown. (See attached sample site plan.) – 6 copies
	A photograph of your proposed Outdoor Dining area. – 6 copies
	A photograph or vendor specification of proposed furniture. – 6 copies
	A photograph or vendor specification of proposed barrier and detail of how far it will extend onto the sidewalk – 6 copies
	Description of proposed outdoor furniture which must include quantity, colors,

materials, types of the following; chairs, tables, umbrellas, heaters, barriers. - 6 color copies

NOTE: All information must be separated into 6 individual packets. Please be sure ALL it checklists are included in application packets. If all items are not included, the application NOT be accepted.						
I hereby certify that I am the legal owner of the DATE	e subject property as set forth in this application: PRINT NAME					
	SIGNATURE					
I hereby certify that I am the legal representati as set forth in this application:	on and/or agent for the owner of the subject property					
DATE	PRINT NAME					
	SIGNATURE					
NOTE: Applications will not be reviewere meeting. Failure to appear shall result	wed without applicant's presence at the in denial of application.					

4/11/13

CAMPUS-WIDE ZONING DATA

PLANNED INSTITUTIONAL DISTRICT (PI)

CLASSIFICATION: REQUIRED EXISTING **PROPOSED** BUILDING AREA 30% MAX. 13.0% (29.26 ACRES) (a) 14.3% (32.25 ACRES) (b)

TOTAL IMPERVIOUS COVERAGE 45% MAX. 37.6% (84.60 ACRES) (a) 36.4% (81.85 ACRES) (c)

DATA OBTAINED FROM LAST CAMPUS DEVELOPMENT APPROVAL SHOWN ON A PLAN ENTITLED "VILLANOVA UNIVERSITY WEST CAMPUS, PROPOSED SOCCER FIELD RECONSTRUCTION", PLAN DATED OCTOBER 4, 2013, LAST REVISED MAY 6, 2014, PREPARED BY ASSOCIATED ENGINEERING CONSULTANTS INCORPORATED (AEC).

b. DORMITORY BUILDING 1 1.05 ACRES (1A: 0.42 + 1B: 0.19 + 1C: 0.44) 1.17 ACRES (2A: 0.32 + 2B: 0.37 + 2C: 0.48) DORMITORY BUILDING 2 PERFORMING ARTS CENTER +0.77 ACRES 2.99 ACRES (PROPOSED BUILDING AREA)

EXISTING BUILDING AREA 29.26 ACRES PROPOSED BUUILDING AREA +2.99 ACRES

c. EXISTING IMPERVIOUS 84.60 ACRES CICD REDUCTION -2.65 ACRES BRIDGE & VISITOR LOT REDUX -0.10 ACRES

CAMPUS PARKING ANALYSIS

EVICTING DECILIDED DADVING CDACES

EXISTING REQUIRED PARK	CING SPACES		
AREA USE DESCRIPTION	AREA USE QUANTITY	REQUIRED PARKING	
DORMITORY	4,322 BEDS	1,441	
OFFICE (NET SF)	365,851 SF	1,303	
RETAIL	6,250 SF (6)	44	
RESTAURANT		•	
LARGEST ASSEMBLY AREA	3,778 FIXED SEATS	945	
GYMNASIUM / LIBRARY	42,432 SF	283	
LARGEST ASSEMBLY AREA	13,722 SF	344	
UNSPECIFIED AREA	30,929 SF	104	
	TOTAL SPACES	4,464 SPACES	
	PARKING AVAILABILITY	5,130 SPACES	
	SURPLUS	666 SPACES	

PROPOSED REQUIRED PARKING SPACES

PROPOSED REQUIRED PAR	KING 3FACE3	
AREA USE DESCRIPTION	AREA USE QUANTITY	REQUIRED PARKING
DORMITORY	5,460 BED\$ (1)	1,820
OFFICE (NET SF)	368,091 SF (2)	1,311
RETAIL	12,371 SF (3)	76
RESTAURANT	85 SEATS (4)	39
LARGEST ASSEMBLY AREA	4,178 FIXED SEATS (5)	1,045
GYMNASIUM / LIBRARY	42,432 SF	283
LARGEST ASSEMBLY AREA	13,722 SF	344
UNSPECIFIED AREA	37,179 SF (6)	124
	TOTAL SPACES	5,042 SPACES
	PARKING AVAILABILITY	5,126 SPACES
	SURPLUS	84 SPACES

PROPOSED PARKING TABULATION

AREA USE DESCRIPTION		EXISTING	PROPOSED
MAIN LOT		1,126	62 .
PIKE LOT		577	1,289
VISITOR LOT		80	45
W. LANCASTER LOT		79	240
ST. AUGUSTINES CENTER		271	494
NEVIN FIELD HOUSE		48	47
UNAFFECTED CAMPUS SPACES	-1 s	2949	2949
	TOTAL	5.130 SPACES	5,126 SPACES

1,138 BEDS PROPOSED WITHIN DORMITORIES 1A-20 2,240 SF OFFICE PROPOSED WITHIN THE PERF. ARTS CENTER 3) 9,369 SF BOOKSTORE, 2,877 SF CONVENIENCE STORE, 125 SF RETAIL WITHIN

THE PERFORMING ARTS CENTER & 27 EMPLOYEES (4) 85 SEATS & 20 EMPLOYEES WITHIN PROPOSED BISTRO 5) 400 SEAT THEATER WITHIN THE PERF. ARTS CENTER

ZONING DATA

COMPREHENSIVE INTEGRATED COLLEGE DEVELOPMENT DISTRICT (CICD)

(6) CONVERSION OF EXISTING BOOKSTORE TO UNSPECIFIED AREA

CLASSIFICATION:	REQUIRED	PROPOSED
MINIMUM CAMPUS AREA	75 ACRES	225 ACRES (PI ZONING DISTRIC 15 ACRES (CO ZONING DISTRIC 240 ACRES (TOTAL CAMPUS)
MINIMUM/MAXIMUM CICD AREA	>10 / <15 ACRES	13.81 GROSS ACRES 11.71 NET ACRES
MAXIMUM BUILDING LENGTH	180'	171'
MINIMUM BUILDING SEPARATION		
BETWEEN BUILDING AND BUILDING	45'	45'
BETWEEN BUILDING AND PARKING STRUCTURE	30'	30'
MAXIMUM BUILDING HEIGHT		
ACADEMIC AND PERFORMANCE FACILITIES	50'	49.9'
FLY LOFT	65'	64.1'
HOUSING AND SOCIAL FACILITIES	45'	44.9' BLDG. 1, 44.8' BLDG. 2
PARKING STRUCTURE	38'	37.9'
MAXIMUM BUILDING COVERAGE - TOTAL (INCLUDES PARKING STRUCTURE)	30%	35.5%*
MAXIMUM BUILDING COVERAGE - INDIVIDUAL		
RESIDENCE HALL 1 (1.05 ACRES)	10%	7.6%
RESIDENCE HALL 2 (1.17 ACRES)	10%	8.5%
PERFORMING ARTS CENTER (0.77 ACRES)	10%	5.6%
MAXIMUM RETAIL SQUARE FOOTAGE	5% OF GSF	2.9% OF GSF ***
MINIMUM FACILITY SETBACK FROM SINGLE FAMILY RESIDENTIAL USE	100'	227.8'
MINIMUM ELEVATOR/STAIR TOWER ON PARKING STRUCTURE SETBACK	10'	10'
MAXIMUM LENGTH OF ELEVATOR/STAIR TOWER PROJECTION	50'	41.4'
MINIMUM LOADING AREA SETBACK	5'	5'
RIPARIAN BUFFER SETBACK	50'	82.5'
MAXIMUM IMPERVIOUS AREA	82%**	69%

* BUILDING COVERAGE EXCEEDING 30% SHALL REQUIRE TWO SQUARE FEET OF OPEN SPACE DEDICATION PER ONE SQUARE FOOT OVER 30%. 33,106 SF EXCEEDING 30% BUILDING COVERAGE REQUIRES 66,212 SF OPEN SPACE DEDICATION. (87,120 SF PROVIDED) (REFER TO THIS SHEET FOR LOCATION OF PRESERVATION AREA)

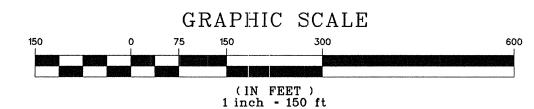
** PROPOSED IMPERVIOUS CONDITIONS MUST BE A MINIMUM 10% REDUCTION FROM EXISTING IMPERVIOUS AREA MAIN LOT: 6.8 Ac + PIKE LOT: 4.0 Ac = 10.8 Ac/11.71 Ac = 92% EXISTING IMPERVIOUS COVERAGE - 10% = 82%

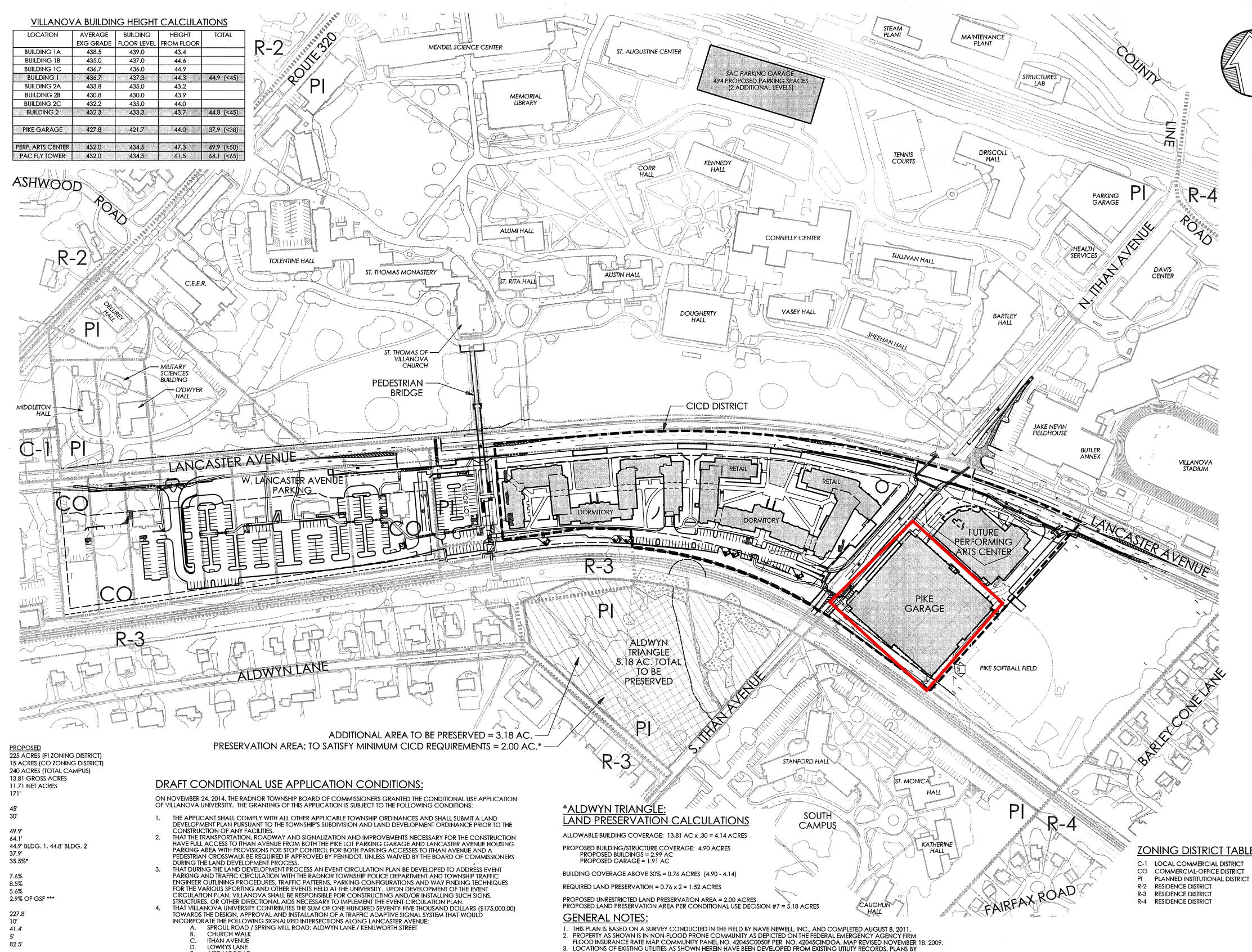
***		 SF (2B) + 125 SF (PAC) SSF (BUILDING 2) * 79,400 SF (PAC)			14,595 SF 497,334 SF	=	2.9% OF	GSF
SETE	SACK CHART	 L STREETS			DLLECTORS	-		GHTS-OF-WAY

SETBACK CHART	ARTERIAL STREETS		Г	MINOR COLLECTORS			RAILROAD RIGHTS-OF-WAY		
	REQUIRED	PROPOSED		REQUIRED	PROPOSED		REQUIRED	PROPOSED	
PERFORMANCE AND SOCIAL FACILITIES	35'	38.2'		30'	65'	_	50'	332'	
HOUSING FACILITIES	35'	39'	T	30'	30'		50'	61.6'	
PARKING STRUCTURES	120'	169.5'	Т	20'	21'		30'	30'	
SURFACE PARKING LOTS	60'	237.7'	Т	60'	103'		5'	12'	
RETAIL SUBORDINATE USES	35'	39'	Т	30'	30'	_	50'	234.4'	

PROJECT SERIAL NO. 20112071972 CALL BEFORE YOU DIG! PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL Pennsylvania One Call System, Inc.

1-800-242-1776





OF ALL UTILITIES BEFORE START OF WORK.

EXCEPT WHERE SHOWN.

LANCASTER AVENUE, S.R. 0030.

AIRDALE ROAD COUNTY LINE ROAD THAT DURING THE LAND DEVELOPMENT PROCESS AN EMERGENCY EVACUATION PLAN FOR THE NEW STUDENT HOUSING THAT APPROPRIATE FENCING BE PROVIDED ON BOTH THE NORTH AND SOUTH SIDES OF LANCASTER AVENUE IN THE AREA OF THE CHURCH WALK PEDESTRIAN BRIDGE IN AN EFFORT TO RESTRICT PEDESTRIAN TRAFFIC FROM ACCESSING THE CAMPUS. A GATE SHALL BE PROVIDED FOR VEHICULAR AND PEDESTRIAN ACCESS DURING CHURCH EVENTS IF

THAT THE UNIVERSITY PRESERVE THE ENTIRE AREA KNOWN AS THE ALDWYN TRIANGLE AND RESTRICT IT AS OPEN SPACE EXCEPT FOR THAT PORTION OF THE AREA NECESSARY TO PROVIDE HANDICAP ACCESSIBILITY IMPROVEMENTS FOR THE ADJACENT SEPTA RAIL LINE. THAT A LANDSCAPE AND BUFFER PLAN BE DEVELOPED TO COMPLY WITH SECTION 280-68.1.D.(3)(b) OF THE ZONING ORDINANCE THAT VILLANOVA SEEK PERMISSION FROM PECO TO PLANT SCREENING ON THE SOUTH SIDE OF THE PECO R-100 LINE TO

APPROVED BY THE BOARD OF COMMISSIONERS.

CHURCH AT THE PRESENT CHURCH WALK LOCATION.

VISUALLY SCREEN THE SEPTA BRIDGE FROM THE ADJACENT RESIDENTIAL NEIGHBORS. PROVIDED THAT THE APPLICANT RECEIVES PERMISSION, VILLANOVA SHALL PROVIDE AN INSTALLATION AND MAINTENANCE PLAN OF THE VEGETATION NECESSARY FOR THIS SCREENING DURING LAND DEVELOPMENT. VILLANOVA SHALL PROVIDE RADNOR TOWNSHIP WITH A LIST OF CONTRACTORS, SUBCONTRACTORS AND VENDORS AND THEIR ADDRESSES WITHIN TWENTY (20) DAYS OF THE EXECUTION OF ANY CONTRACTS BY VILLANOVA IN CONNECTION WITH THE DEVELOPMENT AND/OR CONSTRUCTION OF THE PROPOSED PROJECT. THE PURPOSE OF THIS IST IS TO PERMIT THE TOWNSHIP TO AUDIT FOR REQUIRED BUSINESS/MERCANTILE TAXES.

DURING THE LAND DEVELOPMENT PROCESS, THE APPLICANT SHALL USE ITS BEST EFFORTS TO DEVELOP AND CONSTRUCT STORMWATER MANAGEMENT FACILITIES, INCLUDING GREEN INFRASTRUCTURE PRACTICES AND COMPONENTS THAT MEET OR EXCEED INFILTRATION OR RETENTION REQUIREMENTS AS CURRENTLY REQUIRED BY THE RADNOR TOWNSHIP STORMWATER MANAGEMENT ORDINANCE. THE APPLICANT SHALL CONDUCT SOIL TESTING AS NECESSARY TO DETERMINE WHETHER THE SITE CAN ACCOMMODATE VOLUME MANAGEMENT IN EXCESS OF 1-INCH OF RUN-OFF FROM ALL IMPERVIOUS SURFACES RESULTING FROM THE PROJECT. IF SOIL TESTING INDICATES THAT IT IS POSSIBLE TO PROVIDE VOLUME MANAGEMENT IN EXCESS OF 1-INCH OF RUN-OFF, THE APPLICANT SHALL CONSTRUCT SUCH NECESSARY STORMWATER FACILITIES ON THE SITE TO ACCOMMODATE THIS INCREASED VOLUME. THE APPLICANT SHALL OBTAIN REVISIONS TO BOTH THE RADNOR TOWNSHIP AND LOWER MERION TOWNSHIP ACT 537

PLANS IN ORDER TO ACCOMMODATE THE INCREASED WASTEWATER DISPOSAL GENERATED BY THE PROJECT. THE APPLICANT SHALL DEVELOP A TRAFFIC PLAN DURING THE LAND DEVELOPMENT PROCESS DELINEATING THE PATHS BY WHICH THE EXISTING POPULATION OF COMMUTING AND PART-TIME STUDENTS WILL BE DIRECTED TO AND FROM PARKING FOR EACH PHASE OF THE CONSTRUCTION. THE APPLICANT SHALL PERMIT PARISHIONERS TO PARK, ON A SPACE AVAILABLE BASIS, ON THE NORTH SIDE OF LANCASTER AVENUE ON EXISTING VILLANOVA PROPERTY ADJACENT TO THE CHURCH FOR CHURCH RELATED EVENTS. THE APPLICANT SHALL MAINTAIN A PEDESTRIAN CROSSWALK FROM THE PROPOSED PROJECT SITE TO THE EXISTING

THE APPLICANT SHALL INSURE THAT NO AMPLIFIED MUSIC OR OTHER EXCESSIVE NOISE SHALL EMANATE FROM ANY OF

ESTABLISH A PERMISSIBLE SOUND LEVEL AT THE PROPERTY BOUNDARY OF THE ALDWYN LANE RESIDENTIAL USES.

THE SOUTH FACING DORMITORIES. DURING THE LAND DEVELOPMENT PROCESS, THE TOWNSHIP AND APPLICANT SHALL

FINISH GRADING WITHOUT PRIOR WRITTEN APPROVAL FROM THE TOWNSHIP 13. NO BUILDING OR OBSTRUCTION THAT WOULD OBSCURE THE VISION OF A MOTORIST SHALL BE PERMITTED WITHIN THE 14. THE PROJECT WILL REQUIRE A "GENERAL NPDES PERMIT" FROM THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUBJECT TO OBTAINING APPROVED EROSION AND SEDIMENTATION CONTROL PLANS FROM THE DELAWARE COUNTY CONSERVATION DISTRICT, PRIOR TO CLEARING OR EARTH MOVING ACTIVITY. 15. ALL CURVED SECTIONS OF CURBING SHALL HAVE A FIVE FOOT RADIUS (R=5'), UNLESS NOTED OTHERWISE AS SHOWN ON

I 6. THE INTENDED USE OF THE PROPOSED BUILDINGS ARE FOR STUDENT HOUSING AND ASSOCIATED RETAIL.

AND SHOULD NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

17. ULTIMATE RIGHT-OF-WAY OF ITHAN AVENUE, AS SHOWN, IS OFFERED FOR DEDICATION TO RADNOR TOWNSHIP AS PART OF 18. GRADING AND EROSION CONTROL PLANS MUST BE SUBMITTED AND APPROVED PRIOR TO ISSUANCE OF BUILDING PERMITS. 19. CONTRACTOR TO PROVIDE OPAQUE SCREENING ACROSS OPENINGS IN GARAGE DURING CONSTRUCTION TO SCREEN VISIBILITY OF CONSTRUCTION LIGHTING. 20. CONTRACTOR TO PROVIDE TEMPORARY LIGHTING, AS NEEDED, FOR CONTRACTOR STAGING AREA. ALL TEMPORARY

OTHERS AND/OR ABOVE GROUND EXAMINATION OF SITE. THE COMPLETENESS OR ACCURACIES OF THE LOCATIONS ARE NOT

GUARANTEED. SHOULD ANY NEW CONSTRUCTION BE PROPOSED, THE CONTRACTOR MUST VERIFY LOCATIONS AND DEPTHS

4. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF WETLANDS WAS ACCOMPLISHED AS A PART OF THIS SURVEY

5. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF HAZARDOUS MATERIAL WAS ACCOMPLISHED AS A PART OF

5. THE PROPOSED USES ARE TO BE SERVICED BY PUBLIC SEWER (LOWER MERION TOWNSHIP) AND PUBLIC WATER (AQUA PA).

HIGHWAY OCCUPANCY PERMITS ARE REQUIRED FOR ANY PROPOSED CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF

10. THE PROPOSED BUILDING FOOTPRINTS NOTED ON THE PLAN ARE SCHEMATIC. THE ACTUAL ARCHITECTURAL PLANS SHALL

THE PROPOSED SEWER AND WATER SERVICE CONNECTIONS ARE TO BE COORDINATED WITH THE ARCHITECTURAL PLANS
TO ENSURE EXACT LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY CONNECTION LOCATIONS,

12. THE OWNER SHALL HAVE THE RESPONSIBILITY FOR THE PERPETUAL MAINTENANCE OF THE PERMANENT STORM WATER

DETENTION BASINS AND BASIN OUTLET STRUCTURES. NO CHANGES SHALL BE MADE TO THE STRUCTURES, PIPES OR

. ALL CONSTRUCTION IS TO BE IN COMPLIANCE WITH THE STANDARDS AND SPECIFICATIONS OF RADNOR TOWNSHIP.

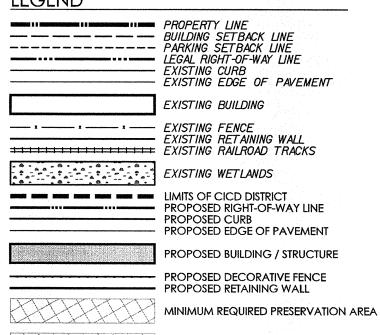
7. ALL PROPOSED UTILITIES IN CONJUNCTION WITH THIS SITE SHALL BE PLACED UNDERGROUND. 8. PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945, (PL1242, NO. 428), KNOWN AS THE "STATE HIGHWAY LAW", PENNDOT

BE UTILIZED FOR BUILDING CONSTRUCTION AND MUST BE NO LARGER THAN SCHEMATIC FOOTPRINT SHOWN. THE PROPOSED

GRADING AND UTILITY CONNECTIONS ARE TO BE COORDINATED WITH THE ARCHITECTURAL PLANS, PRIOR TO CONSTRUCTION

TO AVOID ANY CONFLICTS. THE CONTRACTOR SHOULD NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

LIGHTING MUST BE SHIELDED FROM VIEW OF THE SURROUNDING RESIDENTIAL NEIGHBORS. 21. NOISE EMANATING FROM THE SOUTH- FACING DORMS SHALL NOT 55 dBA AT NIGHTTIME AT THE PROPERTY BOUNDARY OF THE ALDWYN LANE RESIDENTIAL USES. 22. THE PROPERTY OWNER SHALL MAINTAIN FIRE LANE ACCESSIBILITY AFTER SNOW EVENTS BY UTILIZING SNOW PLOW SKIDS TO PRESERVE THE GRASS PAVERS WHILE ALSO LIMITING SNOW ACCUMULATION WITHIN THE LIMITS OF THE FIRE LANE



ADDITIONAL PRESERVATION AREA PROVIDED

VMA **RAMSA**

Villanova University

Pike Field Garage

Villanova PA 19085

Lancaster and Ithan Avenues

ARCHITECT-OF-RECORD Voith & Mactavish Architects LLP 2401 Walnut Street, 6th Floor Philadelphia, PA 19103 phone: 215-545-4544 fax: 215-545-3299 www.voithandmactavish.com

DESIGN ARCHITECT Robert A.M. Stern Architects LLP 460 West 34th Street New York, New York 10001 phone: 212-967-5100 fax: 212-967-5588 www.ramsa.com

CIVIL ENGINEER Nave Newell Inc. 900 West Valley Road, Suite 1100 Wayne, PA 19087 phone: 610-265-8323 fax: 610-265-4299 www.navenewell.com

STRUCTURAL ENGINEER - PARKING PLANNING AND DESIGN The Harman Group, Inc. 900 West Valley Forge Road, Suite 200 King of Prussia, PA 19406 phone: 610-337-3360 x 118 voice mobile phone: 610-334-0974 fax: 610-337-3359 www.HarmanGroup.com

MEP&FP ENGINEER Bala Consulting Engineers, Inc. 443 South Gulph Road King of Prussia, PA 19406 phone: 610-649-8000 fax: 910-649-8475

LANDSCAPE ARCHITECT Sikora Wells Appel 8 Kings Hwy West, Suite A Haddonfield NJ 08033 phone dir: 856-433-6377 phone main: 856-433-6380 phone cell: 267-303-3753 www.sikora-wa.com

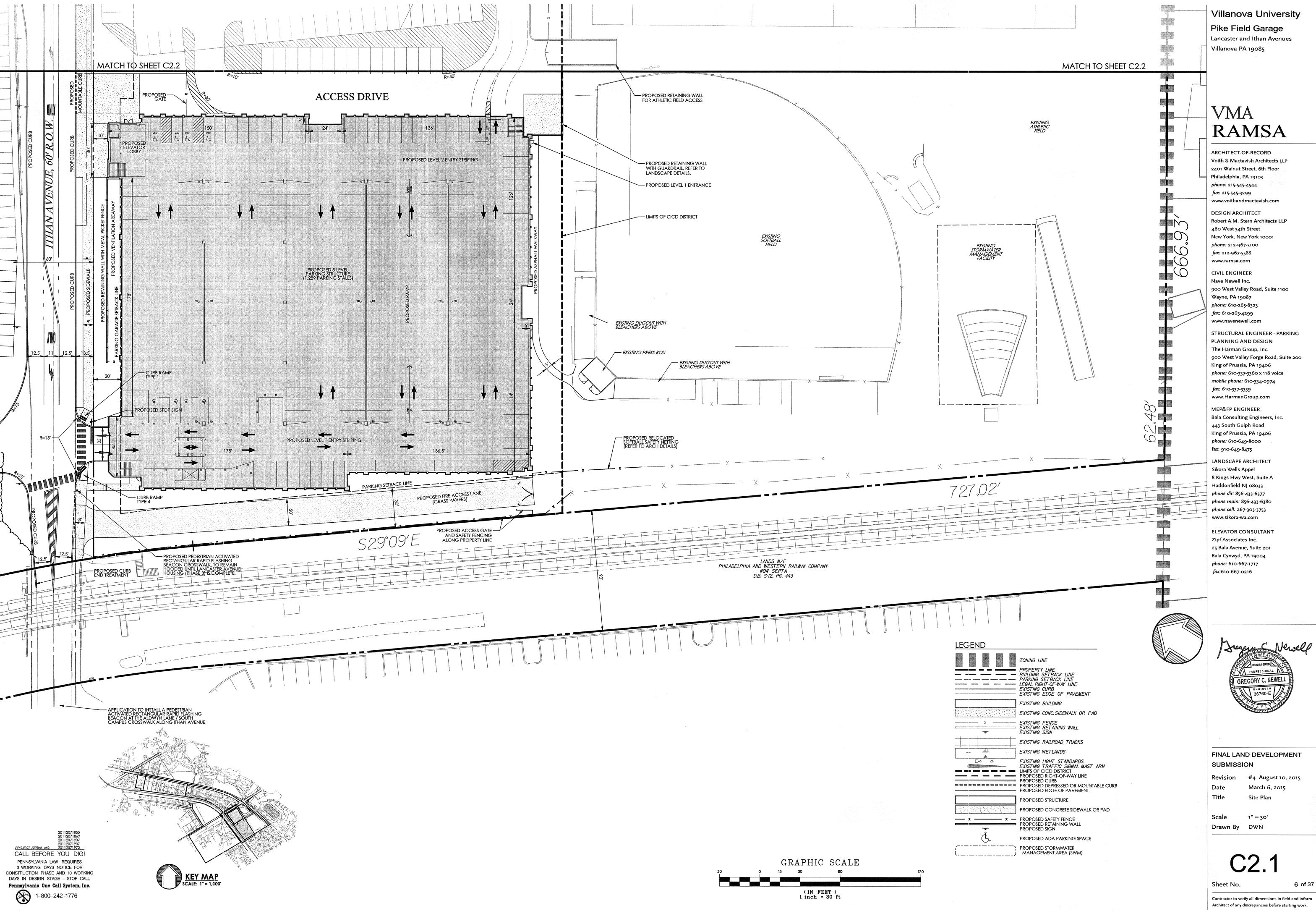
ELEVATOR CONSULTANT Zipf Associates Inc. 25 Bala Avenue, Suite 201 Bala Cynwyd, PA 19004 phone: 610-667-1717 fax:610-667-0216



FINAL LAND DEVELOPMENT SUBMISSION

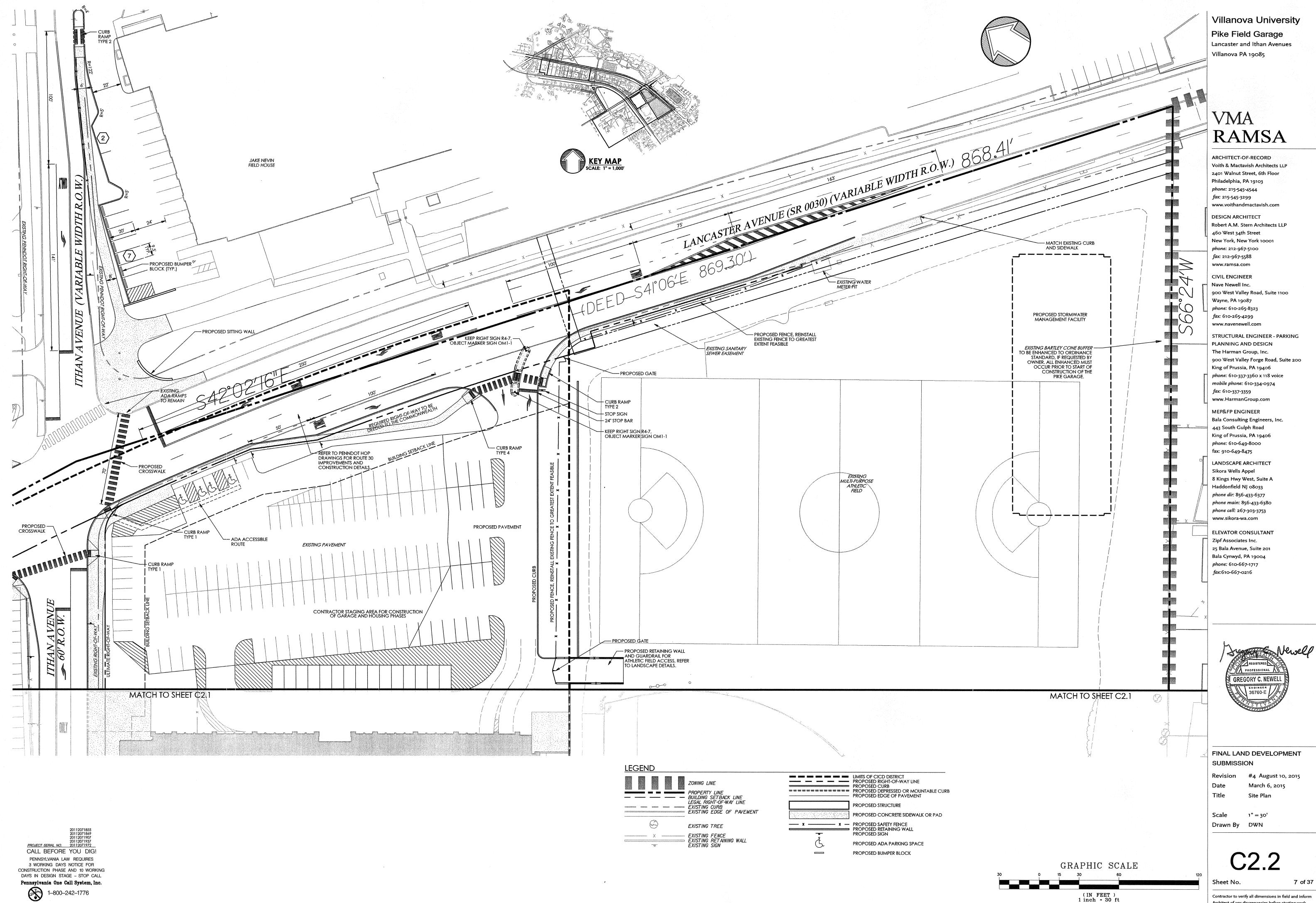
Revision #4 August 10, 2015 Date March 6, 2015 Composite Site Plan

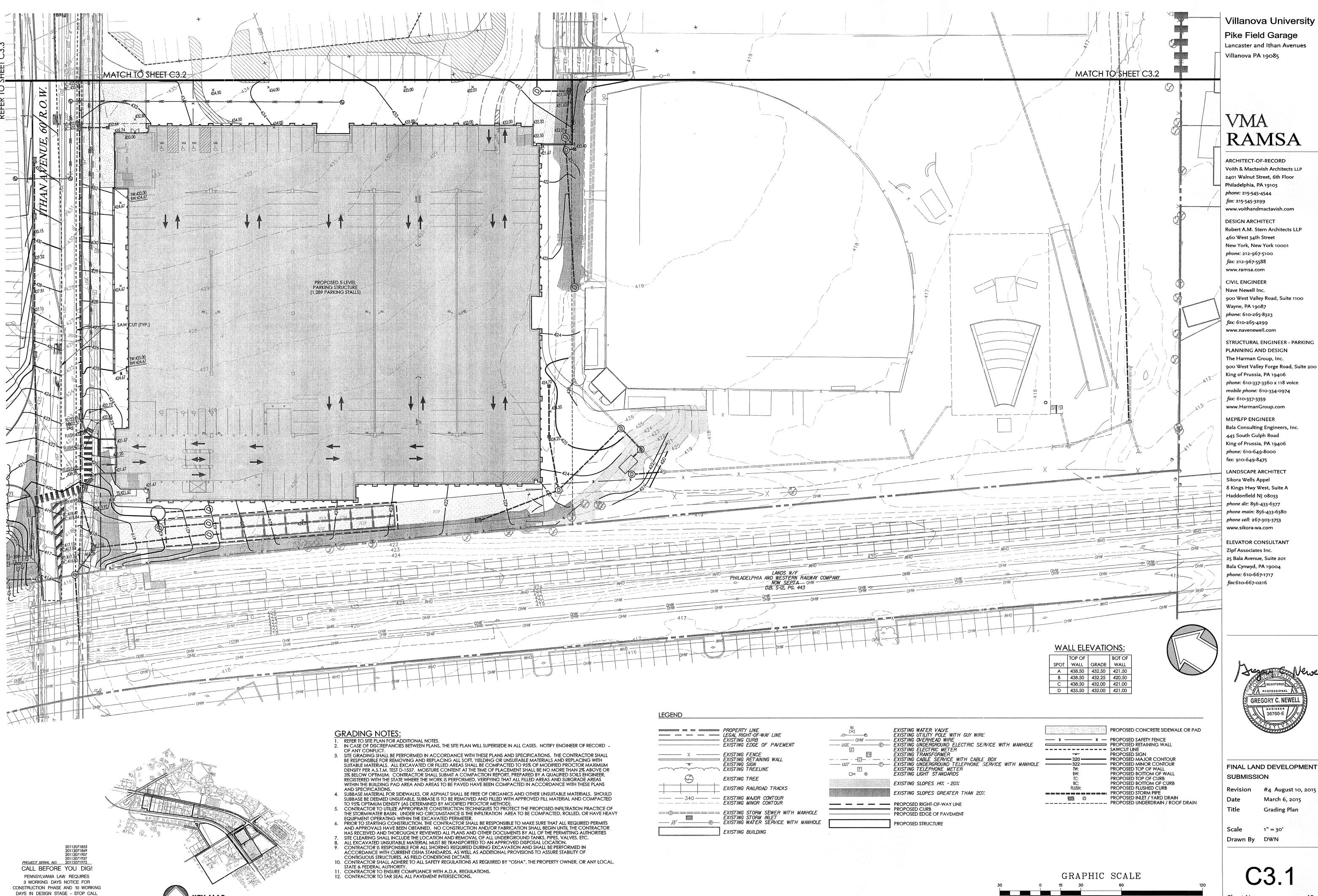
Scale 1" = 150' Drawn By DWN





Contractor to verify all dimensions in field and inform





Pennsylvania One Call System, Inc.

1–800–242–1776

900 West Valley Forge Road, Suite 200

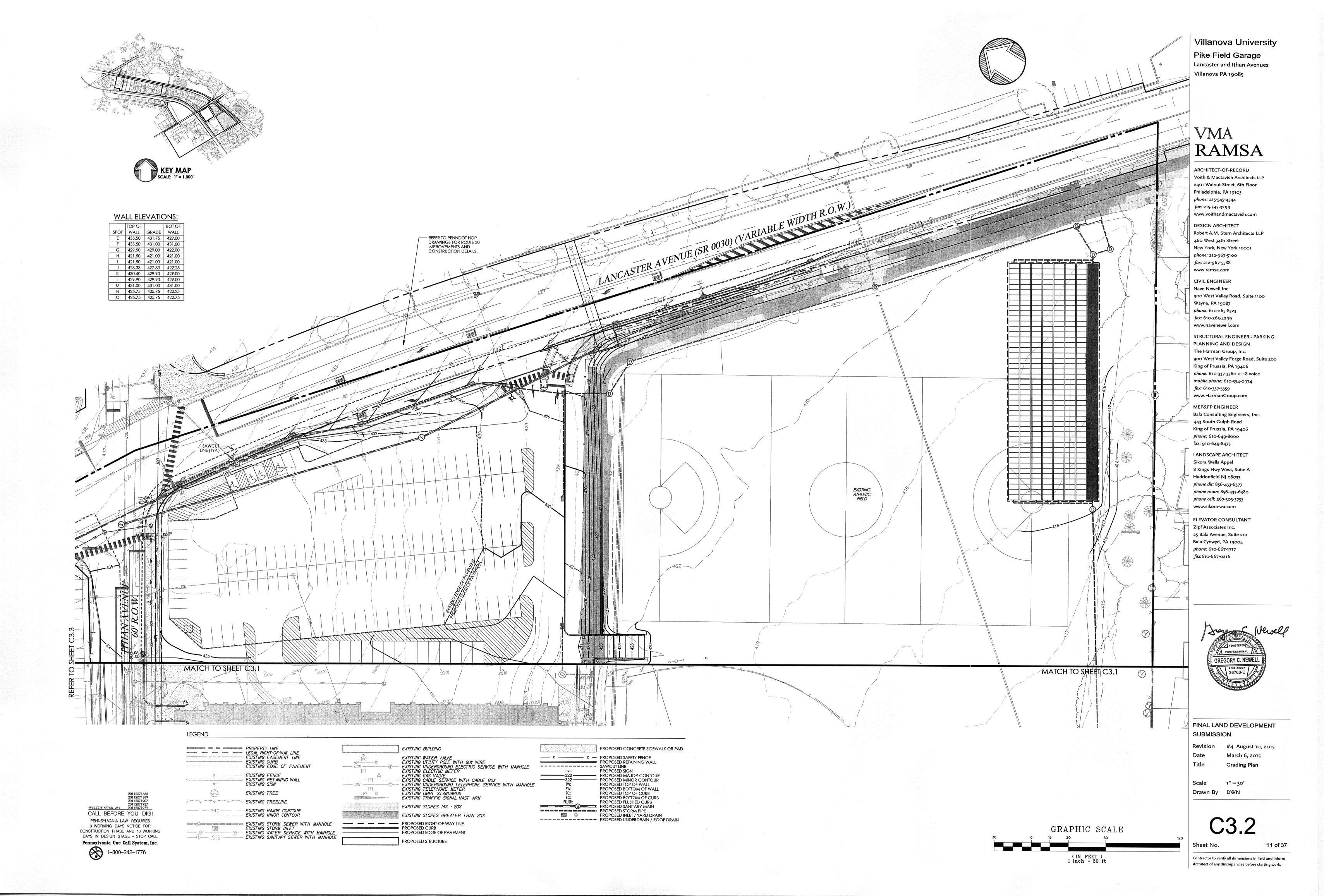


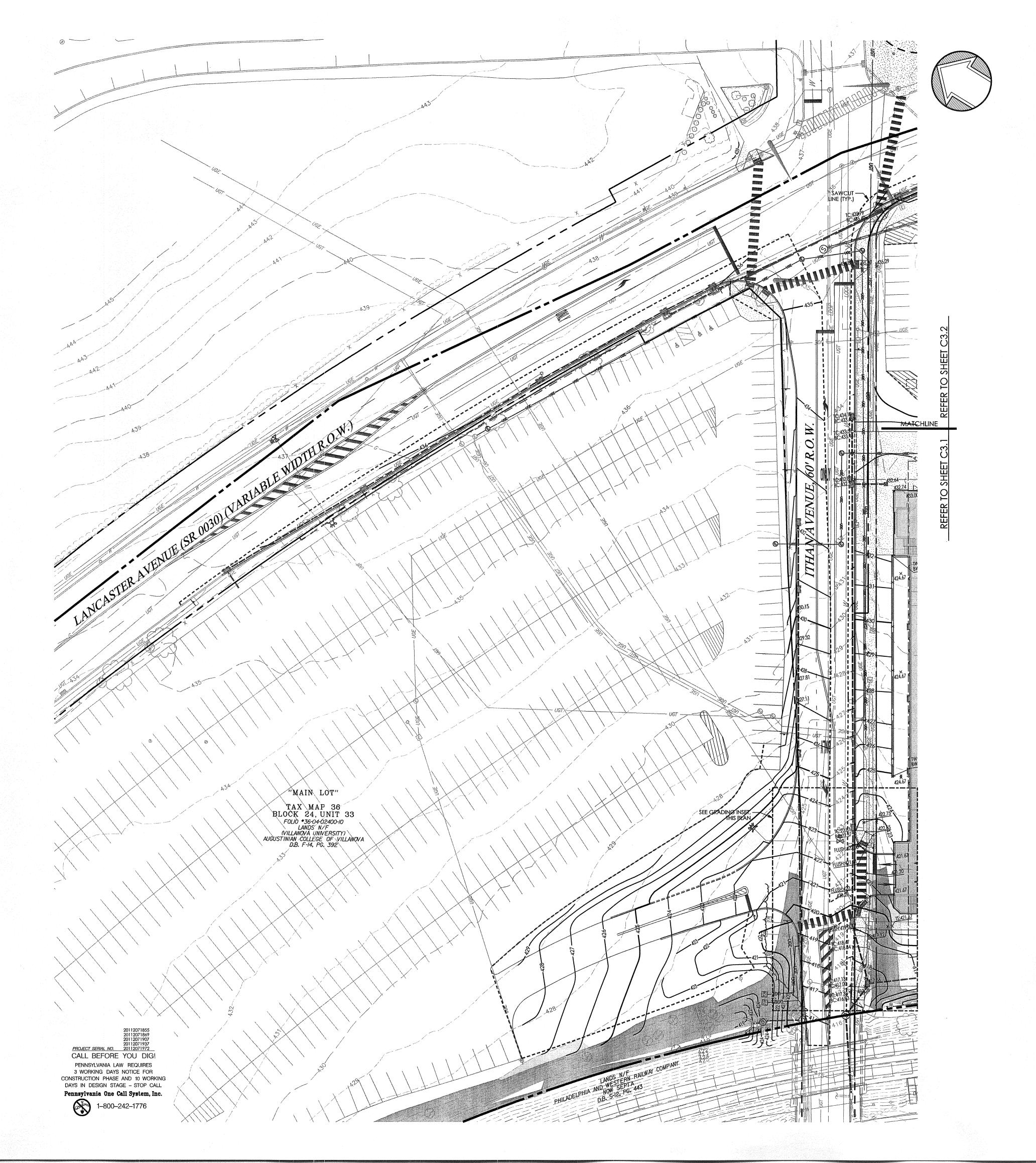
#4 August 10, 2015

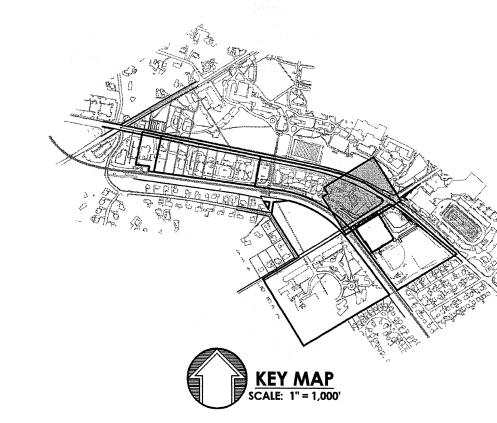
10 of 37 Sheet No.

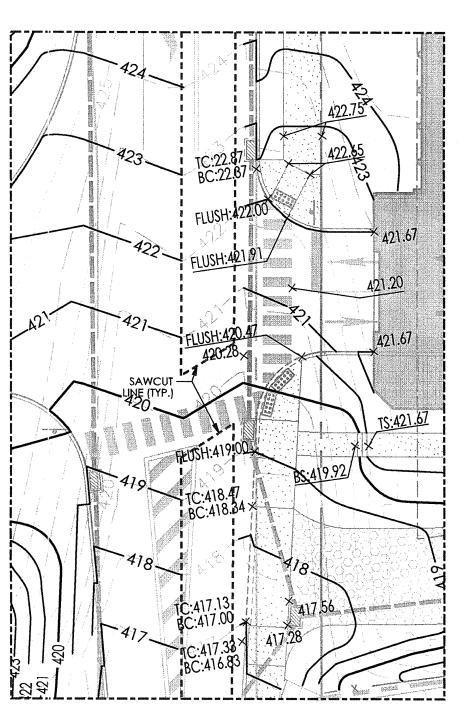
Contractor to verify all dimensions in field and inform Architect of any discrepancies before starting work.

(IN FEET)
1 inch = 30 ft



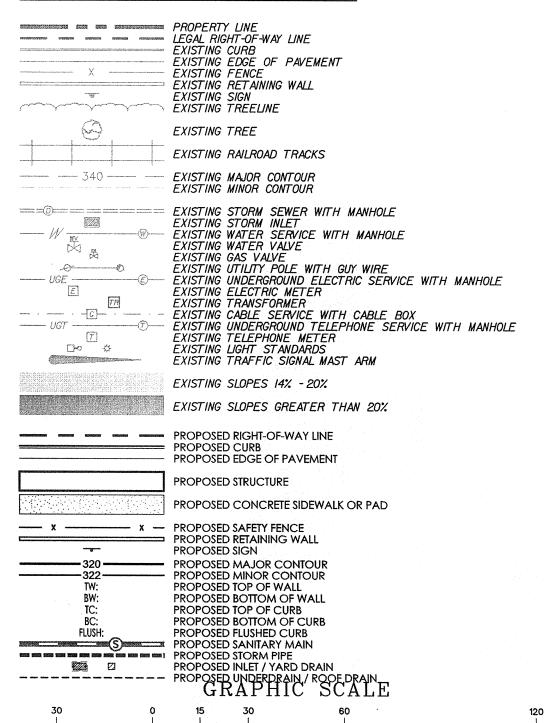






GRADING INSET SCALE: 1" = 20'

LEGEND



(IN FEET) 1 inch - 30 ft Villanova University

Pike Field Garage
Lancaster and Ithan Avenues
Villanova PA 19085

VMA RAMSA

ARCHITECT-OF-RECORD

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The Harman Group, Inc.
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mobile phone: 610-334-0974
fax: 610-337-3359
www.HarmanGroup.com

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Haddonfield NJ 08033
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phone main: 856-433-6380
phone cell: 267-303-3753
www.sikora-wa.com

ELEVATOR CONSULTANT
Zipf Associates Inc.
25 Bala Avenue, Suite 201
Bala Cynwyd, PA 19004
phone: 610-667-1717
fax:610-667-0216



FINAL LAND DEVELOPMENT SUBMISSION

Revision #4 August 10, 2015

Date March 6, 2015

Title Grading Plan

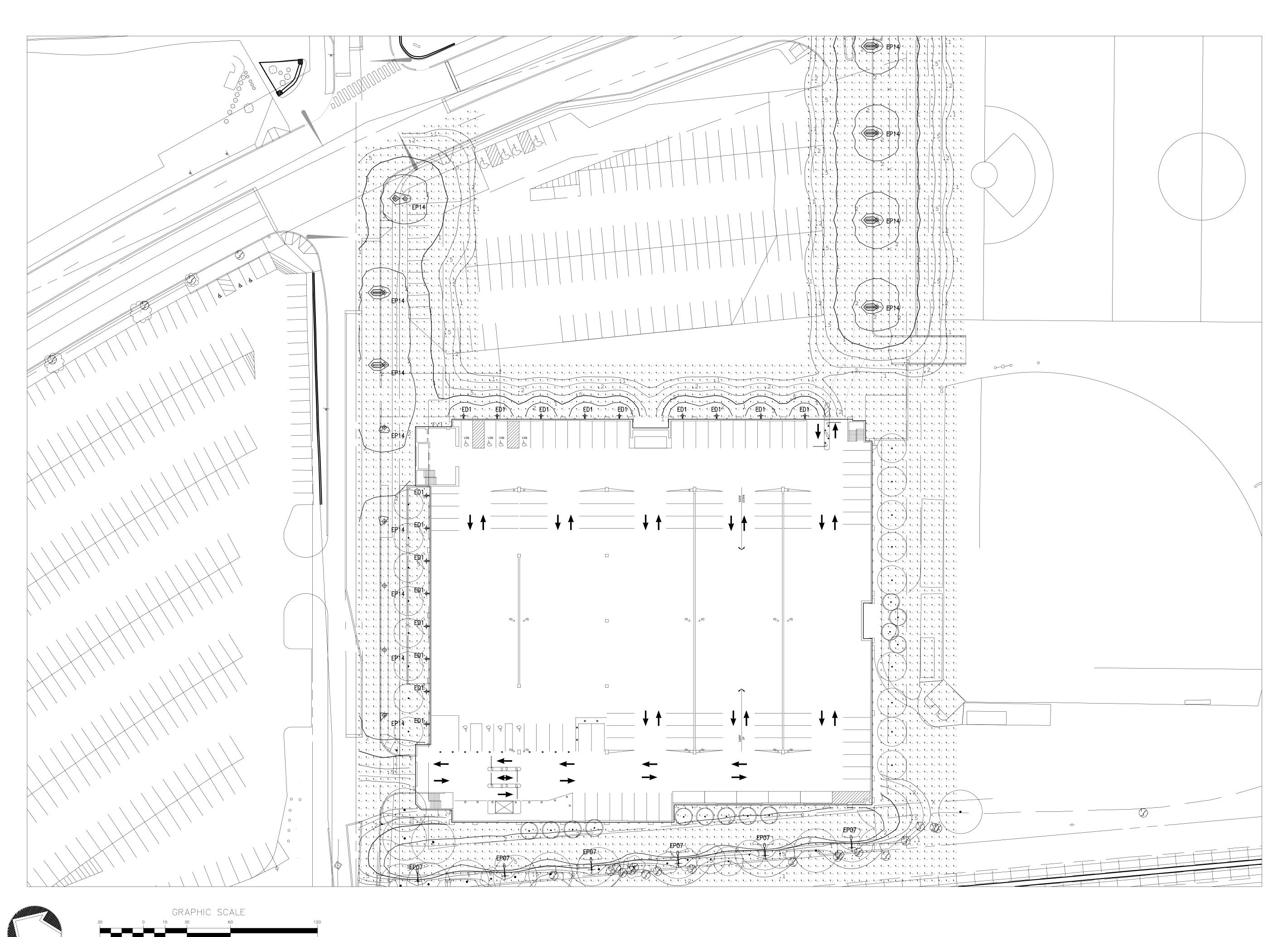
Scale 1" = 30'
Drawn By DWN

C3.3

: No.

Contractor to verify all dimensions in field and inform Architect of any discrepancies before starting work.

12 of 37



Villanova University
Pike Field Garage

Lancaster and Ithan Avenues
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mobile phone: 610-334-0974

fax: 610-337-3359

www.HarmanGroup.com

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fax: 910-649-8475

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Haddonfield NJ 08033
phone dir: 856-433-6377
phone main: 856-433-6380
phone cell: 267-303-3753
www.sikora-wa.com

ELEVATOR CONSULTANT Zipf Associates Inc.

Zipf Associates Inc.
25 Bala Avenue, Suite 201
Bala Cynwyd, PA 19004
phone: 610-667-1717
fax: 610-667-0216

FINAL LAND DEVELOPMENT

Revision August 10, 2015

Date March 6, 2015

Title Site Lighting Plan

Scale 1" = 30'

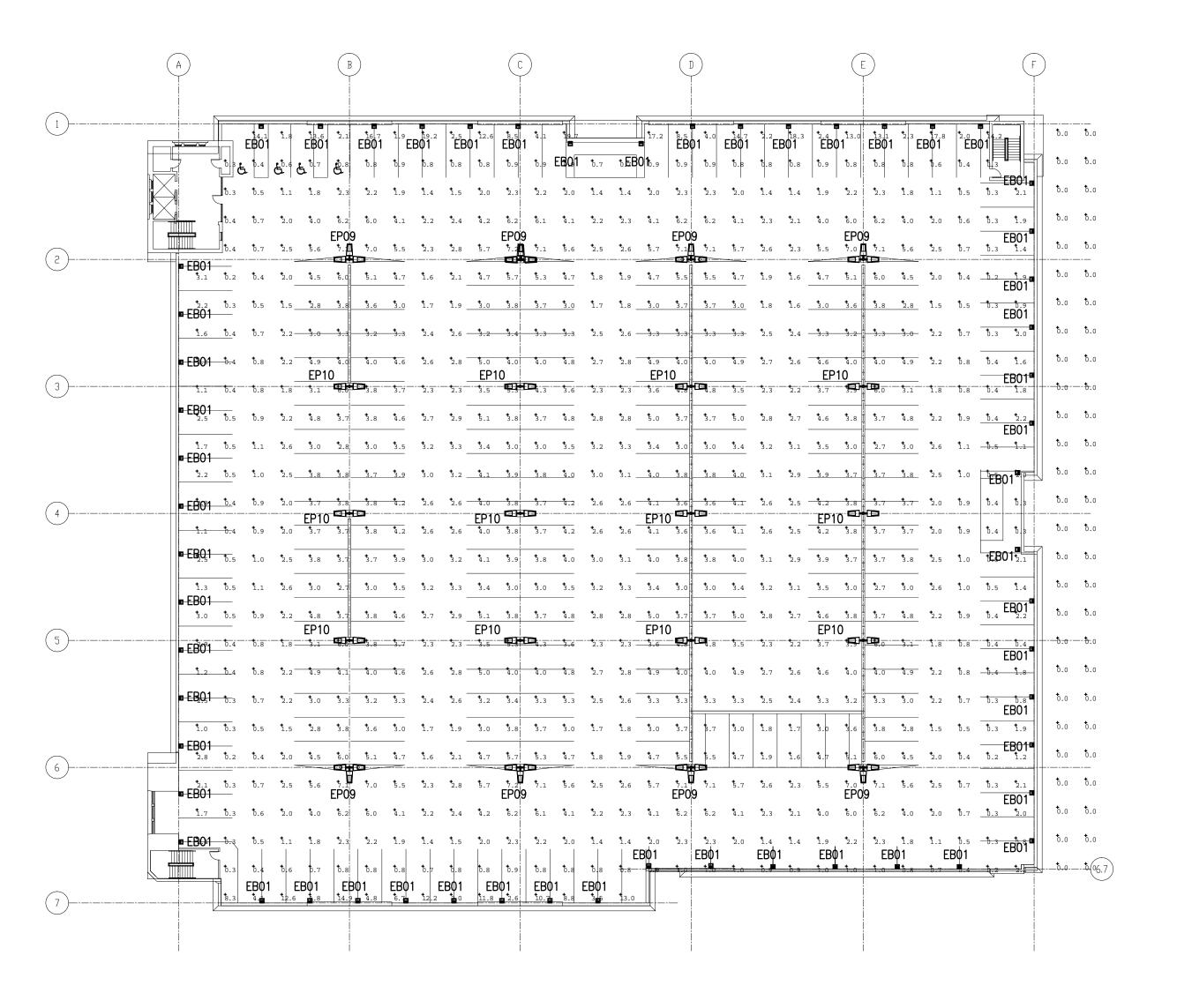
Drawn By JO/JL

C7.1

t No.

Architect of any discrepancies before starting work.

Contractor to verify all dimensions in field and inform



Villanova University Pike Field Garage

Lancaster and Ithan Avenues
Villanova, PA 19085

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FINAL LAND DEVELOPMENT PLANS

Revision August 10, 2015

Date March 6, 2015

Title Roof Lighting Plan

Scale 1" = 30'
Drawn By JO/JL

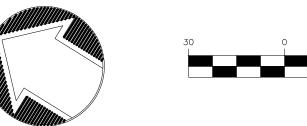
C₇.2

Sheet No.

Sheet No. 30 of 37

Contractor to verify all dimensions in field and inform

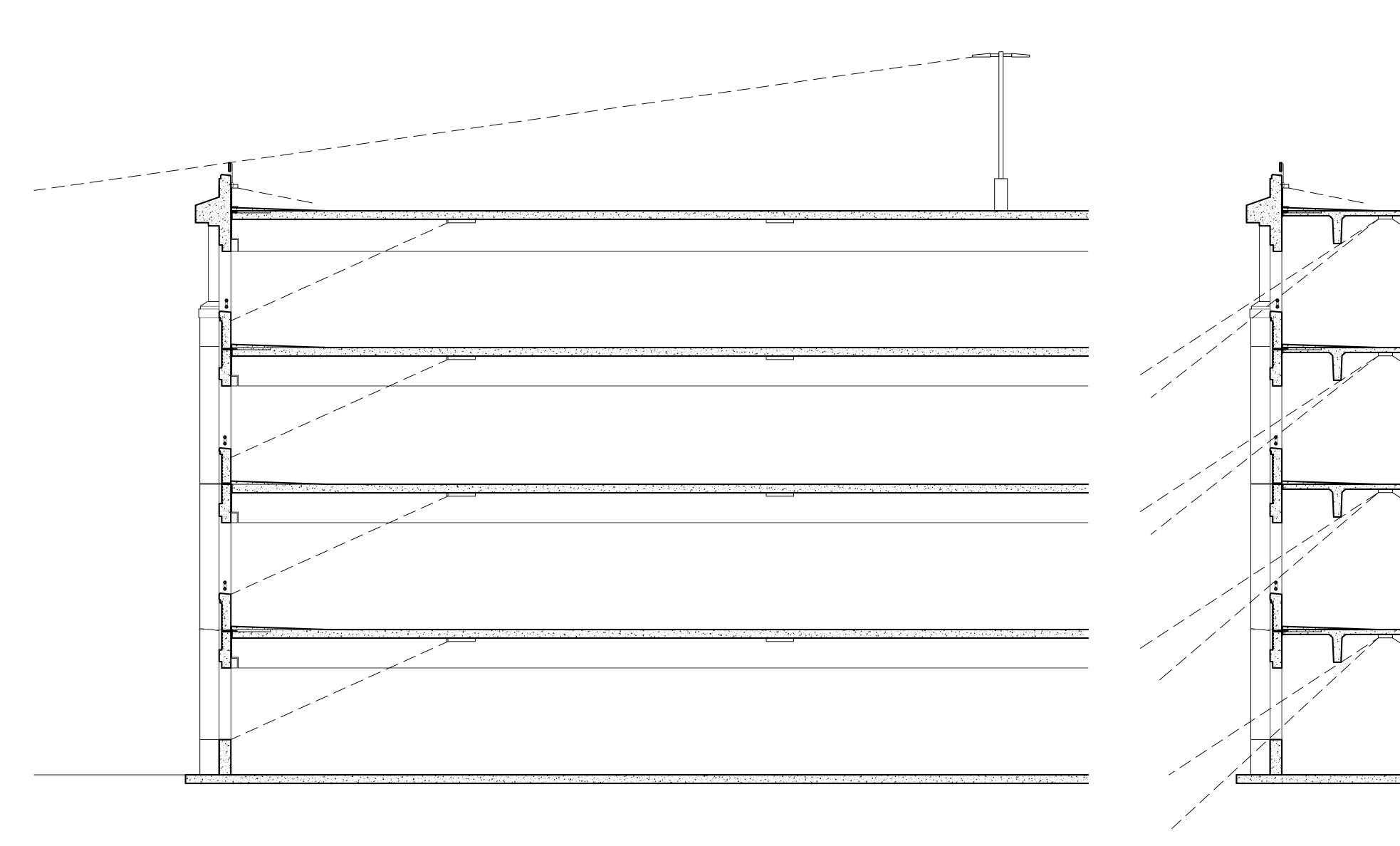
Architect of any discrepancies before starting work.



GRAPHIC SCALE

O 15 30 60 120

(IN FEET.)



TYPICAL LONGITUDINAL CROSS SECTION THROUGH GARAGE

TYPICAL TRANSVERSE CROSS SECTION THROUGH GARAGE

Villanova University Pike Field Garage

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FINAL LAND DEVELOPMENT PLANS

Revision August 10, 2015

Date March 6, 2015

Title Building Lighting Diagram

Scale 3/16" = 1'-0"

Drawn By JO/JL

C7.3

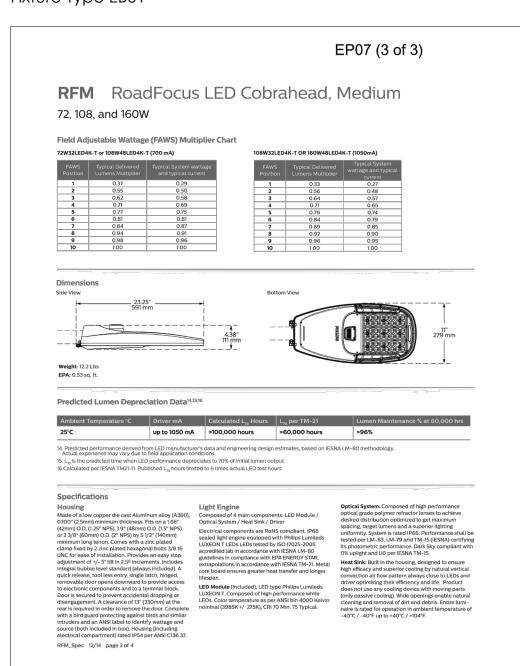
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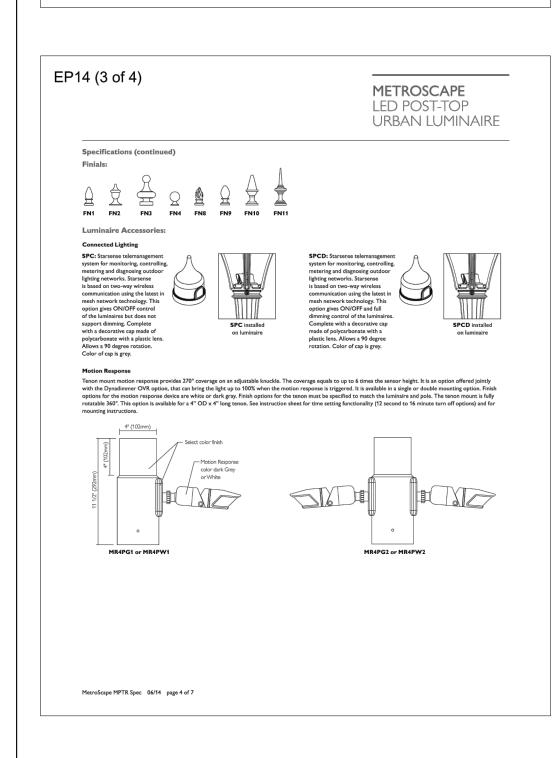
Contractor to verify all dimensions in field and inform Architect of any discrepancies before starting work.

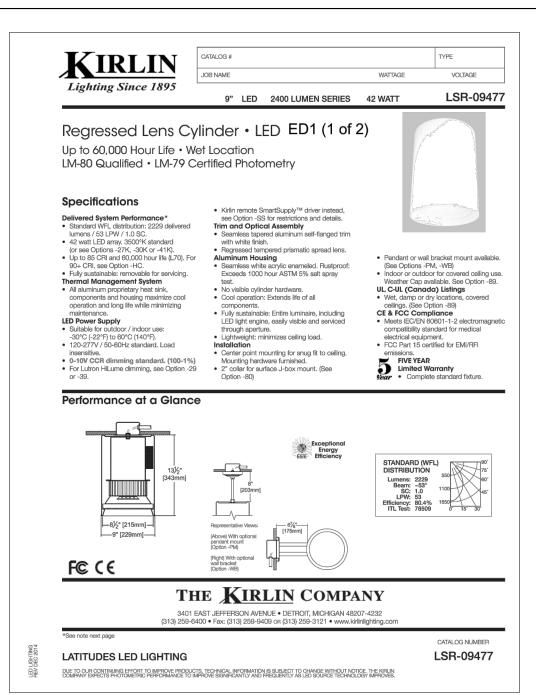
31 of 37

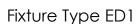


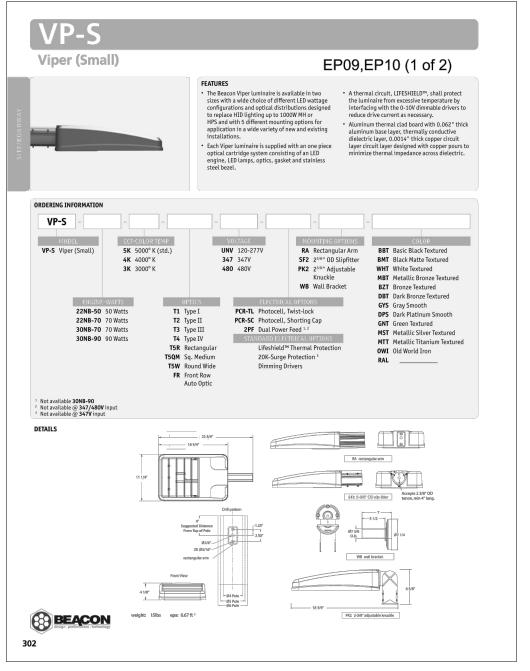


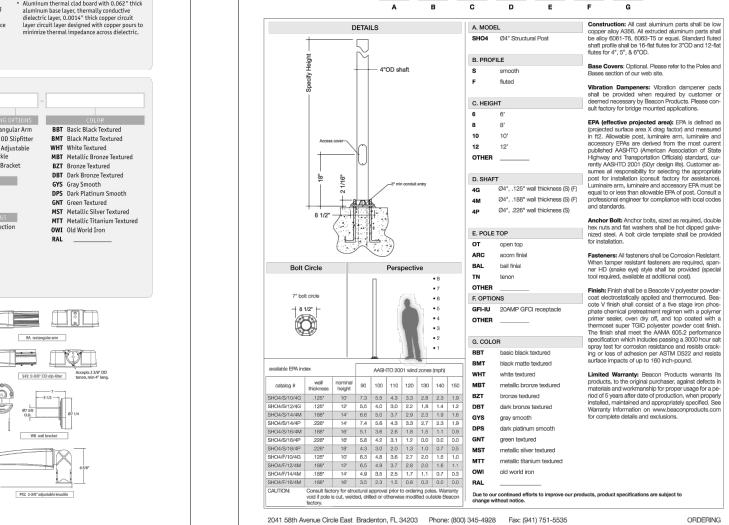












LSR-09477

STANDARD (WFL)

Efficiency: 80.4% ITL Test: 78509

Detailed Photometry - Installed Fixture

Photometric testing done in accordance with IESNA LM-79-08

LM-80 Qualified • LM-79 Certified Photometry

SUBMITTAL DATA

LED Power Supply

-29 Two wire full range (100-1%) PWM dimming instead (Lutron). 120V only. Not available with Option -El.

-39 Three wire full range (100-1%) PWM dimming instead (1 utron)

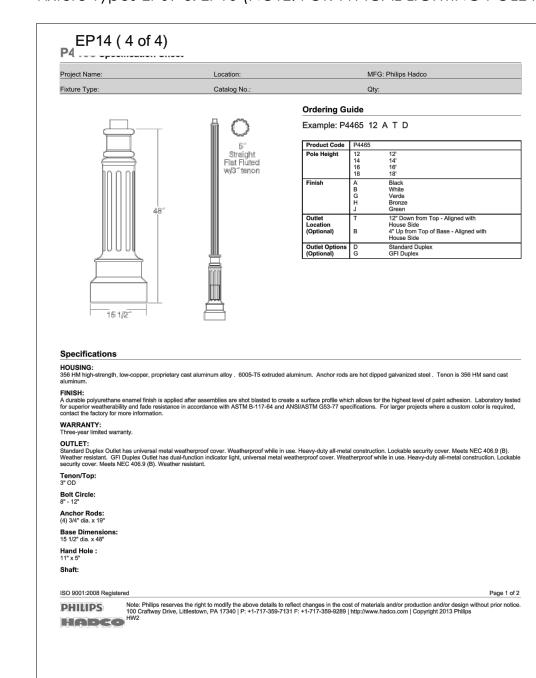
Color Temperature (CCT)

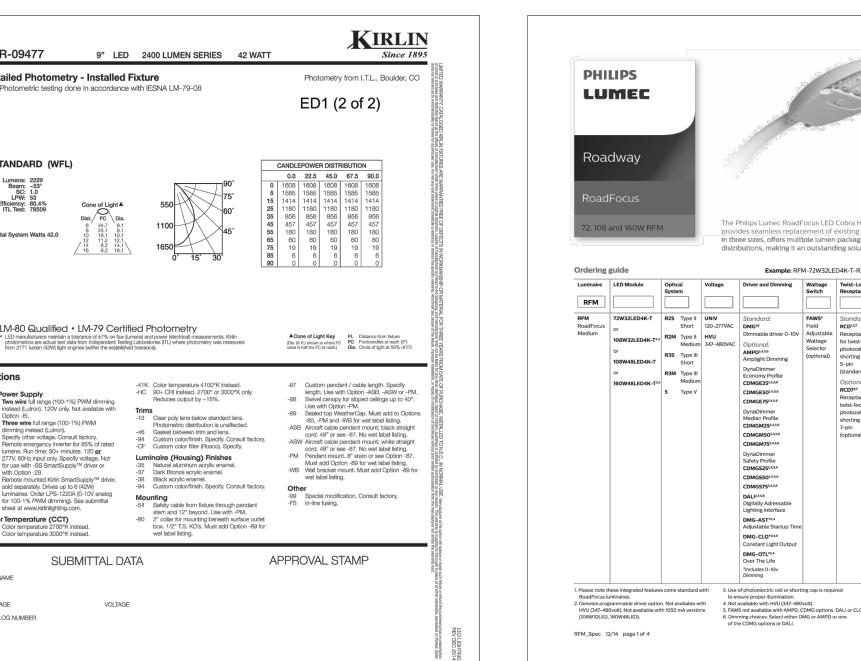
BEACON design , performance , technology

JOB NAME

WATTAGE CATALOG NUMBER

Fixture Types EP09 & EP10 (NOTE: FOR TYPICAL LIGHTING POLE HEIGHTS, REFER TO POLE HEIGHT DIAGRAM IN LIGHTING DESIGN BOOK.)

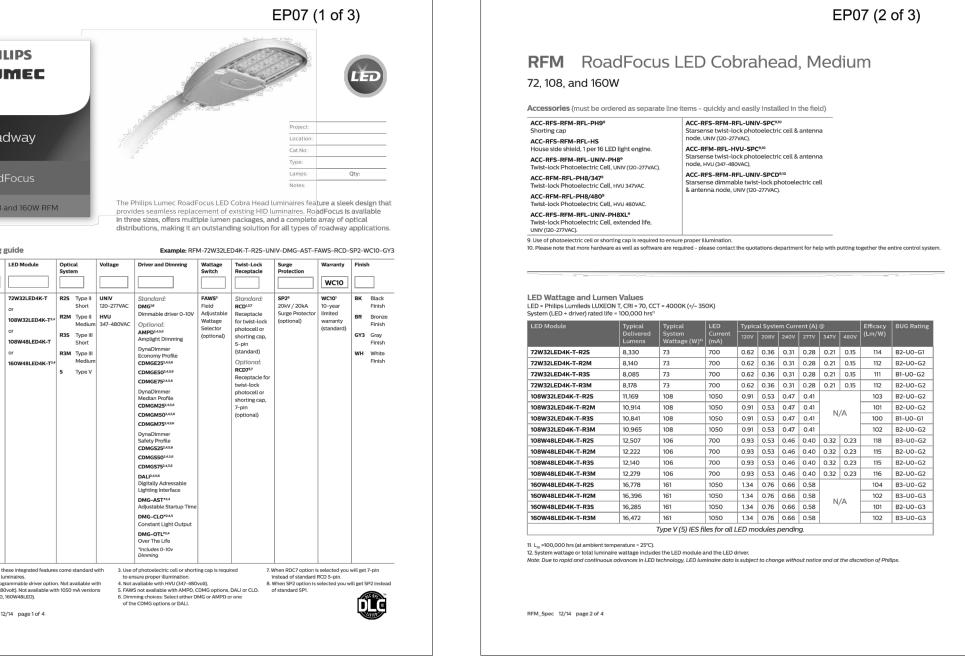




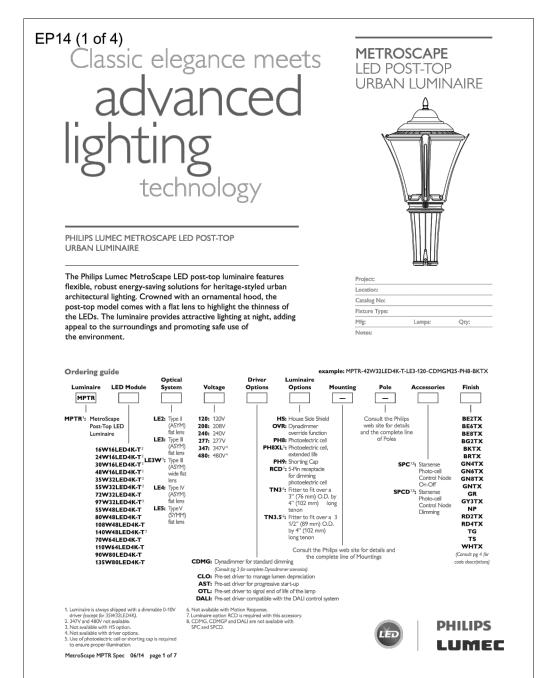
4" STRUCTURAL

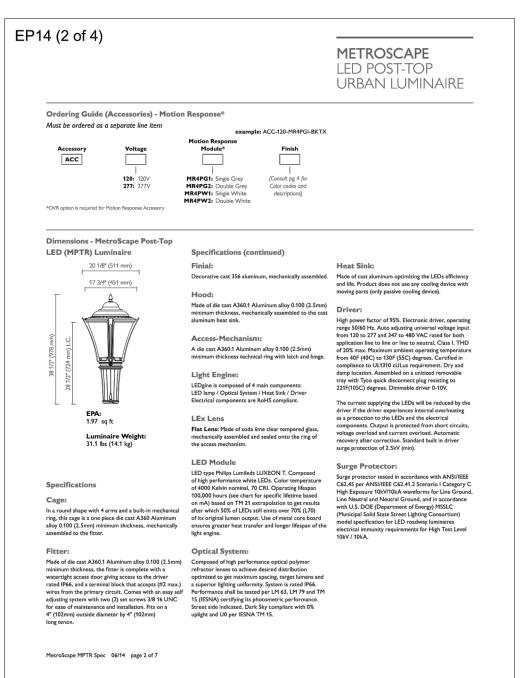
EP09,EP10 (2 of 2)

Sample SHO4 S 8 4G OT GFI-IU BBT

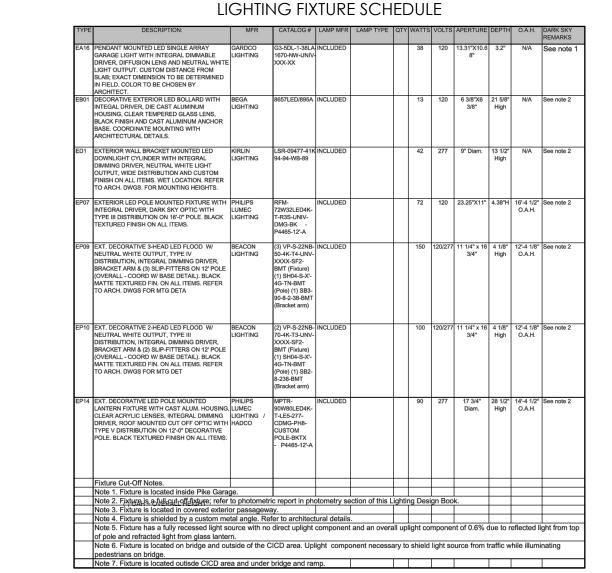


Fixture Types EP07 (NOTE: FOR TYPICAL LIGHTING POLE HEIGHTS, REFER TO POLE HEIGHT DIAGRAM IN LIGHTING DESIGN BOOK.)





Fixture TypeEP14 (NOTE: FOR TYPICAL LIGHTING POLE HEIGHTS, REFER TO POLE HEIGHT DIAGRAM IN LIGHTING DESIGN BOOK.)



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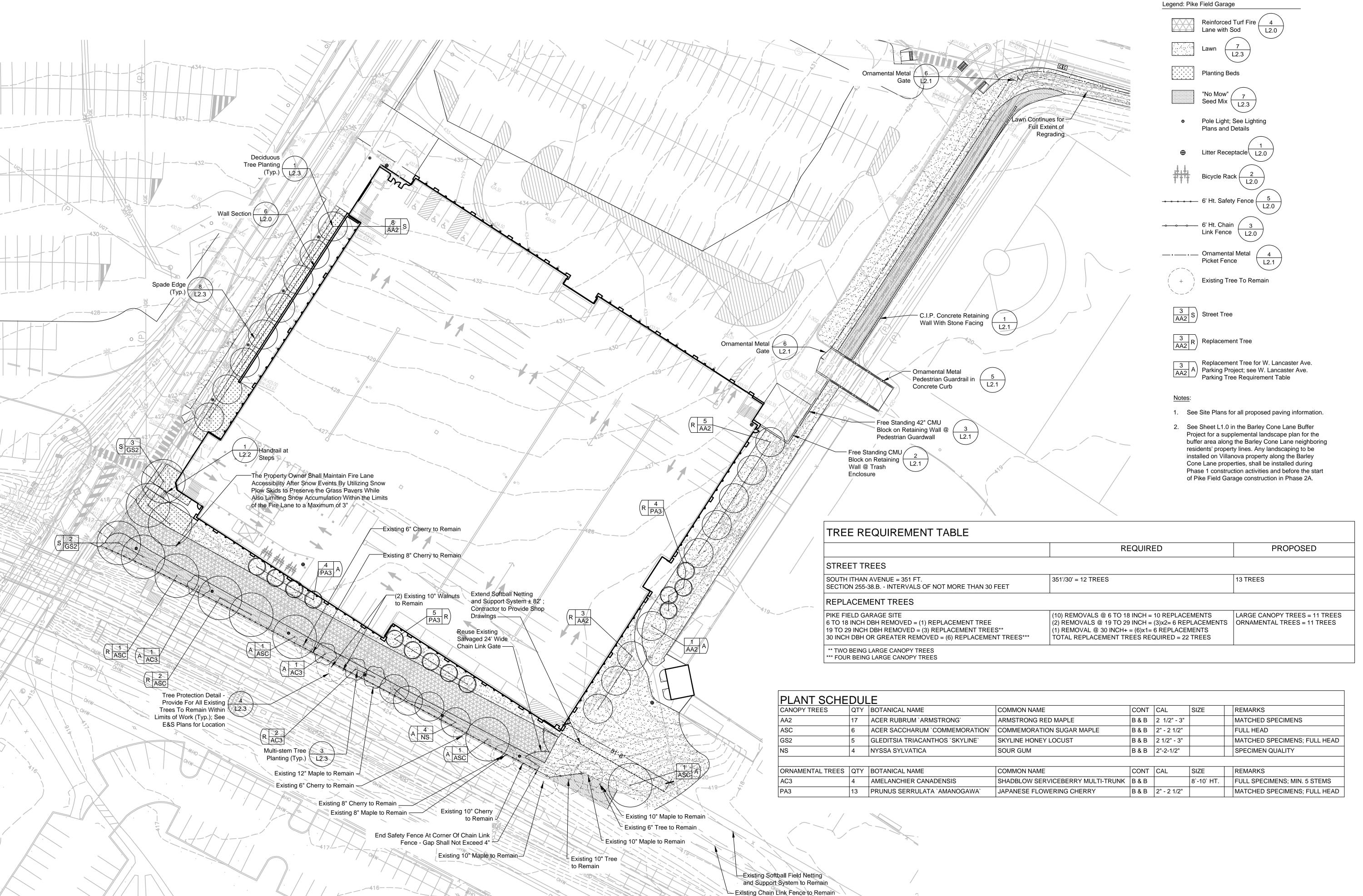
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FINAL LAND DEVELOPMENT PLANS

August 10, 2015 Revision Date March 6, 2015 Title Site Lighting Details

Scale 1" = 30' Drawn By JO/JL

Sheet No. 32 of 37



Villanova University

Pike Field Garage
Lancaster and Ithan Avenues

Villanova PA 19085

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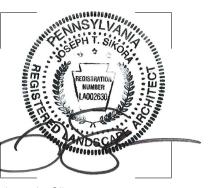
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Joseph Sikora PA.L.A. # LA002630

FINAL LAND DEVELOPMENT SUBMISSION

Revision August 10, 2015

Date March 6, 2015

Title Planting Plan and Schedule

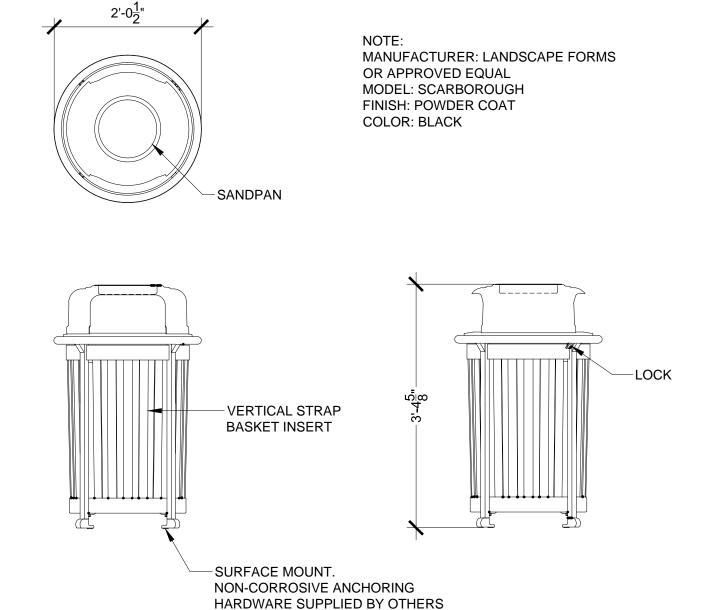
Scale 1" = 30'-0"

Drawn By RM

L1.0

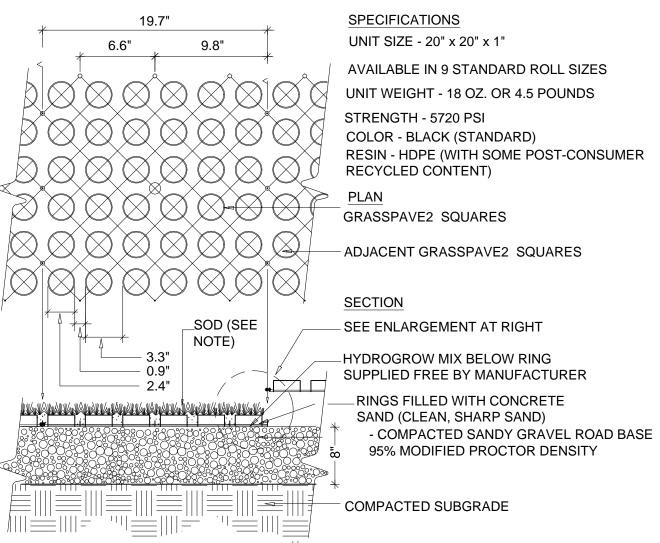
Sheet No.

33 of 37



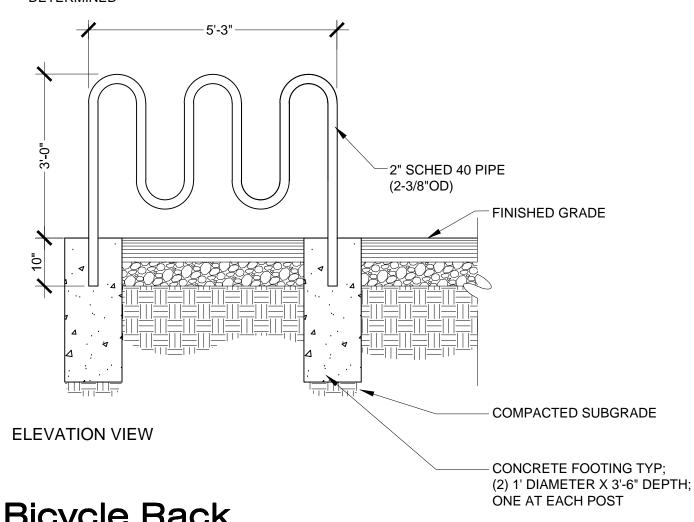
Litter Receptacle

L2.0 N.T.S.



NOTES:

- 1. INSTALL BIKE RACK ACCORDING TO
- MANUFACTURER'S SPECIFICATIONS
- 2. FINAL STYLE AND ATTACHMENT TO BE DETERMINED



Bicycle Rack

L2.0

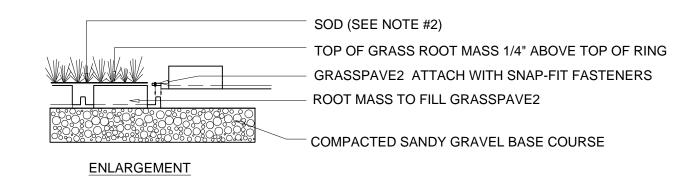
1. ALL REINFORCED TURF AREAS TO BE IRRIGATED WITH AUTOMATED, UNDERGROUND SPRAYHEAD SPRINKLER SYSTEM.

2. SOD MUST CONTAIN VERY LITTLE SOIL WHICH MAY COMPACT

AND KILL THE GRASS WITH USE. SOD MUST BE WASHED, CUT THIN (1/2 INCH),

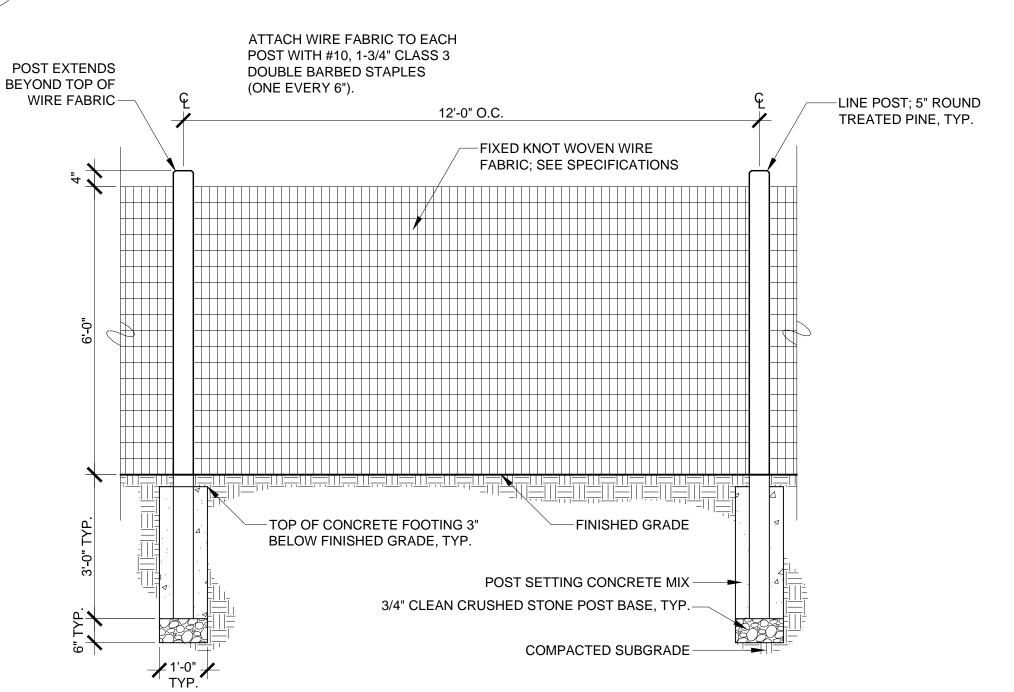
OR GROWN IN SAND OR SANDY LOAM.

MANUFACTURER: INVISIBLE STRUCTURES, INC. *OR APPROVED EQUAL 1600 JACKSON ST., STE. 310 GOLDEN, COLORADO 80401 800-233-1510 OR 303-233-8383 FAX: 800-233-1522 OR 303-233-8282 WWW.INVISIBLESTRUCTURES.COM

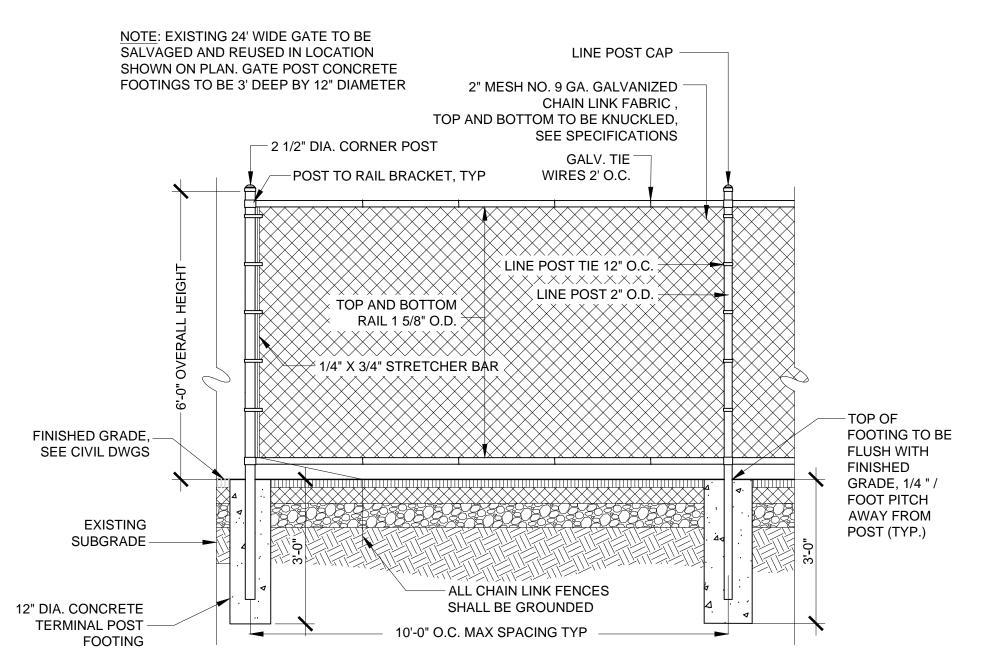


Reinforced Turf Fire Lane, Typ.

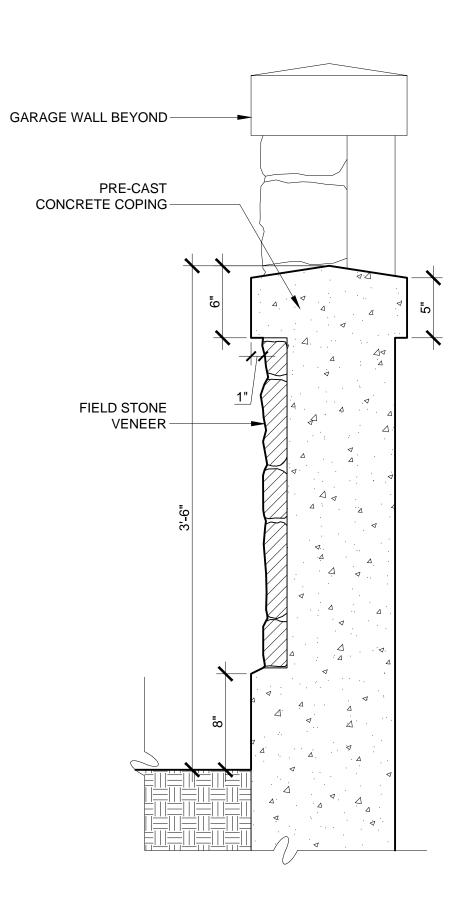
L2.0 N.T.S.



6' Ht. Safety Fence



6' Ht. Chain Link Fence



Wall Section

Villanova University

Pike Field Garage

Lancaster and Ithan Avenues Villanova PA 19085

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PA.L.A. # LA002630

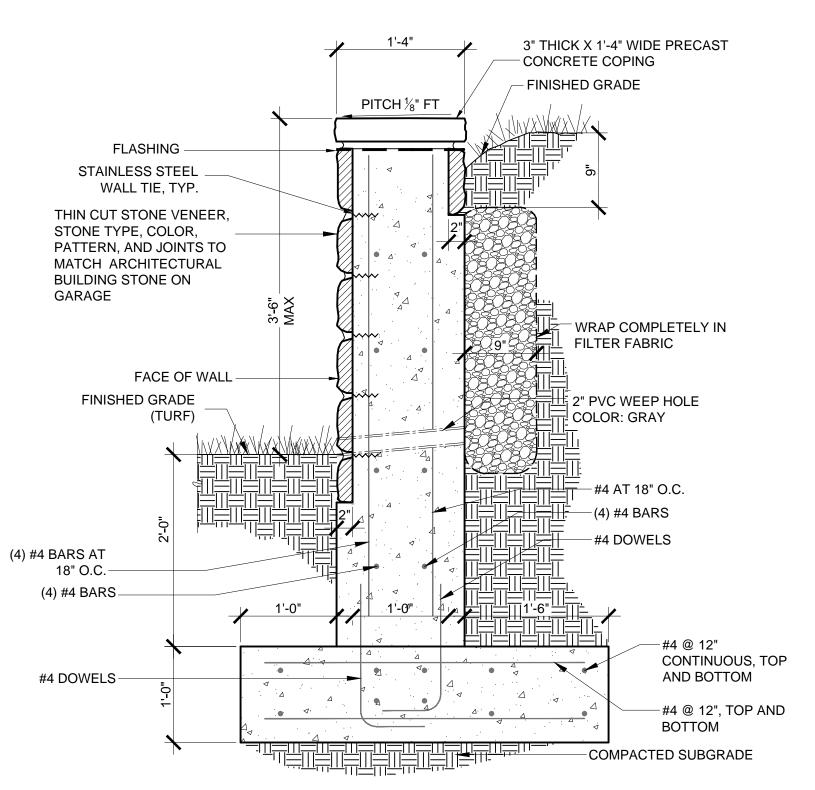
FINAL LAND DEVELOPMENT SUBMISSION

Revision August 10, 2015 Date March 6, 2015 Landscape Details

Scale As Indicated Drawn By RM

Sheet No.

34 of 37



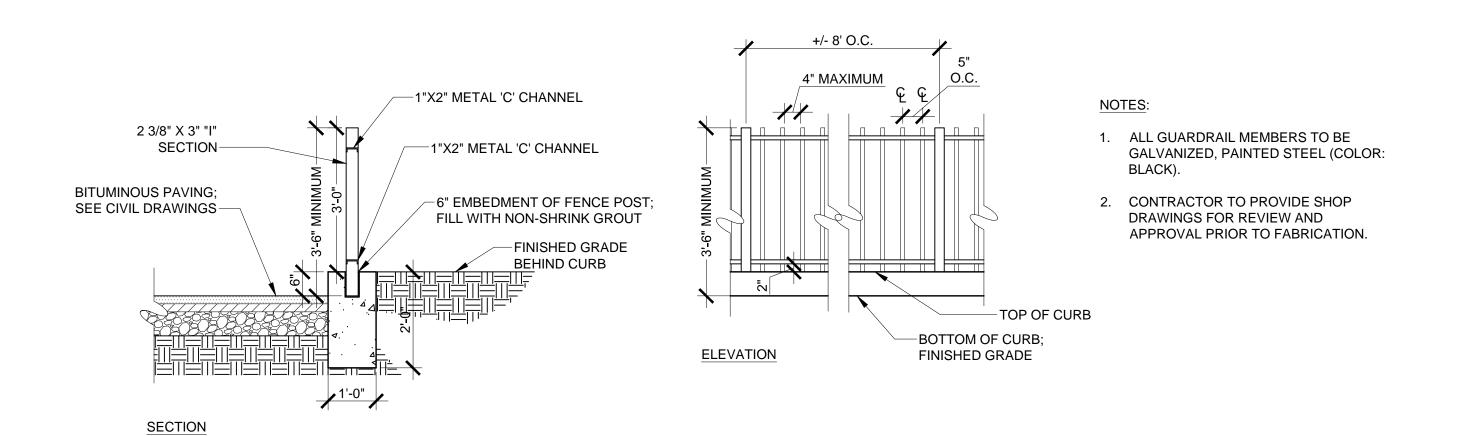
1 C.I.P. Concrete Retaining Wall With Stone Facing

Scale: 1" = 1'-0"

CAST STONE CAP 2" FIELD STONE VENEER ADHERED TO CMU BACKUP 6" CMU BLOCK PROVIDE 1/2" EXPANSION JOINT; WITH PRE-MOLDED FILLER AND SEALANT; TYP STONE VENEER CONTINUES DOWN TO GRADE ALONG -6" REINFORCED CONCRETE RETAINING WALL SLAB; THICKEN SLAB TO REST ON TOP OF PIP RETAINING WALL PIP CONCRETE RETAINING WALL; SEE STRUCTURAL -CLEAN CRUSHED STONE BASE COMPACTED TO 6" COMPACTED SUBGRADE

2'-8" Scale: 3/4"=1'-0"

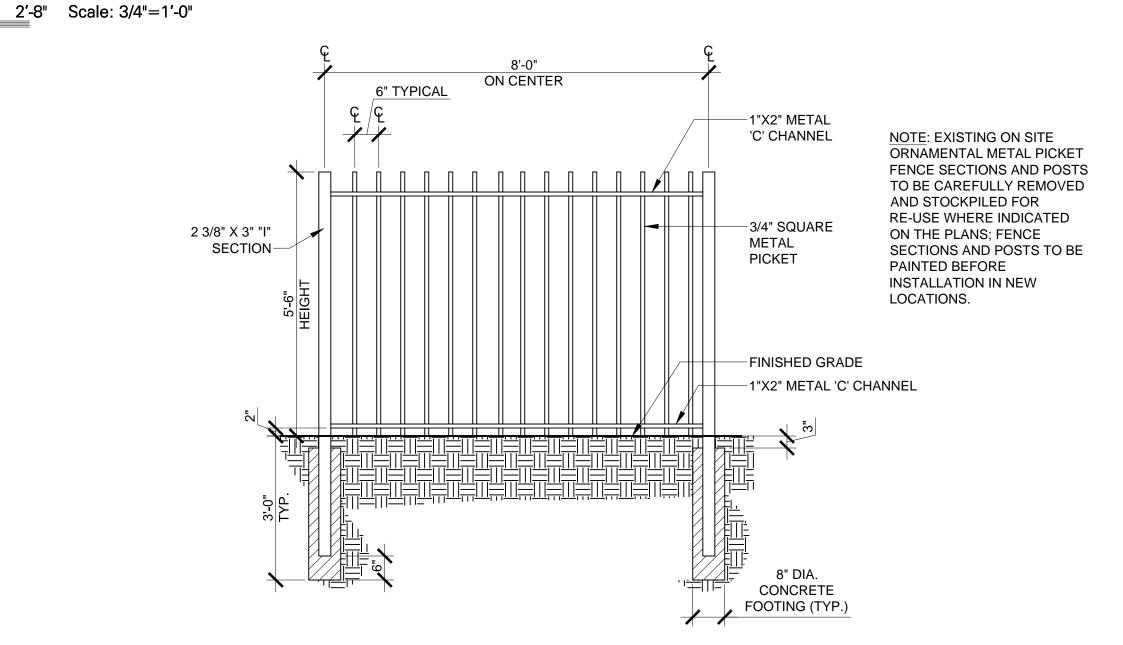
Free Standing 42" CMU Block on Retaining Wall @ Pedestrian Guardwall



ornamental Metal Pedestrian Guardrail in Concrete Curb

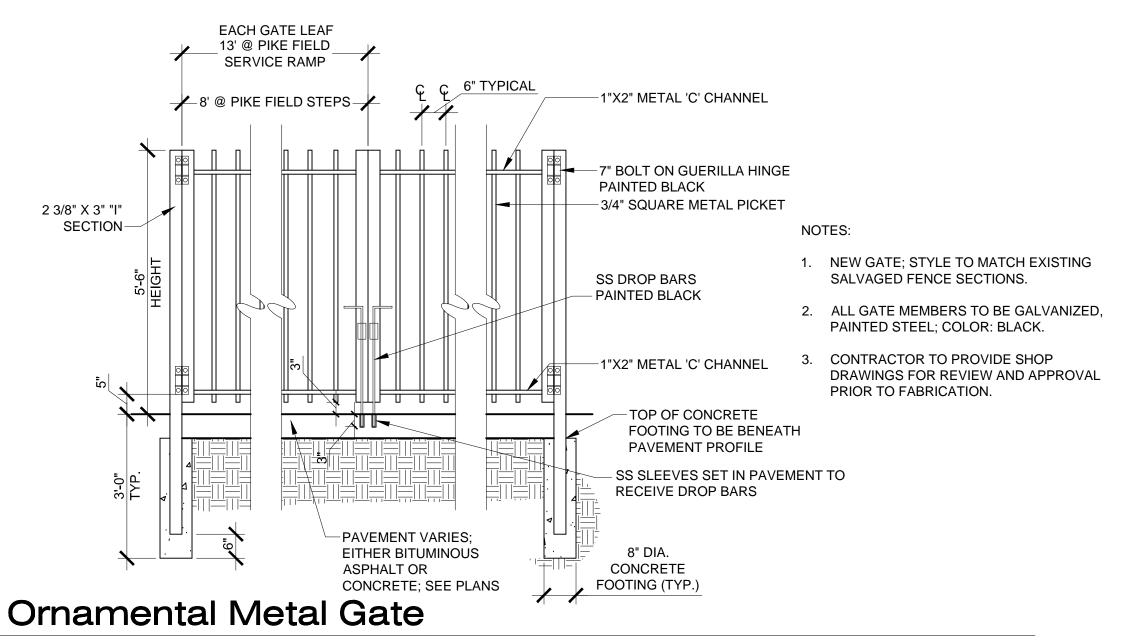
CAST STONE CAP-2" FIELD STONE VENEER ADHERED TO CMU BACKUP 8" CMU BLOCK STONE VENEER CONTINUES DOWN -PROVIDE 1/2" EXPANSION JOINT WITH PRE-MOLDED FILLER AND TO GRADE ALONG SEALANT; TYP RETAINING WALL--6" REINFORCED CONCRETE SLAB; THICKEN SLAB TO REST ON TOP OF PIP RETAINING WALL -CLEAN CRUSHED STONE PIP CONCRETE BASE COMPACTED TO 6" RETAINING WALL; SEE DEPTH STRUCTURAL DRAWINGS COMPACTED SUBGRADE

Free Standing CMU Block on Retaining Wall @ Trash Enclosure



Ornamental Metal Picket Fence





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Joseph Sikora PA.L.A. # LA002630

FINAL LAND DEVELOPMENT SUBMISSION

Revision August 10, 2015

Date March 6, 2015

Title Landscape Details

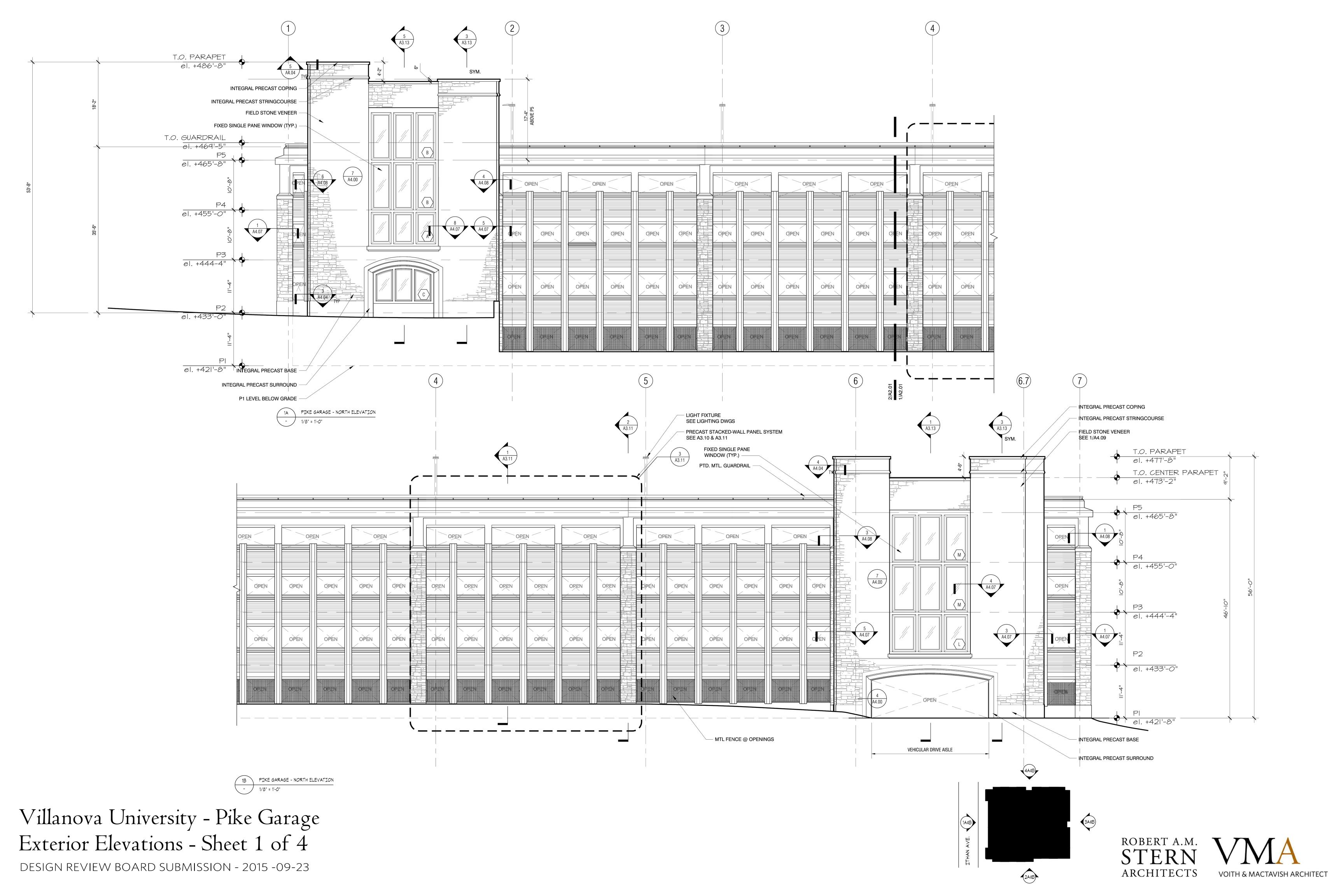
Scale As Indicated
Drawn By SP

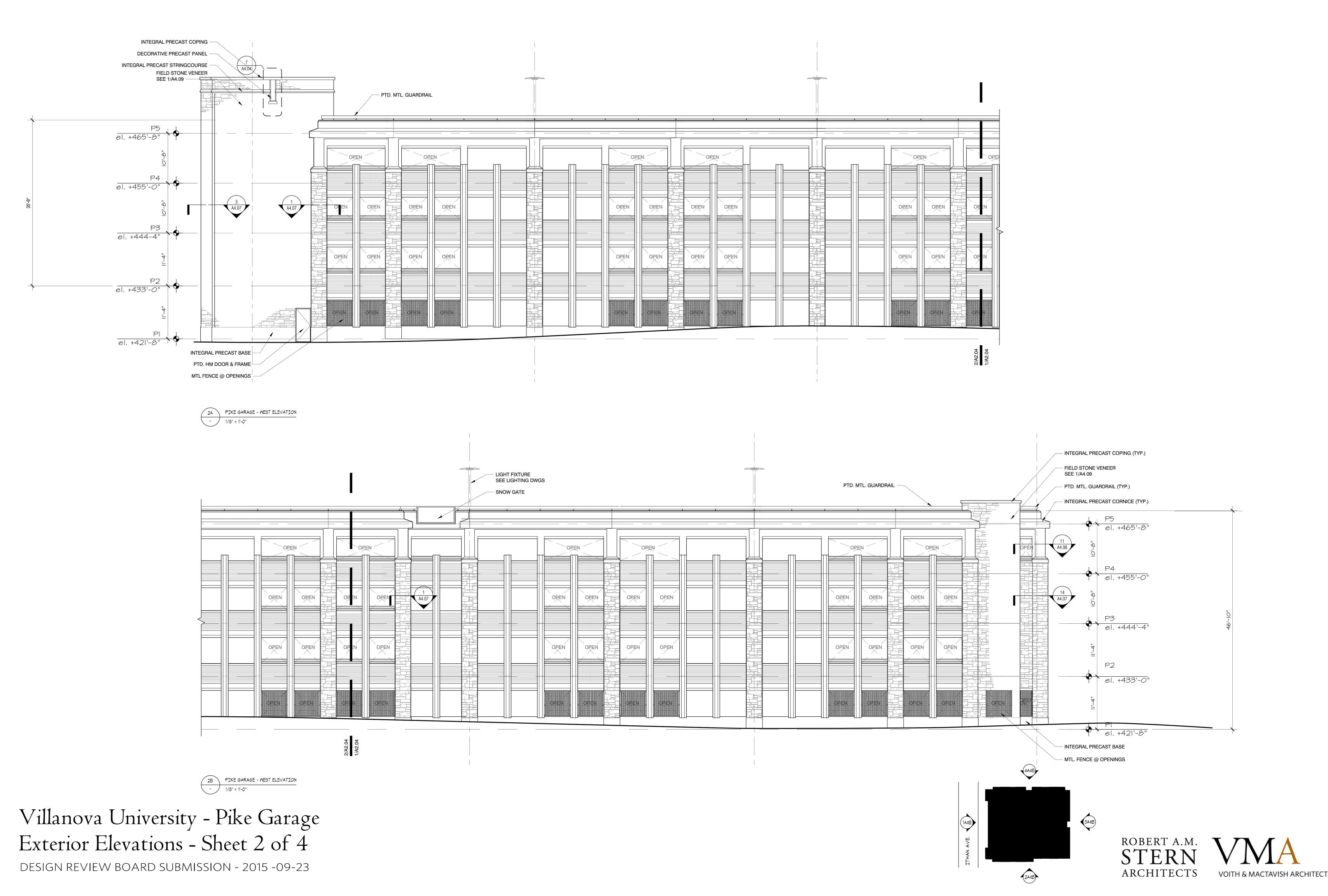
I 2.1

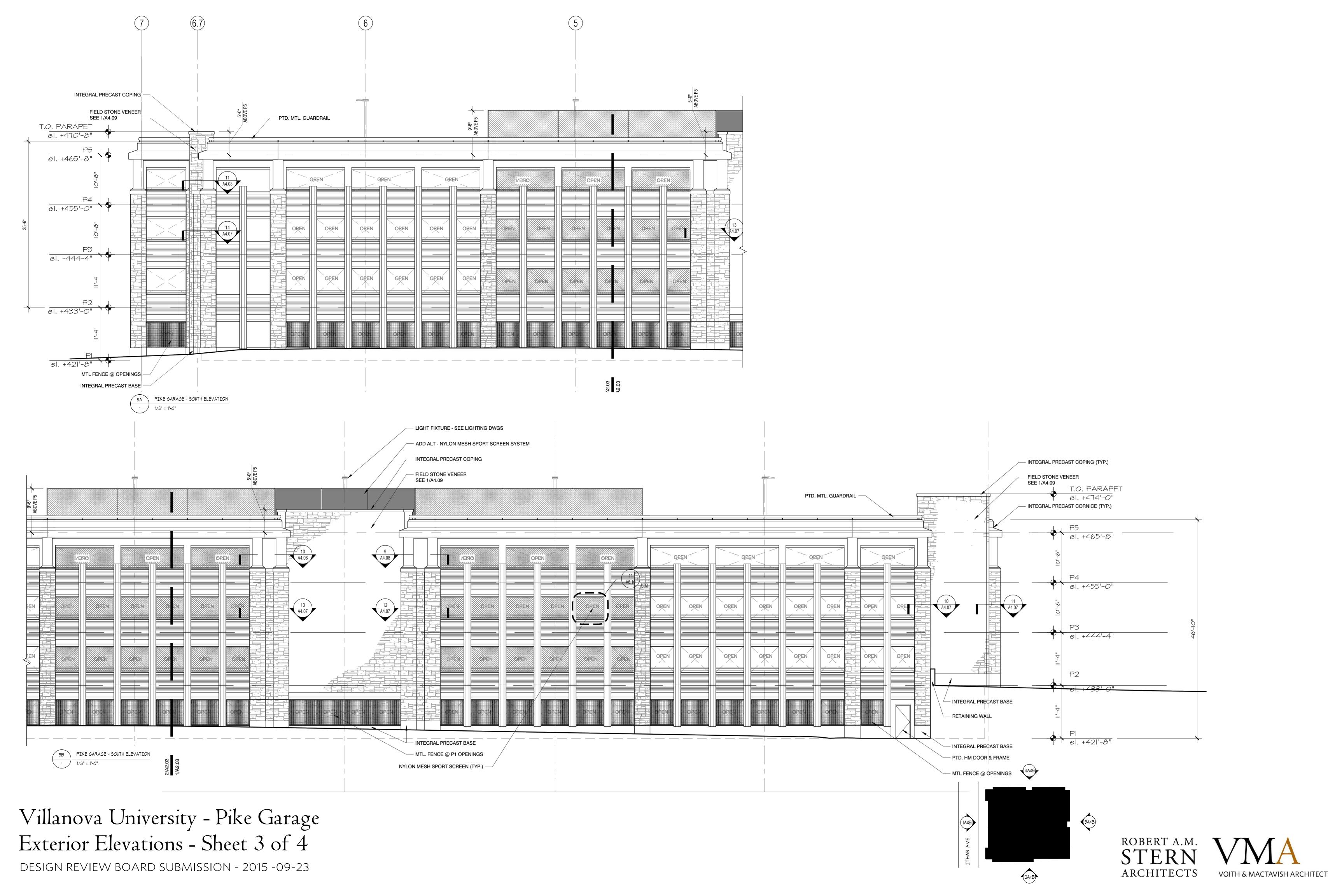
Sheet No. 35 of 37

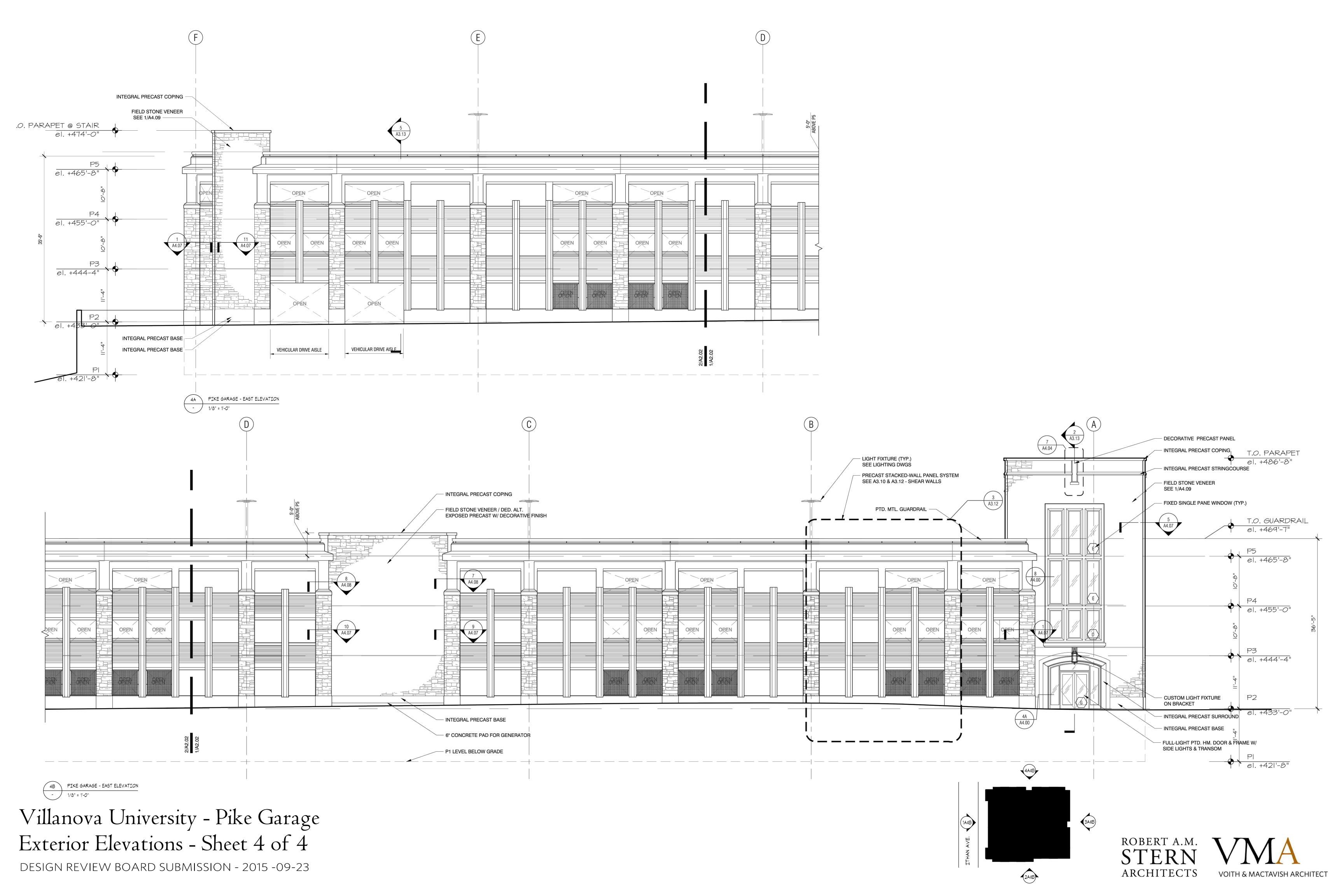
Contractor to verify all dimensions in field and inform Architect of any discrepancies before starting work.

2' 4' Scale: 1/2" = 1'-0"











VIEW ITHAN AVENUE - DESIGN CONCEPT PRESENTED MAY 2015

Villanova University - Pike Garage DESIGN REVIEW BOARD SUBMISSION — 2015-09-23







VIEW LOOKING WEST FROM PIKE FIELD - DESIGN CONCEPT PRESENTED MAY 2015

Villanova University - Pike Garage
DESIGN REVIEW BOARD SUBMISSION — 2015-09-23







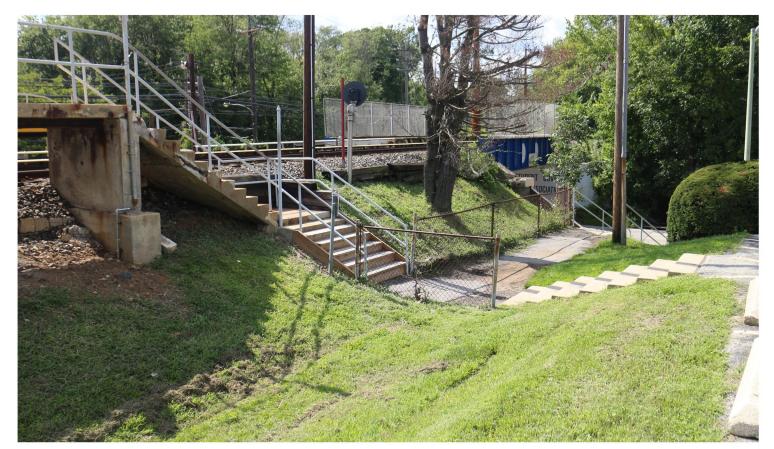
VIEW OF RR BRIDGE FROM ITHAN AVENUE LOOKING SOUTH



VIEW OF FROM PIKE FIELD LOOKING WEST

Villanova University - Pike Garage

DESIGN REVIEW BOARD SUBMISSION — 2015-09-23



STADIUM STATION STAIRS AT NORTH SIDE OF RR



VIEW FROM MAIN LOT PARKING LOOKING SOUTH



