	SYCAMORE TOWNS DEPARTMENT OF PLANNIN 8540 KENWOOD ROAD, CINCIN	G & ZONING	OCT 1 5 2020					
	513.792.7250 PHONE 513.7	792.8564 FAX	S	YCAMOR				
BZA APPLICATION		A			NUMBER			
FEES: APPEAL: \$150.00 VARIANCE: \$150.00 CONDITIONAL USE: \$500.00 NON-CONFORMING USE: \$500.00	COMMERCIAL RESIDEN	ITIAL SU	UCB 200017 DO NOT WRITE IN THIS SPACE					
1. project address: 8341 KENWC	DOD ROAD, CINCINNA	TI, OH	COD	_{Е:} _45236				
2. NAME	STREET ADDRESS	CITY	ST	ZIP	PHONE NUMBER			
Kenwood Baptist Church	8341 KENWOOD ROAD	Cincinnati	ОН	45236	(513) 791-0355			
CONTRACTOR HIFIVE Development Services, Inc.	202 West Main Street	Mason	ОН	45040	(513) 336-9280			
HiFive Design Group	202 West Main Street	Mason	ОН	45040	(513) 336-9280			
Sam Cain (HiFive)	202 West Main Street	Mason	ОН	45040	(513) 257-0028			
samenting 1.com								
3. BZA ACTION REQUESTED: APPEAL	O VARIANCE C)						
CONDITI	ONAL USE 🕥 NON-CONFO	RMING USE 🔿						
4. STATE IN DETAIL ALL EXISTING & PI Existing church with administrativ								
Proposing to build a new lobby w	ith restrooms, kitchenet	te, etc. Existin	g sa	nctuary to	be remodeled.			
Existing south parking lot to be re	epaired and expanded w	vith new lighting	g.					
Existing south parking lot to be repaired and expanded with new lighting. 5. SQUARE FEET: 6,361(new) 6. USE: Church 7. HEIGHT: 1-story+bsmt, 20 feet max. 8. EST. START DATE: 5/17/2021 9. EST. FINISH DATE: 2/14/2022								
THE DEPARTMENT OF PLANNING TOWNSHIP. WE PROMOTE HIGH STAT SERVING OUR CITIZENS AND BUS	NDARDS FOR DEVELOPMENT A	ND QUALITY PROJI	ECTS.	WE LOOK F	ORWARD TO			
The owner of this project and undersigned do hereby the best of their knowledge, true and correct. The app inspection related to this Board of Zoning Appeals app	licant and owner of the real property a	tatements given on this gree to grant Sycamore	applica Towns	ation, drawing hip access to t	s and specifications are to he property for review and			
NOTE: FILING THIS APPLICATION DOE	0/15/2020 / DATE	SION TO BEGIN V	VORF	κ.				

PROPERTY OWNER'S SIGNATURE

DATE

DO NOT WRITE BELOW THIS LINE

October 15, 2020



Skylor Miller, Planning & Zoning Administrator Board of Zoning Appeals Sycamore Township Planning & Zoning 8540 Kenwood Road Sycamore Township, OH 45236

Re: New Addition & Remodeling – Phase I Kenwood Baptist Church 8341 Kenwood Road Cincinnati, OH 45236

Mr. Miller & Sycamore Township Board of Zoning Appeals,

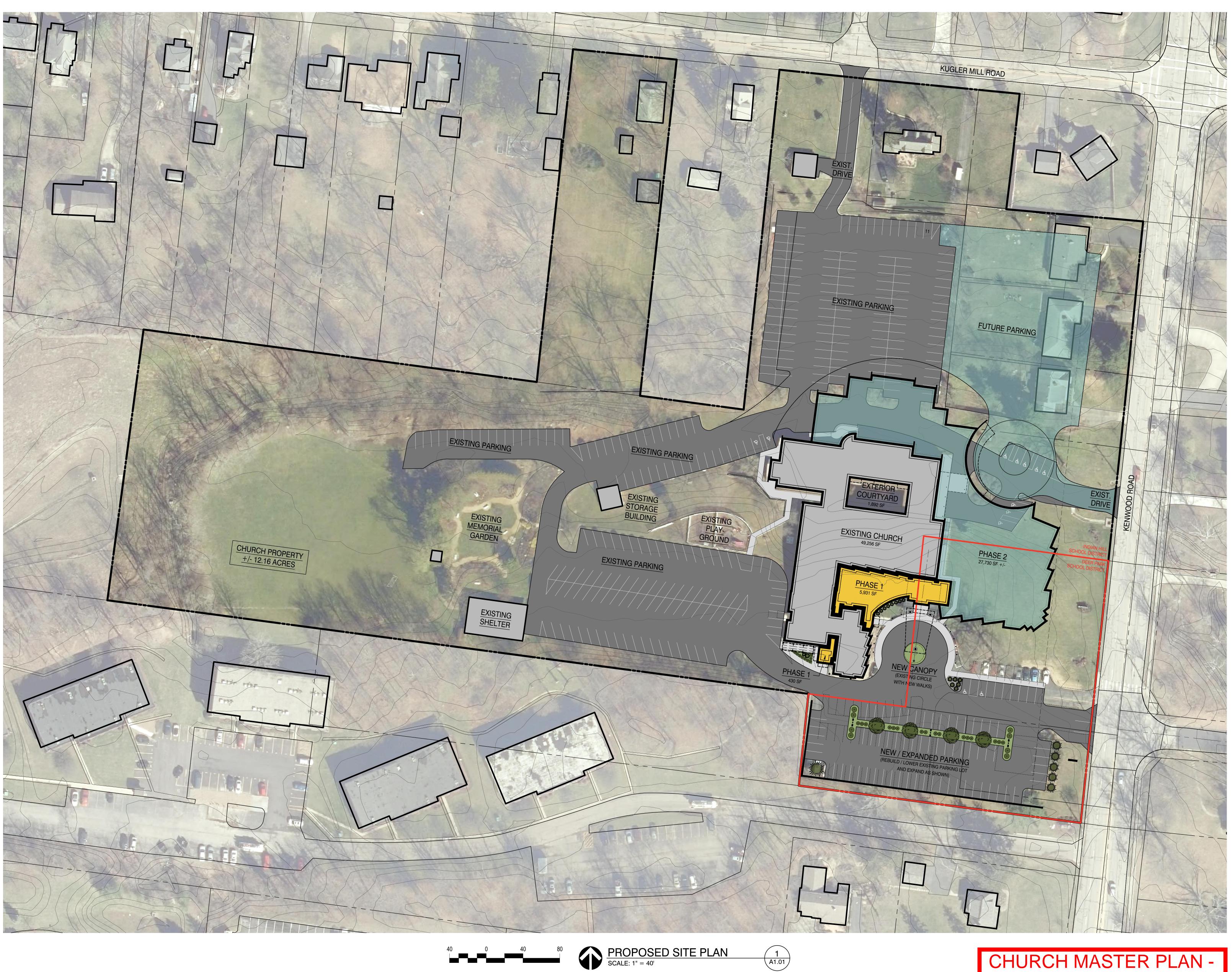
This written statement shall serve as the Letter of Intent for Phase I of the addition and remodeling project being proposed by Kenwood Baptist Church at 8341 Kenwood Road.

- 1. The project shall take place at the above address, which is approximately 12 acres of churchowned land. The existing property is currently zoned 'B' (Single Family Residential).
- 2. The church is submitting a Conditional Use application, seeking approval to build a new addition and perform site improvements. The new addition is a 6,361 SF lobby with restrooms, a kitchenette, storage and an improved south parking lot. Also, the church is proposing to re-align their existing southern most curb-cut for better traffic flow onto their site and to align with the drive directly across Kenwood Road. Some existing rooms within the existing building will be remodeled as well, with focus of this being on renovations of the existing church sanctuary. No seats are being added to the assembly space. This is Phase I of a larger Master Plan. The Church Master Plan is being submitted for reference only to help everyone understand Phase I in context with the big picture plans for development on site.
- 3. Specifically, Kenwood Baptist Church is requesting Conditional Use approval as set forth in Chapter 17 of the Sycamore Township Zoning Resolution. Table 3-2 in the Resolution lists "Church" (with ISR of .45 or less) as being "Permissible with a Conditional Use Zoning Certificate after public hearing and administrative approval by the Board of Zoning Appeals." As such, Kenwood Baptist Church is submitting a Conditional Use Application with all the necessary associated documents and drawings.
- 4. The design of the addition and site improvements is intended to conform with the existing zoning regulations as set forth by Sycamore Township. At this point in time, the church is not seeking any type of variance for this project.

Please let me know if you have any questions or need any clarification on this application.

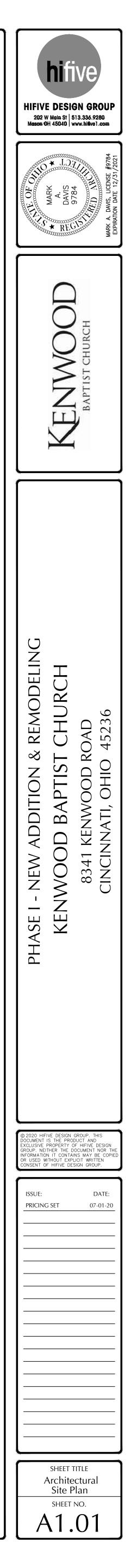
Sincerely,

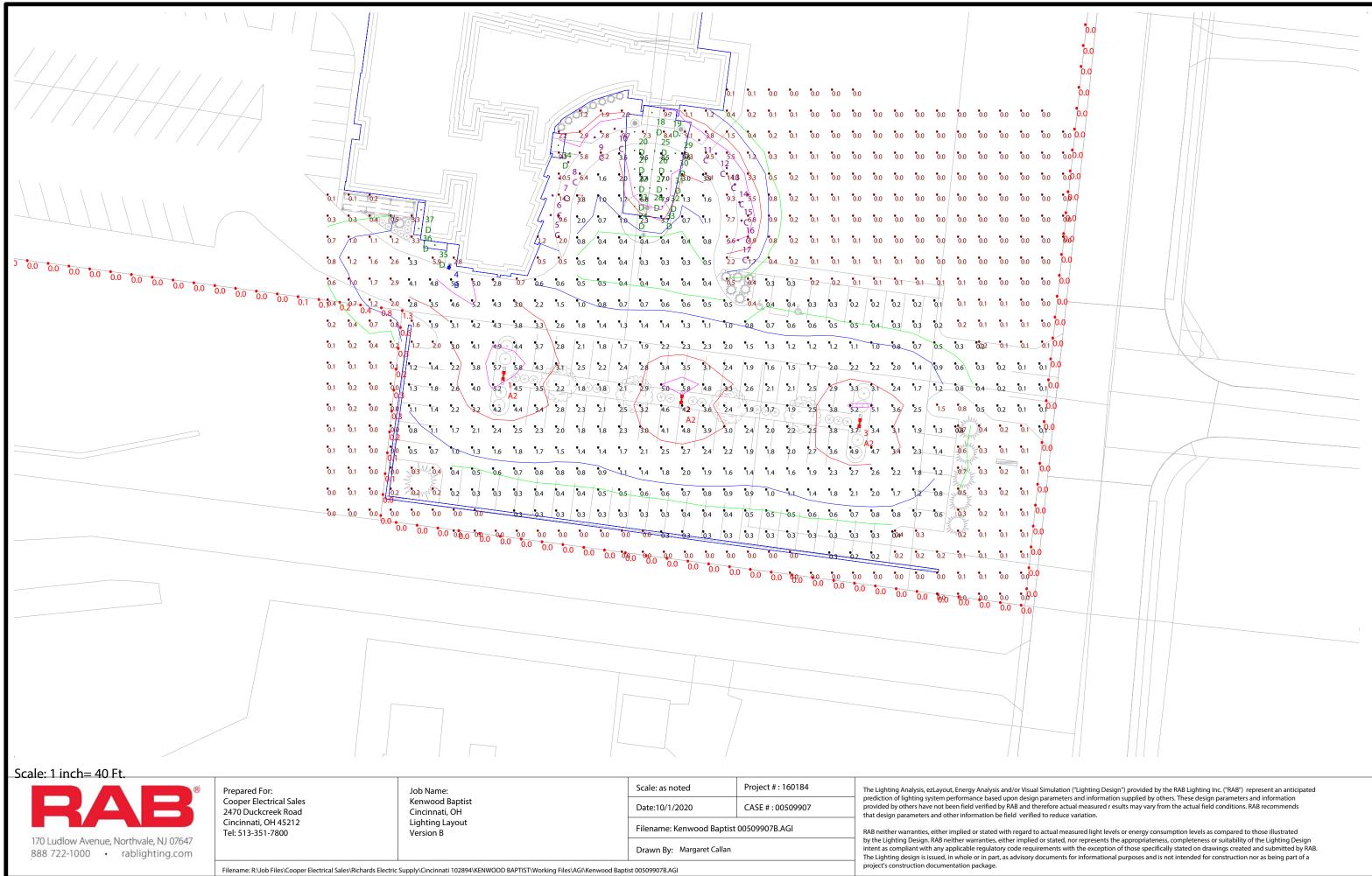
Sam Cain – Registered Architect, NCARB, LEED-AP HiFive Design Group - HiFive Development Services, Inc. sam@hifive1.com mobile = (513) 833-5085 direct = (513) 257-0028

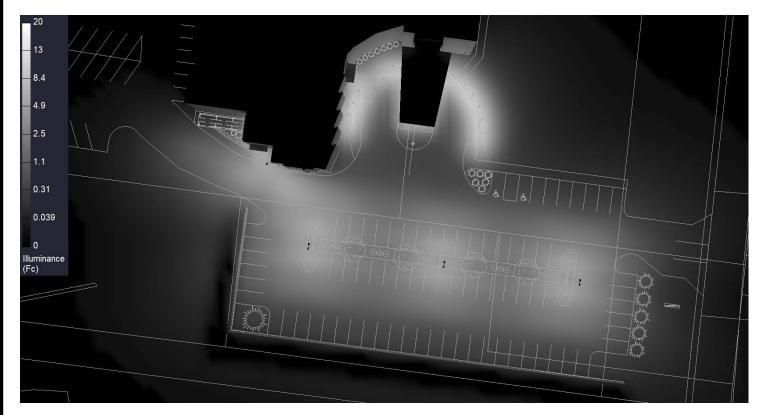


NORTH

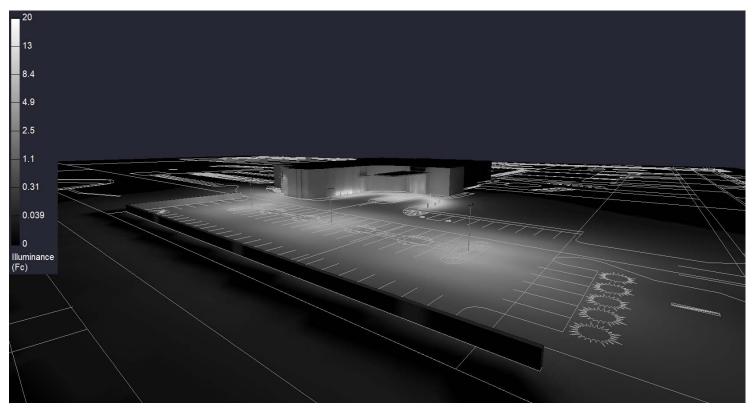
CHURCH MASTER PLAN -FOR REFERENCE ONLY







Plan View



Iso View



The Lighting Analysis, ezLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by the RAB Lighting Inc. ("RAB") represent an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measured r esults may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

RAB neither warranties, either implied or stated with regard to actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design. RAB neither warranties, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design intent as compliant with any applicable regulatory code requirements with the exception of those specifically stated on drawings created and submitted by RAB. The Lighting design is issued, in whole or in part, as advisory documents for informational purposes and is not intended for construction nor as being part of a

Calculation Summary											
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description	PtSpcLr	PtSpcTb	Meter Type
New Adidition Parking	Illuminance	Fc	1.86	9.6	0.1	18.60	96.00	Readings taken at 0'0" AFG	10	10	Horizontal
Property Line	Illuminance	Fc	0.01	1.3	0.0	N.A.	N.A.	Readings taken at 5' AFG	10	N.A.	Horizontal
Site	Illuminance	Fc	0.86	14.3	0.0	N.A.	N.A.	Readings taken at 0'0" AFG	10	10	Horizontal

Luminaire Schedule		lule	All quotes/orders generated from this layout must be forwarded to the Local Rep Agency					
Symbol Qty Tag		Tag	Label	Arrangement	LLF	Description		
	3	A2	ALED3T78 x2	BACK-BACK	1.000	Pole Mounted (Type III)		
-	1	В	ALED2T78	SINGLE	1.000	Pole Mounted (Type II)		
	13	С	BDLEDR18	SINGLE	1.000	42 inch round bollard		
()	20	D	R2R8940120W	SINGLE	1.000	Recessed New Construction 2 inch downlight		

LumNo	Tag	X	Y	MTG HT	Orient
1	A2	1058.477	346.101	20	83
1	A2	1058.111	343.123	20	263
2	A2	1143.236	334.797	20	82
2	A2	1142.818	331.827	20	262
3	A2	1228.003	323.53	20	82
3	A2	1227.585	320.56	20	262
4	В	1032.314	396.035	20	250
5	C	1080.761	421.145	3.5	348
6	C	1081.694	430.479	3.5	343
7	C	1084.894	438.612	3.5	328
8	C	1089.161	446.312	3.5	328
9	C	1101.727	458.079	3.5	303
10	C	1111.194	462.212	3.5	292
11	C	1151.394	456.845	3.5	236
12	C	1159.427	450.379	3.5	223
13	C	1164.561	443.579	3.5	213
14	C	1168.461	435.745	3.5	198
15	C	1170.594	427.212	3.5	180
16	C	1171.561	418.512	3.5	180
17	C	1169.994	409.245	3.5	168
18	D	1129	470	15	262
19	D	1136.895	469.186	15	262
20	D	1120.693	460.812	15	270
21	D	1120.678	451.952	15	270
22	D	1120.663	443.093	15	270
23	D	1120.648	434.233	15	270
24	D	1120.633	425.373	15	270
25	D	1131.374	460.449	15	270
26	D	1130.221	451.67	15	270
27	D	1129.068	442.891	15	270
28	D	1127.915	434.112	15	270
29	D	1142.176	458.992	15	270
30	D	1140.082	450.557	15	270
31	D	1137.989	442.122	15	270
Total Qua	antity: 40) (34 shown,	1 through 34	1)	

Expanded Luminaire Location Summary								
LumNo	Tag	X	Y	MTG HT	Orient			
32	D	1135.895	433.687	15	270			
33	D	1133.801	425.252	15	270			
34	D	1084.405	454.34	15	352			
35	D	1025.733	406.875	15	262			
36	D	1018.005	414.721	15	172			
37	D	1019.131	423.692	15	172			
Total Qua	antity: 40	(6 shown, 3	35 through 40)				

NOTES:

170 Ludlow Avenue, Northvale, NJ 07647 888 722-1000 • rablighting.com

Prepared For: Cooper Electrical Sales 2470 Duckcreek Road Cincinnati, OH 45212 Tel: 513-351-7800

Job Name: Kenwood Baptist Cincinnati, OH Lighting Layout Version B

Scale: as noted	Project # : 160184	The Lighting Analysis, ezLayout, Energy Analysis and/or Vi		
Date:10/1/2020	CASE # : 00509907	prediction of lighting system performance based upon design provided by others have not been field verified by RAB and that design parameters and other information be field verifi		
Filename: Kenwood Baptist	00509907B.AGI	RAB neither warranties, either implied or stated with regard		
Drawn By: Margaret Callan		by the Lighting Design. RAB neither warranties, either implie intent as compliant with any applicable regulatory code requ The Lighting design is issued, in whole or in part, as advisory		
		project's construction documentation package		

Filename: R:\Job Files\Cooper Electrical Sales\Richards Electric Supply\Cincinnati 102894\KENWOOD BAPTIST\Working Files\AGI\Kenwood Baptist 00509907B.AGI

project's construction docume itation package.

* The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLD is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting Inc.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* It is the Owner's responsibility to confirm the suitability of the existing or proposed poles and bases to support the proposed fixtures, based on the weight and EPA of the proposed fixtures and the owner's site soil conditions and wind zone. It is recommended that a professional engineer licensed to practice in the state the site is located be engaged to assist in this determination.

* The landscape material shown hereon is conceptual, and is not intended to be an accurate representation of any particular plant, shrub, bush, or tree, as these materials are living objects, and subject to constant change. The conceptual objects shown are for illustrative purposes only. The actual illumination values measured in the field will vary.

* Photometric model elements such as buildings, rooms, plants, furnishings or any architectural details which impact the dispersion of light must be detailed by the customer documents for inclusion in the RAB lighting design model. RAB is not responsible for any inaccuracies caused by incomplete information on the part of the customer, and reserves the right to use best judgement when translating customer requests into photometric studies.

* RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending apply.

sual Simulation ("Lighting Design") provided by the RAB Lighting Inc. ("RAB") represent an anticipated sign parameters and information supplied by others. These design parameters and information therefore actual measured r esults may vary from the actual field conditions. RAB recommends rified to reduce variation.

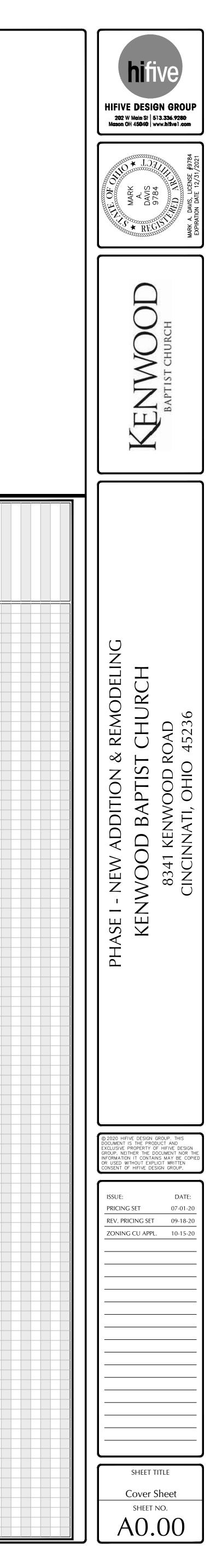
rd to actual measured light levels or energy consumption levels as compared to those illustrated slied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design equirements with the exception of those specifically stated on drawings created and submitted by RAB. bry documents for informational purposes and is not intended for construction nor as being part of a

PHASE I NEW ADDITON & REMODELING KENWOOD BAPTIST CHURCH 8341 KENWOOD ROAD CINCINNATI, OHIO 45236

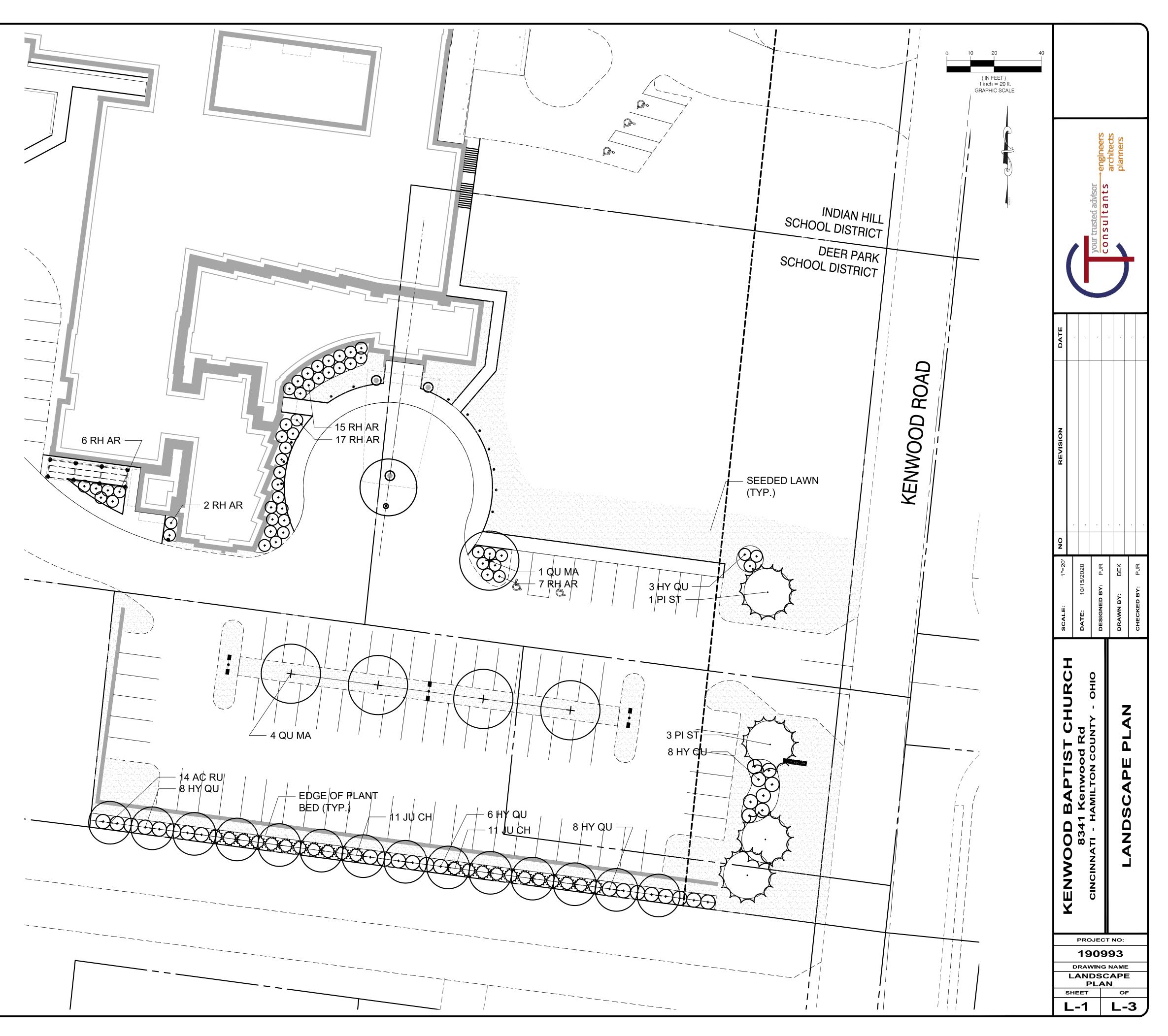
Drawing Symbol Ir	ndex:	Project Team:
	COLUMN LINES	<u>DESIGNED BY:</u> HIFIVE DESIGN GROUP 202 WEST MAIN STREET MASON, OHIO 45040
MATCH LINE ALIGNMENT SIDE	MATCH LINE	VOICE: (513) 336-9280 FAX: (513) 336-0196
	EXISTING SPOT ELEVATION	
	NEW SPOT ELEVATION	
	ELEVATION, WORKPOINT, DATUM	
	REVISION CLOUD AND NUMBER	
BUILDING SECTION NUMBER SHEET NUMBER	BUILDING SECTION REFERENCE	
WALL SECTION NUMBER	WALL SECTION REFERENCE	
ELEVATION NUMBER SHEET NUMBER	EXTERIOR ELEVATION REFERENCE	
B C SUB-ELEVATION NUMBER ELEVATION NUMBER D SHEET NUMBER	INTERIOR ELEVATION REFERENCE	
DETAIL NUMBER SHEET NUMBER	DETAIL REFERENCE	
101	DOOR REFERENCE	
01	WINDOW REFERENCE	
A	PARTITION TYPE REFERENCE	
	DRAWING NOTE REFERENCE	
ROOM NAME	ROOM NAME AND NUMBER REFERENCE	

	Project General Notes:
CONSTRUCTED BY: HIRVE DEVELOPMENT SERVICES 202 WEST MAIN STREET MASON, OHIO 45040 YOICE (513) 336-9280 FAX: (513) 336-0196	 THE DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF HIMUS DESIGN GROUP. DO NOT SCALE DRAWNINGS. WRITTEN DIMENSIONS ARE THE ONLY ACCEPTABLE MEANS OF LOCATION ALL INTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DIMENSIONS THE AND FOR THE ANOTHER AND THE STUD OR MASONIY ALL EXTERIOR DIMENSIONS ARE TO THE FACE OF STUD OR MASONIY ALL EXTERIOR DOWN TO THE AND THE AND THE ANOTHER AND THE AND THE ANOTHER ANOTHER AND ANOTHER AND THE AND THE ANOTHER AND THE AND THE ANOTHER AND THE ANOTHER AND THE ANOTHER AND THE ANOTHER AND THE AND THE ANOTHER ANO
	Vicinity Map:

Index of Drawings	NC INC.	Index of Drawings Con't
Issue Legend O = Included with Issue $\bullet = $ New or Updated	07-01-20 Pricing Set 09-18-20 Pricing Set 10-15-20 Zoning CU Application	Issue Legend O = Included with Issue $\bullet = New \text{ or Updated}$
Drawing No. Drawing Description A0.00 COVER SHEET		Drawing No. Drawing Description
CIVIL / LANDSCAPING		
L-1 LANDSCAPE PLAN L-2 LANDSCAPE SPECIFICATIONS		
L-3 LANDSCAPE SPECIFICATIONS & PLANTING D	DTL.'S	
ARCHITECTURAL A1.00 EXISTING SITE DEMOLITION PLAN A1.01 PROPOSED ARCHITECTURAL SITE PLAN		
A1.11FIRST FLOOR DEMOLITION PLANA1.12SECOND FLOOR DEMOLITION PLAN		
A2.01 OVERALL FIRST FLOOR PLAN A2.02 OVERALL SECOND FLOOR PLAN		
A3.00ENLARGED PARTIAL FLOOR PLANSA3.10ENLARGED REFLECTED CEILING PLANSA3.11ENLARGED REFLECTED CEILING PLANS		
A3.20 ENLARGED FINISH PLANS A3.21 INTERIOR RENDERINGS & CONCEPT IMAGES		
A4.00EXTERIOR ELEVATIONSA4.01EXTERIOR RENDERINGS		



	_			_		
SYMBOL	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	SIZE	ROOTS	COMMENT
Canopy	Trees					
AC RU	14	Acer rubrum 'Brandywine'	Brandywine Red Maple	2 ½" cal.	B&B	
QU MA	5	Quercus macrocarpa	Bur Oak	2 ½" cal.	B&B	
Evergree	en Trees	5				
PI ST	4	Pinus strobus	Eastern White Pine	8' Ht.	B&B	
Deciduo	us Shru	bs				
HY QU	33	Hydrangea quercifolia 'Amethyst'	Amethyst Oakleaf Hydrangea	18" Ht.	No. 5 Cont.	Plant 6' o.c
RH AR	47	Rhus aromatica 'Gro-low'	Gro-low Fragrant Sumac	24" Spi	rd. No. 3 Cont.	Plant 5' o.c
Evergree	en Shrul	bs				
JU CH	22	Juniperus chinensis 'Hetzii Glauca'	Hetz Blue Juniper	24" H1	t. B&B	Plant 6' o.



H:\KENWOOD\L_P190993 PHASE 1_PLANTING_PLAN.DWG - L-1 - 10/14/2020 8:15:00 AM - BRIAN KELL

	LAWN SPECIFICATIONS		
PART	1 GENERAL		
1.01	SECTION INCLUDES		
A.	Planting lawns in disturbed areas and areas indicated on the Drawings.	PART ²	1 GENERAL
В.	Work includes	1.01	DESCRIPTION OF W
	1. Establishing finish grades. 2. Providing seeded lawns.	Α.	Provide all labor, mat includes, but is not lin
1.02	PRODUCT DELIVERY, STORAGE AND HANDLING	В.	A complete list of plan
A.	Deliver seed materials in original, unopened containers showing weight, analysis and name of manufacturer. Store in a manner not to impair effectiveness.		of plants indicated in
1.03	JOB CONDITIONS	1.02	QUALITY ASSURAN
Α.	Planting Season: Sow grass seed immediately after preparation of bed. Perform spring seeding between April 1st and June 1st; fall seeding between August 15th and October 15th, or at such time as approved by Owner's Representative.	Α.	<u>General</u> : 1. Landscape work 2. Ship landscape
PART	2 PRODUCTS/MATERIALS	В.	Substitutions: If spec
2.01	MATERIALS	C.	Analysis and Standar
A.	Fertilizer: Commercial Fertilizer containing 10% nitrogen, 6% phosphoric acid and 4% potash by weight. One quarter of nitrogen shall be in form of nitrates, one quarter in form of ammonia salt and one half in form of organic nitrogen. Phosphoric acid shall be from super-phosphate, bone or tankage. Potash shall be in form of sulfate of potash. Availability of various elements shall conform to standards of the Association of Official Agricultural Chemists.	D.	with methods establis
В.	Grass Seed:		requirements of ANS and free of disease, in years under climatic of
	40% Kentucky Bluegrass 15% Patriot 4 or Laredo II Perennial Ryegrass 15% Amazing GS Perennial Ryegrass 15% Revenge GLX Perennial Ryegrass 15% Replay Perennial Ryegrass	E.	Specimen Plants: Pr branched plants that digging. When speci
	Or approved equal.	F.	Labeling: Label each 1. Where formal ar
	Depending on time of seeding, Annual Ryegrass may be added to the seed mix for quick cover, if requested by Owner, at no additional cost to project.	G.	planting. Inspection: The Own
C.	Topsoil: Existing topsoil from on-site to be respread under earthwork operations. Supplement existing topsoil with new topsoil in accordance ith ODOT Item 653 to achieve specified depth in all areas to be seeded.	G.	Owner's Representat also retains the right
D.	Mulch: Clean straw or other approved material, well-seasoned before baling, containing less than 20% moisture by weight, free from mature seed- bearing stalks or roots of prohibited or noxious weeds. Mulch shall not contain the stems of tobacco, soybeans or other coarse or woody materials.	H.	<u>Plant Tagging</u> : The C variety, size and visu during progress of wo
E.	Asphaltic Emulsion: Refined petroleum asphalt emulsified in alkaline water without use of clay, starch or deleterious substances, and not more than 0.75% of saponifiable acids; of a fluid consistency suitable for spray application with or without dilution with water and with no petroleum solvents or other diluting agents toxic to plant life.		 Submit to the Ov If requested by the expenses related
PART	3 EXECUTION		all nurseries not 3. Schedule with th
3.01	GENERAL		Representative t 4. The Contractor i
Α.	Hydroseeding my utilized to install lawns only if approved in writing by the Owner. If hydroseeding is approved by the Owner, protect adjacent pavements and/or structures from overspray. Any overspray shall be immediately and completed removed from affected pavements and/or structures.	4.00	guarantee requir
3.02	PREPARATION	1.03	SUBMITTALS
A.	Contractor shall test topsoil at an approved testing lab to obtain recommendations for amendments for lawn crops.	А.	Samples: When requ until samples and tes
В.	Spread existing stockpiled topsoil to a minimum 4" depth in all areas to be seeded.		1. <u>Samples of the f</u> a. Compost/or
C.	Finish grade all areas to receive new lawns. Remove any foreign materials larger than 2" from lawn areas. Areas shall be raked of all denuded matter.		b. Mulch: Sub c. Tree Wrap:
D.	Do not finish grade topsoil in muddy or frozen condition.	В.	Certification: Submit
E.	Prior to seeding, apply ground agricultural limestone to soil, if necessary, at rate determined by Contractor's soil tests to adjust pH of soil at no less than 5.0. Distribute ground limestone evenly by machine over whole area and incorporate thoroughly into soil.	C.	materials. Submit oth <u>Test Reports</u> : Test re designated by the Ow
F.	After topsoil and, if necessary, limestone have been spread, apply fertilizer at rate recommended in the soil test.		 Compost/Organi Planting soil for s
3.03	LAWN SEEDING	D.	Planting Schedule: S
Α.	Sow grass seed immediately after preparation of bed.	D.	specified maintenance reasons for delays.
В.	Sow grass seed evenly by mechanical spreader at rate of five (5) pounds per 1000 square feet. Do all seeding when soil is dry and wind does not exceed 5 mph velocity.	-	,
C.	After seeding, rake surface of soil slightly with a fine toothed rake to incorporate seed into top 1/8" of soil and roll with light lawn roller as directed by Owner's Representative.	Ε.	Record Drawings: Pr 1. Legibly mark dra 2. Identify field cha
D.	Place mulch uniformly on seeded areas within 24 hours after seeding.		2. Identity lield cha
E.	Place mulch uniformly in a continuous blanket at rate of one and one half bales per 1,000 square feet.	1.04	INSPECTION, TESTI
F.	Where size of areas mulched precludes use of equipment, mulch may be anchored by use of a light covering of topsoil or other approved means.	Α.	In-progress inspection

- G. Protect buildings, site walls, pavements and plantings and non-seeded areas from asphaltic emulsion overspray.
- 3.04 CLEANUP AND PROTECTION
- A. During lawn operations, keep pavements clean and work area in an orderly condition.
- 3.05 LAWN MAINTENANCE
- A. Maintenance of seeded areas shall begin immediately after each area is seeded and shall continue until a uniform stand of grass is achieved and until acceptance of project by the Owner, but not for less than thirty days after initial seeding.
- B. Water as required to maintain adequate moisture in the upper 4" of soil, necessary to promote proper root growth. Contractor shall furnish water to the site for purposes of lawn watering unless the Contractor makes other arrangements with the Owner for water supply. The irrigation system may be used for watering if it is fully functioning and has been accepted by the Owner, and use of the irrigation system for watering is permitted by Owner.
- C. Remove weeds, diseased and unsatisfactory lawn areas; do not bury into soil.
- 3.06 INSPECTION OF LAWN
- A. Inspection to determine acceptability of work will be made by the Owner's Representative upon the request by the Contractor.
- B. Failure to request inspection extends the maintenance period until such inspection for acceptance.
- C. After inspection, the Contractor will be notified by the Owner's Representative of acceptance of seeding. If there are any deficiencies, notification will be for completion requirements of the work. Work remaining to be done shall be subject to continued maintenance and reinspection before acceptance.
- D. Upon acceptance, the Owner shall be responsible for all maintenance of lawns.
- 3.07 GUARANTEE AND REPLACEMENT OF LAWN
- A. All lawn shall be guaranteed by this Contractor to achieve a uniform stand of grass to the satisfaction of the Owner. All lawn not in a vigorous, thriving condition shall be immediately replaced by this Contractor at no expense to the Owner.
- B. Should replacement fall due during a non-planting season the Contractor may request the Owner's permission to defer the planting until the proper season. Replacement lawn shall be of the same variety originally specified and shall be guaranteed as originally specified.

END OF SECTION

LANDSCAPE WORK SPECIFICATIONS

OF WORK

or, materials, and equipment necessary to perform the landscape work, complete, as indicated on the drawings and as specified. Landscape development work not limited to, plant materials, soils, soil amendments, and miscellaneous appurtenances.

of plants, including a schedule of quantities, sizes and other requirements is shown on the drawings. In the event that discrepancies occur between the quantities ated in the plant list and as indicated on the plan, the plant quantities indicated on the plan shall govern.

URANCE

e work shall be performed by a firm(s) specializing in type of landscape work required for this project. scape materials with certificates of inspection required by governing authorities. Comply with regulations applicable to landscape materials.

If specified landscape material is not obtainable, submit proof of non-availability to Owner's Representative together with a proposal for use of substitute material.

tandards: Package standard products with manufacturer's certified analysis. For other materials, provide analysis by recognized laboratory made in accordance stablished by the Association of Official Agricultural Chemists, wherever applicable.

Provide plant materials of quantity, size, genus, species and variety shown and scheduled for landscape work and complying with recommendations and of ANSI Z60.1 "American Standard for Nursery Stock". Provide healthy, vigorous stock, grown in recognized nursery in accordance with good horticultural practice ease, insects, eggs, larvae and defects such as knots, sun-scald, injuries, abrasions or disfigurements. All plants shall be nursery grown for a minimum of two matic conditions similar to those in the locality of the project. (Plants must be from a nursery in the same U.S.D.A. hardiness zone as the project.)

115: Provide "specimen" plants with a special height, shape or character of growth. Specimen stock should be exceptionally fully developed, bushy and heavily is that have been grown individually in the nursery. Tag specimen trees at the source of supply for inspection and approval by the Owner's Representative prior to n specimen plants cannot be purchased locally, provide sufficient photographs of the proposed specimen plants for approval.

el each tree with securely attached waterproof tag bearing legible designation of botanical and common name. mal arrangements or consecutive order of trees are shown, select stock for uniform caliper, height and spread and label with number to assure symmetry in

e Owner's Representative may inspect trees at place of growth before digging, for compliance with requirements for genus, species, variety, size and quality. The esentative retains the right to further inspect trees for size and condition of balls and root systems, insects, injuries and latent defects. The Owner's Representative e right to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from project site.

The Owner's Representative reserves the right to inspect and tag plant materials at acceptable nurseries for compliance with requirements for genus, species, nd visual quality. The Owner's Representative retains the right to further inspect plant materials and to reject unsatisfactory or defective materials at any time s of work.

the Owner's Representative the names and locations of nurseries proposed as sources of acceptable plant materials. ed by the Owner's Representative, the Contractor shall provide transportation for the Owner's Representative to all out-of-state nurseries and is responsible for all related to such transportation. Air fare, lodging (if required), and meals shall be provided for the Owner's Representative and paid for by the Contractor for trips to es not accessible by car during a single day trip (there and back, not exceeding 12 hours).

with the Owner's Representative a time for viewing plant material at the nursery. Trips to nurseries shall be efficiently arranged to allow the Owner's tative to maximize his viewing time.

ractor is responsible for purchasing the tagged material and delivering it to the site for planting. These requirements do not remove the Contractor from his e requirements.

en requested by the Owner's Representative, samples of all materials shall be submitted for approval. Contractor shall not deliver bulk materials to the project site and test results are approved

of the following shall be submitted: post/organic matter: Submit one cubic foot.

: Submit one cubic foot.

Wrap: Submit a three foot length.

Submit certificates of inspection as required by governmental authorities. Submit manufacturer's or vendor's certified analysis for soil amendments and fertilizer mit other data substantiating that materials comply with specified requirements.

Test reports from an approved testing agency indicating compliance with the specifications shall be submitted for the following materials (and any other materials the Owner's Representative): Organic Matter

oil for shrubs indicating pH, or required amendments to achieve specified pH.

Jule: Submit proposed planting schedule indicating dates for each type of landscape work during normal seasons for such work in area of site. Correlate with tenance periods to provide maintenance from date of substantial completion. Once accepted, revise dates only as approved in writing, after documentation of

gs: Provide plant material record drawings.

ark drawings to record actual construction. eld changes of dimension and detail and changes made by change order, including approved plant variety changes.

TESTING, AND APPROVALS

A. In-progress inspections shall be made by the Owner's Representative at regular intervals during execution of work on the project.

B. Materials shall not be used in construction until test results have been reviewed by the Owner's Representative.

C. All costs associated with testing shall be at Contractor's expense.

D. All approvals shall be in writing.

- making it unsuitable for use, shall be rejected.
- name or trademark, and warranty of the manufacturer. prevent overheating of the plants.
- 4. Trees transported in full-leaf are to be adequately sprayed with an anti-desiccant to provide a film over trunks, branches, stems, twigs, and foliage.
- temporary storage.
- Plants that are not planted immediately shall be protected as follows:
 - burlap or other acceptable means of retaining moisture.
 - Plants shall not be allowed to dry out or freeze.
- 2. As soon as possible after digging, all root balls shall be thoroughly soaked and the top of the plant syringed (in active season).
- destroy its natural shape.
- proper safeguards and protection.
- Do not remove container grown stock from containers until planting time.
- 6. Prepare planting pits and install plant material in accordance with specification.

1.06 JOB CONDITIONS

- been corrected
- required
- required grade.
- 5. Plant only during normal planting seasons for each type of landscape work required. Correlate planting with specified maintenance service periods to provide maintenance until occupancy by the Owner.
- Hand excavate, as required, to minimize possibility of damage to underground utilities. 3. Maintain all stakes and markers set by others until removal is mutually agreed upon by all parties concerned.
- planting operations.
- 1.07 PLANTING SEASON
- with locally accepted practice.

PART 2 PRODUCTS/MATERIALS

2.01 PLANTING SOIL FOR TREES

Four (4) parts existing soil on site, by volume One (1) part compost/organic matter, by volume

- B. Mixture shall be well mixed and approved by the Owner's Representative before any plants are installed.
- 2.02 SOIL AMENDMENTS

- be used to lower the pH of the planting soil when necessary.

- 100% shall pass through a 1" screen Pathogen free; time and temperature tests minimum 55° Celsius for 3 days.
- Organic content shall be between 35-75%; each source shall not vary more than 5%.
- 4. Inert contamination shall be less than 1% by weight. Material shall be cured for at least 90 days.
- Soluble salts shall be between 1-5 mmhos.
- pH shall be between 6 and 8.

- 1.05
 - DELIVERY, STORAGE AND HANDLING

Deliver fresh materials in sealed containers. Protect from deterioration during delivery, and while stored at the site. Material which becomes caked or otherwise damaged, 2. Fertilizer shall be delivered to the site in bags or other sealed containers, each fully labeled, conforming to the applicable state fertilizer law, and bearing the name, trade 3. Protect plants during transportation by proper coverage with tarp or other means to reduce transpiration and damage. Closed vehicles shall be adequately ventilated to

5. Plants shall be kept moist, fresh, and protected at all times. Such protection shall encompass the entire period during which the plants are in transit, being handled, or are in 6. Notify the Owner's Representative at least three working days in advance of the anticipated delivery date of any plant material. A legible copy of the bill of lading, showing

the quantities, kinds (genus, species, cultivar, variety), and sizes of materials included for each shipment shall be furnished to the Owner's Representative. B. Storage: Unless specific authorization is obtained from the Owner's Representative, plants shall not remain on the site of work longer than three days prior to being planted.

a. If planting is to be delayed more than six (6) hours after delivery, set trees, shrubs and plants in shade or protected area. Keep roots moist by covering with mulch,

2. Both the duration and method of storage of plant materials shall be subject to the approval of the Owner's Representative.

Plants shall not be dug at the nursery or approved source until the Contractor is ready to transport them from their original locations to the site of work or acceptable storage

3. Plants shall be handled by the ball and not by trunk or top growth. No plant shall be so bound with rope or wire at any time as to damage the bark, break branches, or 4. Protect all plant areas and plants from damage. Treat or replace any plants that are injured. Perform no work in or over prepared plant areas or adjacent to planting without

Examine subgrade, verify the elevations, observe the conditions under which work is to be performed. Do not proceed with the work until unsatisfactory conditions have 2. Proceed with and complete the landscape work as rapidly as portions of the site become available, working within the seasonal limitations for each kind of landscape work

3. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, do not plant. 4. If underground obstructions are encountered in the excavation of plant pits, alternate locations may be selected by the Owner's Representative. Where locations cannot be changed, the obstruction shall be removed to a depth of not less than 3 feet below grade and no less than 6" below bottom of ball or roots when plant is properly set at the

Determine location of underground utilities and perform work in a manner which will avoid possible damage.

1. Plant trees after final grades are established and prior to planting of lawns. If planting of trees occurs after lawn work, promptly repair damage to lawns resulting from

A. <u>Spring Planting</u>: Spring planting may commence April 1 and as soon as weather conditions make it practicable to work both at the nursery and at the site.

B. Fall Planting: Fall planting may commence September 1 and shall continue until such time as weather conditions make it impractical to work.

Note: Regardless of the dates specified above, planting shall only be performed when weather and soil conditions are suitable for planting the material specified in accordance

Planting season may be extended only with the written permission of the Owner's Representative.

A. For backfilling tree pits, planting soil mixture shall be prepared using the following rate of materials:

A. General: Unless specified otherwise below, the following soil amendments shall be used at rates recommended by topsoil testing.

B. Lime: Natural dolomitic limestone containing not less than 85% of total carbonates with a minimum of 30% magnesium carbonates, ground so that not less than 90% passes a 0-mesh sieve and not less than 50% passes a 100-mesh sieve. Limestone shall be used to raise the pH of the planting soil when necessary.

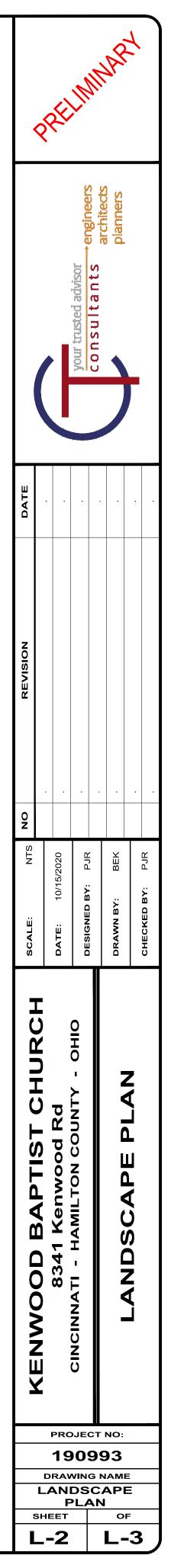
C. <u>Aluminum Sulfate</u>: Unadulterated free flowing and delivered in containers with the name of the material, name of the manufacturer, net weight and purity. Aluminum sulfate shall

D. <u>Weed Control</u>: Shall be a labeled herbicide appropriate for use with the plants grown. It can be applied in either granular or liquid form according to directions.

E. Compost/Organic Matter: Leaves composted 18-24 months in high temperatures, creating rich, mellow dark leaf humus. Leaf humus to be shredded and screened, and shall be ree of weed seeds and toxic materials. Leaf humus (or other approved organic matter) shall conform to the following:

Note: Compost/organic matter other than leaf humus is acceptable providing it conforms to these specifications.

F. <u>Commercial Fertilizers</u>: Complete fertilizer of neutral character with some elements derived from organic sources and containing the following percentages of available plant 1. For trees, shrubs, groundcovers, and perennials, provide controlled release fertilizer with not less than 5% total nitrogen, 10% available phosphoric acid and 5% soluble potash. Fertilizer shall be added in proportions determined by soil analysis and per manufacturer's recommendation.



2.03 PLANT MATERIALS

- Provide plants of size, genus, species and variety shown and scheduled for landscape work and complying with latest recommendations and requirements of ANSI Z60.1 "American Standard for Nursery Stock". All plants shall be nursery grown. 2. All plants shall be hardy under climatic conditions and nursery grown in the same hardiness zone, or colder, as the project.
- 3. Plants shall have outstanding form; symmetrical, heavily branched with an even branch distribution, densely foliated and/or budded, and a strong, straight, distinct leader where this is characteristic of species. Plants shall possess a normal balance between height and spread. The Owner's Representative will be the final arbiter of acceptability of plant form. 4. Provide plants with a vigorous, well-developed fibrous root system.
- 5. Plants shall be healthy and vigorous, free of disease, insect pests and their eggs, larvae, borers, and all other forms of infestation.
- 6. Plants shall be free of physical damage such as scrapes, broken or split branches, scars, bark abrasions, sun scalds, frost cracks, fresh limb cuts, disfiguring knots, or other
- 7. Plants shall meet the sizes indicated in the Plant List. Plants larger than specified may be used only if accepted by the Owner's Representative, and without additional cost to the Owner. 8. Balled and burlapped plants shall be dug with firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock." Cracked or mushroomed balls are not acceptable.
- Plastic burlap and/or twine is not acceptable. B. <u>Deciduous Trees</u>: Provide trees of height and caliper scheduled or shown and with branching configuration recommended by ANSI Z60.1 for type and species required. Provide
- single stem trees except where special forms are shown or listed. Single stem trees shall have a single, straight central leader. Provide balled and burlapped (B&B) deciduous trees. 2. Canopy trees shall be branched up $5\frac{1}{2}$ to 6'

2.04 MISCELLANEOUS LANDSCAPE MATERIALS

- A. Shredded Bark Mulch: Shall be a finely shredded hardwood tree bark of uniform texture and size and shall be a slow decomposing, all organic material. Shredded bark shall be aged at least one year and dark brown in color. It shall not contain an excessive amount of acid that may adversely affect plant growth. Mulch shall be free of weeds and weed
- B. Anti-Desiccant: Emulsion type, film forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver in manufacturer's fully identifiable containers and mix in accordance with manufacturer's instructions.
- C. <u>Herbicide</u>: Shall be a labeled herbicide for the plants grown. It can be applied in either granular or liquid form according to directions.
- Guying Stakes: Shall be sound uniform hardwood stakes 2" x 2" x 36", or as shown on detailed drawings.
- Bracing Stakes: Shall be sound uniform hardwood stakes 2" x 2" x 8' to 10', or as shown on detailed drawings. Trunk Protector: For covering staking wire shall be Arbor Tie or equal.
- Twine: Shall be a jute twine not less than two ply (no synthetic twines).
- Cable/Wire: Shall be 12 or 14 gauge galvanized steel solid strand wire depending on size of tree. See planting details. Turnbuckles: Galvanized or zinc coated, having a 3" minimum lengthwise opening fitted with screw eyes, and shall have a tensile strength equal to or greater than the attaching wire or cable.
- E. Water: Shall be suitable for irrigation and shall be free from ingredients harmful to plant life. Contractor shall furnish water to site for purposes of plant watering unless the Contractor makes other arrangements with the Owner for water supply.

PART 3 EXECUTION

- 3.01 GENERAL
- A. Examine proposed planting areas and conditions of installation. Do not start planting work until unsatisfactory conditions are corrected.
- B. It shall be the Landscape Contractor's responsibility to coordinate work with other Contractors on the project.
- C. The Contractor shall take all proper precautions so as not to disturb or damage subsurface improvements (see Paragraph 1.06 of this section).
- D. Existing soil and organic matter shall be tested at an approved testing lab by the Contractor. When testing indicates a deficiency, soil amendments and fertilizer shall be applied at rates indicated by testing as specified herein, for optimal growth of specified plantings. See Paragraph 2.02 of these specifications for specific requirements for Planting Soil for Shrubs.

3.02 EXCAVATION FOR TREES

- A. Excavate tree pits with vertical sides, taking care not to damage any subsurface improvements or utilities. Loosen hard subsoil on bottom and sides of excavation.
- B. For tree locations, refer to the drawings and details.
- C. Use soil removed from pit for preparation of planting soil backfill.

3.03 PLANTING INSTALLATION

- A. Setting of Trees 1. Set balled and burlapped (B&B) plants in pits as indicated on details. Each plant shall be set in the center of an individual pit and set plumb and straight. All plants shall be
- properly faced so as to give the best effect. 2. No filling is permitted around trunk or stems. Cut off all broken or frayed roots. No planting mixture in a frozen or muddy condition is permitted for backfilling
- 3. Trees with broken root balls will not be accepted and will be replaced at Contractor's expense
- 4. Tree trunks shall be installed plumb. Landscape contractor is responsible for adjustment of trees if not centered in pit.
- B. Burlap Removal
- 1. ALL TWINE SHALL BE REMOVED FROM THE BASE OF ALL PLANTS. Cut wire baskets from ball after setting in pit. Remove burlap from top and sides of ball and retain on bottom.
- C. Backfill:
- 1. When the plant has been properly set, the pit shall be backfilled with specified planting soil. It shall be prepared by thoroughly mixing in the proper proportions prior to backfilling the pit.
- 2. Incorporate fertilizer into backfill mix at the rate recommended in the soil analysis and per manufacturer's recommendations. 3. The pit shall be loosely filled until full. Backfill shall be settled by watering and refilled as necessary. Dish top of backfill to allow for mulching.
- 4. No filling is permitted around trunks or stems. No planting mixture in a frozen or muddy condition is permitted for backfilling.
- D. Watering of All Plants:
- 1. Once backfilled, all plants shall be thoroughly soaked to the depth of the pit excavation. a. Subsequent watering shall be performed by the Landscape Contractor until final acceptance. The Contractor shall furnish water to the site, unless the Contractor makes arrangements with the Owner for water supply. The irrigation system may be used for watering if it is fully functioning and has been accepted by the Owner, and use of the irrigation system for watering is permitted by Owner.

3.04 PLANT FINISHING

A. Pruning: Pruning of deciduous stock shall be limited to removal of dead and broken limbs and conflicting branches, and to enhance the plant's natural character, if necessary. Excessively pruned or misformed stock resulting from improper pruning shall be removed and replaced at the Contractor's expense.

- B. <u>Weed Control</u>: Shall be done by applying pre-emergent herbicide at the rate specified by manufacturer.
- C. <u>Mulching</u>: Mulch all trees to the depths specified.
- D. <u>Watering</u>: Water all planted material thoroughly, immediately after planting.
- E. <u>Applying anti-desiccant</u>: Use a power spray to provide an adequate film over trunks, branches, stems, twigs and foliage. If deciduous trees are moved in full- leaf, spray with anti-desiccant at nursery before moving and again in 2 weeks after planting.
- F. Guying and Staking: Trees shall be staked immediately after planting if directed by Engineer. On B&B stock, stakes shall not be driven through ball. Stakes shall be firmly Iriven into soil. (See planting details on drawing)
- 1. It shall be the Contractor's responsibility to keep guying wires tightened while contract and guarantee is in force.

CLEAN-UP AND PROTECTION

A. During landscape preparation, installation and maintenance, keep pavements debris free and work area in orderly condition. Remove all tags, labels, nursery stakes and ties from plants. Remove all excess soil, debris and surplus material attributed to landscape operations, and leave premises in neat, clean condition.

B. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

3.06 FINAL INSPECTION OF LANDSCAPE WORK

3.05

A. When landscape work is completed, the Owner's Representative will, upon request, make an inspection to determine acceptability.

B. Where inspected landscape work does not comply with requirements, replace rejected work and continue specified maintenance until reinspected by Owner's Representative and found to be acceptable. Remove rejected plants and materials promptly from project site.

3.07 MAINTENANCE OF PLANTS DURING THE ONE YEAR GUARANTEE PERIOD

C. NOTE: Contractor is responsible for watering plants as required to maintain optimum plant health.

A. The Contractor shall be required to maintain all plantings for one year (beginning at the date of acceptance of all plantings). This one-year period shall coincide with the quarantee period.

B. During the guarantee period, the contractor shall be responsible for watering, fertilizing, weeding, cultivating, pruning, mulching, spraying, trimming, protecting from wind, staking (or restaking), resetting, replacing or other procedures necessary to sustain all the plant materials in a healthy and thriving condition. Additional waterings of plant materials shall be provided by the Landscape Contractor as required to maintain optimum plant health.

C. The Contractor, on a monthly basis during the guarantee period, shall submit to the Owner's Representative a written summary of all inspection and maintenance activities.

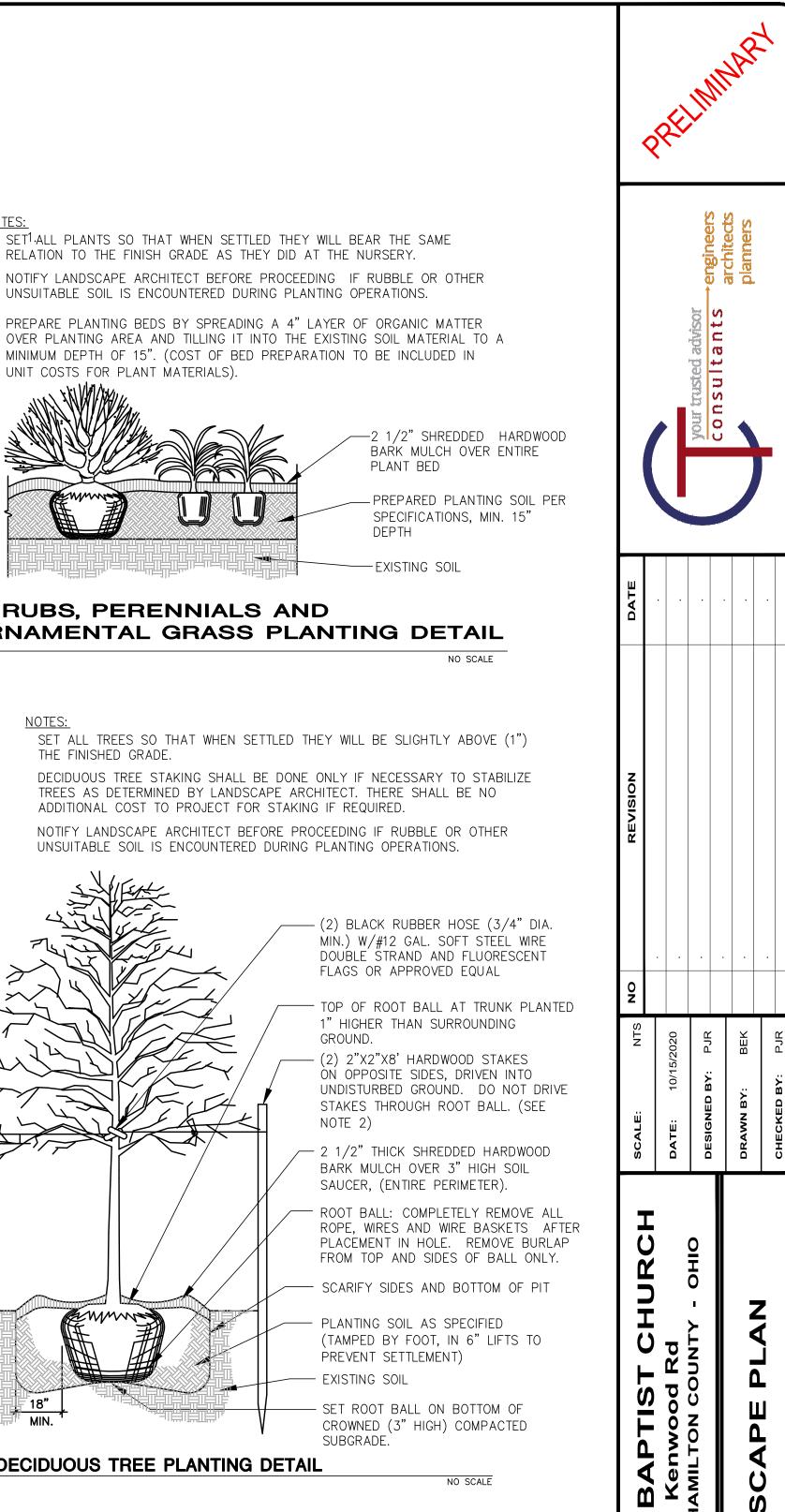
3.08 GUARANTEE AND REPLACEMENT OF PLANT MATERIAL

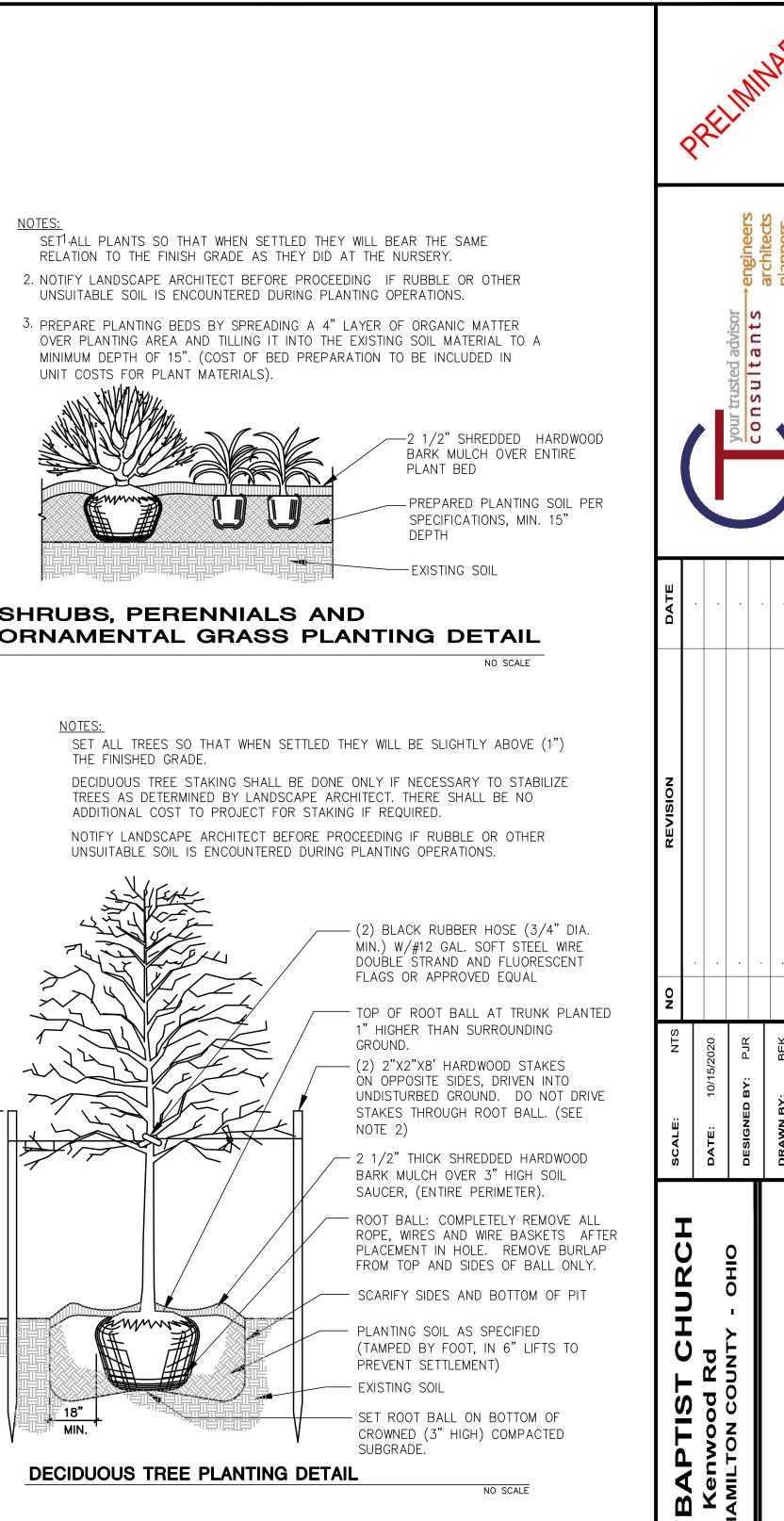
A. All plants shall be guaranteed by this Contractor for a period of one (1) year following acceptance. The Contractor shall make a minimum monthly check of the project during this one-year guarantee period and all dead plants or plants not in a vigorous, thriving condition shall be immediately replaced by this Contractor at no expense to the Owner.

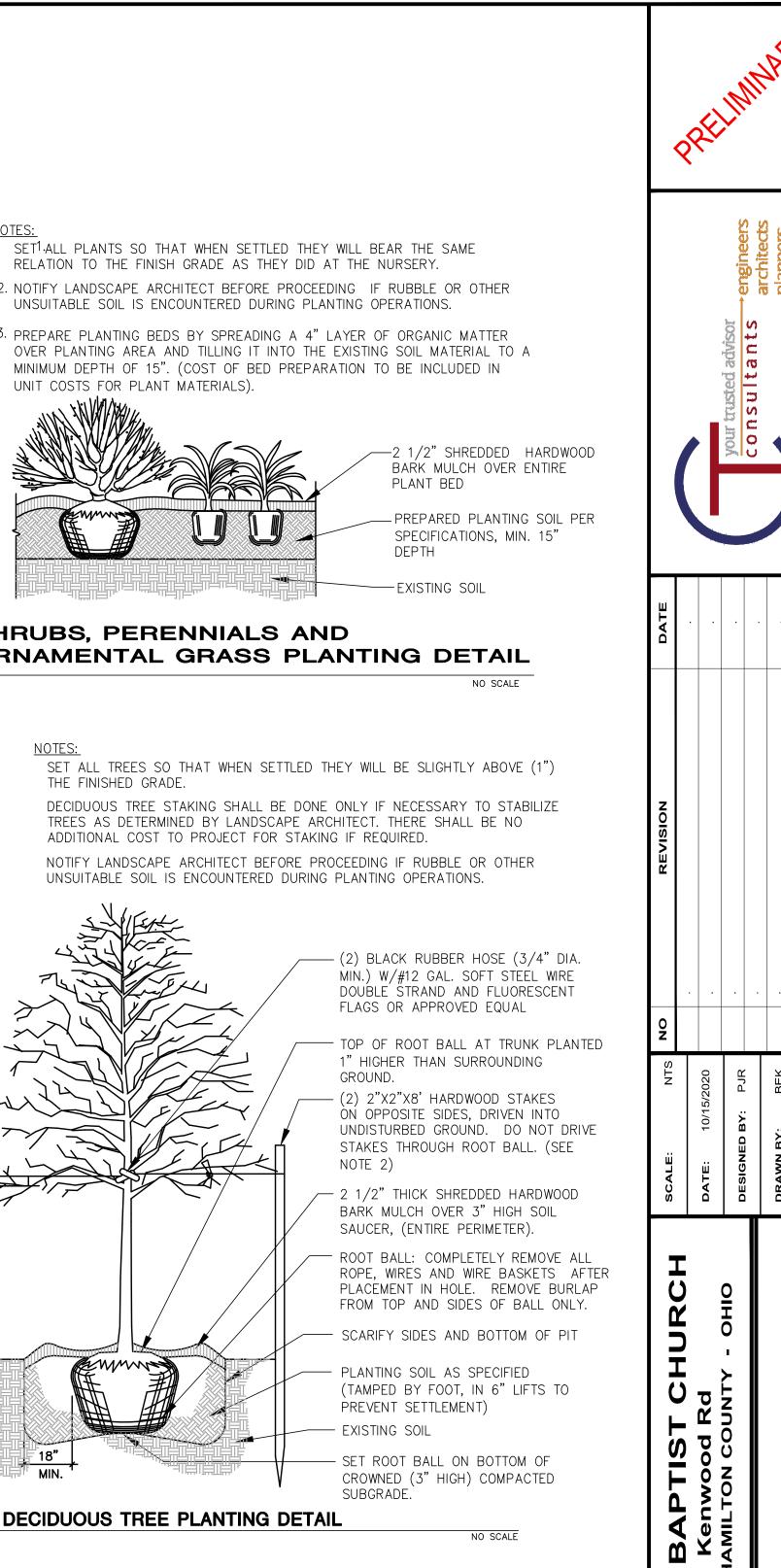
B. Should replacement fall due during a non-planting season the Contractor may request the Owner's permission to defer the planting until the proper season. However, the contractor will be required to immediately remove and dispose of the dead plants, including all roots. The hole shall be backfilled properly with topsoil to finish grade until proper planting season occurs.

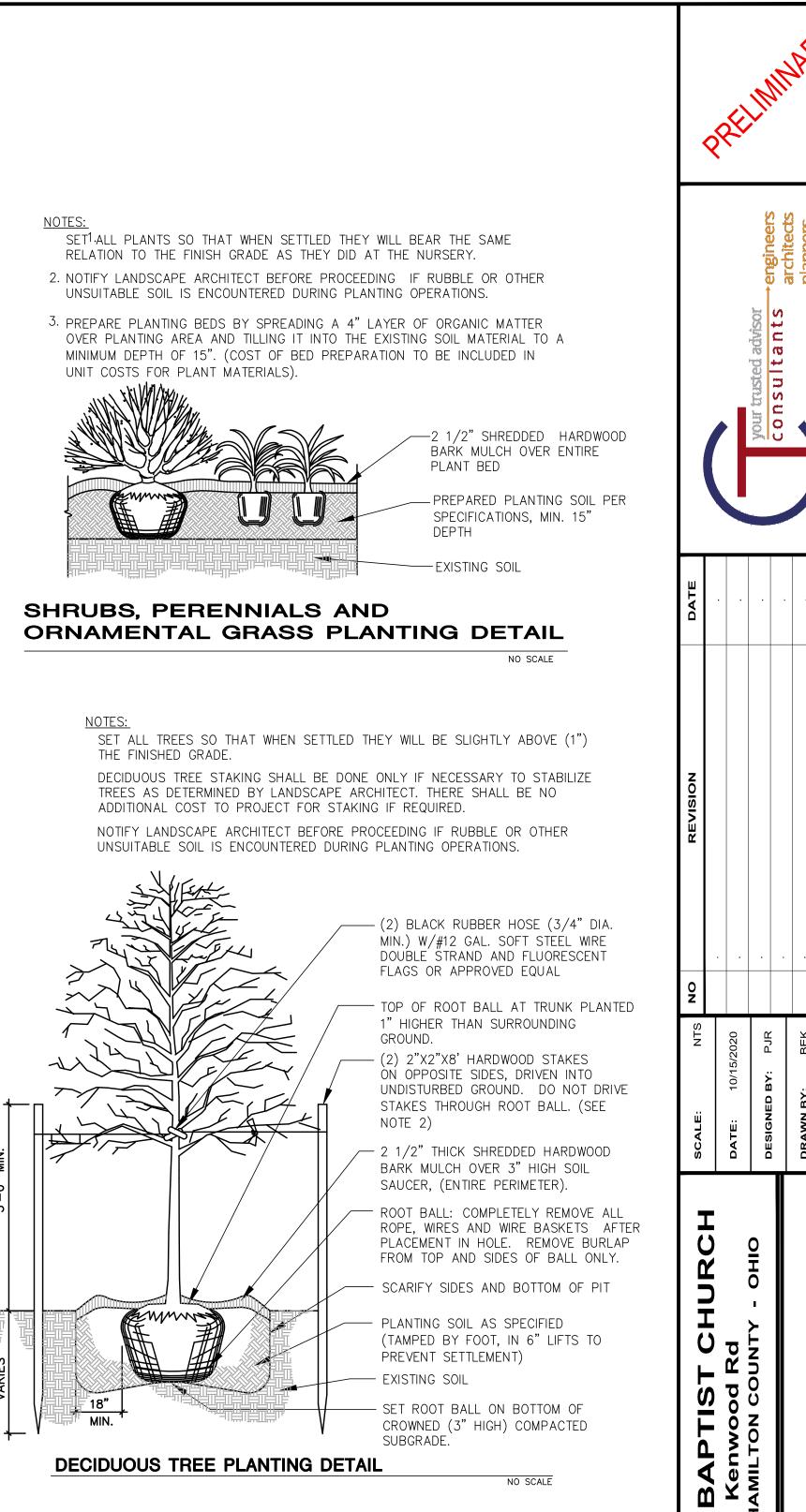
C. Plants used for replacements shall be of the same kind and size originally specified, and they shall be planted, mulched and guaranteed as originally specified. Only one replacement of each plant will be required except for losses of replacements due to failure to comply with specified requirements.

END OF SECTION









O ŵ 0 Ζ Ш PROJECT NO: 190993 DRAWING NAME LANDSCAPE PLAN

SHEET

L-3

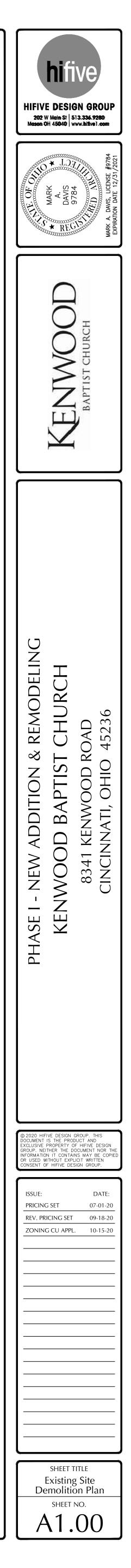
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L-3

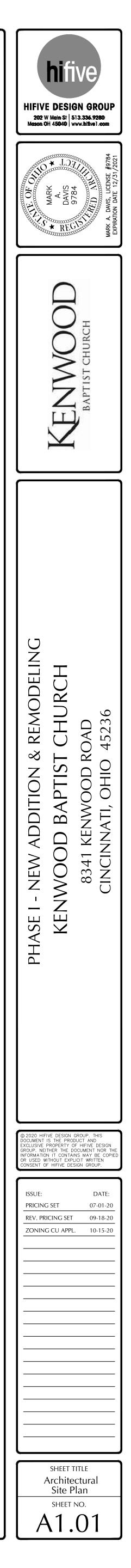


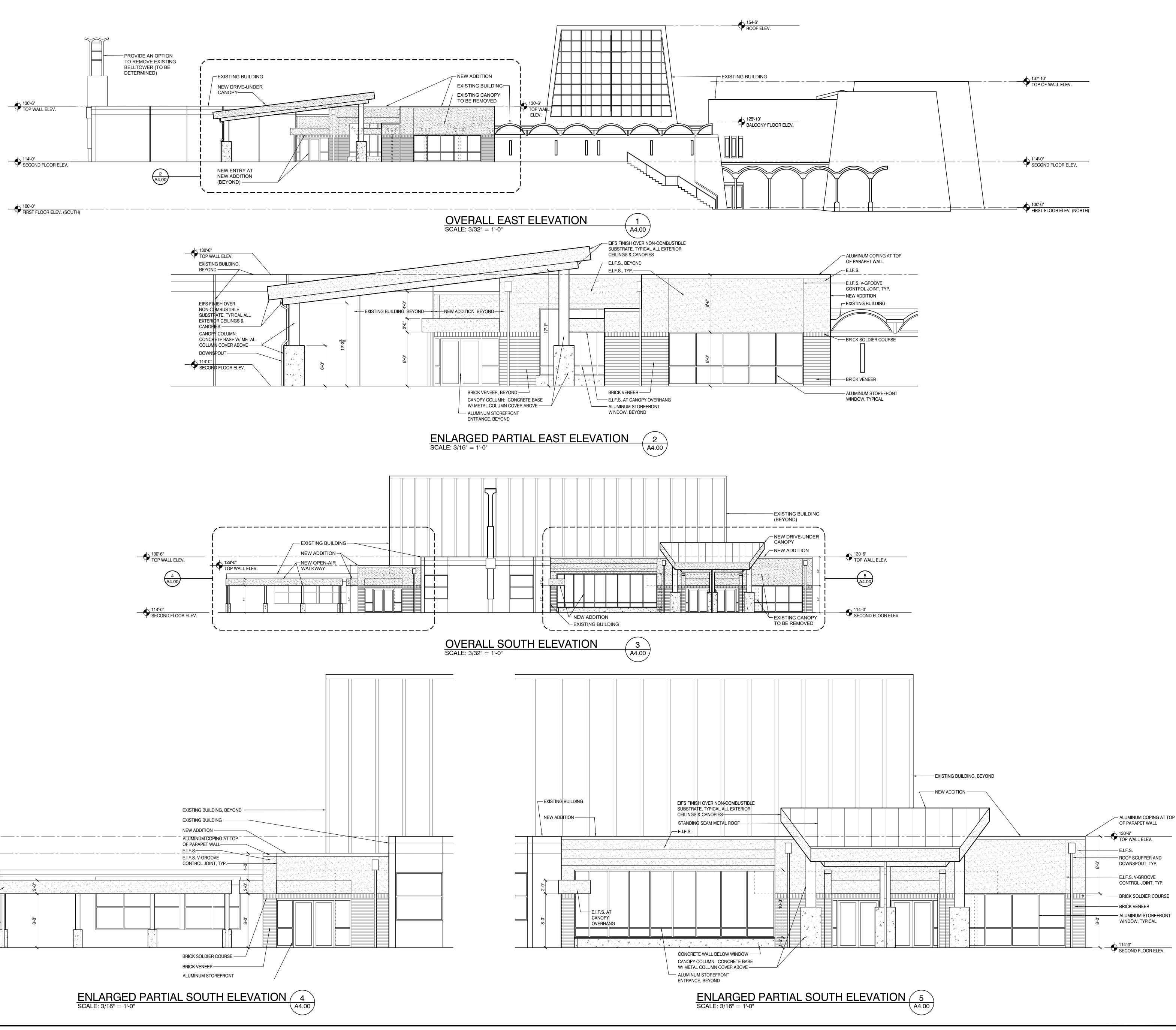
80 NORTH

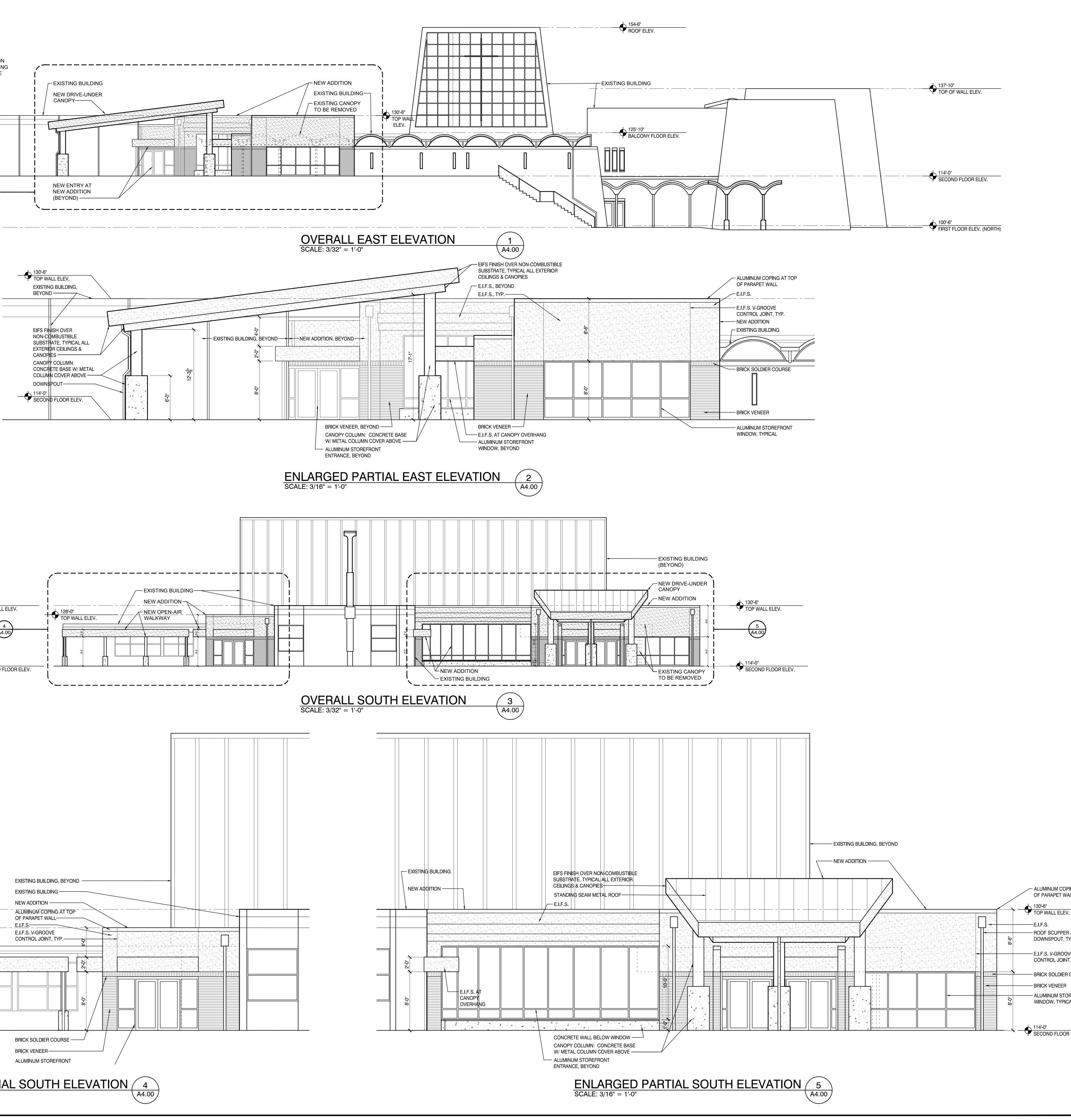
EXISTING SITE DEMOLITION PLAN 1SCALE: 1" = 40'

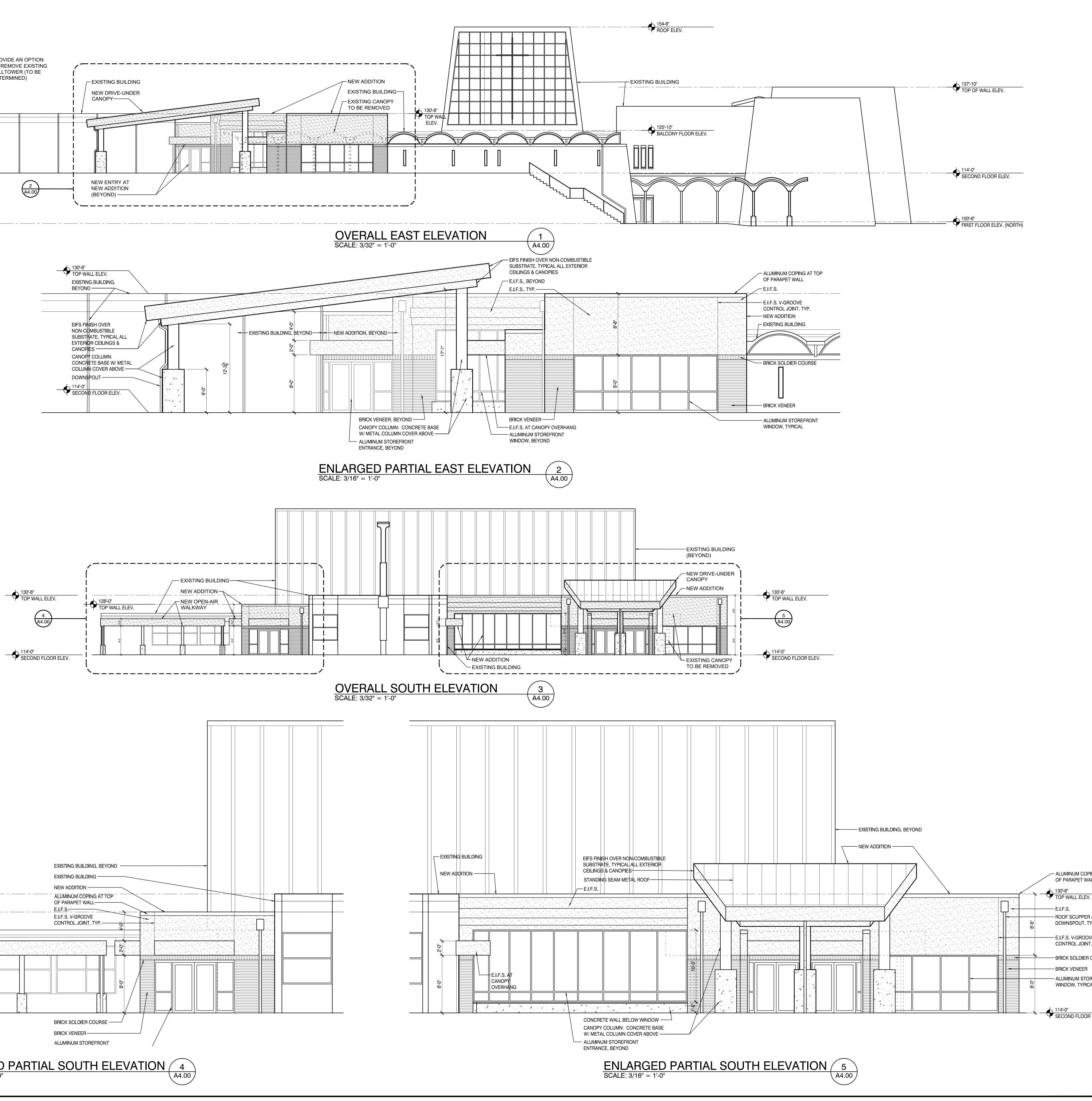


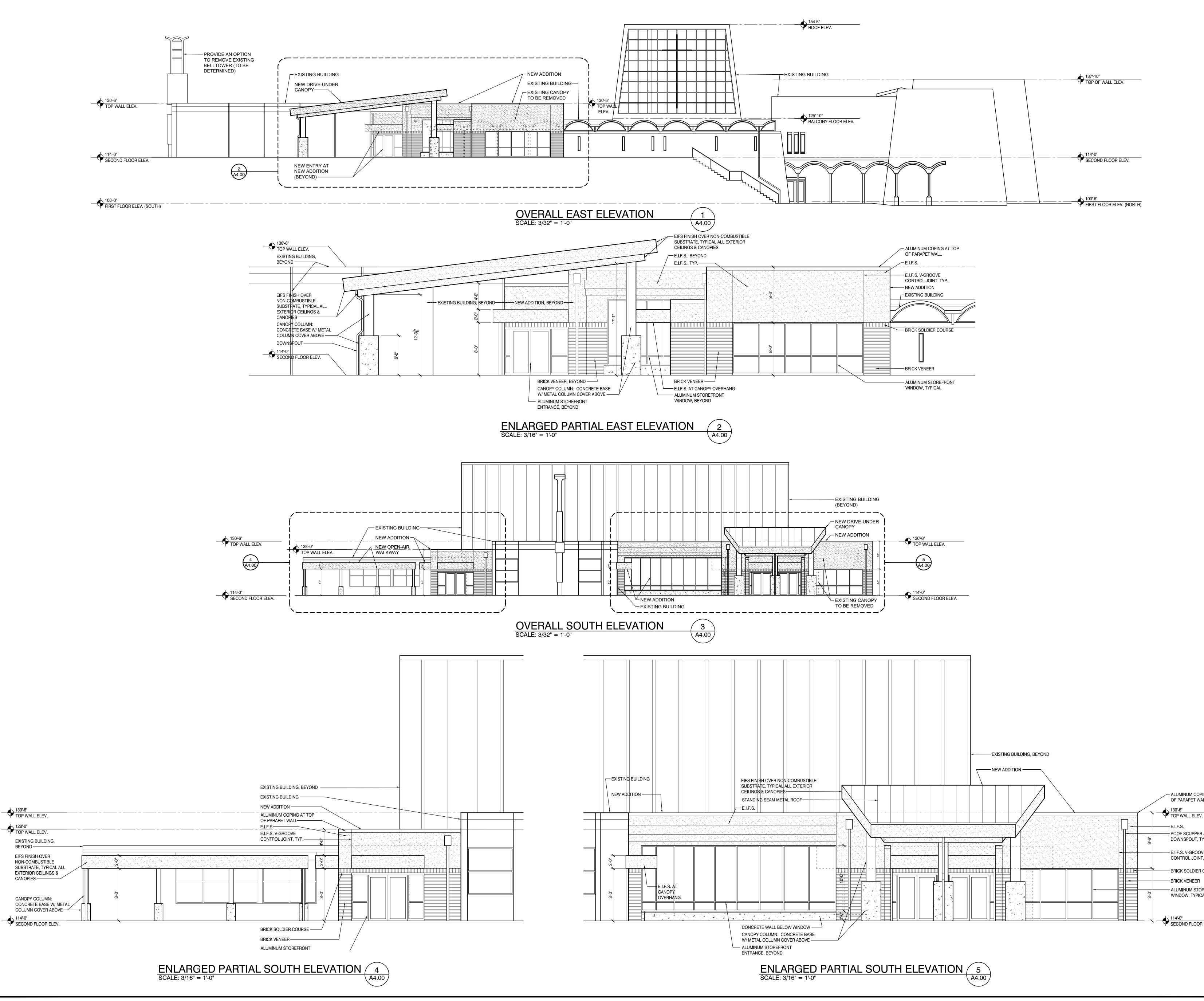


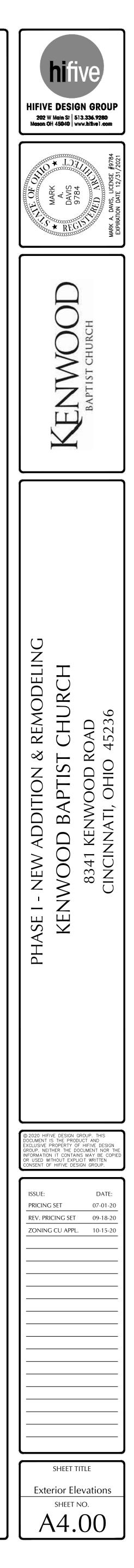




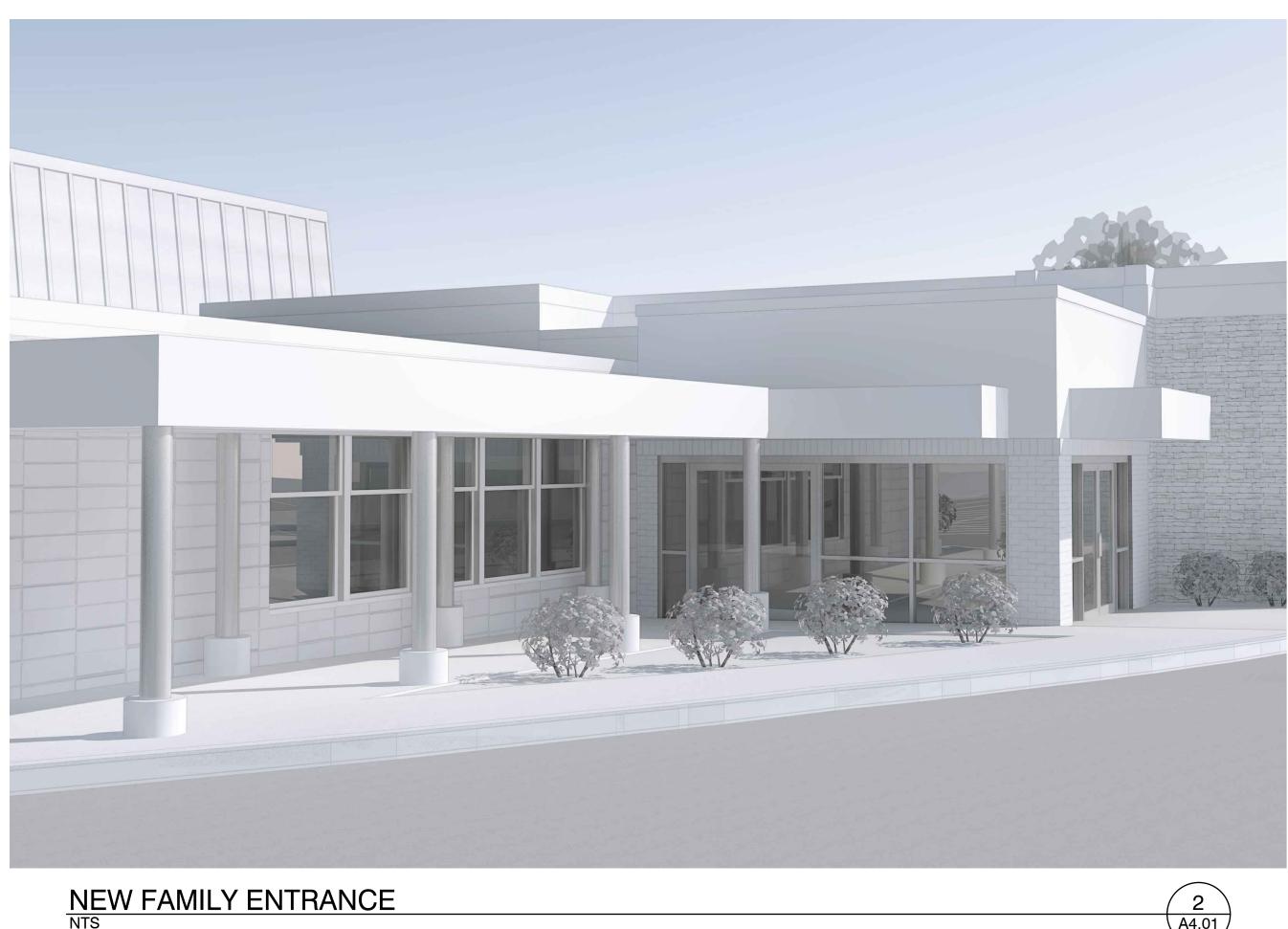






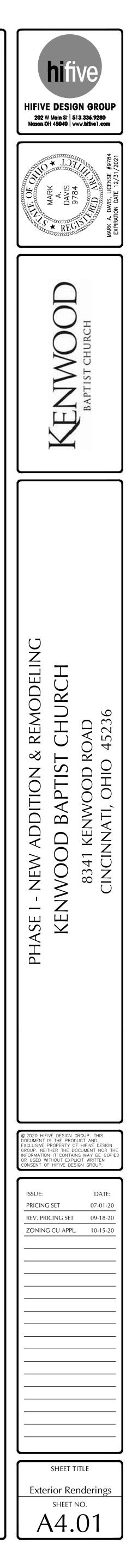




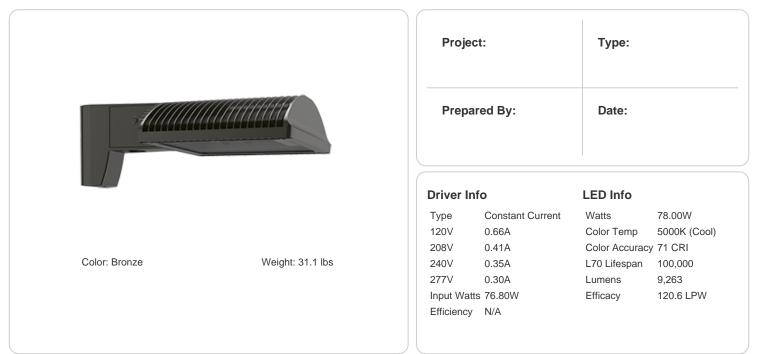




3 A4.01



ALED3T78



Technical Specifications

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Six (6) multi-chip, 13W, high-output, long-life LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Listings

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P0000179S

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

UL Listing:

Suitable for wet locations as a downlight

Dark Sky Conformance:

Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).

Construction

IES Classification:

The Type III distribution is ideal for roadway, general parking and other area lighting applications where a larger pool of lighting is required. It is intended to be located near the side of the area, allowing the light to project outward and fill the area.

IP Rating:

Ingress Protection rating of IP66 for dust and water

Ambient Temperature:

Suitable For use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior heat sinking with external Air-Flow fins

Effective Projected Area:

EPA = 0.75

Lens:

Tempered glass lens

Housing:

Die cast aluminum housing, lens frame and mounting arm

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Reflector:

Specular vacuum-metallized polycarbonate

ALED3T78

Technical Specifications (continued)

Construction

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Electrical

Driver:

Constant Current, Class 2, 2000mA, 100-277V, 50-60Hz, 1.1A, Power Factor 99%

THD:

5.3% at 120V, 13.3% at 277V

Power Factor:

99.5% at 120V, 93.7% at 277V

Surge Protection:

4kV

Other

Patents:

The ALED design is protected by patents in the U.S. Pat. 668,370, Canada Pat. 144956, China ZL201230100154.X, and Mexico Pat. 38423. Pending patents in Taiwan.

BAA Compliance:

Click here for BAA compliance.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at <u>rablighting.com/warranty</u>.

Equivalency:

Equivalent to 250W Metal Halide

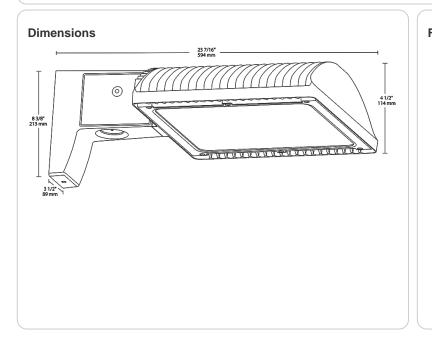
Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G2



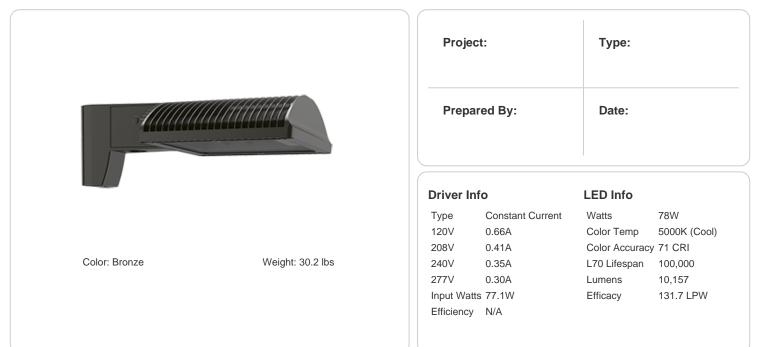
Features

66% energy cost savings vs. HID 100,000-hour LED lifespan 5-Year, No-Compromise Warranty

ALED3T78

Family	Optics	Wattage	Mounting	Color Temp	Finish	Driver Options	Options	Other Options
ALED	3T	78						
	4T = Type IV 3T = Type III 2T = Type II	50 = 50W 78 = 78W 105 = 105W 125 = 125W 150 = 150W	Blank = Pole mount SF = Slipfitter	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze RG = Roadway Gray W = White K = Black	/D10 = 0-10V Dimming Blank = 120-277V /480 = 480V /BL = Bi-Level	Blank = No Option /LC = Lightcloud® Controller /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCT = 120-277V Twistlock Photocell /PCS4 = 480V Swivel Photocell /PCT4 = 480V Twistlock Photocell /WS2 = Multi-Level Motion Sensor 20 ft. /WS4 = Multi-Level Motion Sensor 40 ft.	Blank = Standard USA = BAA Compliant

ALED2T78



Technical Specifications

Listings

UL Listing:

Suitable for wet locations as a downlight

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P0000179P

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Dark Sky Conformance:

Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Six (6) multi-chip, 13W, high-output, long-life LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IES Classification:

The Type II distribution is ideal for wide walkways, on ramps and entrance roadways, bike paths and other long and narrow lighting applications. This type is meant for lighting larger areas and usually is located near the roadside. This type of lighting is commonly found on smaller side streets or jogging paths.

Effective Projected Area:

EPA = 0.75

Ambient Temperature:

Suitable For use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior heat sinking with external Air-Flow fins

Lens:

Tempered glass lens

Housing:

Die cast aluminum housing, lens frame and mounting arm

IP Rating:

Ingress Protection rating of IP66 for dust and water

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Reflector:

Specular vacuum-metallized polycarbonate

Technical Specifications (continued)

Construction

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Electrical

THD:

5.0% at 120V, 12.3% at 277V

Surge Protection:

4kV

Driver:

Constant Current, Class 2, 2000mA, 100-277V, 50-60Hz, 1.1A, Power Factor 99%

Power Factor:

99.5% at 120V, 93.6% at 277V

Other

Patents:

The ALED design is protected by patents in the U.S. Pat. 668,370, Canada Pat. 144956, China ZL201230100154.X, and Mexico Pat. 38423. Pending patents in Taiwan.

BAA Compliance:

Click here for BAA compliance.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at <u>rablighting.com/warranty</u>.

Equivalency:

Equivalent to 250W Metal Halide

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Optical

BUG Rating:

B1 U0 G2

Dimensions

Features

66% energy cost savings vs. HID 100,000-hour LED lifespan 5-Year, No-Compromise Warranty

ALED2T78

Family	Optics	Wattage	Mounting	Color Temp	Finish	Driver Options	Options	Other Options
ALED	2T	78						
	4T = Type IV 3T = Type III 2T = Type II	50 = 50W 78 = 78W 105 = 105W 125 = 125W 150 = 150W	Blank = Pole mount SF = Slipfitter	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze RG = Roadway Gray W = White K = Black	/D10 = 0-10V Dimming Blank = 120-277V /480 = 480V /BL = Bi-Level	Blank = No Option /LC = Lightcloud® Controller /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCT = 120-277V Twistlock Photocell /PCS4 = 480V Swivel Photocell /PCT4 = 480V Twistlock Photocell /WS2 = Multi-Level Motion Sensor 20 ft. /WS4 = Multi-Level Motion Sensor 40 ft.	Blank = Standard USA = BAA Compliant

PS4-11-20D2



Square steel poles drilled for 2 Area Lights at 180°. Designed for ground mounting. Poles are stocked nationwide for quick shipment. Protective packaging ensures poles arrive at the job site good as new.

Color: Bronze

Weight: 136.7 lbs

Technical Specifications

Listings	Weight:	Anchor Bolt:		
CSA Listed:	137 lbs	Galvanized anchor bolts and galvanized hardware		
Suitable for wet locations	Gauge:	and anchor bolt template. All bolts have a 3" hook.		
Construction	11	Anchor Bolt Templates:		
Shaft:	Wall Thickness:	WARNING Template must be printed on 11" x 17" sheet for actual size. CHECK SCALE BEFORE		
46,000 p.s.i. minimum yield.	1/8"	USING. Templates shipped with anchor bolts and		
Hand Holes:	Shaft Size:	available <u>online</u> .		
Reinforced with grounding lug and removable cover	4"			
Base Plates:	Hand Hole Dimensions:	Bolts can be pre-shipped upon request for additional freight charge		
Slotted base plates 36,000 p.s.i.	3" x 5"	Max EPA's/Max Weights:		
Shipping Protection:	Bolt Circle:	U		
All poles are shipped in individual corrugated	8 1/2"	80MPH 5.6 ft./165 lb.		
cartons to prevent finish damage	Base Dimension:	90MPH 3.6 ft./110 lb.		
Color:	8"	110MPH 1.0 ft./45 lb.		
Bronze powder coating		120MPH 0.2 ft./20 lb		
Height:		Accessories:		
20 FT		Anchor Bolts: ABK4-11		
Hand Holes: Reinforced with grounding lug and removable cover Base Plates: Slotted base plates 36,000 p.s.i. Shipping Protection: All poles are shipped in individual corrugated cartons to prevent finish damage Color: Bronze powder coating Height:	Shaft Size: 4" Hand Hole Dimensions: 3" x 5" Bolt Circle: 8 1/2" Base Dimension:	available <u>online</u> . Pre-Shipped Anchor Bolts: Bolts can be pre-shipped upon request for additional freight charge Max EPA's/Max Weights: 70MPH 8.3 ft./240 lb. 80MPH 5.6 ft./165 lb. 90MPH 3.6 ft./110 lb. 100MPH 2.2 ft./75 lb. 110MPH 1.0 ft./45 lb. 120MPH 0.2 ft./20 lb Accessories:		

Project:	Туре:
Prepared By:	Date:

Technical Specifications (continued)

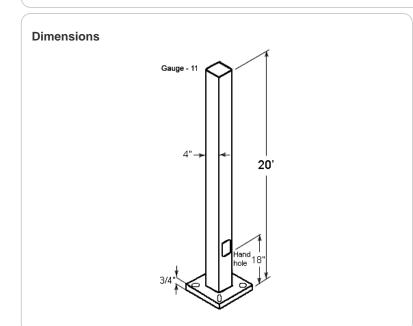
Other

Terms of Sale:

Pole Terms of Sale is available online.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.



Features

Designed for ground mounting

Heavy duty TGIC polyester coating

Reinforced hand holes with grounding lug and removable cover for easy wiring access

Anchor Bolt Kit includes pole cap and base cover (sold separately) Custom manufactured for each application

BDLEDR18

RAB



LED bollard with architectural quality and strength at an affordable price point. Cylindrical post with dome head. Available in 4 light pattern configurations including 360° (24W), 270°(18W), 180°(12W option) & 90°(12W standard).

Color: Bronze

Weight: 10.4 lbs

Proje	ect:	Туре:	
Prep	ared By:	Date:	
Driver	Info	LED Info	
Туре	Constant Current	Watts	18W
120V	0.24A	Color Temp	5100K (Cool)
208V	0.18A	Color Accuracy	74 CRI
240V	0.15A	L70 Lifespan	100,000
277V	0.12A	Lumens	1,865

Technical Specifications

Listings

UL Listed:

Suitable for wet locations. Suitable for mounting within 4 ft. (1.2m) of the ground.

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: PH4AXJWV

LED Characteristics

LEDs:

Long-life, high-efficiency, surface-mount LEDs

Color Consistency:

5-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Optical

BUG Rating:

B1 U3 G2

Construction

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Cast aluminum Thermal Management system for optimal heat sinking. The BDLED is designed for cool operation, maximum efficiency and long life by minimizing LED junction temperature.

Efficacy

107.8 lm/W

Housing:

Input Watts 17.30W

Die-cast aluminum with extruded aluminum post

Lens:

Frosted vandal resistant polycarbonate

Reflector:

Vacuum-metalized polycarbonate



Technical Specifications (continued)

Construction

Mounting:

Four (4) anchor bolts provided for concrete pad mounting. Internal base support has leveling screws.

Gaskets:

High-temperature silicone gaskets seal out moisture gaskets seal out moisture

Anchor Bolt:

Anchor Bolt Dimension is available here.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Other

Patents:

The design of BLED is protected by patents in US, Canada & China

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Equivalency:

Equivalent to 50W Metal Halide

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz, 4kV Surge Protection, 700mA, 120V: 0.24A, 208V: 0.18A, 240V: 0.15A, 277V: 0.12A

THD:

6.5% at 120V, 10.4% at 277V

Power Factor:

99.5% at 120V, 89.7% at 277V

Features

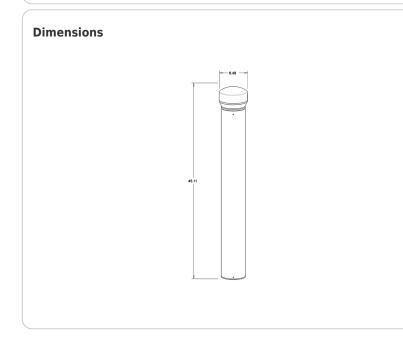
Patented base mount design for super sturdy installation

Durable construction and frosted vandal-resistant polycarbonate lens

Precision-engineered optics deliver maximum downward lighting without glare

Four leveling screws provided for easy installation

100,000-hour LED lifespan



BDLEDR18

Family	Wattage	Color Temp	Finish	Distribution	Voltage	Dimming	Backup
BDLEDR	18			-			
	12 = 12W 18 = 18W 270° Pattern 24 = 24W 360° Pattern	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze W = White K = Black	Blank = Standard ¹ 180 = 180 degrees (12W only)	Blank = No Option (120-277V) /480 = 480V (24W only) ²	Blank = None (Standard) /D10 = 0-10V Dimming	Blank = No Battery Backup /E = Battery Backup (24W only) ³ /EC = Battery Backup Cold Weather (24W only) ³
				ns: 24W = 360Ű, 18W = 27 re versions - offered with /D1	- ,		

R2R8940120WB

RAB



Listings

UL Listed:

Suitable for wet locations

ENERGY STAR V2.2:

This product is ENERGY STAR® Version 2.2 Certified.

Energy Star Model Number:

DLR0085

NEC Compliant:

Suitable for use in closets. Compliant with NEC Sec. 410.16 (A)(1) and 410.16 (C)(3).

California Title 24:

Can be used to conform with the requirements of California Title 24 Part 6.

Electrical

Dimming Driver:

TRIAC compatible dimmer with dimming as low as 5%. See dimmer compatibility guide here.

Power Factor:

≥0.9

Remote Driver:

Die-cast metal driver / junction box with a hinged cover.

Listed for 12AWG and 14AWG conduit. Includes two metal knockouts for wiring. Quick connectors included.

Plenum rated cable connector to connect from module to remote driver box.

PF:

≥0.9

Input Voltage:

120V

Projec	t:	Туре:		
Prepa	ed By:	Date:		
Driver In	fo	LED Info		
Туре	Constant Current	Watts	8W	
120V	0.115A	Color Temp	4000K (Neutral)	
208V	N/A	Color Accuracy	90 CRI	
240V	N/A	L70 Lifespan	50,000	
277V	N/A	Lumens	650	
Input Watt	5 8W	Efficacy	81.2 lm/W	

Operating Frequency (Hz):

60Hz

Performance

Lifespan:

50,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Construction

IC Rated:

Suitable for direct contact with insulation. Type IC inherently protected, suitable for direct contact to air permeable insulation and cULus listed for damp locations. Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013.

Air Tight:

Housing certified Air Tight as per ASTM E283

Technical Specifications (continued)

Construction

Housing:

Precision die-cast aluminum

Trim Style:

Baffle Trim

Cold Weather Starting:

The minimum starting temperature is -30°C (-22°F)

Maximum Ambient Temperature:

Suitable for use in up to 35°C (95°F)

Green Technology:

Mercury and UV free. RoHS-compliant components.

Mounting:

Robust retention clips spring loaded tabs ensure the fixture is securely installed. Can be installed in 1/4" to 1 1/2" thick ceilings.

Lens:

Diffuse Polystyrene lens produces smooth uniform light that is glare free

Finish:

Matte White

Optical

Beam Angle:

38° narrow beam spread for accent lighting

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Wattage Equivalency:

60W Incandescent

R9 Value:

High color performance with R9 greater than or equal to 50

Flicker:

Silent and flicker free operations of less than 30%

Other

Template:

Template included for easy ceiling cut out

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at <u>rablighting.com/warranty.</u>

Buy American Act Compliance:

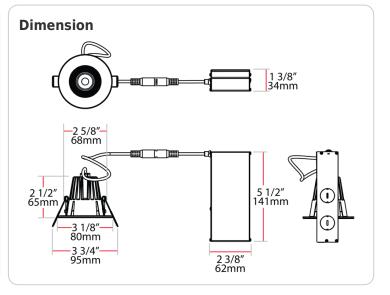
RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Minimum Compartment Size

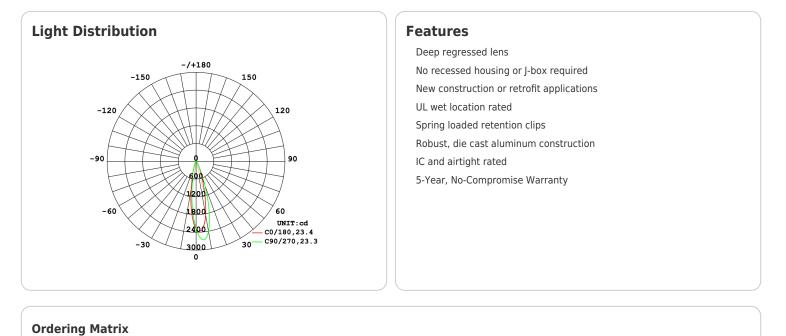
Length x Width x Height [in]	Lamp Quantity
47.8 x 23.8 x 3.0	4

Case and Pallet Dimensions

	QTY	LENGTH (in)	WIDTH (in)	HEIGHT (in)
CASE	6	10.63	9.84	5.71
PALLET	768	4.72	3.35	46.85



R2R8940120WB



Family	Size	Shape	Wattage	CRI/Color Temp	Voltage	Finish	Trim
R	2	R	8	940	120	W	В
	2 = 2"	R = Round	8 = 8W	940 = 90 CRI, 4000K (Neutral) 930 = 90 CRI, 3000K (Warm) 927 = 90 CRI, 2700K (Residential Warm)	120 = 120V	W = White	B = Baffle