



DEVELOPMENT APPLICATION

City of Rockwall
Planning and Zoning Department
385 S. Goliad Street
Rockwall, Texas 75087

STAFF USE ONLY

PLANNING & ZONING CASE NO.

NOTE: THE APPLICATION IS NOT CONSIDERED ACCEPTED BY THE CITY UNTIL THE PLANNING DIRECTOR AND CITY ENGINEER HAVE SIGNED BELOW.

DIRECTOR OF PLANNING:

CITY ENGINEER:

PLEASE CHECK THE APPROPRIATE BOX BELOW TO INDICATE THE TYPE OF DEVELOPMENT REQUEST [SELECT ONLY ONE BOX]:

PLATTING APPLICATION FEES:

- MASTER PLAT (\$100.00 + \$15.00 ACRE)¹
- PRELIMINARY PLAT (\$200.00 + \$15.00 ACRE)¹
- FINAL PLAT (\$300.00 + \$20.00 ACRE)¹
- REPLAT (\$300.00 + \$20.00 ACRE)¹
- AMENDING OR MINOR PLAT (\$150.00)
- PLAT REINSTATEMENT REQUEST (\$100.00)

SITE PLAN APPLICATION FEES:

- SITE PLAN (\$250.00 + \$20.00 ACRE)¹
- AMENDED SITE PLAN/ELEVATIONS/LANDSCAPING PLAN (\$100.00)

ZONING APPLICATION FEES:

- ZONING CHANGE (\$200.00 + \$15.00 ACRE)¹
- SPECIFIC USE PERMIT (\$200.00 + \$15.00 ACRE)^{1 & 2}
- PD DEVELOPMENT PLANS (\$200.00 + \$15.00 ACRE)¹

OTHER APPLICATION FEES:

- TREE REMOVAL (\$75.00)
- VARIANCE REQUEST/SPECIAL EXCEPTIONS (\$100.00)²

NOTES:

¹: IN DETERMINING THE FEE, PLEASE USE THE EXACT ACREAGE WHEN MULTIPLYING BY THE PER ACRE AMOUNT. FOR REQUESTS ON LESS THAN ONE ACRE, ROUND UP TO ONE (1) ACRE.

²: A ~~\$1,000.00~~ FEE WILL BE ADDED TO THE APPLICATION FEE FOR ANY REQUEST THAT INVOLVES CONSTRUCTION WITHOUT OR NOT IN COMPLIANCE TO AN APPROVED BUILDING PERMIT.

PROPERTY INFORMATION [PLEASE PRINT]

ADDRESS Dalton Road

SUBDIVISION Dalton Goliad Addition

LOT 7

BLOCK A

GENERAL LOCATION One lot west of the northwest corner of S.H. 205 & Dalton Road

ZONING, SITE PLAN AND PLATTING INFORMATION [PLEASE PRINT]

CURRENT ZONING GR w/N. SH 205 Overlay

CURRENT USE Vacant

PROPOSED ZONING GR w/N. SH 205 Overlay

PROPOSED USE Child Care Center

ACREAGE 1.35

LOTS [CURRENT] 1

LOTS [PROPOSED] 1

SITE PLANS AND PLATS: BY CHECKING THIS BOX YOU ACKNOWLEDGE THAT DUE TO THE PASSAGE OF HB3167 THE CITY NO LONGER HAS FLEXIBILITY WITH REGARD TO ITS APPROVAL PROCESS, AND FAILURE TO ADDRESS ANY OF STAFF'S COMMENTS BY THE DATE PROVIDED ON THE DEVELOPMENT CALENDAR WILL RESULT IN THE DENIAL OF YOUR CASE.

OWNER/APPLICANT/AGENT INFORMATION [PLEASE PRINT/CHECK THE PRIMARY CONTACT/ORIGINAL SIGNATURES ARE REQUIRED]

OWNER Rockwall 205-552 LLC

APPLICANT Vasquez Engineering L.L.C.

CONTACT PERSON Donald Silverman

CONTACT PERSON Juan J. Vasquez

ADDRESS 4622 Maple Ave.

ADDRESS 1919 S. Shiloh Road

Suite 200

Suite 440

CITY, STATE & ZIP Dallas, TX

CITY, STATE & ZIP Garland, TX 75042

PHONE 214-393-3983

PHONE 972-278-2948

E-MAIL dsilverman@mqcompanies.com

E-MAIL jvasquez@vasquezengineering.com

NOTARY VERIFICATION [REQUIRED]

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED Donald Silverman [OWNER] THE UNDERSIGNED, WHO STATED THE INFORMATION ON THIS APPLICATION TO BE TRUE AND CERTIFIED THE FOLLOWING:

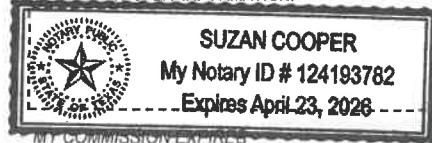
"I HEREBY CERTIFY THAT I AM THE OWNER FOR THE PURPOSE OF THIS APPLICATION; ALL INFORMATION SUBMITTED HEREIN IS TRUE AND CORRECT; AND THE APPLICATION FEE OF \$ 217.00 TO COVER THE COST OF THIS APPLICATION, HAS BEEN PAID TO THE CITY OF ROCKWALL ON THIS THE 20TH DAY OF JANUARY 20 23. BY SIGNING THIS APPLICATION, I AGREE THAT THE CITY OF ROCKWALL (I.E. "CITY") IS AUTHORIZED AND PERMITTED TO PROVIDE INFORMATION CONTAINED WITHIN THIS APPLICATION TO THE PUBLIC. THE CITY IS ALSO AUTHORIZED AND PERMITTED TO REPRODUCE ANY COPYRIGHTED INFORMATION SUBMITTED IN CONJUNCTION WITH THIS APPLICATION, IF SUCH REPRODUCTION IS ASSOCIATED OR IN RESPONSE TO A REQUEST FOR PUBLIC INFORMATION."

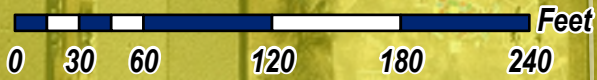
GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 3rd DAY OF January, 2023

OWNER'S SIGNATURE

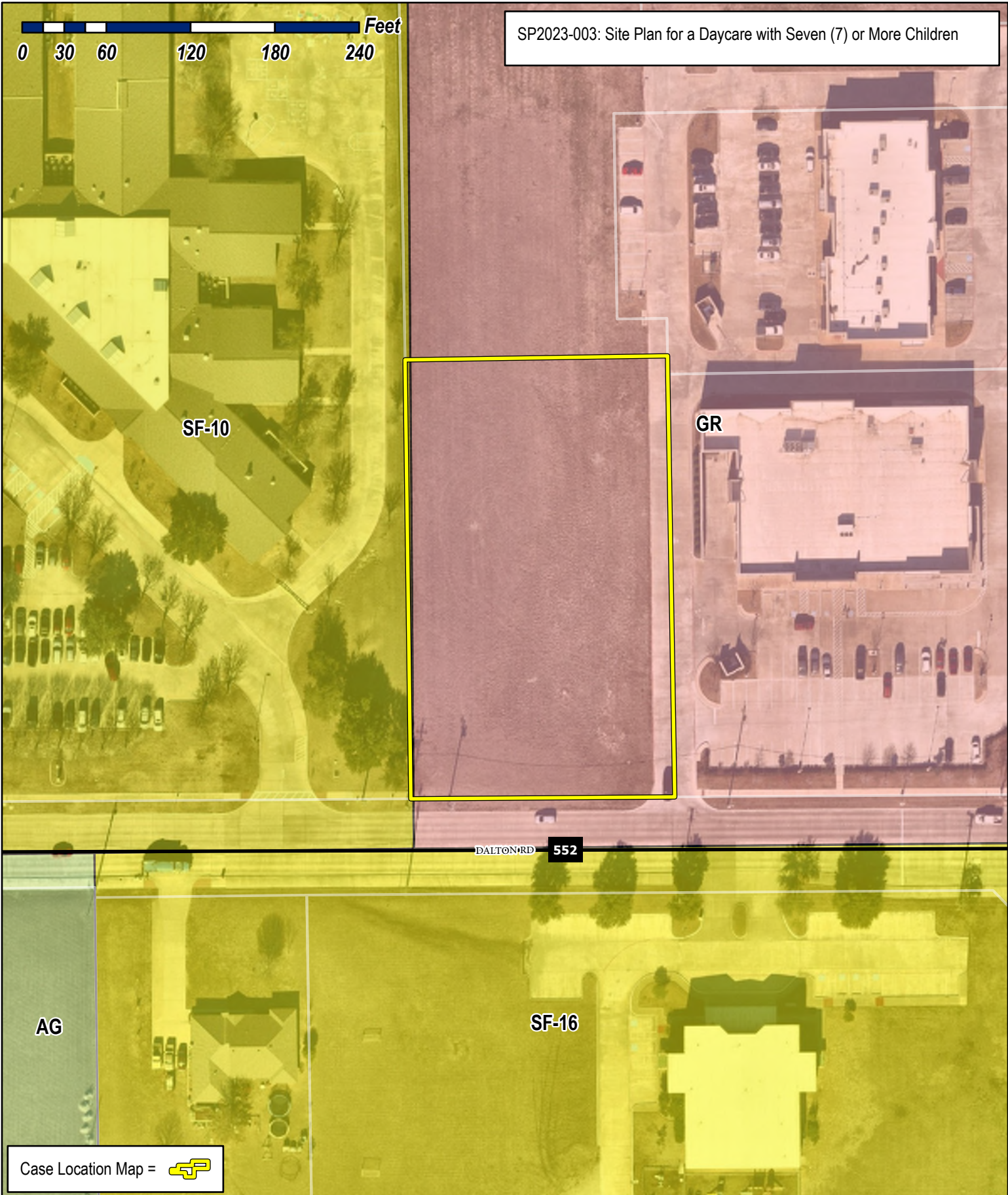
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS


Donald Silverman
Juan Cooper





SP2023-003: Site Plan for a Daycare with Seven (7) or More Children



Case Location Map = 

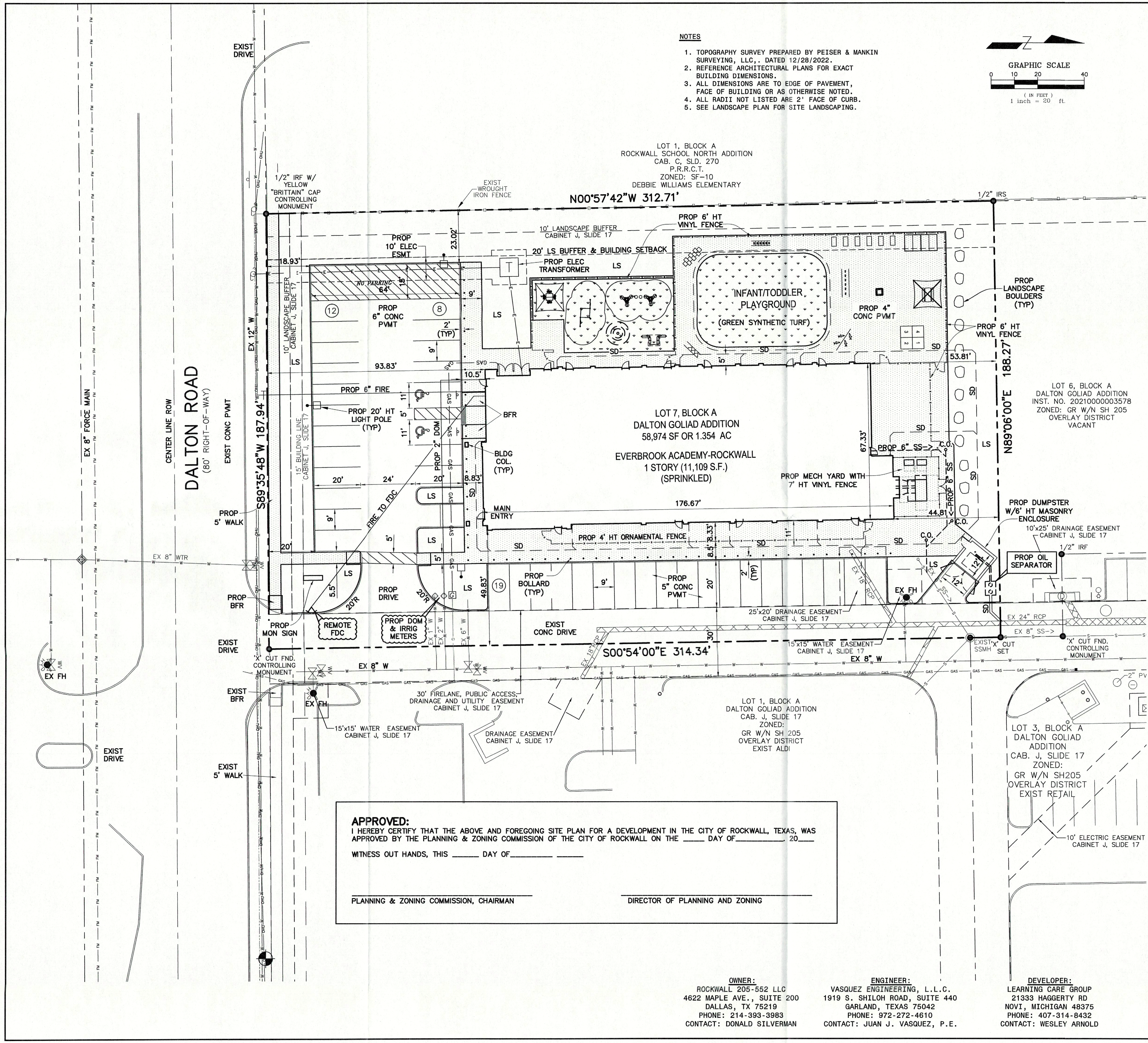


City of Rockwall

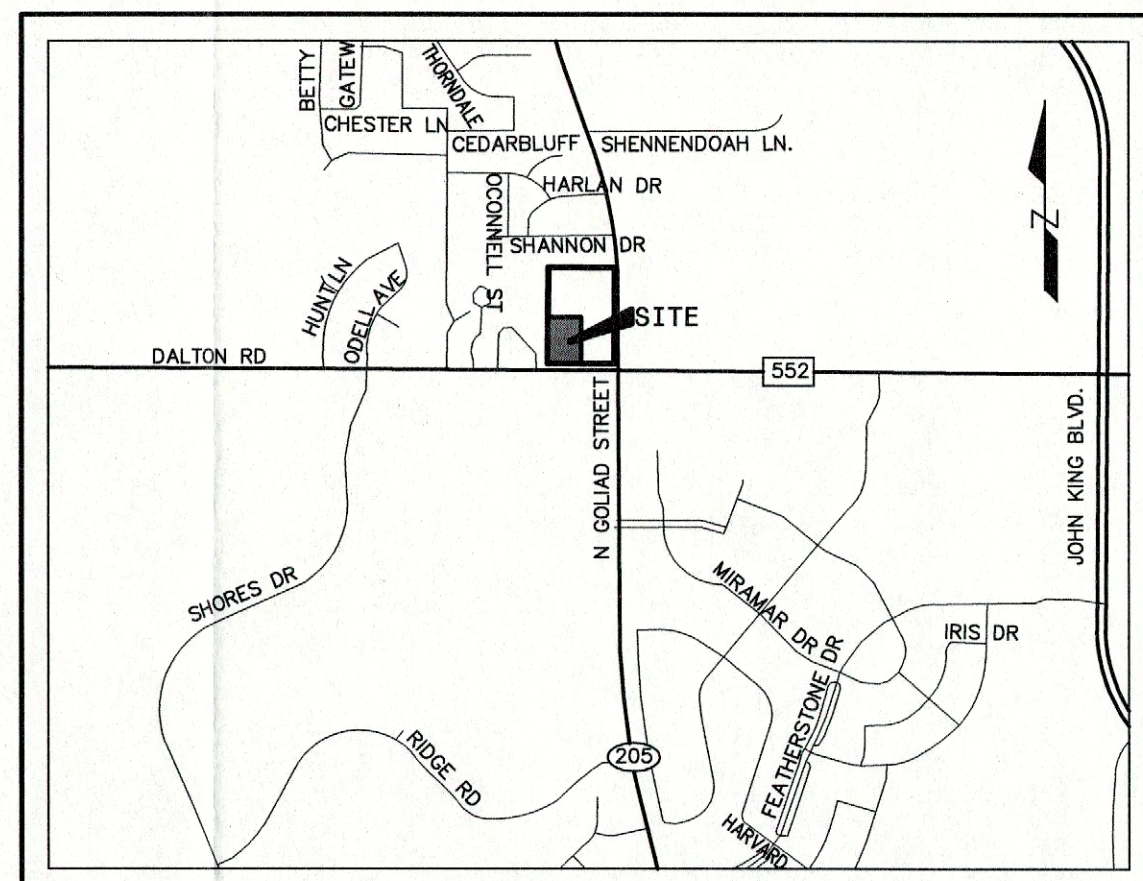
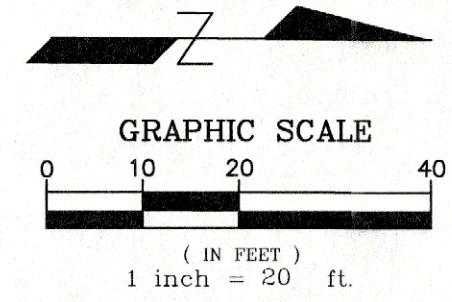
Planning & Zoning Department
 385 S. Goliad Street
 Rockwall, Texas 75087
 (P): (972) 771-7745
 (W): www.rockwall.com

The City of Rockwall GIS maps are continually under development and therefore subject to change without notice. While we endeavor to provide timely and accurate information, we make no guarantees. The City of Rockwall makes no warranty, express or implied, including warranties of merchantability and fitness for a particular purpose. Use of the information is the sole responsibility of the user.





- NOTES**
1. TOPOGRAPHY SURVEY PREPARED BY PEISER & MANKIN SURVEYING, LLC., DATED 12/28/2022.
 2. REFERENCE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
 3. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF BUILDING OR AS OTHERWISE NOTED.
 4. ALL RADII NOT LISTED ARE 2' FACE OF CURB.
 5. SEE LANDSCAPE PLAN FOR SITE LANDSCAPING.



LOCATION MAP
N.T.S.

EXISTING	LEGEND	PROPOSED
---	PROPERTY LINE	---
---	PAVEMENT	---
---	CENTER LINE	---
---	CONC WALK	---
---	PARKING COUNT	(19)
---	LANDSCAPE	LS
---	FENCE	---
W	WATER LINE	---
8"SS	SANITARY SEWER	---
E	U.G. ELEC	---
O.H.U	O.H. ELEC	---
T	TELEPHONE LINE	---
G	GAS LINE	GAS
---	STORM SEWER	SD
---	WATER VALVE	---
---	FIRE HYDRANT	---
---	WATER METER	---
---	SAN. SEWER MH	---
---	LIGHT POLE	---
---	POWER POLE	---
---	GAS METER	---

SITE SUMMARY TABLE

Site Address	DALTON ROAD
County	ROCKWALL
Project Name	LEARNING CARE CENTER
Zoning District	GR W/N. SH 205 OVERLAY DISTRICT
Proposed use	CHILD CARE CENTER
Site Area:	1.354 Acres 58,974 S.F.
Building Area	11,109 S.F.
Building Height:	1 Story
Lot Coverage:	11,109 / 58,974 = 18.83%
Floor Area Ratio:	11,109 S.F. / 58,974 = 1:18.83
Parking Required Building:	11,109 S.F.
Total Parking Required:	CHILD CARE CENTER (1 SPCS/300 SF) = 37 SPACES
Parking Provided:	REGULAR = 37 SPACES
	ACCESSIBLE = 2 SPACES
	TOTAL = 39 SPACES
Impervious Area:	45,750 S.F.
Impervious Area Ratio:	45,750 S.F. / 58,974 = 77.58%
Pervious Area Ratio:	13,224 S.F. / 58,974 = 22.42%

SITE PLAN
EVERBROOK ACADEMY-ROCKWALL
 LOT 7, BLOCK A
 DALTON GOLIAD ADDITION
 1.354 ACRES
 ROCKWALL, ROCKWALL COUNTY, TEXAS
 JANUARY 20, 2023
 CASE #SP2023-XXX

APPROVED:
 I HEREBY CERTIFY THAT THE ABOVE AND FOREGOING SITE PLAN FOR A DEVELOPMENT IN THE CITY OF ROCKWALL, TEXAS, WAS APPROVED BY THE PLANNING & ZONING COMMISSION OF THE CITY OF ROCKWALL ON THE ____ DAY OF ____ 20__

WITNESS OUT HANDS, THIS ____ DAY OF ____

 PLANNING & ZONING COMMISSION, CHAIRMAN

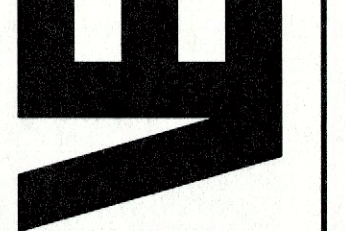
 DIRECTOR OF PLANNING AND ZONING

OWNER:
 ROCKWALL 205-552 LLC
 4622 MAPLE AVE., SUITE 200
 DALLAS, TX 75219
 PHONE: 214-393-3983
 CONTACT: DONALD SILVERMAN

ENGINEER:
 VASQUEZ ENGINEERING, L.L.C.
 1919 S. SHILOH ROAD, SUITE 440
 GARLAND, TEXAS 75042
 PHONE: 972-272-4610
 CONTACT: JUAN J. VASQUEZ, P.E.

DEVELOPER:
 LEARNING CARE GROUP
 21333 HAGGERTY RD
 NOVI, MICHIGAN 48375
 PHONE: 407-314-8432
 CONTACT: WESLEY ARNOLD

VASQUEZ ENGINEERING, L.L.C.
 1919 S. Shiloh Road
 Suite 440, LB 44
 Garland, Texas 75042
 Ph: 972-272-2948
 TX Registration # F-12266



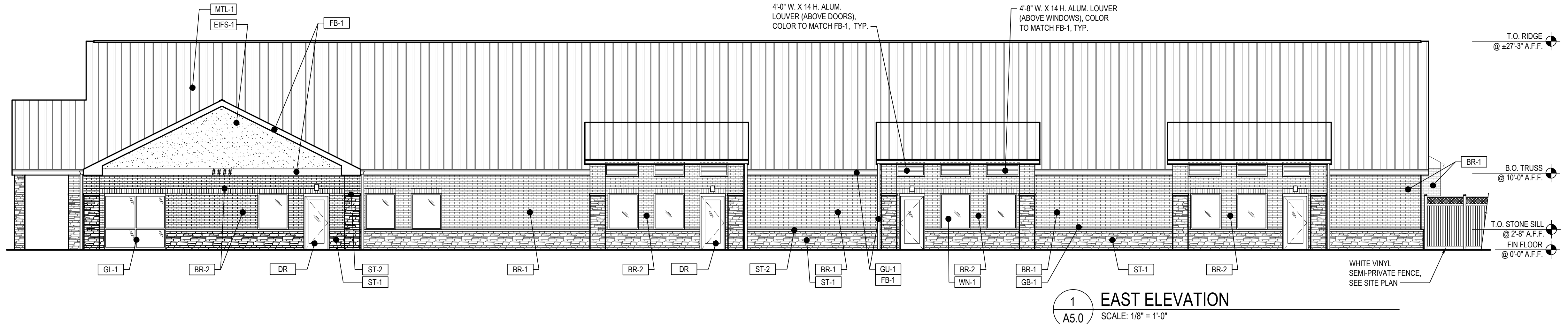
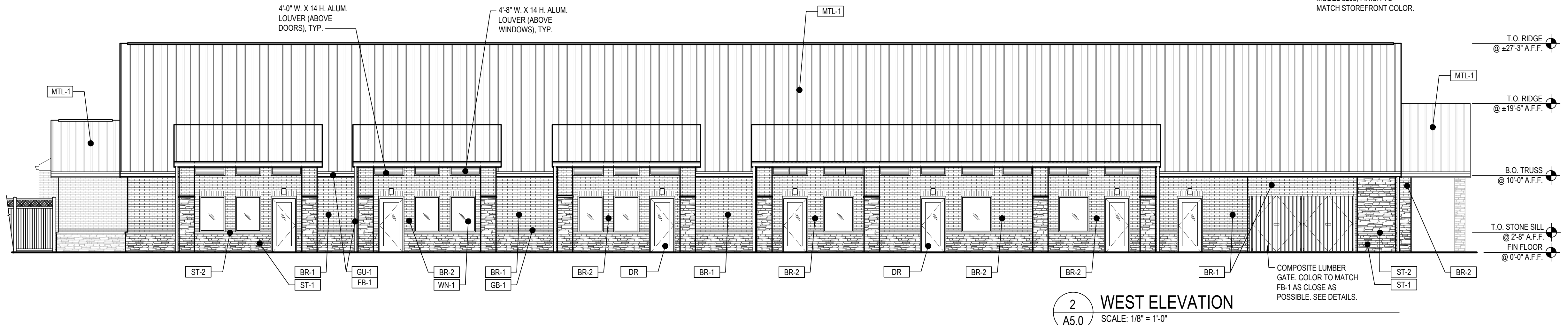
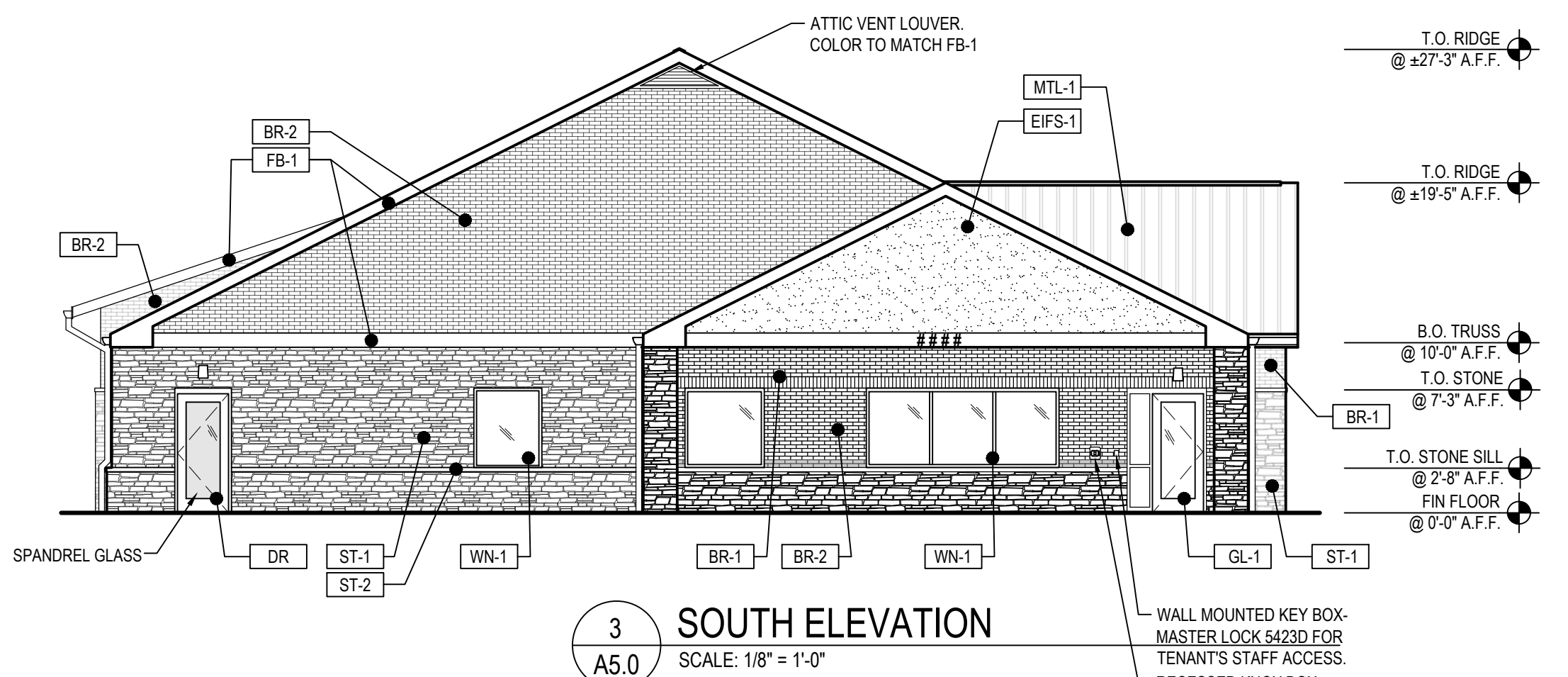
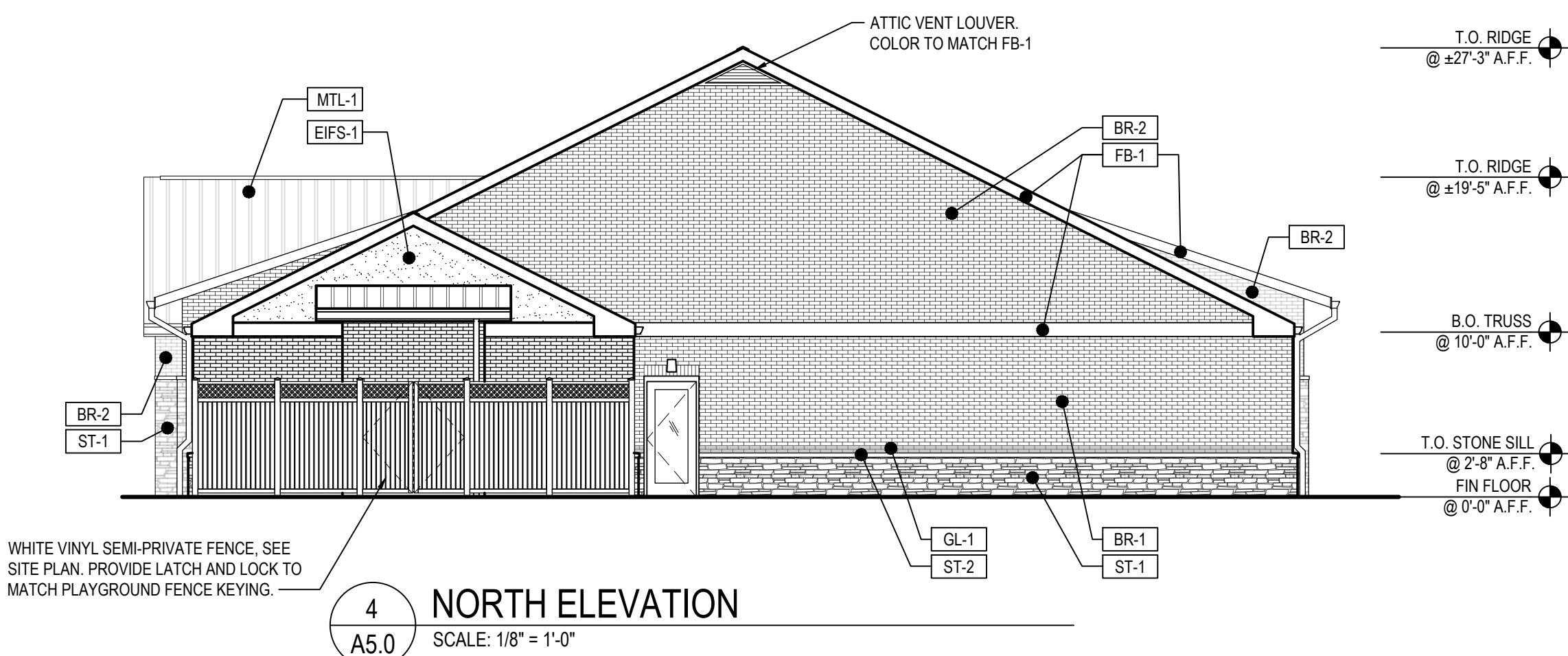
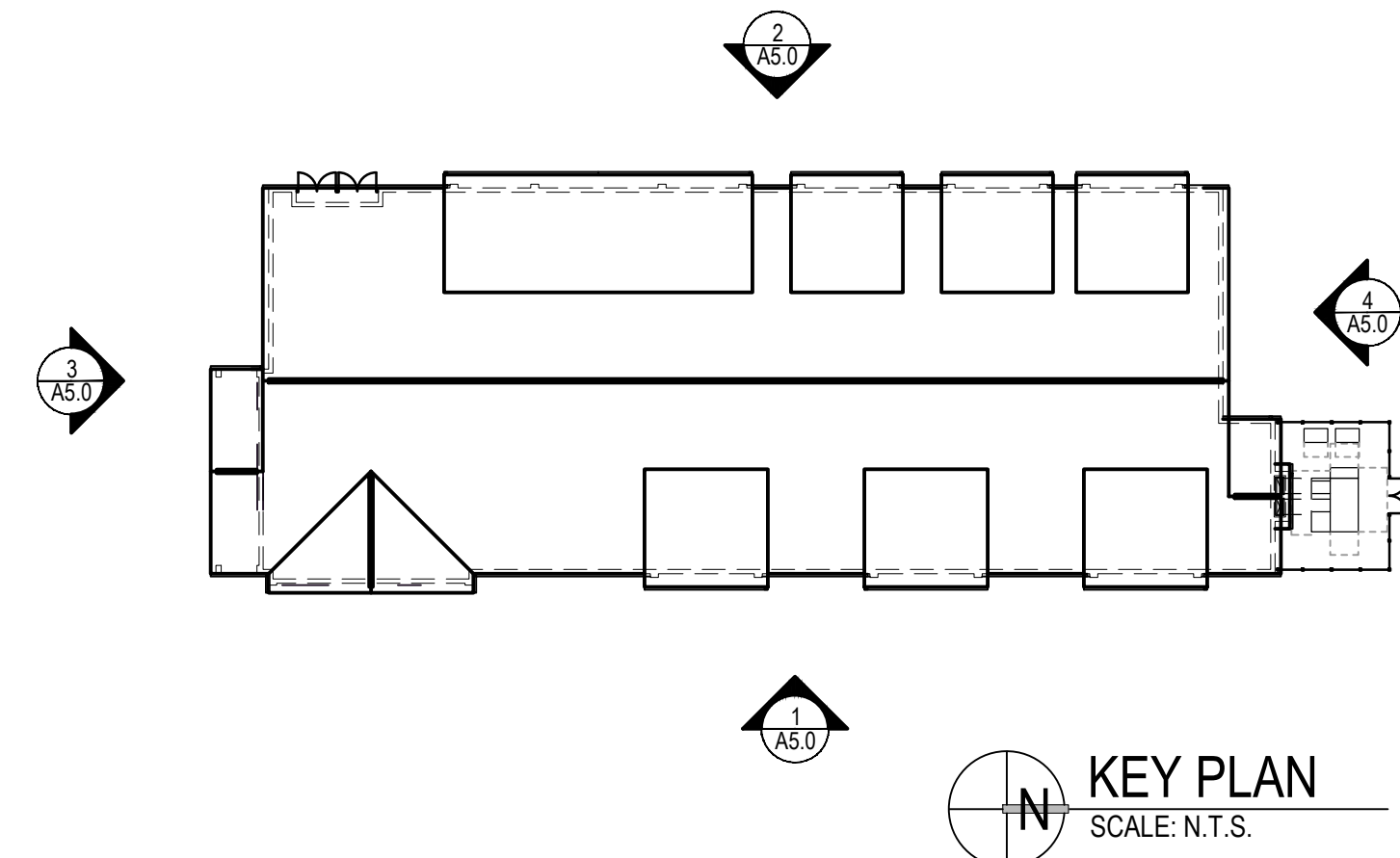
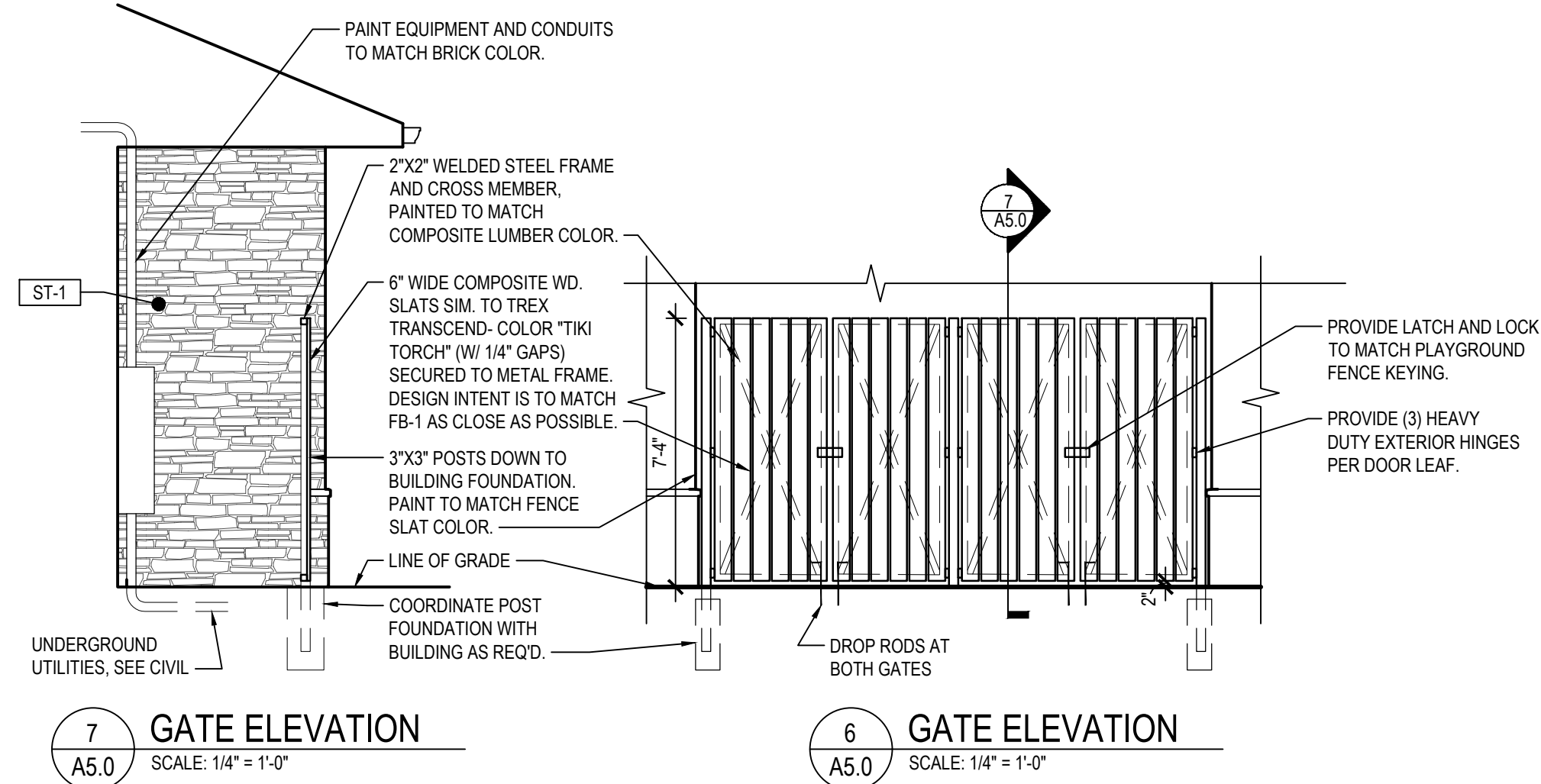
THIS DOCUMENT IS FOR
 INTERM REVIEW AND IS
 NOT INTENDED FOR
 CONSTRUCTION PURPOSES
 JUAN J. VASQUEZ, P.E.
 DATED 01/20/2023
 VASQUEZ ENGINEERING, L.L.C.
 TX REG. F-12266

DEVELOPER:
 LEARNING CARE GROUP
 21333 HAGGERTY RD
 NOVI, MI 48375

SITE PLAN
 EVERBROOK ACADEMY - ROCKWALL
 LOT 7, BLOCK A
 DALTON GOLIAD ADDITION
 CITY OF ROCKWALL, TX.

Scale: 1" = 20'
 Designed by: JUV
 Drawn by: DRS
 Checked by: JUV
 713-010-DWG-SP-LEARNING CARE.dwg
 Date: 01/20/2023

SHEET
SP1



EXTERIOR ELEVATIONS GENERAL NOTES

- ALL MATERIALS NOT LABELED ARE TYPICAL FOR ALL SIMILAR LOCATIONS. QUESTIONS SHALL BE REFERRED TO THE ARCHITECT.
- EIFS SHALL BE DRYVIT, COMMERCIAL GRADE AS FOLLOWS: GENESIS BASE COAT, REINFORCING MESH BASE & FINISH COATS SHALL BE PROVIDED OVER EPS INSULATION BOARD, MECHANICALLY FASTENED OVER DRAINAGE MAT & WEATHER RESISTIVE BARRIER OVER EXTERIOR SHEATHING.
- ALL MATERIALS SHALL BE INSTALLED AS PER MFR'S RECOMMENDATIONS, INCLUDING ALL SEALANT, FLASHING, AND JOINERY AT DISSIMILAR MATERIALS. ON EIFS, ALSO PROVIDE PANZER 20 REINFORCING MESH TO 8'-0" A.F.F. (TYP.)
- PROVIDE BLOCKING IN FAÇADE TO SUPPORT ALL BUILDING SIGNAGE.
- REFER TO ELECTRICAL DRAWINGS FOR LIGHTING INFORMATION.
- GC SHALL PAINT ANY EXPOSED PIPES, CONDUITS, OR UTILITY BOXES THAT ARE VISIBLE FROM THE SITE TO MATCH ADJACENT BUILDING EXTERIOR FINISH.

EXTERIOR FINISH LEGEND

TAG	DESCRIPTION
BR-1	BRICK: BELDEN, 671 VELOUR OR APPROVED SIMILAR
BR-2	BRICK: BELDEN, MODULAR DUTCH GRAY VELOUR 21-31 OR APPROVED SIMILAR
EIFS-1	EIFS: DRYVIT, OUTSULATION, FINISH: SANDPEBBLE DPR, COLOR: #111 PRAIRIE CLAY
FB-1	FASCIA BOARD: HARDIE, COLOR: AGED PEWTER
GB-1	GLAZED BRICK: COLOR EGGPLANT GLAZE, GLOSSY FINISH, BY BELDEN BRICK COMPANY OR APPROVED SIMILAR.
GL-1	STOREFRONT GLAZING, COLOR: CLEAR
GU-1	PRE FINISHED ALUM GUTTER AND DOWNSPOUTS, COLOR TO MATCH PAD-CLAD COLOR GRANITE
MTL-1	STANDING SEAM METAL ROOF PRE-FINISH COLOR TO MATCH PAD-CLAD COLOR AGED BRONZE
PM-1	PRE FINISHED METAL TRIM AND FLASHING, COLOR TO MATCH ADJACENT FINISH AS CLOSE AS POSSIBLE, U.N.O.
SFT	VENTED VINYL SOFFIT: STANDARD COLOR TO MATCH BUILDING FASCIA BD. (FB-1) AS CLOSE AS POSSIBLE
ST-1	STONE: CULTURED STONE, COUNTRY LEDGESTONE, COLOR: CHARDONNAY INSTALL FULLY GROUTED
ST-2	CAST STONE SILL: SMOOTH FINISH, (SAND TONE)
WN-1	VINYL WINDOWS: COLOR ALMOND
WN-2	STOREFRONT: CLEAR ANODIZED ALUMINUM
DR	PAINT EXTERIOR FACE OF EXTERIOR H.M. DOORS COLOR: TO MATCH THE GLAZED BRICK (PURPLE TONE) PAINT INTERIOR FACE OF EXTERIOR H.M. DOORS AND FRAMES COLOR: TO MATCH SW 7531 CANVAS TAN.

	S.F.	Required S.F.	Provided S.F.	Percentage
EAST ELEVATION				
Overall Façade Area	1940			
Masonry Area	-	1,746	1,780	92%
Stone Area	-	388	540	28%
WEST ELEVATION				
Overall Façade Area	1776			
Masonry Area	-	1,598	1,776	100%
Stone Area	-	355	547	31%
SOUTH ELEVATION				
Overall Façade Area	1,207			
Masonry Area	-	1,086	1,112	92%
Stone Area	-	241	427	35%
NORTH ELEVATION				
Overall Façade Area	1207			
Masonry Area	-	1,086	1,086	90%
Stone Area	-	241	179	15%
TOTAL BUILDING				
Overall Façade Area	6,130			
Masonry Area	-	5,517	5,754	94%
Stone Area	-	1,226	1,693	28%

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EVERBROOK ACADEMY-ROCKWALL
 LOT 7, BLOCK A
 DALTON GOLIAD ADDITION
 1.354 ACRES
 ROCKWALL, ROCKWALL COUNTY, TEXAS
 JANUARY 20, 2023
 CASE #SP2023-XXX



EVERBROOK ACADEMY-ROCKWALL
 LOT 7, BLOCK A - DALTON RD.
 ROCKWALL, TX

THESE DOCUMENTS CONTAIN INFORMATION PROPRIETARY TO ADA ARCHITECTS, INC.
 UNAUTHORIZED USE OF THESE DOCUMENTS IS EXPRESSLY PROHIBITED UNLESS AGREED UPON IN WRITING.

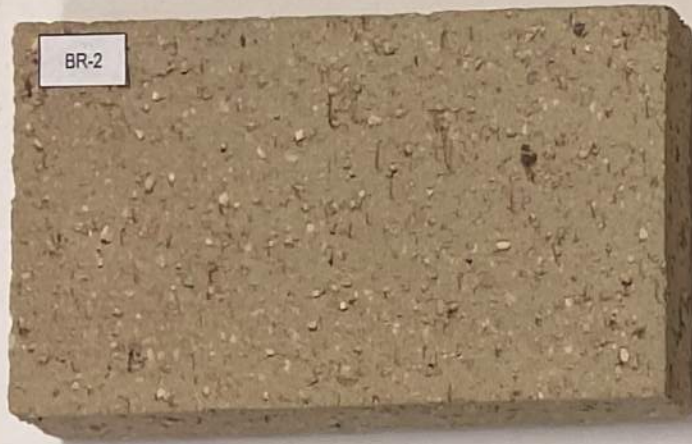
REVISIONS

#	DATE	TYPE
1		
2		
3		
4		
5		
6		
7		
8		
9		

EXTERIOR ELEVATIONS

DATE 01/20/2023
 JOB NO. 22247

A5.0
 SHEET NO.



BR-2



ST-2



GB-1



GL-1



WN-1

261-C6



BR-1



ST-1



SITE PLAN
 EVERBROOK ACADEMY - ROCKWALL
 DALTON GOLIAD ADDITION
 1.354 ACRES
 ROCKWALL, ROCKWALL COUNTY, TEXAS
 JANUARY 20, 2023
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EXTERIOR FINISH LEGEND

TAG	DESCRIPTION
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BR-2	BRICK: BELDEN, MODULAR DUTCH GRAY VELOUR 21-31
EIFS-1	EIFS: DRYVIT, OUTSULATION, FINISH: SANDPEBBLE DPR, COLOR: #111 PRAIRE CLAY
FB-1	FASCIA BOARD: HARDIE, COLOR: AGED PEWTER
GB-1	GLAZED BRICK: BELDEN BRICK COMPANY COLOR: EGGPLANT GLAZE
GL-1	STOREFRONT GLAZING, COLOR: CLEAR
GU-1	PRE FINISHED ALUM GUTTER AND DOWNSPOUTS: PAC-CLAD, COLOR: GRANITE
MTL-1	METAL ROOF: PAC-CLAD, COLOR: AGED BRONZE
PT-1	PAINT EXTERIOR FACE OF EXTERIOR H.M. DOORS COLOR TO MATCH GB-1
ST-1	CAST STONE: CULTURED STONE, COUNTRY LEDGESTONE, COLOR: CHARDONNAY
ST-2	CAST STONE SILL: SMOOTH FINISH (SAND TONE)
WN-1	VINYL WINDOWS, COLOR: SW7531 CANVAS TAN
WN-2	CLEAR ANODIZED ALUMINUM STOREFRONT

APPLICANT INFORMATION

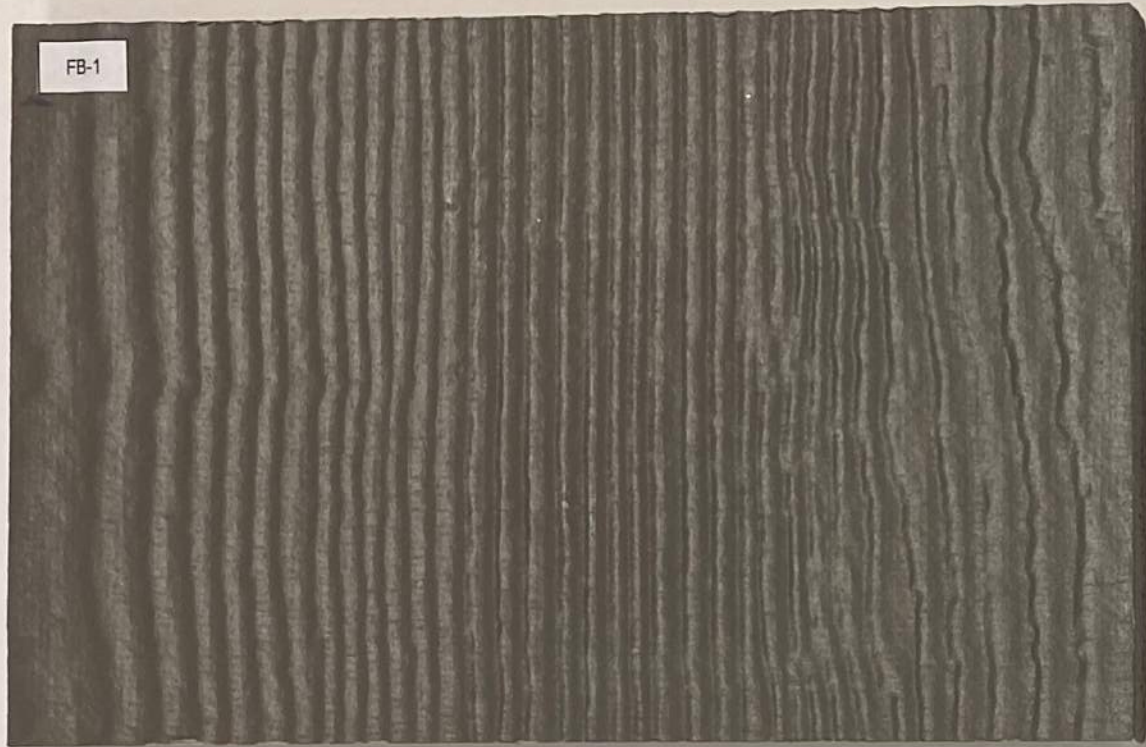
JIM KASSAY
 ADA ARCHITECTS
 17710 DETROIT AVE.
 LAKEWOOD, OH 44107
 (216) 521-5134
 jkassay@adaarchitects.com

OWNER INFORMATION

ROD BLIGHT
 LEARNING CARE GROUP INC.
 21333 HAGGERTY RD,
 SUITE 300
 NOVI, MI 48375
 (248) 294-0473
 rblight@learningcaregroup.com

PROJECT NAME:
 EVERBROOK ACADEMY -
 ROCKWALL, TX
CASE NUMBER:

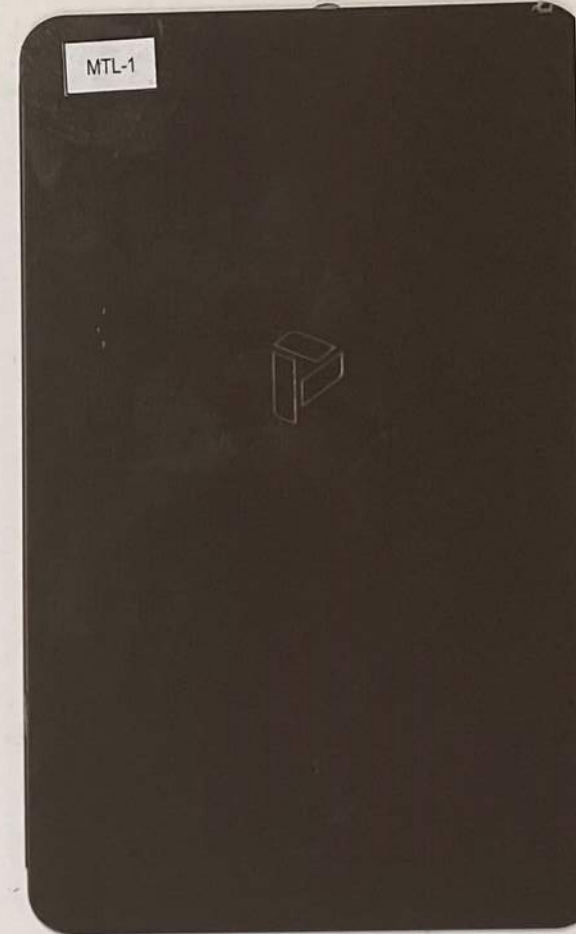
DATE:
 01/20/2023



FB-1



GU-1



MTL-1



WN-2



EIFS-1



PT-1

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 EVERBROOK ACADEMY - ROCKWALL
 DALTON GOLIAD ADDITION
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 ROCKWALL, ROCKWALL COUNTY, TEXAS
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APPLICANT INFORMATION

JIM KASSAY
 ADA ARCHITECTS
 17710 DETROIT AVE.
 LAKEWOOD, OH 44107
 (216) 521-5134
 jkassay@adaarchitects.com

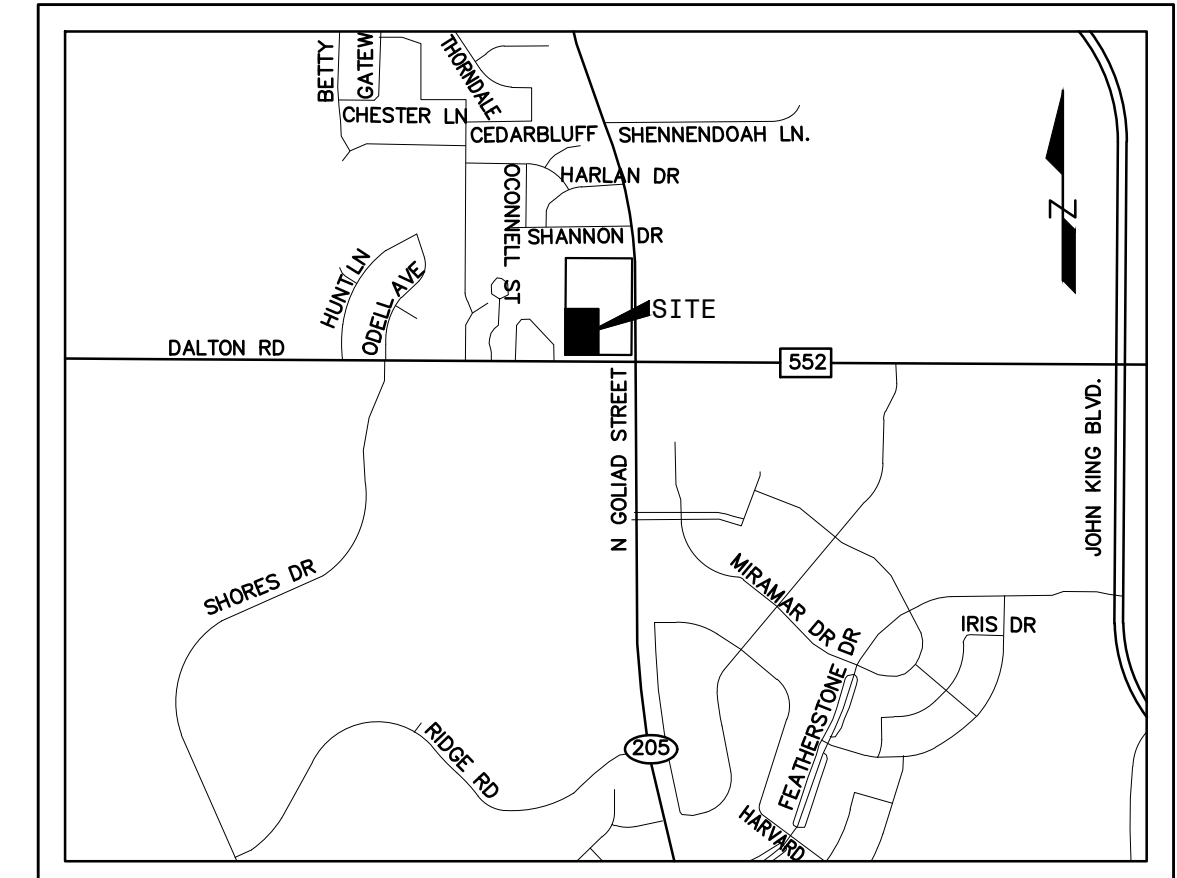
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 SUITE 300
 NOVI, MI 48375
 (248) 294-0473
 rblight@learningcaregroup.com

PROJECT NAME:
 EVERBROOK ACADEMY -
 ROCKWALL, TX
CASE NUMBER:

DATE:
 01/20/2023

IRRIGATION WILL MEET THE REQUIREMENTS OF THE UNIFIED DEVELOPMENT CODE (UDC). (SUBSECTION 05.04, OF ARTICLE 08)



LOCATION MAP N.T.S.

VASQUEZ ENGINEERING, L.L.C.
 1919 S. Shiloh Road
 Suite 440, LB 44
 Garland, Texas 75042
 Ph: 972-278-2948
 TX Registration # F-12286

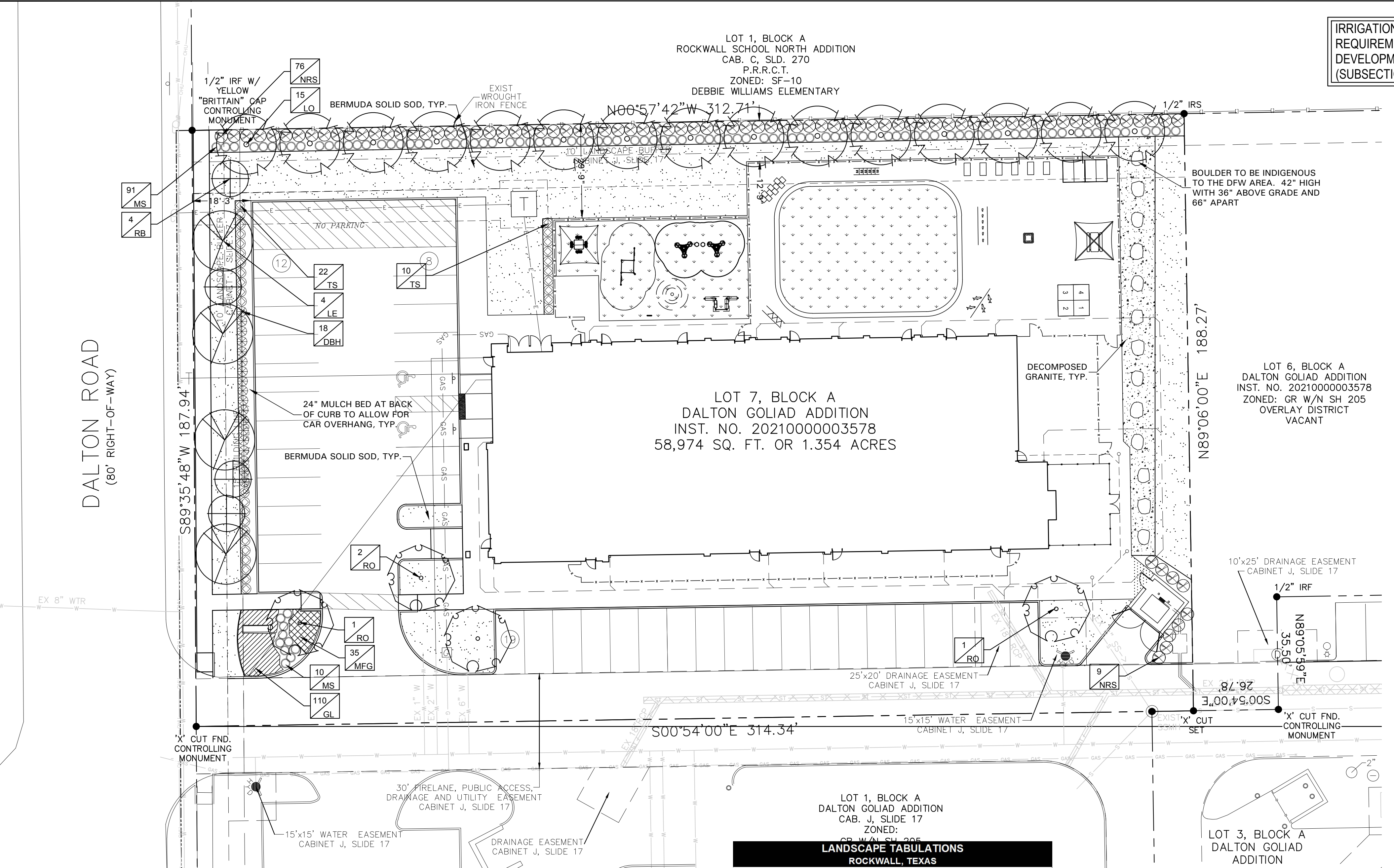
REGISTERED LANDSCAPE ARCHITECT
 AMANDA W. RICHARDS
 STATE OF TEXAS
 2754

DEVELOPER:
 LEARNING CARE GROUP
 21333 HAGGERTY RD
 NOVI, MI 48375

LANDSCAPE PLAN
 EVERBROOK ACADEMY - ROCKWALL
 LOT 7, BLOCK A
 DALTON GOLIAD ADDITION
 CITY OF ROCKWALL, TX

Scale: 1" = 20'
 Designed by: JUV
 Drawn by: DRS
 Checked by: JUV
 T13-01DWGSP/LEARNING CARE.dwg
 Date: 01/20/2023

SHEET
L1.1



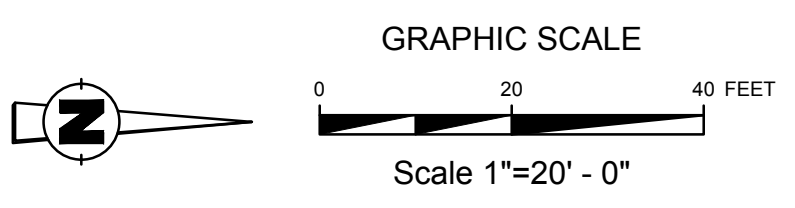
SITE SUMMARY TABLE

Site Address	DALTON ROAD
County	ROCKWALL
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APPROVED:
 I HEREBY CERTIFY THAT THE ABOVE AND FOREGOING SITE PLAN FOR A DEVELOPMENT IN THE CITY OF ROCKWALL, TEXAS, WAS APPROVED BY THE PLANNING & ZONING COMMISSION OF THE CITY OF ROCKWALL ON THE ____ DAY OF ____ 20__

WITNESS OUR HANDS, THIS ____ DAY OF ____

PLANNING & ZONING COMMISSION, CHAIRMAN _____ DIRECTOR OF PLANNING AND ZONING _____



OWNER:
 ROCKWALL 205-552 LLC
 4622 MAPLE AVE., SUITE 200
 DALLAS, TX 75219
 PHONE: 214-393-3983
 CONTACT: DONALD SILVERMAN

ENGINEER:
 VASQUEZ ENGINEERING, L.L.C.
 1919 S. SHILOH ROAD, SUITE 440
 GARLAND, TEXAS 75042
 PHONE: 972-272-4610
 CONTACT: JUAN J. VASQUEZ, P.E.

DEVELOPER:
 LEARNING CARE GROUP
 21333 HAGGERTY RD
 NOVI, MICHIGAN 48375
 PHONE: 407-314-8432
 CONTACT: WESLEY ARNOLD

LANDSCAPE TABULATIONS
 ROCKWALL, TEXAS

Perimeter Collector Street or Arterial Roadway

- A minimum of 10' wide landscape buffer shall be required. Frontage shall contain berms and shrubbery to have a total minimum height of 30".
- One canopy tree and one accent tree shall be incorporated every 50 l.f.
- Headlight screening shall be provided where parking is adjacent to the street. A 2' tall berm with mature evergreen shrubs along the entire adjacency of the parking areas.

Dalton Road = 187 l.f.

REQUIRED	PROVIDED
10' wide buffer	10' wide buffer
berm and/or shrubs	shrubs 36" ht.
4 canopy trees, 4" cal.	4 canopy trees, 4" cal.
4 accent trees, 4" ht.	4 accent trees, 4" ht.
Buffer -	
REQUIRED	PROVIDED
shade trees every 20'	shade trees every 20'
large shrubs	large shrubs (Nellie R Stevens Holly)
smaller shrubs for layering	small shrubs (Muhly grass)

Landscape Requirements

- Commercial landscape requirements must total a minimum of 20% of the project site.
- 50% of the required landscape shall be located in the front yard.

REQUIRED	PROVIDED
11,795 s.f. (20%)	13,224 s.f. (22.4%)
5,897 s.f. (50%)	6036 s.f.

Parking Lot Landscape

- 5% of the parking lot area shall be landscape.
- One large canopy tree shall be provided for every 10 spaces.
- No parking space shall be located more than 80' from the trunk of a canopy tree.

Parking spaces: 39

REQUIRED	PROVIDED
3109 s.f. (20%)	3201 s.f. (20%)
4 canopy trees, 4" cal.	4 canopy trees, 4" cal.

PLANT SCHEDULE

QTY	LABEL	COMMON NAME	SCIENTIFIC NAME	SIZE	NOTES
SHADE TREES					
4	LE	Lacebark Elm	<i>Ulmus parvifolia 'Sempervirens'</i>	4" cal.	12' ht., 4' spread
15	LO	Live Oak	<i>Quercus virginiana</i>	3" cal.	12' ht., 4' spread, matching
4	RO	Texas Red Oak	<i>Quercus buckleyi</i>	4" cal.	12' ht., 5' spread
ORNAMENTAL TREES					
4	RB	Oklahoma Redbud	<i>Cercis reniformis 'Oklahoma'</i>	30 gal.	8' ht., 4' spread, 3 trunk min.
SHRUBS					
18	DBH	Dwarf Burford Holly	<i>Ilex comuta 'Burford Nana'</i>	3" ht for screening	full, 24" spread, 36" o.c.
101	MS	Morning Light Miscanthus	<i>Miscanthus sinensis 'Morning Light'</i>	5 gal.	full, 20" spread, 36" o.c.
85	NRS	Nellie R Stevens Holly	<i>Ilex x 'Nellie R. Stevens'</i>	7 gal.	full, 40" o.c.
32	TS	Texas Sage 'Green Cloud'	<i>Leucophyllum frutescens 'Green Cloud'</i>	3" ht for screening	full, 24" sprd, 36" o.c.
GROUNDCOVER/VINES/GRASS					
110	GL	Giant Liriope	<i>Liriope gigantea</i>	1 gal.	full, 18" o.c.
35	MFG	Mexican Feather Grass	<i>Nassella tenuissima</i>	1 gal.	full, 18" o.c.
		Bermuda Solid Sod	<i>Cynodon dactylon</i>		
		Decomposed Granite			

Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. Trees shall have a strong central leader and be of matching specimens. All plant material shall meet or exceed remarks as indicated.

- GENERAL LAWN NOTES**
- CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER
 - LAWN AREAS SHALL BE LEFT 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
 - CONTRACTOR TO FIND GRADE AREAS TO ACHIEVE FINAL CONTOURS AS SHOWN ON CIVIL DRAWINGS. POSITIVE DRAINAGE SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. ROUNDING AT TOP AND BOTTOM OF SLOPES SHALL BE PROVIDED AND IN OTHER BREAKS IN GRADE. CORRECT AREAS WHERE STANDING WATER MAY OCCUR.
 - ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
 - CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" IN DIAMETER AND LARGER REMOVE ALL DIRT CLOUDS, STICKS, CONCRETE SPOILS, TRASH ETC PRIOR TO PLACING TOPSOIL AND GRASS INSTALLATION.
 - CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE.
 - CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT IF NECESSARY.
- SOLID SOD:**
- SOLID SOD SHALL BE PLACED ALONG ALL IMPERVIOUS EDGES, AT A MINIMUM THIS SHALL INCLUDE CURBS, WALKS, INLETS, MANHOLES AND PLANTING BED AREAS. SOD SHALL COVER OTHER AREAS COMPLETELY AS INDICATED BY PLAN.
 - SOD SHALL BE STRONGLY ROOTED DROUGHT RESISTANT SOD, NOT LESS THAN 2 YEARS OLD, FREE OF WEEDS AND UNDESIRABLE NATIVE GRASS AND MACHINE CUT TO PAD THICKNESS OF 3/4" (1-1/4"), EXCLUDING TOP GROWTH AND THATCH.
 - LAY SOD BY HAND TO COVER INDICATED AREAS COMPLETELY, ENSURING EDGES ARE TOUCHING WITH TIGHTLY FITTING JOINTS, NO OVERLAPS WITH STAGGERED STRIPS TO OFFSET JOINTS.
 - TOP DRESS JOINTS IN SOD BY HAND WITH TOPSOIL TO FILL VOIDS IF NECESSARY.
 - SOD SHALL BE ROLLED TO CREATE A SMOOTH EVEN SURFACE. SOD SHOULD BE WATERED THOROUGHLY DURING INSTALLATION PROCESS.
 - SHOULD INSTALLATION OCCUR BETWEEN OCTOBER 1ST AND MARCH 1ST, OVERSEED BERMUDAGRASS SOD WITH WINTER RYEGRASS AT A RATE OF 4 POUNDS PER 1000 S.F.
- HYDROMULCH:**
- SCARIFY AND LOOSEN ALL AREAS TO BE HYDROMULCHED TO A MINIMUM DEPTH OF 4" PRIOR TO TOPSOIL AND HYDROMULCH INSTALLATION.
 - BERMUDA GRASS SEED SHALL BE EXTRA HULLED, TREATED LAWN TYPE. SEED SHALL BE DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AND SHALL MEET ALL STATE/LOCAL LAW REQUIREMENTS.
 - FIBER SHALL BE 100% WOOD CELLULOSE FIBER, DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AS MANUFACTURED BY "CONWEB" OR EQUAL.
 - FIBER TACK SHALL BE DELIVERED TO THE SITE IN ITS UNOPENED CONTAINER AND SHALL BE "TERRO-TACK ONE", AS MANUFACTURED BY GROWERS, INC OR APPROVED EQUAL.
 - HYDROMULCH WITH BERMUDA GRASS SEED AT A RATE OF 2 POUNDS PER 1000 S.F.
 - USE A BATTER BOARD AGAINST ALL BED AREAS TO PREVENT OVER SPRAY.
 - IF INADEQUATE MOISTURE IS PRESENT IN SOIL, APPLY WATER AS NECESSARY FOR OPTIMUM MOISTURE FOR SEED APPLICATION.
 - IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1ST AND MAY 1ST, ALL HYDROMULCH AREAS SHALL BE OVER-SEED WITH WINTER RYE GRASS AT A RATE OF FOUR POUNDS PER ONE THOUSAND SQUARE FEET. CONTRACTOR SHALL BE REQUIRED TO RE-HYDROMULCH WITH BERMUDA GRASS THE FOLLOWING GROWING SEASON AS PART OF THIS CONTRACT.
 - AFTER APPLICATION, NO EQUIPMENT SHALL OPERATE OVER APPLIED AREAS. WATER SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO SATURATION.
 - ALL LAWN AREAS TO BE HYDROMULCHED SHALL ACHIEVE 100% COVERAGE PRIOR TO FINAL ACCEPTANCE.

- LANDSCAPE NOTES**
- CONTRACTOR TO VERIFY AND LOCATE ALL PROPOSED AND EXISTING ELEMENTS. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE FOR ANY LAYOUT DISCREPANCY OR ANY CONDITION THAT WOULD PROHIBIT THE INSTALLATION AS SHOWN. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
 - CONTRACTOR SHALL CALL 811 TO VERIFY AND LOCATE ANY AND ALL UTILITIES ON SITE PRIOR TO COMMENCING WORK. LANDSCAPE ARCHITECT SHOULD BE NOTIFIED OF ANY CONFLICTS. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING NEAR UNDERGROUND UTILITIES.
 - A MINIMUM OF 2% SLOPE SHALL BE PROVIDED AWAY FROM ALL STRUCTURES.
 - CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO BE LEFT 1" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS. LANDSCAPE ISLANDS SHALL BE CROWNED, AND UNIFORM THROUGHOUT THE SITE.
 - PLANTING AREAS AND SOD TO BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS OR CURBS. EDGING NOT TO BE MORE THAN 1/2" ABOVE FINISHED GRADE.
 - EDGING SHALL BE CUT AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND/OR CURBS.
 - MULCH SHALL BE INSTALLED AT 1/2" BELOW THE TOPS OF SIDEWALKS AND CURBS.
 - QUANTITIES ON THESE PLANS ARE FOR REFERENCE ONLY. THE SPACING OF PLANTS SHOULD BE AS INDICATED ON PLANS OR OTHERWISE NOTED. ALL TREES AND SHRUBS SHALL BE PLANTED PER DETAILS.
 - CONTAINER GROWN PLANT MATERIAL IS PREFERRED HOWEVER BALL AND BURLAP PLANT MATERIAL CAN BE SUBSTITUTED IF NEEDED AND IS APPROPRIATE TO THE SIZE AND QUALITY INDICATED ON THE PLANT MATERIAL LIST.
 - TREES SHALL BE PLANTED AT A MINIMUM OF 5' FROM ANY UTILITY LINE, SIDEWALK OR CURB. TREES SHALL ALSO BE 10' CLEAR FROM FIRE HYDRANTS.
 - IF SHREDED HARDWOOD MULCH (2" SETTLED THICKNESS) SHALL BE PLACED OVER WEED BARRIER FABRIC. MULCH SHALL BE SHREDED HARDWOOD MULCH OR APPROVED EQUAL. PINE STRAW MULCH IS PROHIBITED.
 - WEED BARRIER FABRIC SHALL BE USED IN PLANT BEDS AND AROUND ALL TREES AND SHALL BE MIRAFI 1405 WEED BARRIER OR APPROVED EQUAL.
 - CONTRACTOR TO PROVIDE UNIT PRICING OF LANDSCAPE MATERIALS AND BE RESPONSIBLE FOR OBTAINING ALL LANDSCAPE AND IRRIGATION PERMITS.
- IRRIGATION:**
- ALL REQUIRED LANDSCAPE AREAS SHALL HAVE AN AUTOMATIC IRRIGATION SYSTEM WITH A FREEZE-RAIN SENSOR. SYSTEM SHALL ALSO HAVE AN ET WEATHER BASED CONTROLLER AND BE DESIGNED AND INSTALLED BY A LICENSED IRRIGATOR.
- MAINTENANCE REQUIREMENTS:**
- VEGETATION SHOULD BE INSPECTED REGULARLY TO ENSURE THAT PLANT MATERIAL IS ESTABLISHING PROPERLY AND REMAINS IN A HEALTHY GROWING CONDITION APPROPRIATE FOR THE SEASON. IF DAMAGED OR REMOVED, PLANTS MUST BE REPLACED BY A SIMILAR VARIETY AND SIZE.
 - MOWING, TRIMMING, EDGING AND SUPERVISION OF WATER APPLICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE OWNER OR OWNER'S REPRESENTATIVE ACCEPTS AND ASSUMES REGULAR MAINTENANCE.
 - ALL LANDSCAPE AREAS SHOULD BE CLEANED AND KEPT FREE OF TRASH, DEBRIS, WEEDS AND OTHER MATERIAL.
- MISCELLANEOUS MATERIALS:**
- STEEL EDGING SHALL BE 3/4" X 4 X 1/8" DARK GREEN DURADEGEE STEEL LANDSCAPE EDGING UNLESS NOTED OTHERWISE ON PLANS/DETAILS.
 - RIVER ROCK SHALL BE ARIZONA RIVER ROCK, 2" - 4" DIAMETER. RIVER ROCK SHALL BE COMPACTED TO A MINIMUM OF 3" DEPTH OVER FILTER FABRIC.
 - DECOMPOSED GRANITE SHALL CONIST OF A NATURAL MIX OF GRANITE AGGREGATE NOT TO EXCEED 1/8" IN DIAMETER AND COMPOSED OF VARIOUS STAGES OF DECOMPOSED EARTH BASE. DG SHALL BE PLACED OVER FILTER FABRIC AT A MINIMUM OF 3" DEPTH.
 - BOULDERS SHALL BE ON AVERAGE 36" X 24" X 24" AND A MIN. OF 500LBS. BOULDERS TO BE SET IN GROUND ON A 1" SAND SETTING BED. APPROXIMATELY 2" BELOW FINISH GRADE. BOULDER SHOULD HAVE A WEATHERED FINISH. EACH BOULDER HAS A NATURAL TOP AND BOTTOM. ENSURE THAT THE BOULDER IS POSITIONED CORRECTLY BEFORE INSTALLATION.

LANDSCAPE PLAN
 EVERBROOK ACADEMY--ROCKWALL
 LOT 7, BLOCK A
 DALTON GOLIAD ADDITION
 1.354 ACRES
 ROCKWALL, ROCKWALL COUNTY, TEXAS
 JANUARY 20, 2023
 CASE #SP2023--XXX

SECTION 32 9300 - LANDSCAPE
PART 1 - GENERAL

- 1.1 QUALIFICATIONS OF THE LANDSCAPE CONTRACTOR.
 - A. ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
- 1.2 REFERENCE DOCUMENTS.
 - A. REFER TO LANDSCAPE PLANS, NOTES, SCHEDULES AND DETAILS FOR ADDITIONAL REQUIREMENTS.
- 1.3 SCOPE OF WORK / DESCRIPTION OF WORK.
 - A. WORK COVERED BY THESE SECTIONS INCLUDES: FURNISH ALL SUPERVISIONS, LABOR, MATERIALS, SERVICES, EQUIPMENT AND APPLIANCES REQUIRED TO COMPLETE THE WORK COVERED IN CONJUNCTION WITH THE LANDSCAPING COVERED IN LANDSCAPE PLANS AND SPECIFICATIONS INCLUDING:
 1. PLANTING (TREES, SHRUBS, GRASSES)
 2. BED PREP AND FERTILIZATION
 3. NOTIFICATION OF SOURCES
 4. WATER AND MAINTENANCE UNTIL ACCEPTANCE
 5. GUARANTEE
 - B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK.
- 1.4 REFERENCES.
 - A. AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICAN ASSOCIATION OF NURSERMEN; 27 OCTOBER 1990, EDITION, BY AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PLANT MATERIAL.
 - B. AMERICAN JOINT COMMITTEE ON HORTICULTURE NOMENCLATURE; 1946 EDITION OF STANDARDIZED PLANT NAMES.
 - C. TEXAS ASSOCIATION OF NURSERMEN, GRADES AND STANDARDS.
- 1.5 SUBMITTALS.
 - A. PROVIDE REPRESENTATIVE QUANTITIES OF EACH SOIL, MULCH, BED MIX, GRAVEL AND STONE BEFORE INSTALLATION. SAMPLES TO BE APPROVED BY OWNER'S REPRESENTATIVE BEFORE USE.
 - B. SOIL AMENDMENTS AND FERTILIZERS SHOULD BE RESEARCHED AND BASED ON THE SOILS IN THE AREA.
 - C. BEFORE INSTALLATION, SUBMIT DOCUMENTATION THAT PLANT MATERIALS ARE AVAILABLE AND HAVE BEEN RESERVED. FOR ANY PLANT MATERIAL NOT AVAILABLE, SUBMIT REQUEST FOR SUBSTITUTION.
- 1.6 JOB CONDITIONS, DELIVERY, STORAGE AND HANDLING.
 - A. GENERAL CONTRACTOR TO COMPLETE WORK BEFORE LANDSCAPE CONTRACTOR TO COMMENCE.
 - B. ALL PLANTING BED AREAS SHALL BE LEFT THREE INCHES BELOW FINAL GRADE OF SIDEWALKS, DRIVES AND CURBS. ALL AREAS TO RECEIVE SOIL SHALL BE LEFT ONE INCH BELOW THE FINAL GRADE OF WALKS, DRIVES AND CURBS. CONSTRUCTION DEBRIS SHALL BE REMOVED PRIOR TO LANDSCAPE CONTRACTOR BEGINNING WORK.
 - C. STORAGE OF MATERIALS AND EQUIPMENT AT THE JOB SITE WILL BE AT THE RISK OF THE LANDSCAPE CONTRACTOR. THE OWNER CANNOT BE HELD RESPONSIBLE FOR THEFT OR DAMAGE.
- 1.7 SEQUENCING.
 - A. INSTALL TREES, SHRUBS, AND LINER STOCK PLANT MATERIALS PRIOR TO INSTALLATION OF LANDSCAPE SOD.
 - B. WHERE EXISTING TURF AREAS ARE BEING CONVERTED TO PLANTING BEDS, THE TURF SHALL BE CHEMICALLY ERADICATED TO MINIMIZE RE-GROWTH IN THE FUTURE. AREAS SHALL BE PROPERLY PREPARED WITH ANNESED ORGANIC MATTER.
- 1.8 MAINTENANCE AND GUARANTEE.

MAINTENANCE:

 - A. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK FROM THE TIME OF PLANTING UNTIL FINAL ACCEPTANCE BY OWNER.
 - B. NO TREES, GRASS, GROUNDCOVER OR GRASS WILL BE ACCEPTED UNLESS THEY SHOW HEALTHY GROWTH AND SATISFACTORY FOLIAGE CONDITIONS.
 - C. MAINTENANCE SHALL INCLUDE WATERING OF TREES AND PLANTS, CULTIVATION, WEED SPRAYING, EDGING, PRUNING OF TREES, MOVING OF GRASS, CLEANING UP AND ALL OTHER WORK NECESSARY FOR MAINTENANCE.
 - D. A WRITTEN NOTICE REQUESTING FINAL INSPECTION AND ACCEPTANCE SHOULD BE SUBMITTED TO THE OWNER AT LEAST 7 DAYS PRIOR TO COMPLETION, ON A SITE INSPECTION BY THE OWNER'S AUTHORIZED REPRESENTATIVE WILL BE COMPLETED PRIOR TO WRITTEN ACCEPTANCE.
 - E. NOTIFY OWNER OR OWNER'S REPRESENTATIVE SEVEN DAYS PRIOR TO THE EXPIRATION OF THE WARRANTY PERIOD.
 - F. REMOVE DEAD, UNHEALTHY AND UNSIGHTLY PLANTS DURING WARRANTY PERIOD.
 - G. REMOVE GUYING AND STAKING MATERIALS AFTER ONE YEAR.
 - H. ALL LANDSCAPE MUST BE MAINTAINED AND GRASS MAINTAINED/EDGED ON A WEEKLY SCHEDULE UNTIL ACCEPTANCE BY OWNER. REMOVE CLIPPINGS AND DEBRIS FROM SITE PROMPTLY.
 - I. REMOVE TRASH, DEBRIS, AND LITTER. WATER, PRUNE, RESTAKE TREES, FERTILIZE, WEED AND APPLY HERBICIDES AND FUNGICIDES AS REQUIRED.
 - J. COORDINATE THE OPERATION OF IRRIGATION SYSTEM TO ENSURE THAT PLANTS ARE ADEQUATELY WATERED. WATER AREAS NOT RECEIVING ADEQUATE WATER FROM AN IRRIGATION SYSTEM.
 - K. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN ACCORDANCE TO THE MAINTENANCE TO ENSURE THE SYSTEM IS PROPERLY WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION.
 - L. REAPPLY MULCH TO BARE AND THIN AREAS.
 - M. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER.
 - N. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR:
 - a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE.
 - b. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
 - c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1-12 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE, HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODOED OR RESEED AS APPROPRIATE PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEARLY MOVED.

1.9 QUALITY ASSURANCE

- A. COMPLY WITH ALL FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK.

- B. EMPLOY PERSONNEL EXPERIENCED AND FAMILIAR WITH THE REQUIRED WORK AND SUPERVISION BY A FOREMAN.
- C. MAKE CONTACT WITH SUPPLIERS IMMEDIATELY UPON OBTAINING NOTICE OF CONTRACT ACCEPTANCE TO SELECT AND BOOK MATERIALS.
- D. DEVELOP A PROGRAM OF MAINTENANCE (PRUNING AND FERTILIZATION) WHICH WILL ENSURE THE PURCHASED MATERIALS WILL MEET AND/OR EXCEED PROJECT SPECIFICATIONS.
- E. DO NOT MAKE PLANT MATERIAL SUBSTITUTIONS. IF THE LANDSCAPE MATERIAL SPECIFIED IS NOT READY AVAILABLE, SUBMIT PROOF TO LANDSCAPE ARCHITECT ALONG WITH THE PROPOSED MATERIAL TO BE USED IN LIEU OF THE SPECIFIED PLANT.
- F. AT THE TIME BIDS ARE SUBMITTED, THE CONTRACTOR IS ASSUMED TO HAVE LOCATED THE MATERIALS NECESSARY TO COMPLETE THE JOB AS SPECIFIED.
- G. OWNER'S REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL AND RETAINS THE RIGHT TO INSPECT MATERIALS UPON ARRIVAL TO THE SITE AND DURING INSTALLATION. THE OWNER'S REPRESENTATIVE MAY ALSO REJECT ANY MATERIALS THAT FEEL TO BE UNSATISFACTORY OR DEFECTIVE DURING THE WORK PROCESS. ALL PLANTS DAMAGED IN TRANSIT OR AT THE JOB SITE SHALL BE REJECTED.

- 1.10 PRODUCT DELIVERY, STORAGE AND HANDLING
- A. PREPARATION.
 1. BALL AND BURLAPPED B&B PLANTS: DO AND PREPARE SHIPMENT IN A MANNER THAT WILL NOT DAMAGE ROOTS, BRANCHES, SHAPE AND FUTURE DEVELOPMENT.
 2. CONTAINER GROWN PLANTS: DELIVER PLANTS IN RIGID CONTAINER TO HOLD BALL SHAPE AND PROTECT ROOT MASS.
 - B. DELIVERY.
 1. DELIVER PACKAGED MATERIALS IN SEALED CONTAINERS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETERIORATION DURING DELIVERY AND WHILE STORED ON SITE.
 2. DELIVER ONLY PLANT MATERIALS THAT CAN BE PLANTED IN ONE DAY UNLESS ADEQUATE STORAGE AND DELIVERY FACILITIES ARE AVAILABLE ON SITE.
 3. PROTECT ROOT BALLS BY HELD WITH WADJOST OR OTHER APPROVED MOISTURE RETAINING MATERIAL IF NOT PLANTED WITHIN 24 HOURS OF DELIVERY.
 4. PROTECT PLANTS DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALL OR DESICCATION OF LEAVES.
 5. KEEP PLANTS MOIST AT ALL TIMES. COVER ALL MATERIALS DURING TRANSPORT.
 6. NOTIFY OWNERS REPRESENTATIVE OF DELIVERY 72 HOURS PRIOR TO DELIVERY BY PLANT MATERIAL JOB SITE.
 7. REMOVE REJECTED PLANT MATERIAL IMMEDIATELY FROM JOB SITE.
 8. TO AVOID DAMAGE OR STRESS, DO NOT LIFT, MOVE, ADJUST TO PLUMB, OR OTHERWISE MANIPULATE PLANTS BY TRUNK OR STEMS.

- 2.1 PLANT MATERIALS
- A. GENERAL. WELL FORMED NO. 1 GRADE OR BETTER NURSERY GROWN STOCK LISTED PLANT HEIGHTS ARE FROM TOPS OF FOOT BALLS TO NOMINAL TOPS OF PLANTS. PLANT SPREAD REFERS TO NOMINAL OUTER WIDTH OF THE PLANT NOT THE OUTER LEAF TIPS. PLANTS SHALL BE INDIVIDUALLY APPROVED BY THE OWNERS REPRESENTATIVE AND THEIR DECISION AS TO THEIR ACCEPTABILITY SHALL BE FINAL.
 - B. QUANTITIES: THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. ANYTHING CALLED FOR ON ONE AND NOT THE OTHER IS BINDING AS IF SHOWN AND CALLED FOR ON BOTH. THE PLANT SCHEDULE IS AN AID TO BIDDERS ONLY. CONFIRM ALL QUANTITIES ON PLAN.
 - C. QUANTITIES AND SIZE: PLANT MATERIALS SHALL CONFORM TO THE SIZE GIVEN ON THE PLAN AND SHALL BE HEALTHY, WELL SHAPED, FULL BRANCHED AND WELL ROOTED. SYMMETRY IS ALSO IMPERATIVE. PLANTS SHALL BE FREE FROM INSECTS, INJURY, DISEASE, BROKEN BRANCHES, DISFOLIATIONS, INSECT EGGS AND ARE TO BE OF SPECIMEN QUALITY.
 - D. APPROVAL: ALL PLANTS WHICH ARE FOUND UNSUITABLE IN GROWTH OR ARE UNHEALTHY, BADLY SHAPED OR UNDERWELDED WILL BE REJECTED BY THE OWNERS REPRESENTATIVE EITHER BEFORE OR AFTER PLANTING AND SHALL BE REMOVED AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR AND REPLACED WITH ACCEPTABLE SPECIMENS.
 - E. TREES SHALL BE HEALTHY, FULL BRANCHED, WELL SHAPED AND SHALL MEET THE MINIMUM REQUIREMENTS AS SPECIFIED ON THE PLANT SCHEDULE. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE IF POSSIBLE, AND WITH SIMILAR CLIMATIC CONDITIONS.
 - F. PRUNING: ALL PRUNING OF TREES AND SHRUBS SHALL BE EXECUTED BY THE LANDSCAPE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, PRIOR TO FINAL ACCEPTANCE.
 - G. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED, EXCEPT THE PLANTS LARGER THAN THOSE SPECIFIED MAY BE USED. USE OF LARGER PLANTS WILL NOT INCREASE THE CONTRACT PRICE.
 - H. WHERE MATERIALS ARE PLANTED IN MASSES, PROVIDED PLANTS OF UNIFORM SIZE.
 - I. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED, FIBROUS ROOT SYSTEMS, NON-POD-BOUND, FREE FROM ENCODING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS S-HAPED ROOTS).
 - J. ALL TREES SHALL BE STANDARD IN FORM UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
 - K. TREE TRUNKS TO BE STURDY EXHIBIT HARDENED SYSTEMS AND VIGOROUS AND FIBROUS ROOT SYSTEMS, NOT ROOT OR POD BOUND.
 - L. TREES WITH DAMAGED OR CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, DISFOLIATING KNOTS, OR INSECT DAMAGE WILL BE REJECTED.
 - M. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER.
 - N. MULTI TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL.
 - O. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.
 - P. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF SIX TO 1 1/2 INCHES. EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.

- 2.2 SOIL PREPARATION MATERIALS
- A. SANDY LOAM:
 1. FRIABLE, FERTILE, DARK, LOAMY SOIL, FREE OF CLAY LUMPS, SUBSOIL, STONES AND OTHER EXTRANEOUS MATERIALS AND REASONABLY FREE OF WEEDS AND FOREIGN GRASSES. ALL PLANT CONTAINING DALLAS GRASS OR NUTGRASS SHALL BE REJECTED.
 2. PHYSICAL PRIORITIES AS FOLLOWS:
 - a. CLAY - BETWEEN 7-27%
 - b. SILT - BETWEEN 15-25%
 - c. SAND - LESS THAN 52%
 3. ORGANIC MATTER SHALL BE 3%-10% OF TOTAL DRY WEIGHT.
 4. IF REQUESTED, LANDSCAPE CONTRACTOR SHALL PROVIDE A CERTIFIED SOIL ANALYSIS CONDUCTED BY AN APPROVED SOIL TESTING LABORATORY VERIFYING THAT SANDY LOAM MEETS THE ABOVE REQUIREMENTS.

- 2.3 MISCELLANEOUS MATERIALS
- A. STEEL EDGING - SHALL BE 3/16" X 4" X 16" DARK GREEN LANDSCAPE EDGING, DURAEDGE STEEL OR APPROVED EQUAL.
 - B. TREE STAKING - TREE STAKING SOLUTIONS OR APPROVED SUBSTITUTE; REFER TO DETAILS.
 - C. FILTER FABRIC - MIRAFI 1405 BY MIRAFI INC. OR APPROVED SUBSTITUTE, AVAILABLE AT LONE STAR PRODUCTS INC. (409-SB-044)
 - D. SAND - UNIFORM, GRADED, WASHED, CLEAN, BANK RUN SAND.

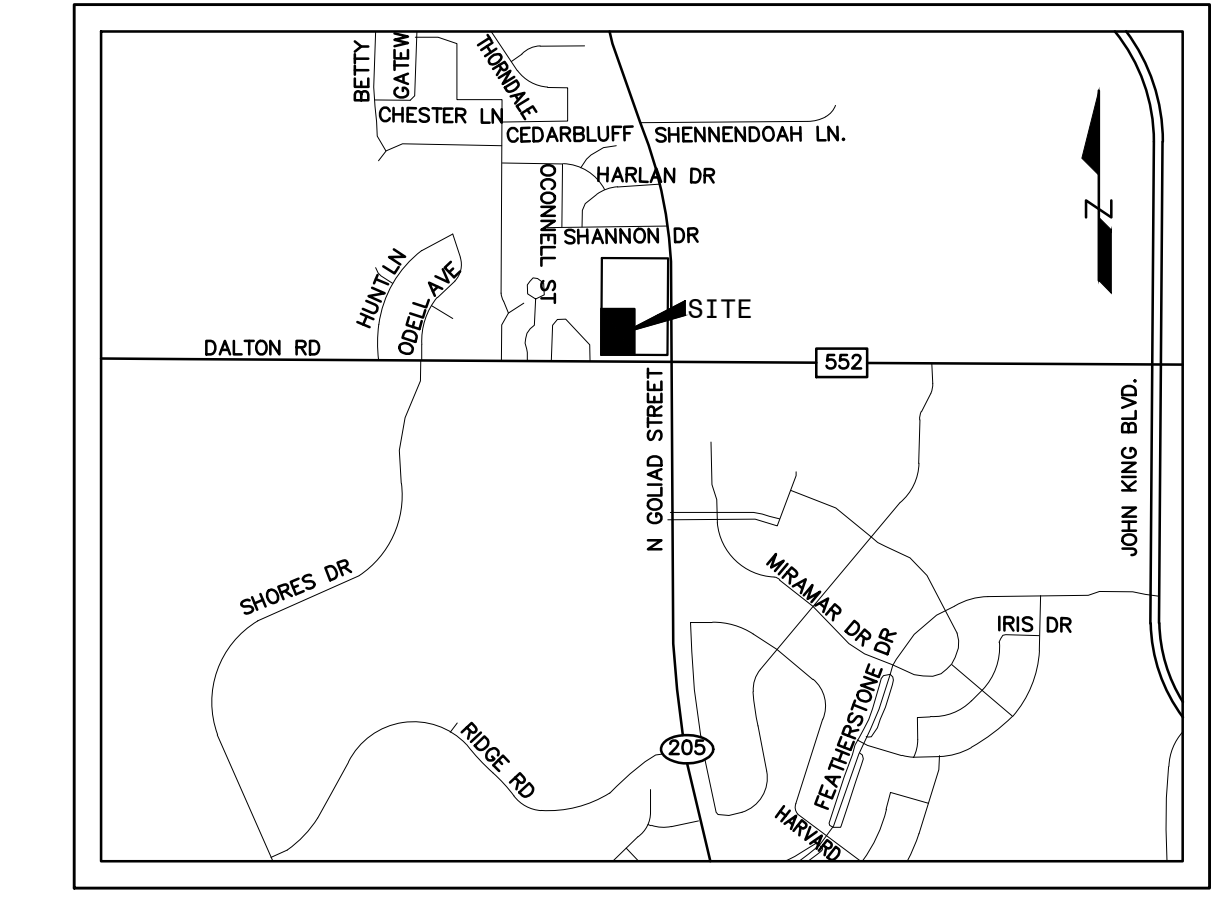
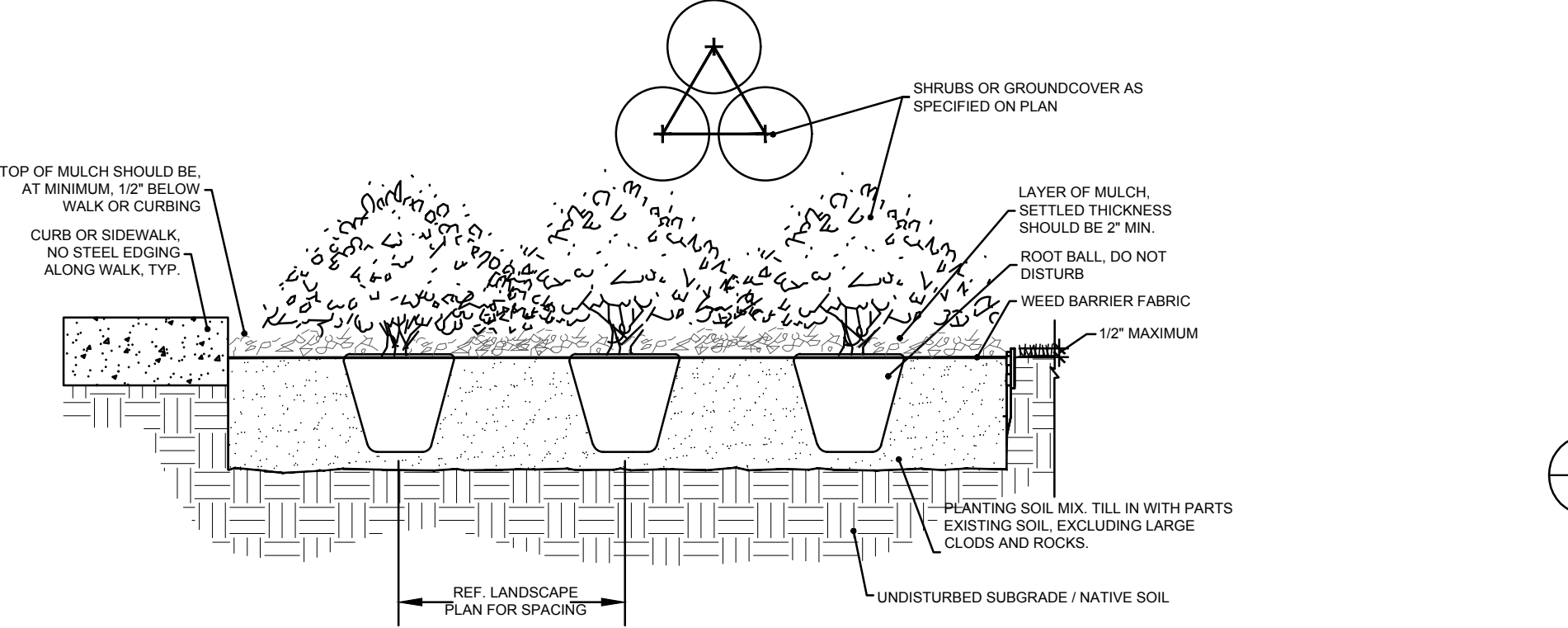
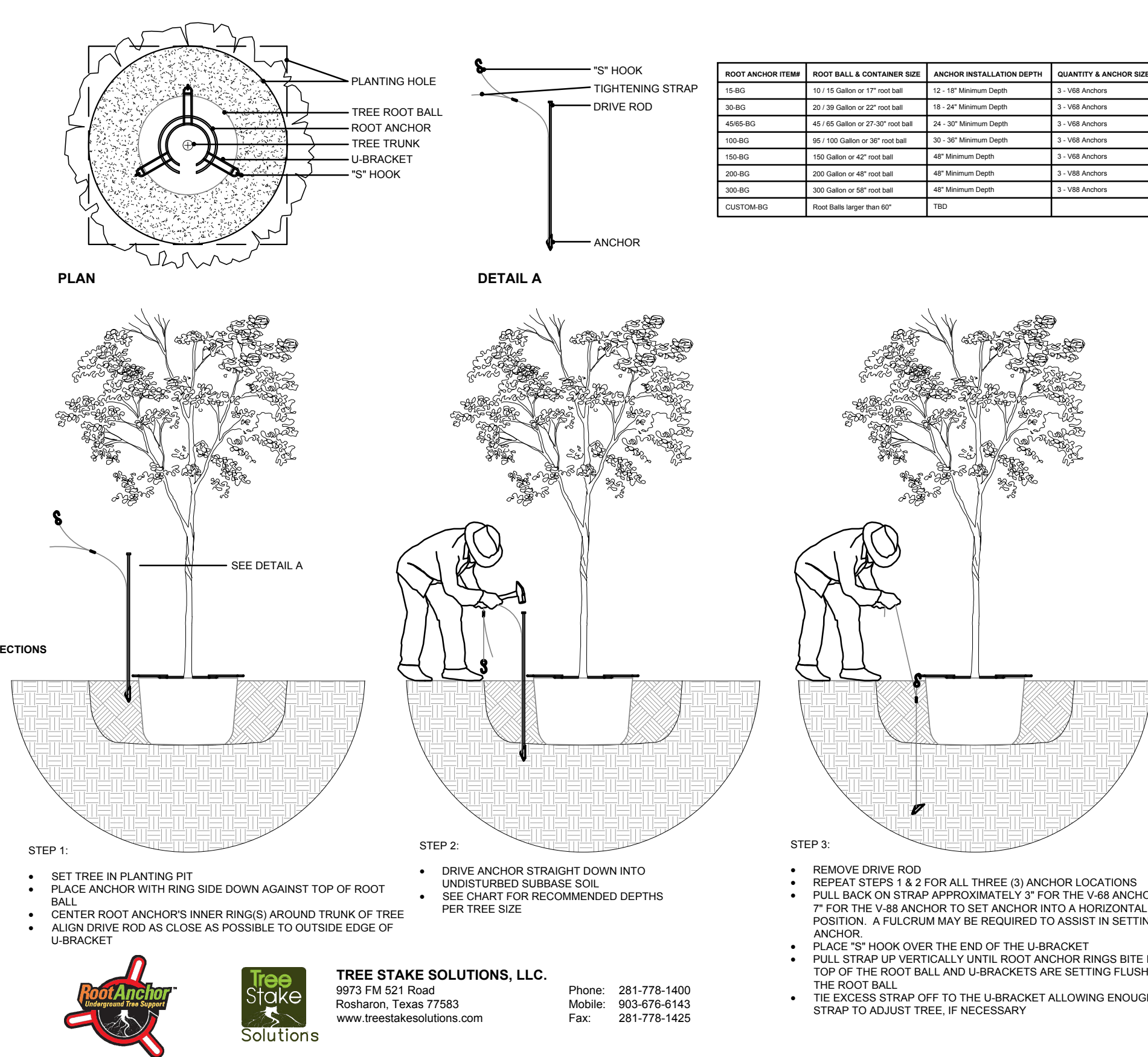
- E. GRAVEL: WASHED NATIVE PEA GRAVEL, GRADED 1" TO 1 1/2"
- F. DECOMPOSED GRANITE - BASE MATERIAL OF NATURAL MATERIAL MIX OF GRANITE AGGREGATE NOT TO EXCEED 1/8" IN DIAMETER COMPOSED OF VARIOUS STAGES OF DECOMPOSITION.
- G. RIVER ROCK - LOCALLY AVAILABLE NATIVE RIVER ROCK BETWEEN 2"-4" IN DIAMETER.
- H. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING, PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

PART 3 - EXECUTION

- 3.1 PREPARATION
- A. LANDSCAPE CONTRACTOR TO INSPECT ALL EXISTING CONDITIONS AND REPORT ANY DEFICIENCIES TO THE OWNER.
 - B. ALL PLANTING AREAS SHALL BE CONDITIONED AS FOLLOWS:
 1. PREPARE NEW BEDS BY SCARPING AWAY EXISTING GRASS AND WEEDS AS NECESSARY. TILL EXISTING SOIL TO A DEPTH OF SIX (6") INCHES PRIOR TO PLACING COMPOST AND FERTILIZER. APPLY FERTILIZER PER MANUFACTURER'S RECOMMENDATIONS. ADD SIX (6") INCHES OF COMPOST AND TILL INTO A DEPTH OF SIX (6") INCHES OF SPECIFIED MULCH (DETILED THICKNESS).
 2. BACKFILL FOR TREE PITS SHALL BE AS FOLLOWS: USE EXISTING TOP SOIL ON SITE (USE IMPORTED TOPSOIL AS NEEDED) FROM LARGE CLUMPS OF DEBRIS, CALICHE, SUBSOILS, ETC., PLACED IN NINE (9") INCH LAYERS AND WATERED IN THOROUGHLY.
 - C. GRASS AREAS:
 1. BLOCKS OF SOD SHOULD BE LAID JOINT TO JOINT (STAGGERED JOINTS) AFTER FERTILIZING THE GROUND FIRST. ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE. THE JOINTS BETWEEN THE BLOCKS OF SOD SHOULD BE FILLED WITH TOPSOIL WHERE THEY ARE GAPPED OPEN, THEN WATERED THOROUGHLY.

- 3.2 INSTALLATION
- A. MAINTENANCE OF PLANT MATERIALS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS DELIVERED TO THE SITE AND SHALL CONTINUE UNTIL ALL CONSTRUCTION HAS BEEN SATISFACTORYLY ACCOMPLISHED.
 - B. PLANT MATERIALS SHALL BE DELIVERED TO THE SITE ONLY AFTER THE BEDS ARE PREPARED AND AREAS ARE READY FOR PLANTING. ALL SHIPMENTS OF NURSERY MATERIALS SHALL BE THOROUGHLY PROTECTED FROM THE WINDS DURING TRANSPORT. ALL PLANTS WHICH CANNOT BE PLANTED AT ONCE, AFTER DELIVERY TO THE SITE, SHALL BE WELL PROTECTED AGAINST THE POSSIBILITY OF WIND AND BALLS OF EARTH OR ROOTS AND SHALL BE OF SUCH DEPTH THAT WHEN PLANTED AND SETTLED, THE CROWN OF THE PLANT SHALL BEAR THE SAME RELATIONSHIP TO THE GROUND AS IT BEARS TO THE SOIL SURFACE IN ORIGINAL PLACE OF GROWTH. THE SIDES OF THE HOLE SHOULD BE ROUGH AND ANGLED, NEVER SLICED OR CUT.
 - C. PERCOLATION TEST: FILL THE HOLE WITH WATER. IF THE WATER LEVEL DOES NOT PERCOLATE WITHIN 24 HOURS, THE TREE NEEDS TO MOVE TO ANOTHER LOCATION OR HAVE DRAINAGE ADDED. INSTALL A PVC STAND PIPE PER TREE IF THE PERCOLATION TEST FAILS.
 - D. BACKFILL ONLY WITH 5 PARTS EXISTING SOIL OR SANDY LOAM AND 1 PART BED PREPARATION. WHEN THE HOLE IS FULL IN SANDY LOAM, TOPSOIL FROM THE SAME AREA SHOULD NOT BE USED. CAREFULLY SETTLE BY WATERING BALL TO PREVENT AIR POCKETS. REMOVE THE BURLAP FROM THE TOP OF THE BALL, AS WELL AS ALL NYLON, PLASTIC STRING AND WIRE. CONTAINER TREES WILL USUALLY BE ROOT BOUND, IF SO FLOW STANDARD NURSERY PRACTICE OF ROOT STAKING.
 - E. DO NOT WRAP TREES.
 - F. DO NOT OVER PRUNE.
 - G. REMOVE NURSERY TAGS AND STAKES FROM ALL PLANTS.
 - H. REMOVE BOTTOM OF PLANT BOXES PRIOR TO PLACING PLANTS. REMOVE SIDES AFTER PLACEMENT AND PAPER BACKFLIPPING.
 - I. REMOVE UPPER THIRD OF BURLAP FROM BALLED AND BURLAPPED TREES AFTER PLACEMENT.
 - J. NURSE PLANT UPRIGHT AND PLUMB IN CENTER OF HOLE. ORIENT PLANTS FOR BEST APPEARANCE.
 - K. MULCH THE TOP OF THE BALL. DO NOT PLANT GRASS ALL THE WAY TO THE TRUNK OF THE TREE. LEAVE THE AREA ABOVE THE TOP OF THE BALL AND MULCH WITH AT LEAST TWO (2") INCHES OF SPECIFIED MULCH.
 - L. ALL PLANT BEDS AND TREES TO BE MULCHED WITH A MINIMUM DETILED THICKNESS OF TWO (2") INCHES OVER THE ENTIRE BED OR PIT.
 - M. OBSTRUCTION: BELOW GROUND - IN THE EVENT THAT ROOT OR UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN ANY PLANT PIT EXCAVATION WORK TO BE DONE UNDER THIS SECTION, ALTERNATE LOCATIONS MAY BE SELECTED BY THE OWNER, WHERE LOCATIONS CANNOT BE CHANGED, THE OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN THREE (3") FEET BELOW GRADE AND NO LESS THAN SIX (6") INCHES BELOW THE BOTTOM OF BALL WHEN PLANTING. THE PROPERLY SPECIFIED REQUIRED GRADE. THE WORK OF THIS SECTION SHALL INCLUDE THE REMOVAL FROM THE SITE OF SUCH ROCK OR UNDERGROUND OBSTRUCTIONS ENCOUNTERED AT THE COST OF THE LANDSCAPE CONTRACTOR.
 - N. TREES AND LARGE SHRUBS SHALL BE STAKED AS SITE CONDITIONS REQUIRE. STAKE TO BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF SIX TO 1 1/2 INCHES. EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.
 - O. SPRUNING AND MULCHING: PRUNING SHALL BE DIRECTED BY THE LANDSCAPE ARCHITECT AND SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE FOLLOWING FINE PRUNING, CLASS I PRUNING STANDARDS PROVIDED BY THE NATIONAL ARBORIST ASSOCIATION.
 1. DEAD WOOD, SUCKERS, BROKEN AND BADLY BRUISED BRANCHES REMOVE BE REMOVED. GENERAL TIPPING OF THE BRANCHES IS NOT PERMITTED. DO NOT CUT TERMINAL BRANCHES.
 2. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
 3. IMMEDIATELY AFTER PLANTING OPERATIONS ARE COMPLETED, ALL TREE PITS SHALL BE COVERED WITH A LAYER OF ORGANIC MATERIAL TWO (2") INCHES IN THICKNESS. THIS LAYER OF THE ORGANIC MATERIAL FOR TREES SHALL BE THE DIAMETER OF THE PLANT PIT.
 - P. STEEL EDGE INSTALLATION: EDGE SHALL BE ALIGNED AS INDICATED ON PLANS. STAKE OUT LIMITS OF STEEL CURBING AND OBTAIN OWNERS APPROVAL PRIOR TO INSTALLATION.
 1. ALL STEEL CURBING SHALL BE FREE OF KINKS AND ABRUPT BENDS.
 2. TOP OF EDGING SHALL BE 1/2" MAXIMUM HEIGHT ABOVE FINAL FINISHED GRADE.
 3. STAKES ARE TO BE INSTALLED ON THE PLANTING BED SIDE OF THE CURBING, AS OPPOSED TO THE GRASS SIDE.
 4. DO NOT INSTALL STEEL EDGING ALONG SIDEWALKS OR CURBS.
 5. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE EDGING MEETS SIDEWALKS OR CURBS.

- 3.3 CLEANUP AND ACCEPTANCE
- A. CLEANUP: DURING THE WORK, THE PREMISES SHALL BE KEPT NEAT AND ORDERLY AT ALL TIMES. STORAGE AREAS FOR ALL MATERIALS SHALL BE SO ORGANIZED SO THAT THEY, TOO, ARE NEAT AND ORDERLY. ALL TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES. KEEP PAVED AREAS CLEAN BY SWEEPING OR HOSEING THEM AT END OF EACH WORK DAY.
 - B. REPAIR RUTS, HOLES AND SCARES IN GROUND SURFACES.
 - C. ENSURE THAT WORK IS COMPLETE AND PLANT MATERIALS ARE IN VIGOROUS AND HEALTHY GROWING CONDITION.
 - D. UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE LANDSCAPE CONTRACTOR WITH A LIST OF DEFECTS AND TRASH. USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
 - E. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNERS SATISFACTION WITHIN 24 HOURS.
 - F. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE.



ROOT ANCHOR ITEM	ROOT BALL & CONTAINER SIZE	ANCHOR INSTALLATION DEPTH	QUANTITY & ANCHOR SIZE
15-85	151 1/8 Galvan @ 12\"/>		
20-85	20 3/8 Galvan @ 12\"/>		
20-85-85	20 3/8 Galvan @ 12\"/>		
15-85-85	85 1/2 Galvan @ 12\"/>		
15-85-85	150 Galvan @ 48\"/>		
20-85-85	200 Galvan @ 48\"/>		
20-85-85	300 Galvan @ 48\"/>		
040727-85	Steel Stake length max 48\"/>		

APP.	DATE	NO.	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	DATE
			1" = 20'	JUV	DRS	JUV	01/20/2023

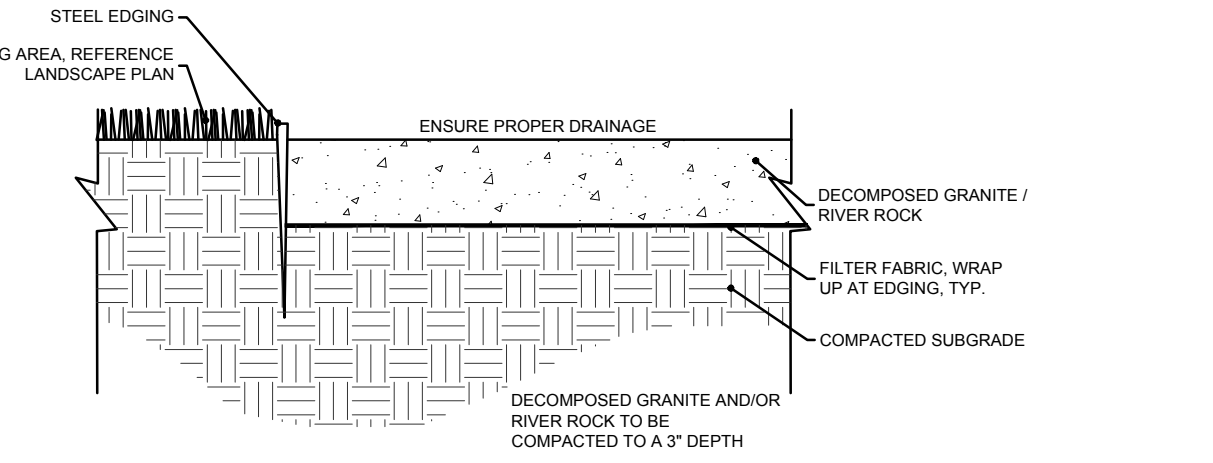
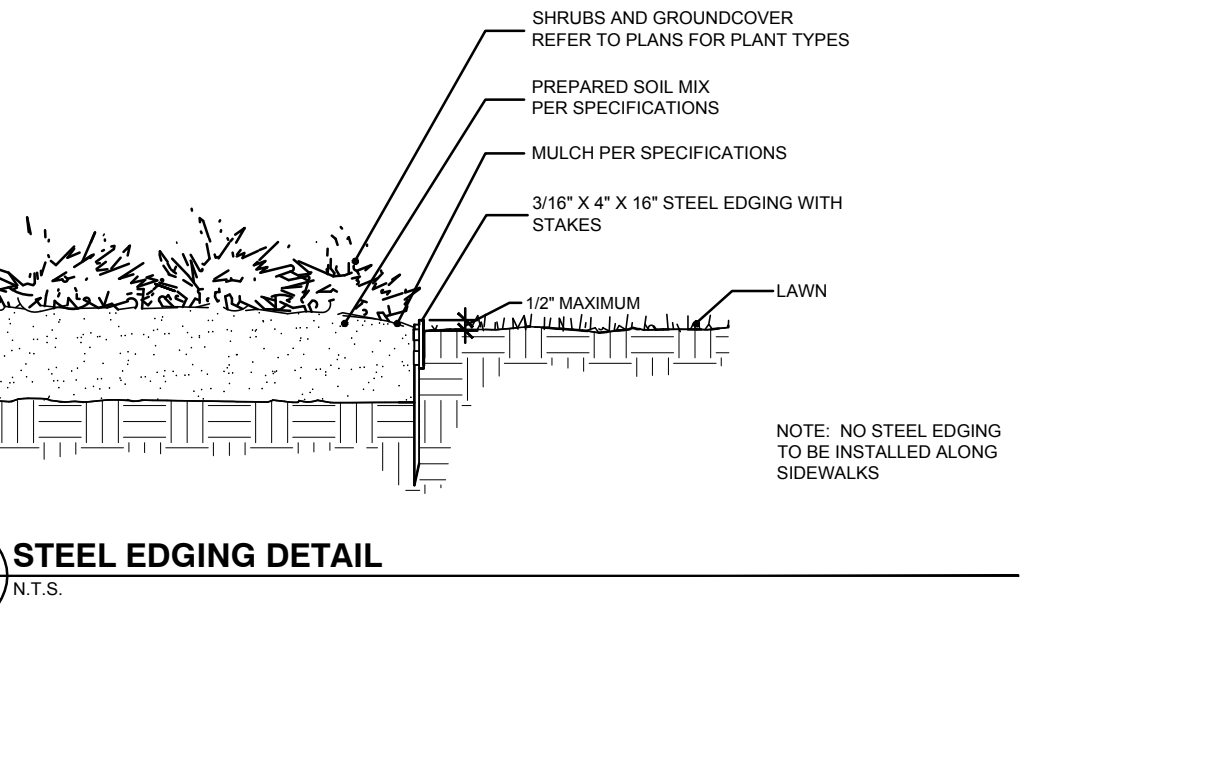
LANDSCAPE SPECIFICATIONS AND DETAILS

EVERBROOK ACADEMY - ROCKWALL
LOT 7, BLOCK A
DALTON GOLIAD ADDITION
CITY OF ROCKWALL, TX

DEVELOPER:
LEARNING CARE GROUP
21333 HAGGERTY RD
NOVI, MI 48375

REGISTERED LANDSCAPE ARCHITECT
STATE OF TEXAS
AMANDA W. RICHARDS
2754

VASQUEZ ENGINEERING, L.L.C.
1919 S. Shiloh Road
Suite 440, LB 44
Garland, Texas 75042
Ph: 972-272-2948
TX Registration # F-12286



APPROVED: _____
HEREBY CERTIFY THAT THE ABOVE AND FOREGOING SITE PLAN FOR A DEVELOPMENT IN THE CITY OF ROCKWALL, TEXAS, WAS APPROVED BY THE PLANNING & ZONING COMMISSION OF THE CITY OF ROCKWALL ON THE _____ DAY OF _____ 20__.

WITNESS OUR HANDS, THIS _____ DAY OF _____

PLANNING & ZONING COMMISSION, CHAIRMAN

DIRECTOR OF PLANNING AND ZONING

3 SHRUB SPACING AND PLANTING AT B.O.C. N.T.S.

<p>OWNER: ROCKWALL 205-552 LLC 4622 MAPLE AVE., SUITE 200 DALLAS, TX 75219 PHONE: 214-393-3983 CONTACT: DONALD SILVERMAN</p>	<p>ENGINEER: VASQUEZ ENGINEERING, L.L.C. 1919 S. SHILOH ROAD, SUITE 440 GARLAND, TEXAS 75042 PHONE: 972-272-4610 CONTACT: JUAN J. VASQUEZ, P.E.</p>
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LANDSCAPE SPECIFICATIONS
AND DETAILS
EVERBROOK ACADEMY - ROCKWALL
LOT 7, BLOCK A
DALTON GOLIAD ADDITION
1.354 ACRES
ROCKWALL, ROCKWALL COUNTY, TEXAS
JANUARY 20, 2023
CASE #SP2023-XXX

SHEET
L1.2

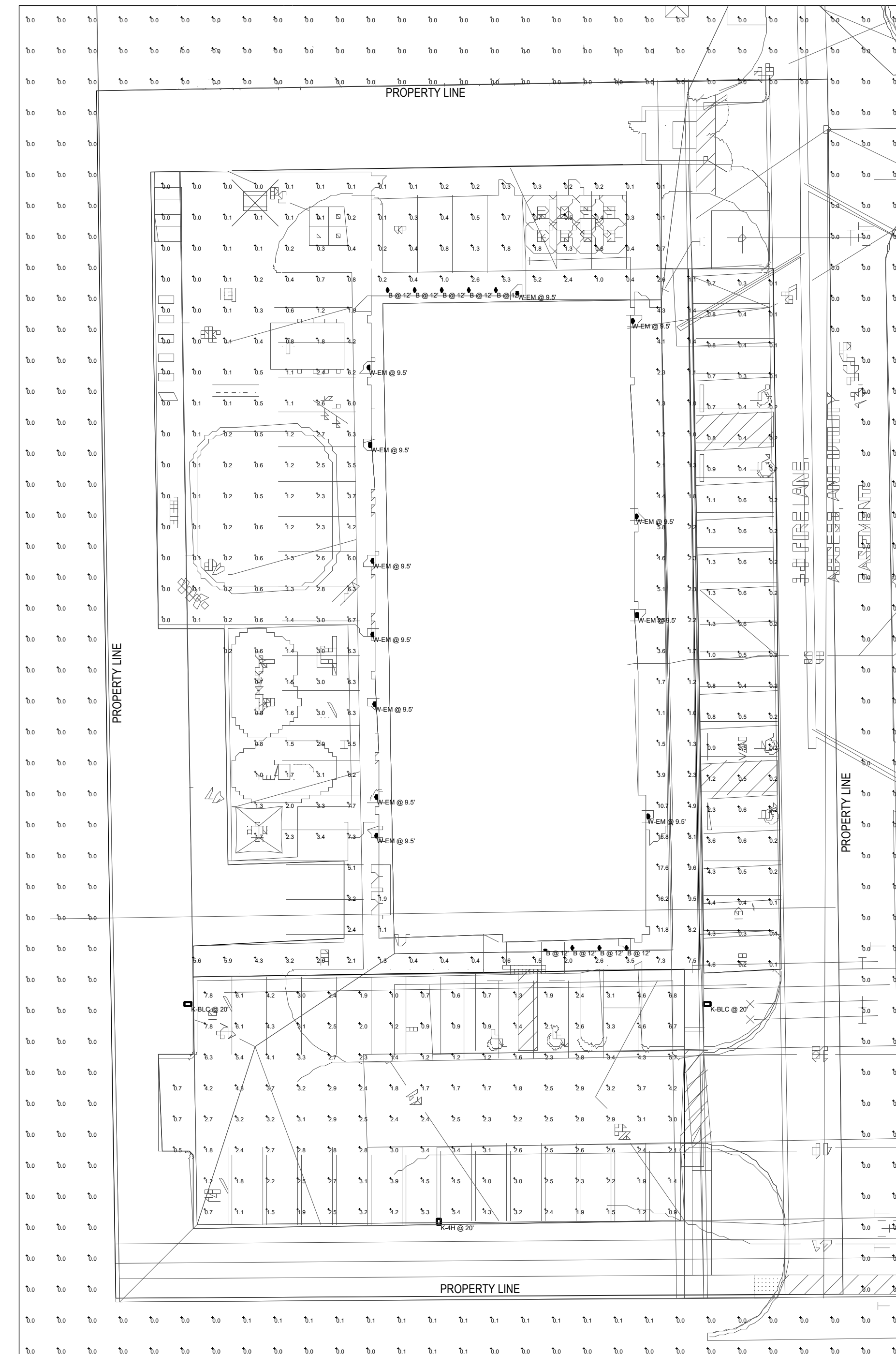
AWR Designs, LLC
P.O. Box 1746
Aledo, Texas 76608
amanda@awr-designs.com
c. 512.517.5589

Statistics					
Description	Avg	Max	Min	Max/Min	Avg/Min
Pedestrian Walkways and Fenced Area	2.0 fc	17.6 fc	0.0 fc	N/A	N/A
Plan East Row Parking @ 0" AFF	0.8 fc	4.6 fc	0.1 fc	46.0:1	8.0:1
Plan South Parking lot @ 0" AFF	2.8 fc	7.8 fc	0.5 fc	15.6:1	5.6:1
Property Boundary @ 0" AFF	0.0 fc	0.1 fc	0.0 fc	N/A	N/A

Schedule										
Symbol	Label	Quantity	Manufacturer	Catalog Number	Lamp	Filename	Lumens Per Lamp	Light Loss Factor	Description	Wattage
○	B	9	SIGNIFY LIGHTING - LIGHTOLIER	P6RDL10835CLZ10U	LED	P6RDL30835CLZ10U.ies	3257	0.567	LYTEPROFILE 6 INCH ROUND - File derated for 2000 lumens and 0.85 LLF	30.3
□	K-4H	1	SIGNIFY GARDCO	ECF-S-48L-1A-NW-G2-4-HIS	(3) LEDGINE SLD LIGHT ARRAY(S) DRIVEN AT 1050mA	ECF-S-48L-1A-NW-G2-4-HIS.ies	14912	0.85	EcoForm Area LED ECF - Small, 48 LED's, 4000K CCT, TYPE 4-HIS OPTIC, House-side Internal Shielding	158.7
□	K-BLC	2	PHILIPS GARDCO	ECF-S-48L-1A-NW-G2-BLC	(3) LEDGINE SLD LIGHT ARRAY(S) DRIVEN AT 1050mA	ECF-S-48L-1A-NW-G2-BLC.ies	14544	0.85	EcoForm Area LED ECF - Small, 48 LED's, 4000K CCT, TYPE BLC OPTIC.	156.3489
□	W-EM	12	Barron Lighting Group	WLZ4-4-4K	12 white LEDs with optics attached to each	WLZ4-4-4K (1).IES	4286	0.85	Formed black metal housing	41.0529

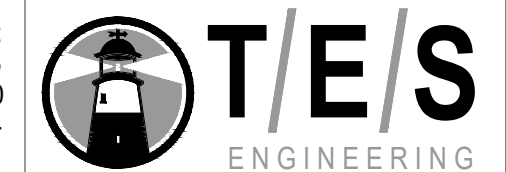
SITE SUMMARY TABLE

Site Address	DALTON ROAD	
County	ROCKWALL	
Project Name	LEARNING CARE CENTER	
Zoning District	GR W/N. SH 205 OVERLAY DISTRICT	
Proposed use	CHILD CARE CENTER	
Site Area:	1.354 Acres 58,974 S.F.	
Building Area	11,109 S.F.	
Building Height:	1 Story	
Lot Coverage:	11,109 / 58,974 = 18.83%	
Floor Area Ratio:	11,109 S.F. / 58,974 = 1:18.83	
Parking Required Building:	11,109 S.F.	
Total Parking Required:	CHILD CARE CENTER (1 SPCS/300 SF)	= 37 SPACES
		= 37 SPACES
Parking Provided:	REGULAR	= 37 SPACES
	ACCESSIBLE	= 2 SPACES
	TOTAL	= 39 SPACES
Impervious Area:	45,750 S.F.	
Impervious Area Ratio:	45,750 S.F. / 58,974 = 77.58%	
Pervious Area Ratio:	13,224 S.F. / 58,974 = 22.42%	



DRAWN BY: JTK CHECKED BY: RAS

25760 First Street
Cleveland, OH 44145
P 440 871 2410
F 440 871 7954
tesengineering.com



SITE PLAN
EVERBROOK ACADEMY-ROCKWALL
LOT 7, BLOCK A
DALTON GOLIAD ADDITION
1.354 ACRES
ROCKWALL, ROCKWALL COUNTY, TEXAS
JANUARY 20, 2023
CASE #SP2023-XXX

REVISIONS

#	DATE	TYPE
1		
2		
3		
4		
5		
6		
7		
8		
9		

PHOTOMETRIC PLAN

DATE 01/20/2023

JOB NO. 22247

E0.1

SHEET NO.

EVERBROOK ACADEMY- ROCKWALL

12 K.PROTOTYPE/MODEL

DALTON RD.

ROCKWALL, TX

ADA ARCHITECTS

17710 Detroit Avenue
Lakewood, Ohio 44107
Phone (216) 521-5134
Fax (216) 521-4824
www.adaarchitects.com

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LyteProfile downlights and wall washers provide a perfect balance of functionality with glare control. The robust and versatile UniFrame frame-in kit makes changes and updates easy to manage and install. Ideal for use in a variety of applications including open office, institutional, healthcare, and retail.

Standard luminaire = Frame + Engine/Trim + Accessories (optional)

Buy American Act of 1933 (BAA)** Compliant luminaire* = Frame-BAC + Engine/Trim-BAC

* BAA compliance requires that BAC option be selected for each of frame and engine/trim.

Frame and engine/trim will be ordered/shipped together (ex: 4RN-BAC-Z4RDL20835WOCZ10U-BAC).

Accessories (optional) are not currently BAA-compliant.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Qty: _____

Notes: _____

Frame

Standard example: 6RN | BAC example: 6RN-BAC

Series	Aperture	Installation	Options
6	R		
6 Uniframe 6-inch Non-IC	R Round	N New construction (Non-IC)	<ul style="list-style-type: none"> — Universal 120/277/347V¹ LC Chicago Plenum EM6 Emergency, 6W Self-Test/Self-Diagnostic (not available for BAC)²
		R Remodeler (Non-IC)	<ul style="list-style-type: none"> — Universal 120/277/347V¹
		A AirSeal (IC)	<ul style="list-style-type: none"> — Universal 120/277/347V¹
			<ul style="list-style-type: none"> 3 347V (for non-0-10v configurations) RADIO Integral Interact Pro RF sensor (120/277/347V) (enables wireless connected lighting control)³ BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
			<ul style="list-style-type: none"> 3 347V (for non-Z10 configurations) BAC Meets the requirements of the Buy American Act of 1933 (BAA)**

Light Engine / Trim

Standard example: P6RDL20835CDZ10U | BAC example: P6RDL20835CDZ10U-BAC

Series	Style	Lumen	CRI/CCT	Reflector	Flange	Dimming	Voltage	Options
P6R								
P6R LyteProfile 6-inch Round downlight	DL Downlight	10 1000lm	827 80CRI / 2700K	CL Specular clear	— White (matte)	Z10 0-10V 1%	U 120/277V 3 347V ^{5,6} (0-10v only)	<ul style="list-style-type: none"> — None R Retrofit (not compatible with IEM6) IEM6 Trim mounted EM test switch⁸ BAC Meets the requirements of the Buy American Act of 1933 (BAA)**
	LW Lensed Wall Wash	15 1500lm	830 80CRI / 3000K	CC Comfort clear	B Black (matte)			
	SL Shower light ⁴ (non-conductive lens)	20 2000lm	835 80CRI / 3500K	CD Comfort clear diffuse	P Polished (matches aperture)	L Lutron LDE1 EcoSystem (fade-to-black)	U 120/277/ 347V	
		25 2500lm	840 80CRI / 4000K	WH White (matte)	— White (matte)	P Power over Ethernet (PoE)	E Ethernet 48V DC	
		30 3000lm	850 80CRI / 5000K	BK Black (matte)	B Black (matte)			
		35 3500lm		WHAMF White (gloss antimicrobial)	— White (gloss)	Only compatible with 1000 (10) to 2500 (25) lumen configurations		

Accessories (Not currently BAA-compliant - learn more on page 2)

- SBA** Interact Ready System Bridge Accessory with integral occupancy and daylight sensor (compatible with all 0-10V options, see SBA spec sheet)⁷
- CAEM6** Field installable Bodine BSL6 6W battery pack with self-test/self-diagnostic for use with new construction frames, 120-277V
- 7925** 6" sloped ceiling adapter (refer to SCA spec sheet for slope options)
- AMS** ActiLume multi-sensor (optional accessory for PoE configurations)

1. Universal 120-347V is for 0-10v (Z10) dimming configurations only. For 347V non-Z10 dimming, order 347V (3) frame with (U) light engine/trim.
2. Emergency (EM6) frame is compatible with reflector mounted test switch when light engine is ordered with IEM6 option code (not compatible with 347V or Power over Ethernet configurations).
3. Interact Pro (RADIO) requires above ceiling access.
4. Shower light (SL) is only available with White (WH) reflector finish.
5. Specify standard UNV frame for use with 347V light engines
6. The 347V light engine voltage option is only available with Z10 dimming option. For other dimming protocols order UNV (U) light engine and 347V (3) frame.
7. Requires IRT9015 IR remote and Interact Pro App for commissioning.
8. IEM6 option available on DL style only.

** Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.



P6R LyteProfile 6"

Round Downlight & Lensed Wall Wash

Features

Optics

- Provides a 60° cutoff (physical and reflected)
- Wide beam distribution for general illumination
- Spun and anodized reflectors available in specular (clear), semi-specular (comfort clear and diffuse finishes. Also available in white and black painted finishes.

Quality of light

- Consult factory for RAL finishes
- Color consistency: 3 SDCM
- 80 CRI minimum

Construction (New Construction)

- Galvanized stamped steel for dry / plaster ceilings.
- Pre-installed telescoping mounting bars (13"-24")
- Frame accommodates C- channel, black iron, and 3/4" EMT for mounting distances greater than 24" between joists.
- Manufactured from 20 gage galvanized steel construction with rolled edge aperture to guide cutting tools for perfect hole cutting.

Max ceiling thickness is 2" (51 mm).
Including PoE frame 4.88" (124 mm).

Patented install mounting frame

- Pre-installed mounting bars allow for fast and tool-less install into T-grid & hat channel ceilings
- Close-cut aperture design eliminates an undesired gap between ceiling material and reflector.
- Simple plug-and-play connection between frame and light engine from below the ceiling allows for:
 - Easy upgrades
 - Technology changes
 - Repairs and troubleshooting

Dimming

- Advance 0-10V 1% dimming
- Lutron Hi-lume EcoSystem H Series 1% dimming
- EldoLED ECOdrive Dali 1% dimming
- EldoLED SOLOdrive 0-10V 0.1% dimming
- EldoLED DMX POWERdrive

Light engine

Quick connect power pack allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for:

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- Ease and upgradability of technology.
- Lumen Maintenance: L80 at 60,000 hours.
- 347V light engines are 0-10v dimming only and include dedicated 347V driver for use with universal 120/277/347V (U) frames. For 347V and non-0-10v dimming, order (U) light engine and 347V (3) frame (includes step down transformer).

Emergency

Bodine BSL6 6W battery pack with self-test/diagnostic functionality. Factory or field mounted to frame.

- For trim with integral emergency test switch, order light engine with IEM6 option (ex: P6RDL20835CDZ10UIEM6). DL or SL styles only.
- For remote ceiling mounted test switch, order standard light engine (ex: P6RDL20835CDZ10U). Optional accessory ceiling mounting plate available (CAEM6TSCP) for remote mounted test switch.
- Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

Retrofit

- Easily updates legacy LyteProfile LED downlights to the latest technology. Includes light engine, trim, and driver mounted on cover plate that mounts to previous generations of LyteProfile LED luminaires. Order with R option code at end of light engine/trim catalog number.

Power over Ethernet

Powered via Philips PoE lighting controller: Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

Options and Accessories

Sloped ceilings: Compatible with sloped ceiling adapters (see SCA spec sheet).

Field Installed Emergency: Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

CAEM6: Field install EM6 kit with Bodine BSL6 6W battery pack with self-test/self-diagnostic, mounts to new construction frames. Includes remote ceiling plate for test switch. To mount test switch to trim for new construction frame, order light engine with IEM6 option code (e.g. P6RDL20835CDZ10UIEM6).

CAEM6TSCP: Ceiling cover plate for remote mounted EM6 test switch. 1/2" (25mm) hole, 4 3/8" (109mm) x 2 3/4" (69mm) rectangular. Includes two mounting screws.

ENERGY STAR® exceptions

- 500lm configurations
- Black finishes
- PoE drivers

Labels and Listings

- cULus listed for wet locations
- CCEA (frames with *LC suffix)
- ENERGY STAR® certified
- RoHS certified

Warranty



5 year limited warranty
Visit Signify.com/warranties for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

Finishes



Specular clear

Most specular and therefore most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



Comfort clear

Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



Comfort clear diffuse

Slightly diffuse clear finish, which eliminates iridescence and reduces the mirror image effect inherent with a specular finish.



White

Brightest aperture when illuminated and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



Black

Specular finish that provides the lowest aperture brightness possible and reduces source identification in a ceiling significantly (black is only available with a black flange).

P6R LyteProfile 6"

Round Downlight & Lensed Wall Wash

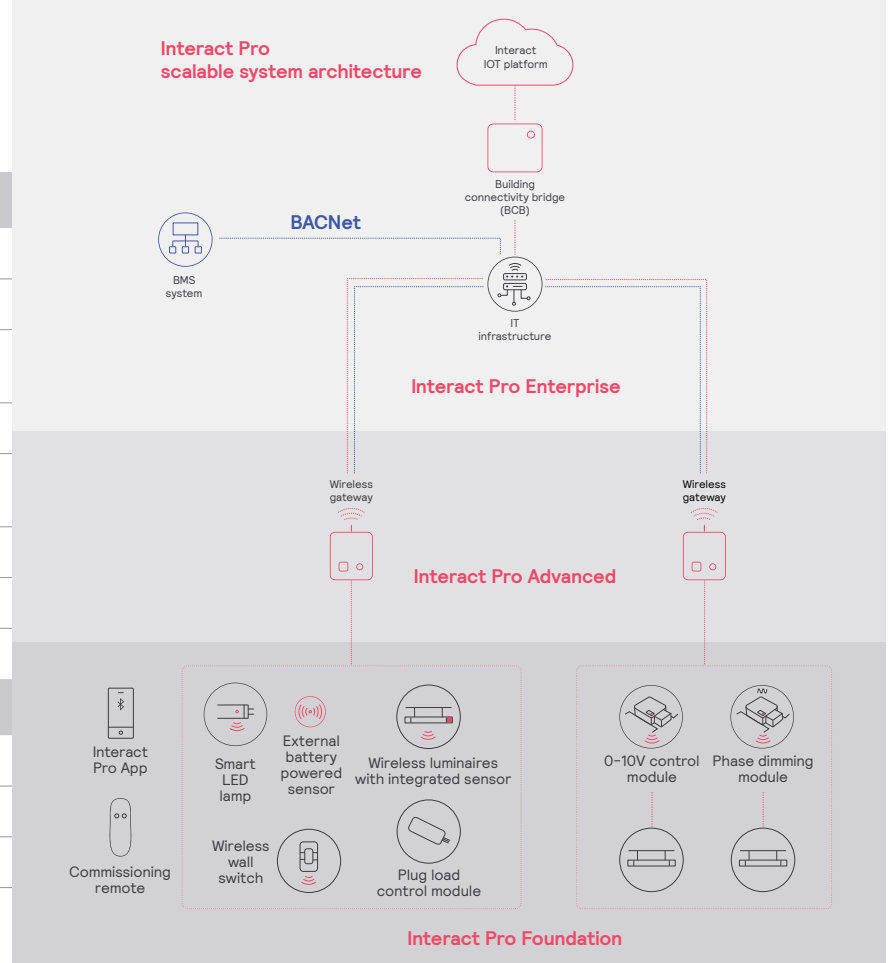
interact

	Interact Pro scalable system		
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
<ul style="list-style-type: none"> • luminaires with integrated sensors 	150
<ul style="list-style-type: none"> • smart TLEDS 	150
Total number of ZGP devices (sensors and switches)	50
<ul style="list-style-type: none"> • sensors 	30
<ul style="list-style-type: none"> • switches 	50
<ul style="list-style-type: none"> • zones and groups 	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



P6R LyteProfile 6"

Round Downlight & Lensed Wall Wash

Wireless Controls Options

Interact Pro scalable sensor

(System Bridge Accessory with -CS option):

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & Bluetooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.
- Compatible with:
 - UID8451/10 wireless dimmer switch
 - SWS200 wireless scene switch
 - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
 - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
 - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
 - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit: www.interact-lighting.com/interactproscalablesystem.

Interact Pro Enterprise

(System Bridge Accessory with -SB option):

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with UID8451/10 wireless dimmer switch, SWS200 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- SB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Emergency Options (ER100)

(System Bridge Accessory with -ER100 option):

- Power Sensing (Factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output
- Power Interruption Detection (Field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output

Radio only sensor (RADIO):

- Integral RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.

Wired Controls Options

Interact Office Wired (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.

- Optional integral emergency controller and battery pack provides 600lm nominal output.
- Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

Interact Office Wired (PoE), Static White:

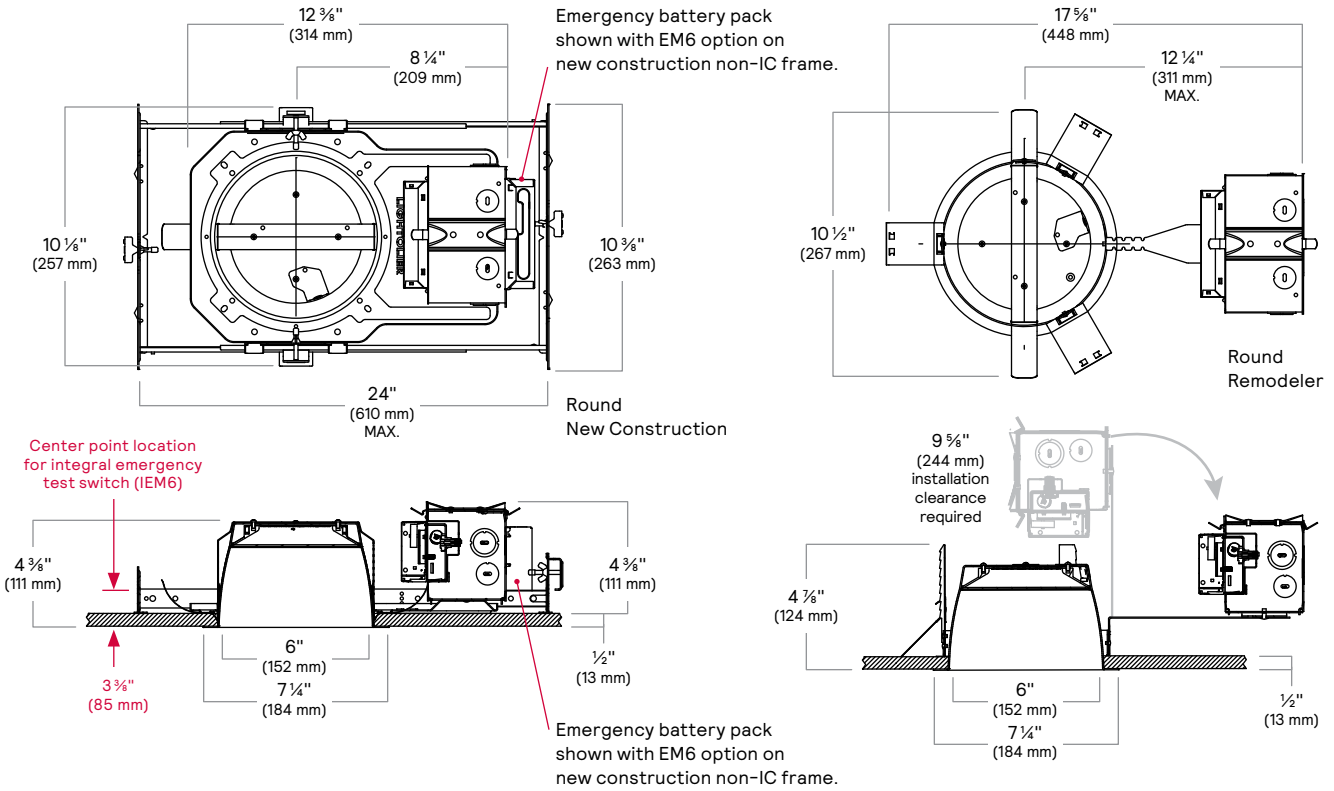
- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.

- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices.

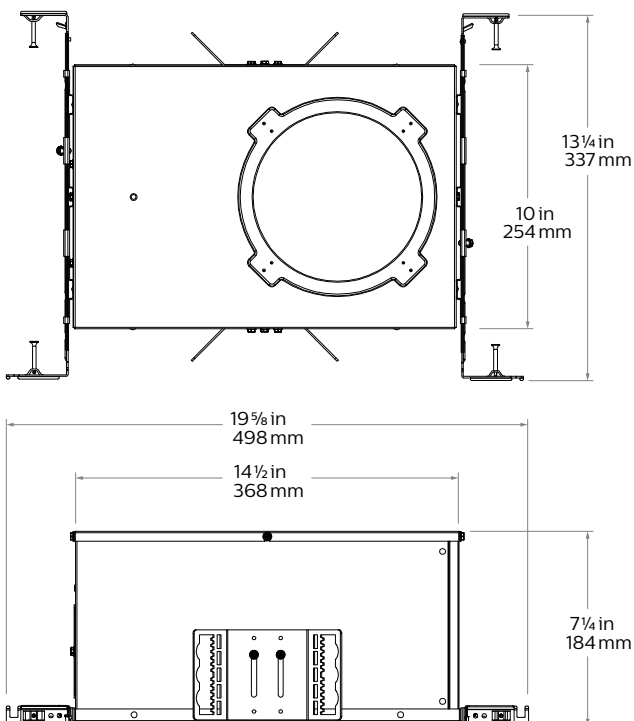
P6R LyteProfile 6"

Round Downlight & Lensed Wall Wash

Dimensions



AirSeal (A)



Electrical

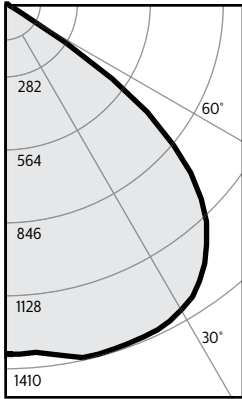
Product	Input Volts	Input Frequency	Input Current (A)	Input Power (W)
P6*10*Z10U/3	120	50/60Hz	0.083	10
	277		0.038	10
P6*15*Z10U/3	120	50/60Hz	0.125	15
	277		0.061	15
P6*20*Z10U/3	120	50/60Hz	0.17	21
	277		0.078	21
P6*25*Z10U/3	120	50/60Hz	0.21	25
	277		0.096	26
P6*30*Z10U/3	120	50/60Hz	0.27	32
	277		0.12	33
P6*35*Z10U/3	120	50/60Hz	0.32	38
	277		0.14	37
P6*10*LU	120	50/60Hz	0.093	10
	277		0.046	10
P6*15*LU	120	50/60Hz	0.13	15
	277		0.07	15
P6*20*LU	120	50/60Hz	0.175	20
	277		0.085	21
P6*25*LU	120	50/60Hz	0.21	25
	277		0.099	25
P6*30*LU	120	50/60Hz	0.274	31
	277		0.122	31
P6*35*LU	120	50/60Hz	0.32	36
	277		0.14	37

P6R LyteProfile 6"

Round Downlight & Lensed Wall Wash

P6RDL30835CLZ10U • 30W LED, 80CRI, 3500K

Candela Curves



Angle	Mean CP	Lumens
0	1361	131
5	1362	
10	1391	
15	1408	398
20	1403	
25	1397	644
30	1372	
35	1316	820
40	1218	
45	1073	816
50	852	
55	506	428
60	60	
65	12	17
70	6	
75	3	4
80	2	
85	1	1
90	0	

Single unit data

Height to Lighted Plane	Initial center beam foot-candles	Beam dia. (ft)*
5'	54	7.5'
6'	38	9.0'
7'	28	10.5'
8'	21	12.0'
9'	17	13.5'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq.ft.
5'	141.2	1.34
6'	92.7	0.88
7'	66.2	0.63
8'	55.2	0.52
9'	44.1	0.42

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10	0	
Wall	Zonal cavity method - Effective floor reflectance = 20%											
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	112	108	105	102	106	101	102	98	98	95	90
	2	104	98	93	88	96	87	93	85	90	83	80
	3	97	88	82	77	87	76	84	75	81	73	70
	4	90	80	72	67	78	66	76	66	74	65	62
	5	83	72	64	59	71	58	69	58	67	57	55
	6	77	65	58	52	65	52	63	51	61	51	49
	7	72	60	52	46	59	46	57	46	56	46	44
	8	67	55	47	42	54	41	53	41	51	41	39
	9	62	50	43	38	50	37	48	37	47	37	35
10	58	46	39	34	46	34	45	34	44	34	32	

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	1173.33	36.0%
0-40	1993.21	61.2%
0-60	3236.94	99.3%
0-90	3258.47	100.0%

CRI and CCT adjustment factors

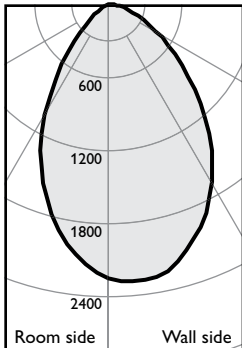
90 CRI 2700K = 84%
 80 CRI 2700K = 100%
 80 CRI 3000K = 100%
 80 CRI 3500K = 105%
 80 CRI 4000K = 109%

Report: 1552GFR

Output lumens:	3258lms	Efficacy:	107.5lm/w
Spacing Criterion:	1.5	CCT ³ :	3500K
Beam Angle:	101°	CRI:	80min
Input Watts ² :	30.3W		

P6RLW30835CLPZ10U • 30W LED, 80CRI, 3500K

Candela Curve



Report: 1560GFR

Efficacy:	104.6 lm/w
Output lumens:	3177 lms
Input watts ² :	30.3 W
CRI:	80 min
CCT ³ :	3500K

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	2' from wall		
	3' on ctr.	3' on ctr.	3' on ctr.
1	74	48	74
2	111	91	111
3	96	90	96
4	74	72	74
5	56	56	56
6	43	44	43
7	35	35	35
8	29	29	29
9	24	24	24
10	21	21	21
12	17	17	17
14	15	15	15

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	3' on ctr.	3' on ctr.	3' on ctr.
1	28	25	28
2	56	54	56
3	69	67	69
4	67	67	67
5	59	59	59
6	50	50	50
7	42	42	42
8	36	36	36
9	31	31	31
10	27	27	27
12	21	21	21
14	18	18	18

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	4' on ctr.	4' on ctr.	4' on ctr.
1	24	18	24
2	46	38	46
3	55	49	55
4	52	49	52
5	46	45	46
6	38	38	38
7	33	33	33
8	28	28	28
9	24	24	24
10	21	21	21
12	17	17	17
14	14	15	14

1. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.
2. Wattage: controlled to within 5%
3. Correlated Color Temperature: within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.



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Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Ordering guide

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	
ECF-S							
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules) 48L 48 LEDs (3 modules) 64L 64 LEDs (4 modules)	365 365mA 530 530mA 700 700mA 1A 1050mA 1.2A 1200mA 900 900mA 1A 1050mA 1.2A¹⁹ 1200mA 900 900mA 1A¹⁹ 1050mA	WW-G2 Warm White 3000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2 CW-G2 Cool White 5000K, 70CRI Generation 2	AR² Arm Mount (standard) The following mounting kits must be ordered separately (See accessories) SF³ Slip Fitter Mount (fits to 2 3/8" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM² Retrofit arm mount kit	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270° Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270° Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270° Type 5 5 Type 5 5W Type 5W	AFR Auto Front Row AFR-90 Auto Front Row, Rotated left 90° AFR-270 Auto Front Row, Rotated right 270° BLC Back Light Control BLC-90 Back Light Control rotated at 90° BLC-270 Back Light Control rotated at 270° LCL¹⁹ LEED Corner Optic Left RCL¹⁹ LEED Corner Optic Right	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)

Options						Finish
Dimming controls	Motion sensing lens	Photo-sensing	Electrical	Luminaire		
DD^{4,18} 0-10V External dimming (for controls by others) DCC^{4,5,6,18} Dual Circuit Control FAWS^{4,6,7,18} Field Adjustable Wattage Selector LLC^{4,6,7,8,18} Integral wireless module BL^{1,4,7,18} Bi-level functionality SRDR^{4,5,6,8,17} SR driver connected to Zhaga socket DynaDimmer: Automatic Profile Dimming CS50^{4,8} Safety 50% Dimming, 7 hours CM50^{4,8} Median 50% Dimming, 8 hours CS30^{4,8} Safety 30% Dimming, 7 hours CM30^{4,8} Median 30% Dimming, 8 hours	IMR13¹⁵ Integral with #3 lens IMR17¹⁶ Integral with #7 lens	PCB^{8,9} Photocontrol Button TLRD5^{10,17} Twist Lock Receptacle 5 Pin TLRD7^{10,17} Twist Lock Receptacle 7 Pin TLRPC^{9,10,11,17} Twist Lock Receptacle w/ Photocell	Fusing F1⁹ Single (120, 277, 347VAC) F2⁹ Double (208, 240, 480VAC) Pole Mount Fusing FP1⁹ Single (120, 277, 347VAC) FP2⁹ Double (208, 240, 480VAC) FP3⁹ Canadian Double Pull (208, 240, 480VAC) Surge Protection (10kA standard) SP2 Increased 20kA	Square Pole Adapter included in standard product TB¹² Terminal Block RPA¹³ Round Pole Adapter (fits to 3"- 3.9" O.D. pole) HIS¹⁴ Internal House Side Shield	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)	

- BL-IMR13/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- Mounts to a 4" round pole with adapter included for square poles.
- Limited to a maximum of 45 degrees aiming above horizontal.
- Not available with other dimming control options.
- Not available with motion sensor.
- Not available with photocontrol.
- Must specify a motion sensor lens.
- Not available in 347 or 480V
- Must specify input voltage.
- TLRD5, TLRD7 and TLRPC receptacle pins 4 & 5 are capped off when ordered with any of the Dimming controls DD or FAWS or LLC.
- Not available in 480V. Order photocell separately with TLRD5/7.
- Not available with DCC.
- Not available with SF and WS. RPAs provided with black finish standard.
- HIS not available with Type 5, 5W, BLC, BLC-90, BLC-270, LCL or RCL optics.
- Not available with DD, DCC, and FAWS dimming control options.
- Not available with DD, DCC, FAWS and LLC dimming control options.
- When ordering SRDR, controller (by others) to be used on socket must be SR compatible (See specifications for more details). Consult factory for lead time. All 7 pins in NEMA receptacle are connected to SR driver. SRDR not available with TLRD5 or TLRPC.
- 0-10V dimming driver standard.
- LCL and RCL not available with 48L-1.2A or 64L-1A.



ECF-S EcoForm small

Area luminaire

EcoForm Accessories²¹ (ordered separately, field installed)

Shielding Accessories

House Side shield

Standard optic orientation:

HIS-32-H²⁰ Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-H²⁰ Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-H²⁰ Internal House Side Shield for 64 LEDs (4 modules)

Optic at 90 or 270 orientation:

HIS-32-V²⁰ Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-V²⁰ Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-V²⁰ Internal House Side Shield for 64 LEDs (4 modules)

Luminaire Accessories

ECF-BD-G2 Bird deterrent
ECF-RAM-G2-(F) Retrofit Arm mount kit
ECF-SF-G2-(F) Slip Fitter Mount (fits to 2 3/8" O.D. tenon)
ECF-WS-G2-(F) Wall mount with surface conduit rear entry permitted

EcoForm PTF2
 (pole top fitter fits 23/8-21/2" OD x 4" depth tenon)

PTF2-ECF-S/L-1-90-(F) 1 luminaire at 90°
PTF2-ECF-S/L-2-90-(F) 2 luminaires at 90°
PTF2-ECF-S/L-2-180-(F) 2 luminaires at 180°
PTF2-ECF-S/L-3-90-(F) 3 luminaires at 90°
PTF2-ECF-S/L-4-90-(F) 4 luminaires at 90°
PTF2-ECF-S/L-3-120-(F) 3 luminaires at 120°

(F) = Specify finish

EcoForm PTF3
 (pole top fitter fits 3-31/2" OD x 6" depth tenon)

PTF3-ECF-S/L-1-90-(F) 1 luminaire at 90°
PTF3-ECF-S/L-2-90-(F) 2 luminaires at 90°
PTF3-ECF-S/L-2-180-(F) 2 luminaires at 180°
PTF3-ECF-S/L-3-90-(F) 3 luminaires at 90°
PTF3-ECF-S/L-4-90-(F) 4 luminaires at 90°
PTF3-ECF-S/L-3-120-(F) 3 luminaires at 120°

EcoForm PTF4
 (pole top fitter fits 31/2-4" OD x 6" depth tenon)

PTF4-ECF-S/L-1-90-(F) 1 luminaire at 90°
PTF4-ECF-S/L-2-90-(F) 2 luminaires at 90°
PTF4-ECF-S/L-2-180-(F) 2 luminaires at 180°
PTF4-ECF-S/L-3-90-(F) 3 luminaires at 90°
PTF4-ECF-S/L-4-90-(F) 4 luminaires at 90°
PTF4-ECF-S/L-3-120-(F) 3 luminaires at 120°

Footnotes

20. Not available with Type 5 or 5W optics

21. Consult Signify to confirm whether specific accessories are BAA-compliant.

Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

Catalog Number	12NC	Catalog Number	12NC
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BZ	912401466002	RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK	912401534560
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-MGY	912401466003	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ	912401466016
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BK	912401534554	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY	912401466017
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BZ	912401466004	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK	912401534561
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-MGY	912401466005	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ	912401466018
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BK	912401534555	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY	912401466019
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BZ	912401466006	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BK	912401534562
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-MGY	912401466007	RS-ECF-RAM-G2-DGY	912401466487
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BK	912401534556	RS-ECF-RAM-G2-MGY	912401466488
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BZ	912401466008	RS-ECF-RAM-G2-WH	912401466485
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-MGY	912401466009	RS-ECF-RAM-G2-BZ	912401466486
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BK	912401534557	RS-ECF-RAM-G2-BK	912401466484
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ	912401466010	RS-HIS-32-H	912401466489
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-MGY	912401466011	RS-HIS-48-H	912401466491
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BK	912401534558	RS-HIS-64-H	912401466493
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BZ	912401466012		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-MGY	912401466013		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BK	912401534559		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BZ	912401466014		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-MGY	912401466015		

ECF-S EcoForm small

Area luminaire

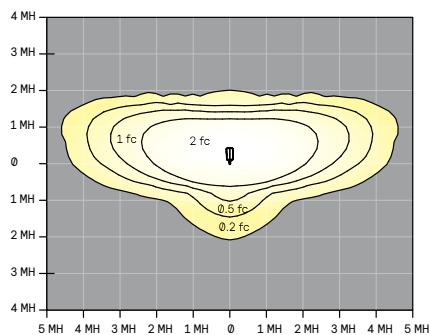
Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

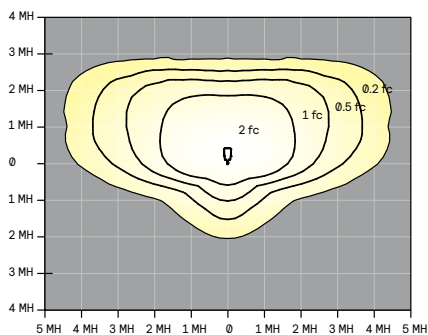
Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>120,000 hours	>99%

Optical Distributions

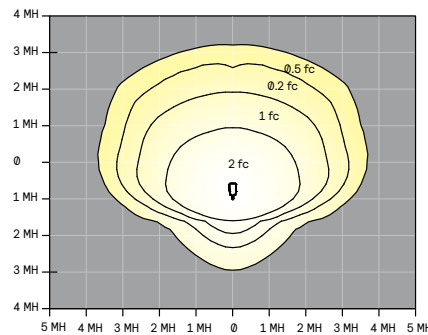
Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.



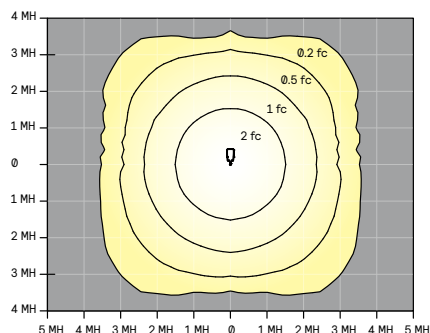
Type 2



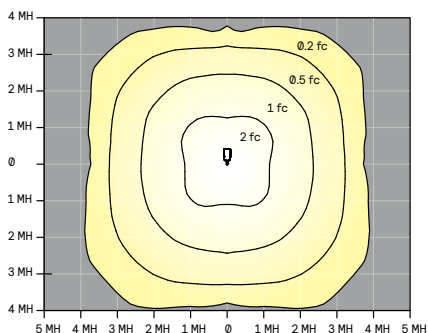
Type 3



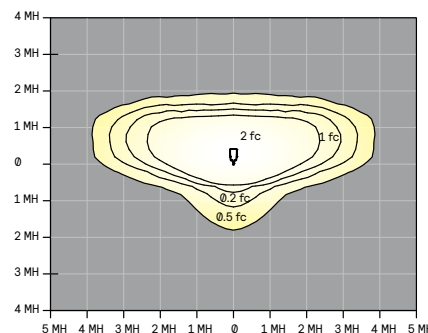
Type 4



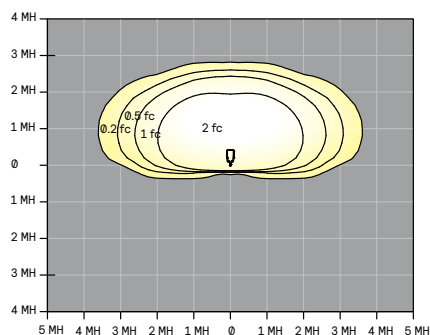
Type 5



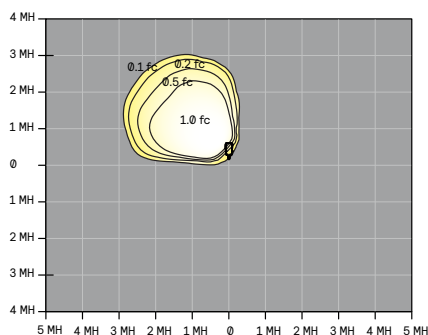
Type 5W



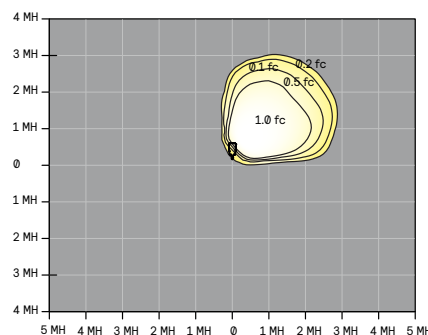
AFR



BLC



LCL



RCL

ECF-S EcoForm small

Area luminaire

3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,508	B1-U0-G1	138	5,428	B1-U0-G2	136	5,637	B1-U0-G2	141	5,790	B3-U0-G1	145	5,604	B3-U0-G1	140
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,159	B2-U0-G2	129	7,055	B1-U0-G2	127	7,327	B1-U0-G2	132	7,526	B3-U0-G2	135	7,284	B3-U0-G2	131
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,234	B2-U0-G2	127	9,034	B2-U0-G2	124	9,452	B2-U0-G2	130	9,707	B4-U0-G2	133	9,395	B4-U0-G2	129
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,001	B3-U0-G2	123	12,719	B2-U0-G2	120	13,306	B2-U0-G3	126	13,665	B4-U0-G2	129	13,227	B4-U0-G2	125
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,421	B3-U0-G3	119	14,108	B2-U0-G3	116	14,760	B2-U0-G3	121	15,158	B4-U0-G2	125	14,671	B4-U0-G2	121
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,115	B3-U0-G3	127	16,744	B3-U0-G3	124	17,518	B2-U0-G3	130	17,990	B4-U0-G2	133	17,413	B5-U0-G3	129
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	19,381	B3-U0-G3	122	18,960	B3-U0-G3	119	19,836	B3-U0-G4	125	20,372	B5-U0-G3	128	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	21,515	B3-U0-G3	118	21,048	B3-U0-G4	115	22,020	B3-U0-G4	121	22,616	B5-U0-G3	124	21,888	B5-U0-G3	120
ECF-S-64L-900-WW-G2-x	64	900	3000	178	22,652	B3-U0-G3	127	22,161	B3-U0-G4	125	23,185	B3-U0-G4	130	23,810	B5-U0-G3	134	23,045	B5-U0-G3	130
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	25,520	B3-U0-G3	124	24,966	B3-U0-G4	121	26,120	B3-U0-G4	127	26,150	B5-U0-G3	127	25,964	B5-U0-G4	126

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,706	B2-U0-G1	143	3,691	B0-U0-G1	94	2,449	B0-U0-G1	62
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,417	B2-U0-G1	133	5,005	B0-U0-G2	91	3,183	B0-U0-G1	58
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,567	B2-U0-G2	131	6,409	B0-U0-G2	89	4,106	B0-U0-G1	57
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,467	B3-U0-G2	128	9,024	B1-U0-G2	87	5,793	B0-U0-G2	56
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,939	B3-U0-G2	123	10,010	B1-U0-G2	84	6,426	B0-U0-G2	54
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,731	B3-U0-G2	131	11,880	B1-U0-G2	89	7,626	B0-U0-G2	57
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	20,076	B3-U0-G2	127	13,453	B1-U0-G2	86	8,636	B0-U0-G2	55
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	22,288	B3-U0-G2	122	14,934	B1-U0-G3	83			
ECF-S-64L-900-WW-G2-x	64	900	3000	178	23,465	B3-U0-G2	132	15,723	B1-U0-G3	90	10,093	B0-U0-G2	58
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	26,437	B4-U0-G3	128	17,714	B1-U0-G3	87			

4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-NW-G2-x	32	700	4000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-NW-G2-x	64	900	4000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

ECF-S EcoForm small

Area luminaire

5000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-CW-G2-x	32	700	5000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-CW-G2-x	64	900	5000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-CW-G2-x	32	700	5000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-CW-G2-x	64	900	5000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

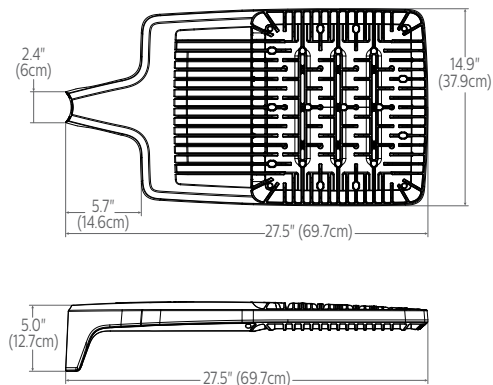
ECF-S EcoForm small

Area lumineuse

Dimensions

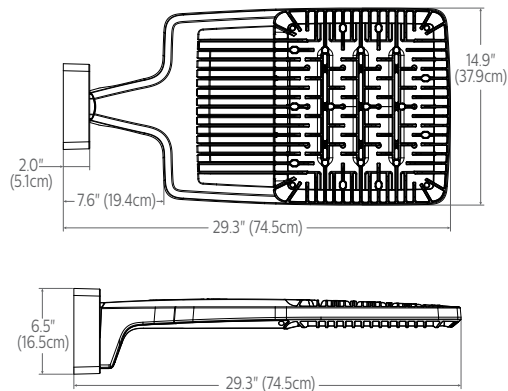
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



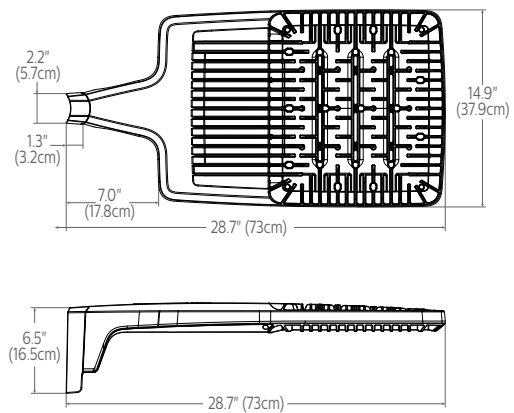
Wall (WS)

Weight: 27 Lbs. (12. 2Kg)EPA: 0.27ft² (.025m²)



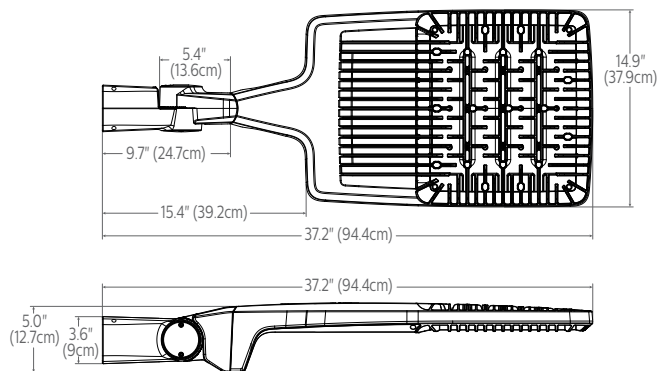
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

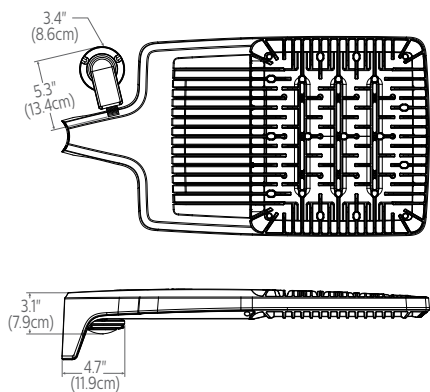


Slip fitter (SF)

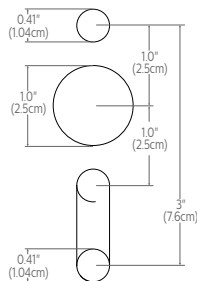
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



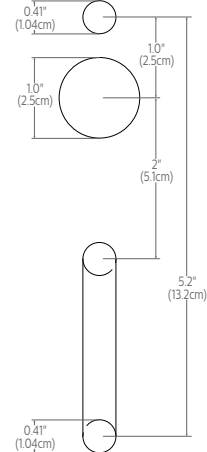
Outboard IMR-HVU sensor



Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern



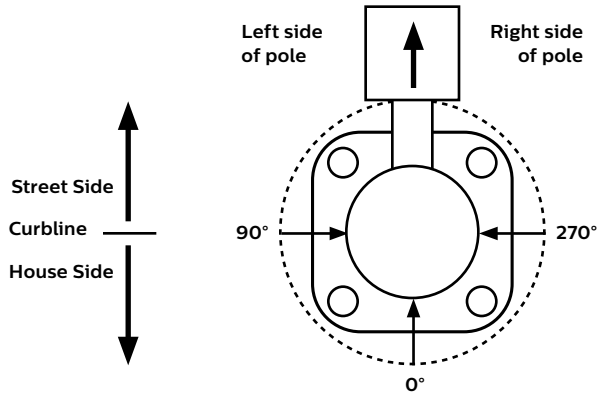
ECF-S EcoForm small

Area luminaire

Optical Orientation Information

Standard Optic Position

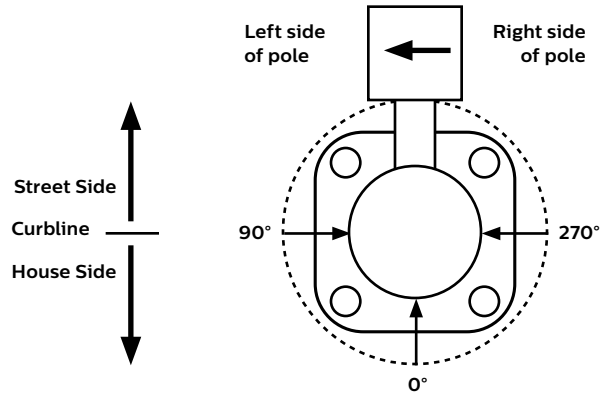
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

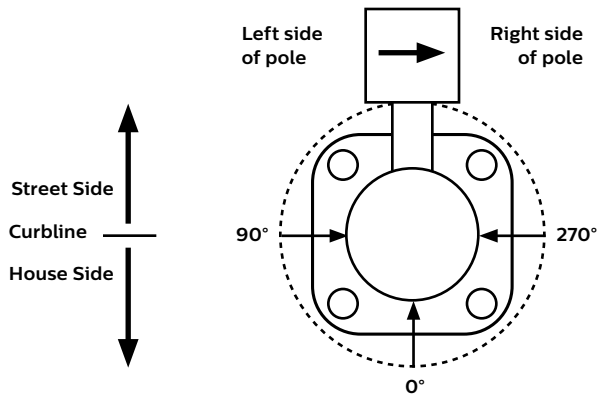
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

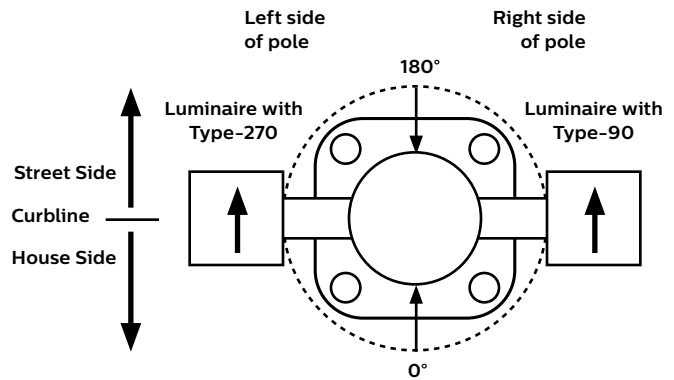
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S EcoForm small

Area luminaire

Specifications

Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2018. Testing includes vibration in three axes, all performed on the same luminaire.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 152 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions, including a dedicated BLC, LCL, and RCL optics to provide the best backlight control possible for those stringent requirements around property lines. Types 2, 3, 4, AFR, and BLC when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories. Note that only fixed mounts (AR, RAM, WS) are required to meet IDA compliance. SF mounting will not meet IDA.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Sensor Ready Zhaga Socket Connector (SRDR): Product equipped with Sensor Ready drivers connected to 4-pin Zhaga Book 18 compliant receptacle designed for sensor and other control system applications. Receptacle is rated IP66 assembly in a compact design that provides a sealed electrical interface and rated UV resistance, mounted on underside of the luminaire, protective dust cap included. When a controller not provided by Signify is used with Sensor Ready Zhaga socket connector, the controller must be certified to work with the Xitanium SR LED drivers as part of the SR certified program. SRDR can be used with NEMA 7-pin twist lock receptacle, which is mounted on top of the luminaire.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM - 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM - 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

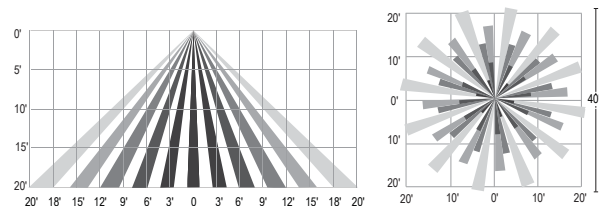
Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Lighthouse system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC wireless controller with #3 lens



Motion response options

Bi-Level Infrared Motion Response (BL-IMRI): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

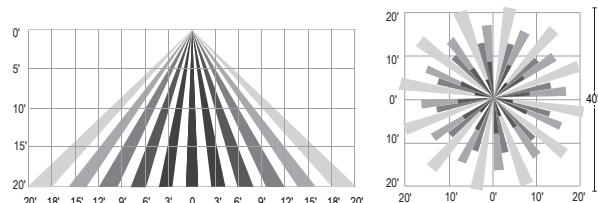
ECF-S EcoForm small

Area luminaire

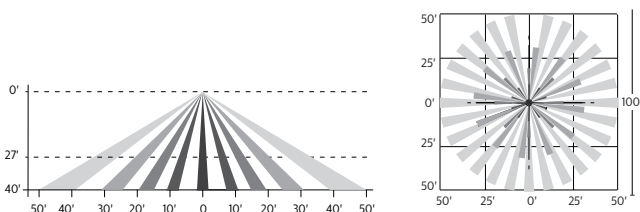
Specifications

Infrared Motion Response Lenses (IMRI3/IMRI7): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens



Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TLRD7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When ordering a twist-lock receptacle with a photocell (TLRPC), the receptacle used is a 5-pin receptacle, so pins 6 and 7 are not available (no SR driver). 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. All drivers are 0-10V dimming to 10% power standard, except when using Sensor Ready (SR) drivers, which uses DALI protocol (options CS50/CM50/CS30/CM30, SRDR, and TR7). Drivers are RoHS and FCC Title 47 CFR Part 15 compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA, 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: signify.com

Warranty

EcoForm luminaires feature a 5-year limited warranty. See signify.com/warranties for complete details and exclusions.



DESCRIPTION

The WLZ Series features an architecturally relevant low-profile LED design in lumen packages ranging from 1500 lumens to over 12,000 lumens. Its high-efficiency light engine is designed for optimal light control and distribution with zero uplight. This family of product is offered in several size housings to complement any building exterior and accommodates mounting heights up to 35'. Integral emergency battery backup available for path of egress with Cold Location operation down to -20°C.

SPECIFICATIONS

Construction

- Sleek die-cast aluminum housing with stainless steel hardware and powder coated black, bronze, silver or white finish
- UV-stabilized polycarbonate optical lens
- Integral heat sink for maximized heat dissipation
- Back box houses drivers away from LEDs and includes three 3/4" hubs (WLZ1 and WLZ2 - two 3/4" hubs)

Optics/LEDs

- Zero uplight design to minimize light pollution
- 15 to 100 Watt models replace up to 400 Watt HID for up to 70% energy savings
- Efficacies up to 123 LPW at 5000K to maximize utility rebates
- Type III and Type IV distributions for optimal light distribution (WLZ1 - Type III only)
- Available in 3000K, 3500K, 4000K and 5000K CCT
- L70 of 50,000 hours at 40°C
- CRI of ≥70

Electrical

- Class 2 power supply, 120-277VAC, 50/60Hz
- 347/480VAC Dedicated driver option for WLZ4, WLZ7 and WLZ10
- 0-10V Dimming driver (120-277VAC only)
- Power supply rated Class A EMI rating

Installation

- Housing hinges to back box and is secured with set screws
- Back box is complete with three 3/4" hubs and internal bubble level for easy installation (WLZ1 and WLZ2 - two 3/4" hubs)
- Mounts to a standard 3-1/2" or 4" square electrical J-box
- Suitable for downlight installation only

Options

Battery Backup

- Integral battery backup (BB) provides over 700 lumens and 90 minutes of runtime for path of egress. Rated for ambient temperatures of 0°C to 40°C (32°F to 104°F). Not available on WLZ1
- Integral Battery Backup with Internal Heater (BB-IH) provides over 700 lumens and 90 minutes of runtime for path of egress in Cold Locations down to -20°C. Not available on WLZ1 or WLZ2.
- Factory installed dual driver options for WLZ4 and WLZ10 (WLZ7 is standard with two drivers)
- Factory installed 120/277VAC button type photocontrol option (PC)
- Factory installed 10kVA surge protection options (SP or SPH)

Accessories (Field Installed)

- 120/277VAC Button type universal photocontrol options accessory (PCU)
- Dimming occupancy sensor programmable, Wattstopper FSP221 available in multiple finishes (TL-SCES-L2)
- Remote control for occupancy sensor. Optional (TL-FSIR100)

Testing & Compliance

- cULus Listed for Wet Locations
- International Dark Sky friendly approved product. (IDA) 3000K only
- Operating temperatures: -40°C to 40°C (-40°F to 104°F)

Warranty

- Five year warranty (terms and conditions apply)

Model: _____ Date: _____
Accessories: _____
Job Name: _____ Type: _____



Specs At A Glance*					
Model	WLZ1	WLZ2	WLZ4	WLZ7	WLZ10
Wattage (nominal)	15W	25W	40W	70W	100W
Lumens (lm)	1745	3198	5021	8729	12,393
Efficacy (LPW)	115	118	123	120	116
Equivalency (HID)	50W	100W	150W	250W	400W
Distribution	Type III, IV (WLZ1 Type III only)				
CCT	3000K, 3500K, 4000K, 5000K				
CRI	≥70				
Input Voltage	120-277VAC, 50/60Hz, 347/480V option				
Operating Temp	-40°C to 40°C (-40°F to 104°F)				
Certifications	UL Listed for Wet Locations, IDA				
Warranty	5 Years				
Weight	2.6 lbs	3.3 lbs	6.0 lbs	9.9 lbs	12.1 lbs

* Nominal Wattage, tested at 5000K CCT, Type III distribution. Values at 120/277VAC. See performance table for more detailed lumen information.

Note: Environment and application will affect actual performance. Typical values and 25°C (77°F) used for testing. Specifications subject to change without notice.

Ordering Information (Example: WLZ2-3-4K-BR)

Series/Configuration	Distribution	Input Voltage	CCT	Finish	Options
WLZ1 = 15W, Extra-Small	3 = Type III	BLANK = 120/277VAC	3K = 3000K	BL = Black	BB ⁵ = Battery backup
WLZ2 = 25W, Small	4 ² = Type IV	HVS ³ = 347/480VAC	35K ⁴ = 3500K	BR = Bronze	BB-IH ⁶ = Cold Location Battery backup (operation down to -20°C)
WLZ4 = 40W, Medium			4K = 4000K	SV = Silver	DD ⁷ = Dual driver
WLZ7 ¹ = 70W, Large			5K = 5000K	WH = White	PC = 120/277VAC Button photocontrol
WLZ10 = 100W, Extra-Large					SP = 120/277VAC Surge protection SPH = 347/480VAC Surge protection

Notes

¹ Standard with two drivers

² Not available for WLZ1 configuration

³ WLZ4, WLZ7 and WLZ10 only, compatible with SPH option only

⁴ Consult factory for lead times

⁵ WLZ2, WLZ4, WLZ7 and WLZ10 only. 120/277VAC Only. Not compatible with DD and SPH options

⁶ WLZ4, WLZ7 and WLZ10 only. 120/277VAC Only. Not compatible with DD and SPH options

⁷ Dual driver option available for WLZ4 and WLZ10 only. Not compatible with photocontrol option, consult factory

⁸ Compatible with WLZ4, WLZ7 and WLZ10 only. Contact factory for compatibility with other options

⁹ Dimming occupancy sensor, programmable, Wattstopper FSP221, L2 Lens

¹⁰ Order as a separate line item. Shipped in separate box for final installation in the field

Accessories¹⁰ (Field Installed)

PCU = 120/277VAC Button photocontrol accessory

TL-FSIR-100 = Remote control for TL-SCES sensor (optional)

TL-SCES-L2^{8,9} = Motion sensor, white finish

TL-SCES-L2-BL^{8,9} = Motion sensor, black finish

TL-SCES-L2-BR^{8,9} = Motion sensor, bronze finish

TL-SCES-L2-GR^{8,9} = Motion sensor, gray finish

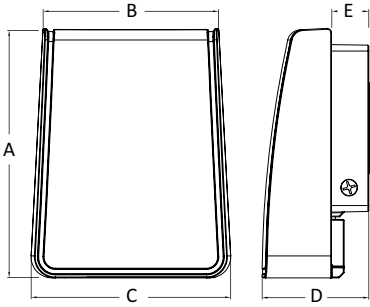
Performance Data

Model	Wattage (W)	CCT	Distribution	Lumen Output (lm)	Efficacy (LPW)
WLZ1-3-3K-XX	15	3000K	Type III	1531	101
WLZ1-3-4K-XX	15	4000K	Type III	1534	101
WLZ1-3-5K-XX	15	5000K	Type III	1745	115
WLZ2-3-3K-XX	25	3000K	Type III	2795	103
WLZ2-3-4K-XX	25	4000K	Type III	2997	111
WLZ2-3-5K-XX	25	5000K	Type III	3198	118
WLZ2-4-3K-XX	25	3000K	Type IV	2609	98
WLZ2-4-4K-XX	25	4000K	Type IV	2797	105
WLZ2-4-5K-XX	25	5000K	Type IV	2985	112
WLZ4-3-3K-XX	40	3000K	Type III	4389	107
WLZ4-3-4K-XX	40	4000K	Type III	4705	115
WLZ4-3-5K-XX	40	5000K	Type III	5021	123
WLZ4-4-3K-XX	40	3000K	Type IV	4021	98
WLZ4-4-4K-XX	40	4000K	Type IV	4310	105
WLZ4-4-5K-XX	40	5000K	Type IV	4599	112
WLZ7-3-3K-XX	70	3000K	Type III	7657	105
WLZ7-3-4K-XX	70	4000K	Type III	8193	113
WLZ7-3-5K-XX	70	5000K	Type III	8729	120
WLZ7-4-3K-XX	70	3000K	Type IV	6837	94
WLZ7-4-4K-XX	70	4000K	Type IV	7316	101
WLZ7-4-5K-XX	70	5000K	Type IV	7794	107
WLZ10-3-3K-XX	100	3000K	Type III	10,871	102
WLZ10-3-4K-XX	100	4000K	Type III	11,632	109
WLZ10-3-5K-XX	100	5000K	Type III	12,393	116
WLZ10-4-3K-XX	100	3000K	Type IV	9706	91
WLZ10-4-4K-XX	100	4000K	Type IV	10,385	98
WLZ10-4-5K-XX	100	5000K	Type IV	11,065	104

* Nominal Wattage. Values at 120/277VAC

** HVS configuration not DLC qualified

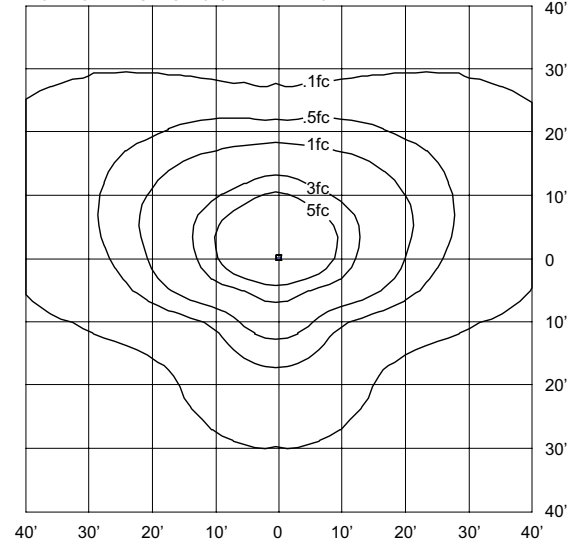
Dimensions



Model	A	B	C	D	E
WLZ1	6.7"	5.0"	5.6"	3.2"	1.4"
WLZ2	8.0"	5.7"	6.0"	3.2"	1.4"
WLZ4	10.2"	6.8"	7.8"	5.0"	1.9"
WLZ7	11.6"	8.3"	9.4"	5.0"	1.9"
WLZ10	11.6"	10.3"	11.5"	5.0"	1.9"

Sample Photometrics

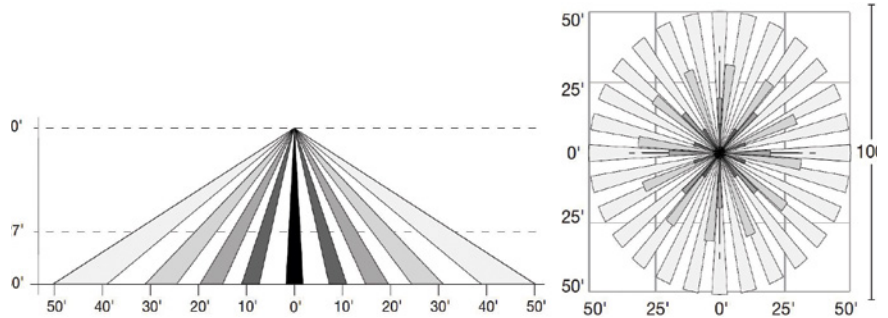
WLZ4-3-5K
 IES: TYPE III VERY SHORT
 MOUNTING HEIGHT: 10'
 TILT: ZERO
 HORIZONTAL SPACING CRITERIA: 2.0



Sensor Details (Accessory: TL-SCES-L2)



Side and Top Sensor Coverage Pattern:
 With FSP-L7 lens (included) 360° lens



Settings for TL-SCES-L2

	Settings	Default
High Mode:	0-10V	10V
Low Mode:	Off, 0-9.8V	1V
Time Delay:	30 seconds; 5-30 minutes	5 Minutes
Cut Off Delay:	None, 1-60 Minutes, 1-5 hours	1 Hour
Sensitivity:	None, Low, Medium, Max	Max
Setpoint:	None, 1-250fc, Auto	Disabled
Ramp Up Time:	None, 1-60 Seconds	Disabled
Fade Down Time:	None, 1-60 Seconds	Disabled

NOTE:

To change settings in the field, please order TL-FSIR-100 controller.

