

# CITY OF AUBURN DEVELOPMENT REVIEW APPLICATION

# TAYLOR BROOK HOUSE AT HOTEL ROAD, AUBURN, MAINE

Prepared for: John F. Murphy Homes, Inc.

March 3, 2023

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PROJECT NAME: Taylor Brook House				
PROPOSED DEVELOPMENT ADDRESS: Hotel Road				
PARCEL ID#: 237-6	070-001			
REVIEW TYPE: Site Plan X Site Plan Amendment  Subdivision  Subdivision Amendment				
PROJECT DESCRIPTION Please see project			me run by John F. Murphy Homes, Inc.	
	_			
CONTACT INFORM	ATION:			
<u>Applicant</u>			Property Owner	
Name: John F. Murphy	y Homes, Inc		Name: Beth C. Bell & John D. Crafts	
Address: 800 Center St	t., Auburn, ME		Address: 2 Passing Ln, Lisbon Falls, ME	
Zip Code 04210			Zip Code 04252	
Work #: 207-440-6213			Work #:	
Cell #:			Cell #:	
Fax #: 207-782-173	4	_	Fax #:	
Home #:			Home #:	
Email: andrew.cowan@	⊉jfmh.org		Email:	
Project Representative			Other professional representatives for the project (surveyors, engineers, etc.),	
Name: Main-Land Deve	elopment Consultants,	Inc _	Name: Stoneybrook Land use, Inc. (Mike Gotto)	)
Address: Po Box Q, Livermore Falls, ME			Address: 4846 Sun City Ctr Blvd #300, Sun City	/ Ctr, FL
Zip Code 04254			Zip Code 33573	
Work #: 207-897-6752		_	Work #:	
Cell #: 207-931-8484	4 (Esther Bizier, P.E.)		Cell #: 207-513-6123	
Fax #:			Fax #:	
Home #: Home #:			Home #:	
Email: esther@main-landdci.com		Email: mike@stoneybrookllc.com		

# **PROJECT DATA**

The following information is required where applicable, in order complete the application

The tono wing morning to require where up	ppinousie, in order co	implete the approach
IMPERVIOUS SURFACE AREA/RATIO	0.000	
Existing Total Impervious Area	6.980	sq. ft.
Proposed Total Paved Area	33,541	sq. ft.
Proposed Total Impervious Area	<u>49.658</u> 42,678	sq. ft.
Proposed Impervious Net Change Impervious surface ratio existing	1.3 %	sq. ft. % of lot area
Impervious surface ratio existing  Impervious surface ratio proposed	9.02%	% of lot area
BUILDING AREA/LOT	9.02 /0	
<u>COVERAGE</u>	0	sq. ft.
Existing Building Footprint	13,469	sq. ft.
Proposed Building Footprint Proposed Building Footprint Net change	13,469	sq. ft.
Existing Total Building Floor Area	0	sq. ft.
Proposed Total Building Floor Area	12,600	sq. ft.
Proposed Building Floor Area Net Change	12,600	sq. ft
New Building	yes	(yes or no)
Building Area/Lot coverage existing	0%	% of lot area
Building Area/Lot coverage proposed	2.4%	% of lot area
ZONING	Culturban Dasidant	in with DD CL7 Overlay
Existing		ial with RP SLZ Overlay
Proposed, if applicable	N/A	<u> </u>
LAND USE		
Existing	vacant	
Proposed	Care Home	<del></del>
1	Care Home	<del></del>
RESIDENTIAL, IF APPLICABLE	N/A	
Existing Number of Residential Units	N/A	<del></del>
Proposed Number of Residential Units	N/A	<del></del>
Subdivision, Proposed Number of Lots	11/71	<del></del>
PARKING SPACES	0	
Existing Number of Parking Spaces	17	<del></del>
Proposed Number of Parking Spaces	2	<del></del>
Number of Handicapped Parking Spaces		<u> </u>
Proposed Total Parking Spaces	_19	
ESTIMATED COST OF PROJECT	\$4.9M to \$5.1M	_
DELEGATED REVIEW AUTHORITY CHECKLIST  SITE LOCATION OF DEVELOPMENT AND STORMW  Existing Impervious Area Proposed Disturbed Area Proposed Impervious Area  1. If the proposed disturbance is greater than one acre, the General Permit (MCGP) with MDEP.  2. If the proposed impervious area is greater than one acre 11/16/05, then the applicant shall apply for a MDEP Ste City.  3. If total impervious area (including structures, pavement)	6,980  122,404  49,658  en the applicant shall shall applicant shall shall applicant shall app	sq. ftsq. ftsq. ft. pply for a Maine Construction ious area crated since Permit, Chapter 500, with the
acres, then the applicant shall apply for a Site Location acres then the application shall be made to MDEP unle 4. If the development is a subdivision of more than 20 acre apply for a Site Location of Development Permit with the shall be made to MDEP unless determined otherwise.	of Development Permi ss determined otherwis es but less than 100 acre	t with the City. If more than 7 se. es then the applicant shall
TRAFFIC ESTIMATE  Total traffic estimated in the peak hour existing	0 .	passanger car aggivelants (DCE)
Total traffic estimated in the peak hour-existing (Since July 1, 1997)		passenger car equivalents (PCE)
Total traffic estimated in the peak hour-proposed (Since July 1, 19	997) 13	passenger car equivalents (PCE)
If the proposed increase in traffic exceeds 100 one-way trips in the	- ' /	nent permit will be required.

	res / <u>550,162</u>	zoning districtsquare feet(sf).		
Regulations	Required/Allowed	<u>Provided</u>		
Min Lot Area	21,780 sf	/ 550,162 sf		
Street Frontage	150 ft	/ 331 ft		
Min Front Yard	25 ft	/ 241 ft		
Min Rear Yard	25 ft	/ 252 ft		
Min Side Yard	15 ft			
Max. Building Height	35 ft			
Use Designation		/ Care Home		
Parking Requirement	1 space/ per	square feet of floor area		
Total Parking:		/ 19 total		
Overlay zoning districts(if any):	Resource Prote	ction SLZ Overlay	/	
Urban impaired stream watershed?	YES/NO If yes, watershed name No			
•	·			
Urban impaired stream watershed?	· · · · · · · · · · · · · · · · · · ·			

#### DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

- Full size plans containing the information found in the attached sample plan checklist.
- 2. Application form that is completed and signed.
- 3. Cover letter stating the nature of the project.
- 4. All written submittals including evidence of right, title and interest.
- 5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

#### Refer to the application checklist for a detailed list of submittal requirements.

L/A's development review process and requirements have been made similar for convenience and to encourage development. Each Citys ordinances are available online at their prospective websites:

<u>Auburn:</u> www.auburnmaine.org under City Departments/ Planning and Permitting/Land Use Division/<u>Zoning Ordinance</u> <u>Lewiston:</u> http://www.ci.lewiston.me.us/clerk/ordinances.htm Refer to Appendix A of the Code of Ordinances

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review <u>only</u>; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:	011 2 1	Date:
	Other & Digies	March 3, 2023



# City of Auburn, Maine

Office of Planning & Permitting
Eric J. Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

# **Development Review Checklist**

The following information is required where applicable to be submitted for an application to be complete

PROJECT NAME	Taylor Brook House	
	ELOPMENT ADDRESS:_	
PARCEL#: 237-0	070-001	

Required Information		Check when St	ubmitted	Applicable Ordinance
Site Plan		Applicant	Staff	
	Owner's Names/Address	х		
	Names of Development	х		
	Professionally Prepared Plan	х		
	Tax Map or Street/Parcel Number	х		
	Zoning of Property	х		
	Distance to Property Lines	х		
	Boundaries of Abutting land	х		
	Show Setbacks, Yards and Buffers	х		
	Airport Area of Influence	N/A		
	Parking Space Calcs	х		
	Drive Openings/Locations	х		
	Subdivision Restrictions	N/A		
	Proposed Use	х		
	PB/BOA/Other Restrictions	N/A		
	Fire Department Review	х		
	Open Space/Lot Coverage	х		

Required Information				Applicable Ordinance
Landscape Plan		Applicant	Staff	
	Greenspace Requirements	х		
	Setbacks to Parking	х		
	Buffer Requirements	х		
	Street Tree Requirements	n/a		
	Screened Dumpsters	х		
	Additional Design Guidelines	х		
	Planting Schedule	х		
Stormwater & Erosion Control Plan		Applicant	Staff	
	Compliance w/ chapter 500	х		
	Show Existing Surface Drainage	х		
	Direction of Flow	х		
	Location of Catch Basins, etc.	х		
	Drainage Calculations	х		
	Erosion Control Measures	х		
	Maine Construction General Permit	х		
	Bonding and Inspection Fees			
	Post-Construction Stormwater Plan	х		
	Inspection/monitoring requirements	х		
Lighting Plan		Applicant	Staff	
	Full cut-off fixtures	х		
	Meets Parking Lot Requirements	х		
Traffic Information		Applicant	Staff	
	Access Management	х		
	Signage	х		
	PCE - Trips in Peak Hour	х		

Required Information		Check when Submitted		Applicable Ordinance
	Vehicular Movements	х		
	Safety Concerns	х		
	Pedestrian Circulation	х		
	Police Traffic	х		
	Engineering Traffic	Х		
Utility Plan		Applicant	Staff	
	Water	х		
	Adequacy of Water Supply	х		
	Water main extension agreement			
	Sewer	х		
	Available city capacity	х		
	Electric	х		
	Natural Gas	х		
	Cable/Phone	х		
Natural Resources		Applicant	Staff	
	Shoreland Zone	х		
	Flood Plain	х		
	Wetlands or Streams	х		
	Urban Impaired Stream	N/A		
	Phosphorus Check	N/A		
	Aquifer/Groundwater Protection	NA		
	Applicable State Permits	х		
	Lake Auburn Watershed	N/A		
	Taylor Pond Watershed	N/A		
Right, Title or Interest		Applicant	Staff	
	Verify	х		
	Document Existing Easements, Covenants, etc.	х		

Required Information		Check when S	Submitted	Applicable Ordinance
Technical & Financial Capacity		Applicant	Staff	
	Cost Est./Financial Capacity	х		
	Performance Guarantee			
State Subdivision Law		Applicant	Staff	
	Verify/Check	N/A		
	Covenants/Deed Restrictions	N/A		
	Offers of Conveyance to City	N/A		
	Association Documents	N/A		
	Location of Proposed Streets & Sidewalks	N/A		
	Proposed Lot Lines, etc.	N/A		
	Data to Determine Lots, etc.	N/A		
	Subdivision Lots/Blocks	N/A		
	Specified Dedication of Land	N/A		
Additional Subdivision Standards		Applicant	Staff	
	Mobile Home Parks	N/A		
	PUD	N/A		
A JPEG or PDF of the proposed site plan		Applicant	Staff	
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving				



# John F. Murphy Homes, Inc.

To Whom It May Concern:

The signature below authorizes Main-Land Development Consultants, Inc. and Stoneybrook Land Use, Inc. to act as the applicant's agents in the processing of the enclosed application.

250

2/20/2023

Andrew Cowan, CFO

for John F. Murphy Homes, Inc., applicant

#### Engineers, surveyors, scientists

P.O. BOX Q LIVERMORE FALLS, ME 04254 367 US ROUTE 1, S. BUILDING, FALMOUTH, ME 04105 Tel: (207) 897-6752/FAX: (207) 897-5404 Www.main-landdci.com

March 3, 2023

Mr. John A. Blais Planning, Permitting and Code Division City of Auburn 60 Court Street Auburn, ME 04210

RE: Taylor Brook House for John F. Murphy Homes, Inc.

Hotel Road, Auburn, Maine

Dear Mr. Blais,

On behalf of John F. Murphy Homes, Inc. (JFMH), we are pleased to submit this permit application to secure approvals for Taylor Brook House, an 8-bed Care Home to be located off Hotel Road. The parcel is located in the Suburban Residential District and is also subject to the Resource Protection Shoreland Overlay District. Care Homes are a special exception use in the Suburban Residential District. As shown on plans and in this application, the use will not alter the characteristics of the neighborhood and will not result in the creation of any nuisance or unsafe conditions on site or in the surrounding area. The parcel is identified on the City GIS system as Parcel ID 237-070-001

The property is currently vacant and is a mixture of field and woods, with one small gravel pull off adjacent to Hotel Road. Property boundaries are shown on the Existing Conditions Plan which is based on a survey completed by Main-Land. The lot contains 12.63 acres and has about 331 feet of frontage on Hotel Road. The lot also has about 1,425 feet of frontage on Taylor Brook. The Existing Condition Plan also shows mapped wetland areas, the 100-Year Flood Plain areas on the property and the location of the Resource Protection Shoreland Overlay District as depicted on the City of Auburn Zoning Map. City of Auburn sewer runs through the property along Taylor Brook via an easement and a Central Maine Power Easement runs across the eastern portion of the property. These utilities are shown on the Existing Condition Plans and Site Plans.

A full set of engineered Site Plans are enclosed. The site engineering plans provide full details for the site improvements, utility connections and stormwater improvements. All these improvements have been designed to meet City and State standards. We have also included plans showing a preliminary floor layout and elevation views of the building prepared by TAC Architectural Group, Inc.

Since 1977, people with intellectual disabilities, other developmental disabilities, and Autism Spectrum Disorder have been calling JFMH "home". JFMH is one of the nation's premier providers of these services and the leading provider in the Greater Lewiston-Auburn area. Their dedicated and committed professionals utilize best practices and the latest developments in the field of direct support and education to provide learning opportunities, community integration and compassionate care to those they support and their families. They offer Long-Term Residential Settings, Nursing Home Care, Community Support Programs, Shared Living Partnerships and Case Management.

The Taylor Brook House has been designed to replace an existing facility located in Lewiston which has become outdated. Taylor Brook House is fully handicap accessible and specifically designed for residents in wheelchairs with intellectual disabilities and/or autism. It will include about 13,000 square feet of new space all on one level. Each

resident will have a private bedroom with bathroom facilities. They will also have access to shared sitting areas near their bedrooms. The facility will include a kitchen, a common living area, a common dining area, activity area and common porch. Separate areas for private dining, tub rooms and PT services are also provided. On-duty staff will also have separate work areas and a conference room. The floor plan layout, with a single row of bedrooms off of a hallway, was purposefully designed to provide a residential feel for those who call Taylor Brook House home. As such, two residential wings were needed to provide the required number of bedrooms and to prevent the institutional feel of bedrooms off either side of a hallway. The proposed building is set back 83' from the nearest property line and 241' from the Hotel Road. The building is set back 252' from Taylor Brook.

The project will also include a separate garage structure with storage areas. The garage is sized to accommodate a small bus and van used to transport residents to appointments or outings off-site. The driveway and garage have been designed to allow drive-in/drive-out movements with these vehicles. The driveway also provides a covered drop-off/pick-up area at the main entrance. The entrance canopy provides 12 feet of clearance from pavement grade to roof, tall enough to accommodate the van and small bus used by JFMH for resident transport. Other large service vehicles are intended to access the site in front of or on the side of the garage, keeping the canopy for resident use only. The intent is that a vehicle, such as a garbage truck or fuel truck, could drive through the parking area, pull in front of the garage and then back up and drive out through the parking area. Vehicle drive paths are shown in further detail in Section 12 of this application.

Site access from Hotel Road will be a single, two-way 25' wide private driveway. Sidewalks are provided from the parking lot to the main entrance and to the employee entrance near the garage. Walkways are also provided from the bedroom wings and the common porch to access the outdoor sitting area. These walkways are also connected to the driveway for use in case of an emergency. Parking is for a total of 19 vehicles, 2 spaces of which are handicap accessible.

The facility will operate 24 hours per day, seven days per week, 365 days per year. This is done in three shifts with the maximum number of seven employees on duty between 6:00 AM and 1:00 PM. The second shift, with 6 employees, begins at 1:00 PM and the third shift begins at 9:00 PM with only two employees on duty. A minimum of thirteen spaces are required to accommodate employees during first and second shift changes each day. With 19 spaces provided, there will be six spaces remaining for visitor parking.

With only 13 employees entering and exiting the site during the shift change at 1pm (equal to 13 one-way trips and the maximum number of per hour trips for this site), the project will not exceed the 100-vehicle peak hour trip generation that would require a Traffic Movement Permit from MDOT. Sight distances measured at the proposed site driveway are 650 feet looking northerly and 1,000 feet looking southerly. These measurements exceed the ordinance requirements for 350 feet at the posted speed limit of 35 mph. Therefore, the driveway location proposed has sufficient sight distance and will operate safely for the proposed use.

In the proposed condition, total non-revegetated, impervious area totals 49,658 square feet (1.13 acres) and total developed area totals 122,404 square feet (2.81 acres). Stormwater improvements include a roof dripline filter around the building, two grassed underdrain soil filter ponds and a bioretention filter (rain garden). Main-Land has prepared a stormwater quality analysis, erosion control narrative and have provided plans with details showing how these improvements meet the requirements of Local and State stormwater rules.

Public sewer and water utilities will be utilized by this development. The sewer service will leave the east side of the building and connect to the existing public sewer main, which runs across the property along Taylor Brook. Water service for domestic use and the building sprinkler system will be extended along the proposed driveway from the existing water main in Hotel Road. Power and communications will be extended from Hotel Road overhead to a new pole on the property and then underground along the proposed driveway to reach the building. New propane tanks and a generator are proposed to be installed on site as shown on the Site Plans.

The project will impact 3,282 square feet of wetland area. The project also impacts XXX square feet of Inland Wading Waterfowl Habitat, a Significant Wildlife Habitat (SWH) mapped by the Department of Inland Fisheries and Wildlife. Please note that wetlands within the SWH are considered a wetland of special significance (WOSS). The project was designed so that no WOSS were permanently impacted or altered. Applications to secure State and Federal permits for these impacts are being submitted to The Maine Department of Environmental Protection (MDEP) and U.S. Army Corps of Engineers (USACOE) concurrently with this Application.

As shown on the project Site Plans, 805 square feet of the proposed building, 1,182 square feet of driveway area, some minor grading and limited tree removal is proposed within the Resource Protection District. These activities are allowed with Planning Board review. Building location and finish floor elevation was optimized in order to minimize and avoid impacts to on site wetlands and the significant wildlife habitat. The drive access was sited to provide safe access to structures on site and to minimize impacts within the Resource Protection District. Tree removal is proposed to support these permittable site construction activities. Some selective cutting within an upland area of the Resource Protection District is also proposed in order to provide and improve bird and wildlife viewing from bedrooms and sitting areas.

Construction is expected to begin this May for occupancy by May 2024. Total project costs are not expected to exceed \$5.1 million and a financial capacity letter is provided in Section 4 of this application. Please do not hesitate to call if you have any questions about the information provided or need additional information to complete your review of this project.

Sincerely,

Esther K. Bizier, P.E.

Senior Engineer & Director of Main-Land Falmouth Office

# Section 3: Title, Right, or Interest

In the following section please find the following:

- Purchase and Sale Document between the Applicant and Owner
- Signed extension of Purchase & Sale until June 1, 2023
- Property Deed

DigiSign Verified: BF1997D9-B693-4227-BB1E-851242DD09F2 DigiSign Verified: BEAF6629-826B-4732-A234-7C63A16A68A4

# PURCHASE AND SALE AGREEMENT - LAND ONLY

("days" means business days unless otherwise noted, see paragraph 20)

September 7 , 2022	Sept 12 202 Zeiffeelive Date
Offer Date	Effective Date is defined in Paragraph 20 of this Agreement.
1. PARTIES: This Agreement is made between John F. Murphy	Homes, Inc.
	("Buyer") and
Both C. Bell, John D	
<ol> <li>DESCRIPTION: Subject to the terms and conditions hereinaft part of (if "part of" see para, 22 for explanation) the property s</li> </ol>	ituated in municipality of Augusta
County of Androscoggin , State of Maine, located described in deed(s) recorded at said County's Registry of Deeds Box	I CI
3. PURCHASE PRICE/EARNEST MONEY: For such Deed at	
Buyer has delivered; or X will delivered a deposit of carnest money in the amount in the amount of Sa/a will be delivered	er in the Acency within 3 days of the Effective Date,
in the amount of Sn/a will be delivered	nle
If Buyer fails to deliver the initial or additional deposit in compliant right to terminate ends once Buyer has delivered said deposit (s). To cashier's or trust account check upon delivery of the Deed.	e with the above icines Scher may remineste this Agreement. This
This Purchase and Sale Agreement is subject to the following condit	ions:
	dens Real Estate The Wasiello Group ("Agency") shall hold hall be valid until September 9, 2022 (date) if non-acceptance, this earnest money shall be returned promptly
to Buyer.  5. TITLE AND CLOSING: A deed, conveying good and mercha	of the first sent the
the Maine Bar Association shall be delivered to Buyer and this transexecute all necessary papers on	closing date) or before, if agreed in writing by both parties. If paragraph, then Seller shall have a reasonable time period, not to it, unless otherwise agreed to in writing by both Buyer and Seller, to cure any title defect during such period. If, at the later of the e period, Seller is unable to remedy the title, Buyer may close and in which case the parties shall be relieved of any further obligations
<ol> <li>DEED: The property shall be conveyed by aQuit claim encumbrances except covenants, conditions, easements and restrict continued current use of the property.</li> </ol>	m with covenant deed, and shall be free and clear of all fons of record which do not materially and adversely affect the
<ol> <li>POSSESSION: Possession of premises shall be given to Buyer in</li> </ol>	mmediately at closing unless otherwise agreed in writing.
<ol> <li>RISK OF LOSS: Until the closing, the risk of loss or damage t shall have the right to view the property within 24 hours prior to substantially the same condition as on the date of this Agreement.</li> </ol>	o said premises by fire or otherwise, is assumed by Seller. Buyer
9. PRORATIONS: The following items, where applicable, shall be no other. Real estate texes shall be no other. Real estate texes shall be apportioned on the basis of the taxes assessed for the pand valuation can be ascertained, which latter provision shall survequired by State of Maine.	all be prorated as of the date of closing (basec on municipality's s. If the amount of said taxes is not known at the time of closing, proceeding year with a reapportionment as soon as the new tex rate
10. DUE DILIGENCE: Buyer is encouraged to seek information fr Seller nor Licensec makes any warranties regarding the condition, p subject to the following contingencies, with results being satisfactory	esmitted use or value of Sellers' real property. This Agreement is
Page 1 of 5 Buyer(s) Initials VG  Better Groups & Gerdens, 155 Center Street Ashton MS 60310  Produced With Lone Well Transpotons (top Form Edition) 7	Seller(s) Initials Selb Selb Selb Selb Selb Selb Selb Selb

C	ONTINGENCY	YES	NO	FUI,	L RESOLUT	TON	OBTAINED BY	TO BE PAID FOR BY
1.		X	П		75		buyer	boyer
	Purpose:	20	فسة	.,,				
2.	SOILS TEST Purpose:		X	within		days _		***************************************
3.	SEPTIC SYSTEM	*******						
	DESIGN Purpose:		X	within		days		
4.		X		within	120	days	buyer	buyer
	Ригрозе:	125	ten.i					
5.		-						
	WASTE REPORTS		X	within		days		
,	Porpose:	X	П	within	75	days	boyer	buyer
6.	UTILITIES Purpose:	124		WATTERST.	13	tays	SAME & BA	
7	WATER	П	X	within		dzys		
1.0	Furpose:	12.	10.00					
8.	SUB-DIVISION		_		Nillanda			
	APPROVAL		X	within		days		
	Purpose:	-	150	-14-5-		de-m		
9.	DEP/LUPC/ACOE APPROVALS		X	WIRIT		Days _		
t.n	ZONENG VARIANCE		X	anthin		days		
IV.	Purpose:	لسلا	100	PF ALLEGALIA				
11.	HABITAT REVIEW/							
	WATERFOWL		X	within		days		
	Purpose:		-					
12.	REGISTERED FARMLAND Purpose:	L.i	X	within		days		
13.	MDOT DRIVEWAY/		_	444				
	ENTRANCE PERMIT		X	within		tays		
1.1	Purpos≃  DEED RESTRICTION		X	neithir		dave		
14.	Purpose:	ئــا	(A)	WITH THE				
15	TAX STATUS*	11	X	within		days		
	Ршрова:							
16.	BUILD PACKAGE		X	within		days		
	Punose:		F-7	111	AZ.	Acres	bayer	boyer
17.	OTHER	X		WILDIN	13	days _	пауст	007.5
	* If the land is enrolled in the l	Maine 1	Insa Gr	outh Tax or	noram Seller	APTERS ID D	rovide Buyer with	the current Fores
	Management and Harvest Plan with	in	days	Yes T	No		9/	
Britis	ther specifications regarding any of	the abov	e: Subi	ect to a well	and study bei	ing complete	d within 75 busines	s days and being
pai	d for by the buyer.					- 5		
_								
Unl	ess otherwise specified above, all o	f the ab	lliw syo	be obtained	and paid for l	by Buyer. Set	ler agrees to cooper	ate with Buyer and
shal	! give Bover and Buver's agents an	d consu	Itanis TE	asonable acc	ess to the pro-	perty in order	to undertake the ai	nove myesuganous
Buy	er agrees to take reasonable steps t	o reban	the pro	perty to its p	re-mspection	condition. If	me resum of any m	nt mill and void by
con	dition specified herein is unsatisfac fying Seller in writing within the sp	mry m	nuyer r	of days and	anv eamest n	nonev shall be	returned to Buver.	If the result of any
inve	stigation or other condition specific	ed herei	n is uns	atisfactory to	Buyer, and I	Buyer wishes	to pursue remedies	omer man volum
the	Agreement, Buyer must do so to fi	ill resol	ntion w	thin the time	period set fi	orth above; of	therwise this comin	gency is waived i
Bur	er does not notify Seller that an inv	estigation	on is uns	atisfactory w	ithin the time	period set fo	rth above, or it any	massidanon mos
this	paragraph is not performed or com	pleted o	nuing th	e period spe	critica in this	paragraph, ini	s contingency and	v amon Buver's own
an i	nvestigation are waived by Buyer. I tion as to the condition of the prope	i ide ad Tu	sence of	uispection(S	) mennonen s	e . A	a rashme combinater	1
וניטי	Page 2 of 5 Euger(s) initials V	-			Seller(s) Init	iels DED	1.DC.	
	Produced with Lone Well T		ctoForm E	fition) 717 N Hoveo			www.Forphi.gom	John F. Marphy

### <u>DigiSign Verified: BF1997D9-B693-4227-BB1E-851242DD09F2</u> <u>DigiSign Verified: BEAF6629-826B-4732-A234-7C63A16A68A4</u>

11.		ANCING: Buyer's obligation to close:
	No	t Subject to Financing
	닕	is not subject to a financing contingency. Buyer has provided Seller with exceptable proof of the funds.  is not subject to a financing contingency. Buyer shall amy de moof of the funds acceptable to Seller within 5 days. If such
	<b>E</b>	
		proof is unacceptable to Seller, Seller may terminate this Agreement no later than 3 days from receipt. If proof of funds is not provided within such time period, Seller may terminate this Agreement which right shall end once such proof is received, however Seller
		provided within such time period, Select may estimate this Agreement which right such that the entry in the surrect manage that is
		retains the agreed upon time period to terminate if such proof is unacceptable. If Seller tempinates in either case, the carnest money shall be
		resumed to Buyer.
	X	Suyar's ability to purchase is is is not subject to the sale of another property. See addendum Yes X No.
	Sol	ject to Financing
		Buyer's obligation to close is subject to financing as follows:
	2	Buyer's obligation to close is subject to Buyer obtaining a <u>ula</u> lost of <u>n/a</u> % of the purchase
		price, at an interest rate not to exceed n/a % and amortized over a period of n/a years. Buyer is under a good
		faith obligation to seek and obtain financing on these terms. If such financing is not available to Buyer as of the closing date, buyer is not
		obligated to close and may terminate this Agreement in which case the earnest money shall be returned to Stryer.
	Ď.	Buyer to provide Softer with letter from lender showing that Buyer has made application for loan specified in (2) 200, subject to verification
		of information is qualified for the loan respected within 10 days from the Effective Date of the Agreement, it buyer take
		to provide Seller with such letter within said time period, Seller may terminate this Agreement and the earnest money sound be returned to
		Buyer This right to terminate ends once Payer's lefter is received.
	Ç.	- A STATE OF THE S
		and Buyer's licenses.
	á.	after the is met if the lender politice Ruyer that it is mable or unwilling to provide said financing, Buyer is obligated to provide Seller
	_	with written documentation of the loan denial within two days of receipt. After nonliving Selier, Buyer shall have
		Seller with a letter from another lender showing that Buyer has made application for loan specified in (a) and, subject to verification of
		information, is qualified for the loan requested. If Buyer fails to provide Seller with such letter within said time period, Seller may
		reminate this Agreement and the carnest money shall be returned to Buyer. This right to terminate ends once Buyer's letter is received.
	_	Buyer agrees to pay no more than n/a points. Seller agrees to pay up to Sn/a toward Buyer's actual pre-
	ę,	paids, points and/or closing costs, but no more than allowable by Hayer's lender.
	=	Buyer's ability to obtain financing \(\sigma\) is not subject to the sale of another property. See addending \(\sigma\) Yes \(\mathbb{Z}\) No.
	Ĩ-	Buyer may choose to pay cash instead of obtaining financing. If so, Buyer shall notify Seller in writing including providing proof of funds
	g,	and the Agreement shall no longer be subject to financing, and Seller's right to terminate pursuant to the provisions of this paragraph shall
		be void and Seller's obligations pursuant to 11e shall remain in full force and effect.
		ac Adid and Jetter a building building to the high retirent in purifice and extend
12	201	KERAGE DISCLOSURE: Buyer and Sailer acknowledge they have been advised of the following relationships:
14.	DIV	Both Bell (007867) of Keller Williams Regity (1898)
	_	Licensec MLS ID Agency MLS ID
ic a	W C	No. 4 Toman Agent   Direction   Const.   Transportion States
134	SE C	Jane Cyr / Even Cyr ( 000202 ) of Better Homes & Gardens Real Estate The Musicillo Group ( 1066 )
	-	Licensee MLS D Agency MLS D
	Fle.	eller Agent M Buyer Agent Disc Dual Agent Transaction Broker
E .L	ic ten	assortion involves Disclosed Dual Agency, the Buyer and Soller acknowledge the limited fiduciary duties of the agents and hereby consent
en 45a	is ua	angement. In addition, the Buyer and Seller acknowledge prior receipt and signing of a Disclosed Dual Agency Consent Agreement.
O IE	72 411	anticurent in arminit the balant and series storms and be him according to the series of the series
13.	PRO	PERTY DISCLOSURE FORM: Buyer acknowledges receipt of Froperty Disclosure Form.
14.	DEF	AULT/RETURN OF EARNEST MONEY: Buyer's failure to fulfill any of Buyer's obligations hereunder shall constitute a default and
Salle	P 1710	or arming all lengt and equitable remedies including without limitation, termination of this Agreement and fortentile by buyer of the
POTTL	not ro	oney Saller's failure to fulfill any of Saller's obligations horounder shall constitute a default and Buyer may employ all legal and equipole
******	Same	including without limitation termination of this Agreement and return to Buyer of the earnest money. Agency acting as exclass agent was
Same	matte.	as another suited with the basics wine to dishurcing the cornect manay to either Buyer or Seller. In the event that the Agency is
made	e a re	it to respon the white the leaders with the discussion of the countries of
be as		ed as court costs in favor of the prevailing party.
	150551	
	15 <b>2</b> \$51	
15.	MET	NATION: Espect money or other disputes within the uniedictional limit of small claims court will be handled in that forum. All other
dien	MEI	DIATION: Earnest money or other disputes within the jurisdictional limit of small claims court will be handled in that forum. All other relains spicing out of or relating to this Agreement or the money's addressed in this Agreement (other than requests for injunctive relief) shall
dispi	MEI nes o	DIATION: Earnest money or other disputes within the jurisdictional limit of small claims court will be handled in that forum. All other relains arising out of or relating to this Agreement or the property addressed in this Agreement (other than requests for injunctive relief) shall and to mediation in accordance with generally accorded mediation machines. Buyer and Seller are bound to mediate in good faith and to each
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dispi be si pay l relie faile	MEI nes o chmit half o f), th d to f	DIATION: Expest money or other disputes within the jurisdictional limit of small claims court will be handled in that forum. All other or claims arising out of or relating to this Agreement or the property addressed in this Agreement (other than requests for injunctive relief) shall need to mediation in accordance with generally accepted mediation practices. Buyer and Seller are bound to mediate in good faith and to each of the needtation free. If a party fails to submit a dispute or claim to mediation prior to initiating litigation (other than requests for injunctive an that party will be liable for the other party's legal fees in any subsequent litigation regarding that same matter in which the party who list submit the dispute or claim to mediation loses in that subsequent litigation. This clause shall survive the closing of the transaction.  OR STATEMENTS: Any representations, statements and agreements are not valid unless contained herein. This Agreement completely
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- 17. HEIRS/ASSIGNS: This Agreement shall extend to and be obligatory upon heirs, personal representatives, successors, and assigns of the Seller and the assigns of the Buyer.
- 18. COUNTERPARTS: This Agreement may be signed on any number of identical counterparts, such as a faxed copy, with the same binding effect as if the signatures were on one instrument. Original, faxed or other electronically transmitted signatures are binding.
- 19. NOTICE: Any notice, communication or document delivery requirements bereunder may be satisfied by providing the required notice. communication or documentation to or from the patries or their Licenses. Only withdrawals of offers and withdrawals of counteroffers will be effective upon communication, verbally or in writing.
- 20. EFFECTIVE DATE/BUSINESS DAYS: This Agreement is a binding contract when the last party signing has caused a paper or electronic copy of the fully executed agreement to be delivered to the other party which shall be the Effective Date. Licensez is authorized to fill in the Effective Date on Page I hereof. Except as expressly set forth to the contrary, the use of the term "days" in this Agreement, including all addends made a part hereof, shall mean business days defined as excluding Separdays, Sandays and any observed Maine State/Federal holidays. Deadlines in this Agreement, including all addunds, expressed as "within x days" shall be counted from the Effective Dete. miless another starting date is expressly set forth, beginning with the first day after the Effective Date, or such other established starting date, and ending at 5:00 p.m. Eastern Time on the last day counted. Unless expressly stated to the contrary, deadlines in this Agreement, including all addends, expressed as a specific date shall end at 5:00 p.m. Bastern Time on such date.
- 21. CONFIDENTIALITY: Buyer and Seller anthorize the disclosure of the information herein to the real estate licensees, attorneys, lenders, appraisors, inspectors, investigators and others involved in the transaction necessary for the purpose of closing this transaction. Buyer and Selber arriborize the lender and/or closing agent preparing the entire closing disclosure and/or sattlement statement to release a copy of the closing disclosure and/or settlement statement to the parties and their licensees prior to, at and effor the closing
- 22. OTHER CONDITIONS: Subject to John F. Murphy Homes, Inc. Board approval once all contingencies/studies are completed and reviewed.

Should beyor elect not to purchase the property during pursuit of their due diligence, buyer agrees to provide at no charge to the seller a completed copy of one or more of the following as applicable: Survey, Wetlands Study and Phase I Environmental Study.

32	GENER	AT.	PRO	VIS	DNS:
۷٠.	Section Control	C Selection	***	T 4554	Court States

- a. A copy of this Agreement is to be received by all parties and, by signature, receipt of a copy is hereby acknowledged. If not fully understood, contact an attorney. This is a Maine contract and shall be construed according to the laws of Maine.
- b. Soller acknowledges that State of Maine law requires buyers of property owned by con-testident sellers to withhold a prepayment of capital gains tax unless a waiver has been obtained by Saller from the State of Maine Ravenue Services.
- e. Super and Soller acknowledge that under Maine law payment of property taxes is the legal responsibility of the person who owns the property on April 1, even if the property is sold before payment is due, if any part of the taxes is not paid when thee, the lien will be filed in he name of the owner as of April 1 which could have a negative impact on their credit rating. Buyer and Selier shall agree at closing on their responsive obligations regarding certal payment of taxes after slowing. Buyer and Seller should make sure they understand their obligations agreed to at closing and what may keppon if taxes are not paid as agreed.
- Buyer acknowledges that Maine law requires continuing interest in the property and any back up offers to be communicated by the listing agent to the Seller.
- Whenever this Agreement provides for earnest money to be returned or released, agency acting as escrow agent must comply with Maine which may require written polices or obtaining written releases from both parties.

ADDENDA: Ye	s X No Explain:		
		ROA TY	× 3
Page 4 of 5	Buyer(s) Initials TE	Seller(s) Initials SCO	oho E. Murphy

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<ol> <li>ELECTRONIC SIGNATURES: Pursuant to agree to the use of electronic signatures as a either party may sign electronically by utilizing</li> </ol>	nethod of signing/in	ectionic Transactions Act and Digital Signature A Italing this Agreement, including all addends. Th are service.	ct, the parties authorize and se parties hereby agree that
Buyer's Mailing address is 880 Center Stress			A STATE OF THE PARTY AND ADDRESS OF
Vadd Condinin	50-17-2022		
BUYER John F. Murphy Homes, Inc.	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE
Seller accepts the offer and agrees to deliver agrees to pay agency a commission for service Seller's Mailing address is 26 North Agency	es as specified in the	listing agreement.	i conditions set forth and
SELLER Beth C. Bell	DATE	SELLER John D. Crafts	DATE
SELLER	DATE	SELLER	DATE
	COUNT	er-offer	- Was
The parties acknowledge thereatil signed by will expire unless accepted by Buyer's signati (time)	re with communicate  - 94-22 DATE  DATE	stire constitutes only an offer to sell on the action of such signature to Sciler by (date)  SELLER  BUYER  BUYER	OOVE SETTINS and the office 9/9/02 PATE DATE
	EXT'	ENSION	
The closing date of this Agreement is extended	until	DATE	···································
SELLER	DATE	SELLER	DATE
SELLER	DATE	SELLER	DATE
BUYER	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE









TC

8k 7114 Ps278 #7917 \* 1 04-19-2007 @ 10:40a

NOT DEED OF SALE BY OT

APERSONAL REPRESENTATIVE
OFFICIAL (Testate) FFICIAL
COPY
COPY

KNOW ALL MEN BY THESE PRESENTS, That I, LAURIER T. RAYMOND, JR. of Lewiston, County of Androscoggin, State of Maine, July appointed and acting Personal Representative of the Estate of Madeline C. Whitman, deceased, whose will was duly admitted to probate in the Probate Court for the County of Androscoggin, Maine, and having given notice to each person succeeding to an interest in the real property described below at least ten (10) days prior to the sale, by the power conferred by the Probate Code, and every other power, grant to BETH C. BELL of Auburn and JOHN D. CRAFTS of Lisbon Falls, both in the County of Androscoggin, State of Maine, as joint tenants with rights of survivorship, the land thereon situated in AUBURN, County of ANDROSCOGGIN, State of MAINE, bounded and described as follows, to wit:

A CERTAIN LOT OR PARCEL OF LAND situated in said Auburn, on the Easterly side of the Hotel Road, so-called, as more particularly described in Exhibit A attached hereto and made a part hereof.

BEING A PART OF THE PREMISES conveyed to Madeline C. Whitman by Deed of Albert D. Crockett dated June 21, 1976, and recorded in Book 1212, Page 335, Androscoggin County Registry of Deeds.

Madeline C. Whitman died on July 14, 2004. See Androscoggin County Probate Court, Docket No. 2004-378.

MAINE REAL ESTATE TRANSFER TAX PAID TG

WITNESS my Hand affid seal in s	said capacity this or The day of April, 2007.					
OFFICIAL	OF F (I ) I A L					
COPY	my read					
NOT	Laurier T. Raymond, Jr.					
A N O F F I C I A L	Personal Representative of the					
COPY	Estate of Madeline C. Whitman					
STATE OF MAINE ANDROSCOGGIN, SS.	APRIL <u>9</u> , 2007					
Then personally appeared <i>Laurier T. Raymond</i> , <i>Jr.</i> , in his capacity as Personal Representative of the Estate of Madeline C. Whitman and acknowledged the foregoing instrument to be his voluntary act and deed.						
Before me,	Cleanor Bardas					
	Notary Public ELEANOR B. DOUGLAS					
	Print Name: NOTARY PUBLIC, MAINE					
	Commission Expression Expression Expression Expression					

Title not Examined; Description not verified

Clients/Whitman/Deed of Sale-land.doc

A certain lot or parcel of land with the buildings thereon, situated in said Auburn, on the easterly side of the Hotel Road, sp-called, bounded and described ap follows, to wit:

On the North and East by Taylor Brook there situated; on the south by land now or formerly of the H.L. Haskell Estate; and on the west by the Hotel Road aforesaid.

Being all the same premises, and subject to the same exceptions and reservations as contained in deed of Madeline C. Whitman et als to Alice M. Crockett dated March 26, 1958, recorded in the Androscoggin County Registry of Deeds in Book 778, Page 216.

There is excepted from the above described premises a certain lot or parcel of land with any improvements thereon, it being further bounded and described as follows:

Beginning on the northeasterly sideline of Hotel Road at the northwesterly corner of land now or formerly of Michael and Jacqueline Pettengill evidenced by deed recorded in the Androscoggin County Registry of Deeds in Book 1212, Page 335;

Thence North twenty-two degrees thirteen minutes forty-seven seconds West (N 22° 13' 47" W), along said sideline of Hotel Road, five hundred seventy-one and eleven hundredths (571.11) feet to an iron rod set;

Thence North sixty-six degrees thirty-four minutes seven seconds East (N 66° 34' 07" E), passing through land of this grantor, two hundred fifty and zero hundredths (250.00) feet to an iron rod set;

Thence South fifty degrees twenty-three minutes nine seconds East (S 50° 23' 09" E), continuing through land of this grantor, three hundred twenty nine and forty hundredths (329.40) feet to an iron rod set along the northwesterly line of land now or formerly of Kurvin, LLC evidenced by deed recorded in said Registry in Book 4337, Page 35;

Thence South thirty-two degrees thirty-four minutes twenty-five seconds West (\$ 32° 34' 25" W), along the northwesterly lines of land of said Kurvin, LLC and said Pettengill, four hundred ninety-six and eight hundredths (496.08) feet to the point of beginning.

The above described parcel is subject to a 100' wide Central Maine Power easement evidenced by deed recorded in said Registry in Book 907, Page 75.

All bearings refer to magnetic north as shown on a plan entitled "Master Plan – Granite Mill Estates", dated April 6, 2002, recorded at said Registry in Plan Book 42, Page 146.

Said excepted parcel contains 3.5 acres, and the above description derives from a deed sketch prepared by Sebago Technics dated April, 2007 under Project No. 07197.

The premises herein Conveyed being a portion of Mhop Emises conveyed to Madeline C. Whitman by deed of AlbertaDNCrockett dated June 21, 1976 And recorded in said Registry in Book 1212, Page 335. Reference Ishould be made to the orobate estate of Madeline C. Whitman on file with the Androscoggin County Registry of Probate under Dacket No. 2004-378, and recorded Abstract thereof recorded in said Registry in Book 6100, Page 62. Albert D. Crockett predeceased Madeline C. Whitman, thereby terminating the former's reserved Right of First Refusal set forth in the aforesaid deed recorded in said Registry in Book 1212, Page 335.

COPY

O F F I C I A L O F F I C I A L COPY

> ANDROSCOGGIN COUNTY Tha K. Chaunoed REGISTER OF DEEDS

AG

'NOT NOT

O FOR I COLLAIL of Auburn First the Country of Androscoggin and State of Maine, in consideration of Pone dollar and other valuable consideration paid by the Auburn Sewerage District, a quasi-municipal N O T N O T corporation, duly chartered under the laws of the State of Maine,

Fand located an said Auburn, the remaint whereast is hereby acknowledged dochemetry drant and convey to the Cauburn Sawerage District, its successors and assigns to have and to hold forever the perpetual right and easement to enter upon, construct, repair, replace and maintain a sewer pipe or drain with necessary appurtenances across (my) (ownk land located in said Auburn and described as follows:

Land as described in a deed and recorded in the Androscoggin County Registry of Deeds, Book 778 Page 216

as further delinested on the City of Auburn Tax Map 83-1-3
(I) (We) covenant and agree for ourselves, our heirs and agsigns that we will not erect any permanent structure, tree or shrub above the location of the pipes of the grantee.

The Auburn Sewerage District covenants and agrees with the grantor(s) (bis) (her) (time(x)) heirs and assigns that it will cause no unnecessary damage in connection with its use of the land above described and that upon each entry it will restore the surface of the land to its original condition so far as possible and will not otherwise interfere with the grantors use of said land.

FEARTOR AND	rele	****	<del>ill-</del> righ	te by	descent-e	ind-other-	sights.
WITNESS	(my)	(RHR)	hand (s)	this	6 day of	June	1972.
					_	repet	
				(7)	eck Iti l	repuir	

ANDROSCOGGIN, SS:

June 6,

19 72 .

Then personally appeared the above named Alice M. Crockett
and acknowledged the foregoing instrument to the

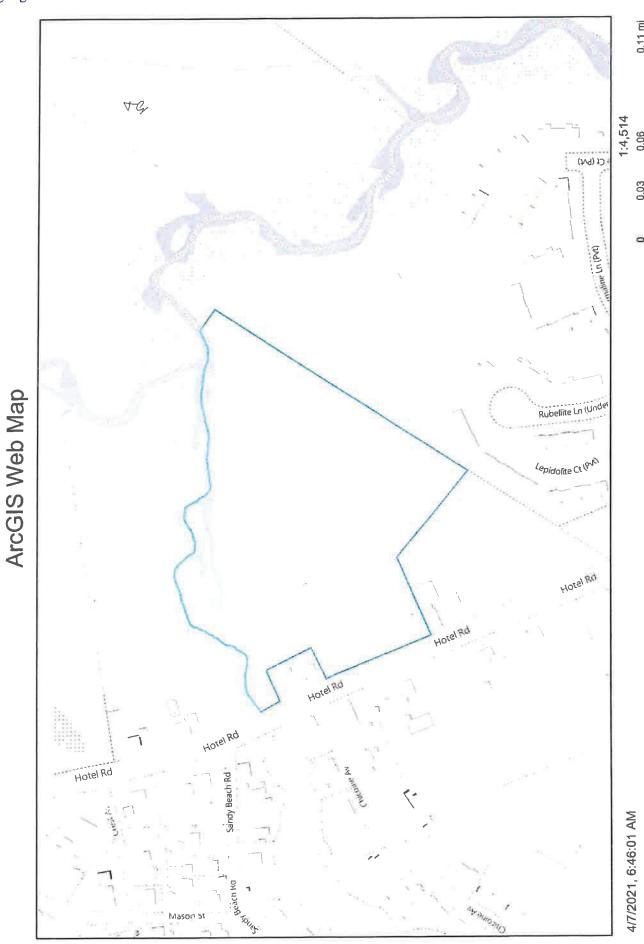
her free act and dead,

Before me.

Notary Public

My Commission expires May 3, 1979

ANDROSOGGIN, SS. # RECEIVED FEB 2 7 1975 H. - M. P. P. and recorded from the original



Web AppBuilder for ArcGIS Esri Community Maps Contributors, BuildingFootprintUSA, Esr Canada, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA | Maine GeoLibrary |

Parcels\_2019

Sources: Esri, Alrbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS,

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<ol> <li>SLECTRONIC SIGNATURES: Pursuant to the agree to the use of electronic signatures as &amp; 1 either party may sign electronically by utilizing</li> </ol>	method of signing/in	tectronic Transactions Act and Digital Signature Act, the partie sticking this Agreement, including all addends. The parties he nore service.	s authorize and reby agree that
Buyer's Mailing address is 800 Center Street.			
Vadd Continue	19417-2022		
BUYER John F. Murchy Homes, Inc.	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE
		i property at the price and upon the terms and conditions a limited assessment.  And house 12 Passing La Usba	
SELLER Beds C. Zell	DATE	SELLER John D. Craits	DATE
SELLER	DATE	SELLER.	DATE
	COUNT	TER-OFFER	
\$255,0	200 <u>800</u>	Cir Terms remain the Same entre consistence consistence only as offer to sell on the above terms nion of such signature to Saffer by (date) 9/13,	2032 /2/32 /9/32 DATE
SELLER	DATE	SELLER	DATE
The Buyer bereby accepts the counter offer set  Andrew Counter	fath above.		
	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE
	exp	ENSION	
The closing date of this Agreement is extended	until	TONE 1 2023	·
Both Chill 2.	-1-2023	AND A SECOND	
SELLER STATE OF SUFFICE	2-1-100	2, SELLER	DATE
SELLER /	DATE	SELLER	DATE
Andrew Cowan SUYER	01-31-2023 DATE	BUYER	DATE
	(c co c.		DATE
BUYER	DATE	BUYER	90 ID



Page Sof 5

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Zelon St. Minoria

# NOT DEED OF SALE BY OT APERSONAL REPRESENTATIVE OFFICIAL (Testate) FFICIAL COPY COPY

KNOW ALL MEN BY THESE PRESENTS, That I, LAURIER T. RAYMOND, JR. of Lewiston, County of Androscoggin, State of Maine, July appointed and acting Personal Representative of the Estate of Madeline C. Whitman, deceased, whose will was duly admitted to probate in the Probate Court for the County of Androscoggin, Maine, and having given notice to each person succeeding to an interest in the real property described below at least ten (10) days prior to the sale, by the power conferred by the Probate Code, and every other power, grant to BETH C. BELL of Auburn and JOHN D. CRAFTS of Lisbon Falls, both in the County of Androscoggin, State of Maine, as joint tenants with rights of survivorship, the land thereon situated in AUBURN, County of ANDROSCOGGIN, State of MAINE, bounded and described as follows, to wit:

A CERTAIN LOT OR PARCEL OF LAND situated in said Auburn, on the Easterly side of the Hotel Road, so-called, as more particularly described in Exhibit A attached hereto and made a part hereof.

**BEING A PART OF THE PREMISES** conveyed to Madeline C. Whitman by Deed of Albert D. Crockett dated June 21, 1976, and recorded in Book 1212, Page 335, Androscoggin County Registry of Deeds.

Madeline C. Whitman died on July 14, 2004. See Androscoggin County Probate Court, Docket No. 2004-378.

WITNESS my hand and seal in s	aid capacity this OT May of April, 2007.
OFFICIAL COPY	OF F (I O I A L
NOT AN OFFICIAL COPY	Laurier T. Raymond, Jr. Personal Représentative of the Estate of Madeline C. Whitman
STATE OF MAINE ANDROSCOGGIN, SS.	APRIL <u>9</u> , 2007
	T. Raymond, Jr., in his capacity as Personal C. Whitman and acknowledged the foregoing ed.
Before me,	Cleanor Blandas
	Notary Public ELEANOR B. DOUGLAS Print Name: NOTARY PUBLIC, MAINE
	Commission Expression Express September 2012

Title not Examined; Description not verified

Clients/Whitman/Deed of Sale-land.doc

NOT Exhibit A NOT
AN AN
OFFICIAL Land OnlyFFICIAL
COPY COPY

A certain lot or parcel of land with the buildings thereon, situated in said Auburn, on the easterly side of the Hotel Road, sp-called, bounded and described ap follows, to wit:

On the North and TEast by Taylor Brook there situated; ron the south by land now or formerly of the H.L. Haskell Estate; and on the west by the Hotel Road aforesaid.

Being all the same premises, and subject to the same exceptions and reservations as contained in deed of Madeline C. Whitman et als to Alice M. Crockett dated March 26, 1958, recorded in the Androscoggin County Registry of Deeds in Book 778, Page 216.

There is excepted from the above described premises a certain lot or parcel of land with any improvements thereon, it being further bounded and described as follows:

Beginning on the northeasterly sideline of Hotel Road at the northwesterly corner of land now or formerly of Michael and Jacqueline Pettengill evidenced by deed recorded in the Androscoggin County Registry of Deeds in Book 1212, Page 335;

Thence North twenty-two degrees thirteen minutes forty-seven seconds West (N 22° 13' 47" W), along said sideline of Hotel Road, five hundred seventy-one and eleven hundredths (571.11) feet to an iron rod set;

Thence North sixty-six degrees thirty-four minutes seven seconds East (N 66° 34' 07" E), passing through land of this grantor, two hundred fifty and zero hundredths (250.00) feet to an iron rod set;

Thence South fifty degrees twenty-three minutes nine seconds East (S 50° 23' 09" E), continuing through land of this grantor, three hundred twenty nine and forty hundredths (329.40) feet to an iron rod set along the northwesterly line of land now or formerly of Kurvin, LLC evidenced by deed recorded in said Registry in Book 4337, Page 35;

Thence South thirty-two degrees thirty-four minutes twenty-five seconds West (\$ 32° 34' 25" W), along the northwesterly lines of land of said Kurvin, LLC and said Pettengill, four hundred ninety-six and eight hundredths (496.08) feet to the point of beginning.

The above described parcel is subject to a 100' wide Central Maine Power easement evidenced by deed recorded in said Registry in Book 907, Page 75.

All bearings refer to magnetic north as shown on a plan entitled "Master Plan – Granite Mill Estates", dated April 6, 2002, recorded at said Registry in Plan Book 42, Page 146.

Said excepted parcel contains 3.5 acres, and the above description derives from a deed sketch prepared by Sebago Technics dated April, 2007 under Project No. 07197.

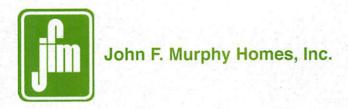
The premises herein Conveyed being a portion of Mhoppetmises conveyed to Madeline C. Whitman by deed of Albert DNCrockett dated June 21, 1976 And recorded in said Registry in Book 1212, Page 335. Reference should be made to the ordoare estate of Madeline C. Whitman on file with the Androscoggin County Registry of Probate under Docket No. 2004-378, and recorded Abstract thereof recorded in said Registry in Book 6100, Page 62. Albert D. Crockett predeceased Madeline C. Whitman, thereby terminating the former's reserved Right of First Refusal set forth in the aforesaid deed recorded in said Registry in Book 1212, Page 335.

OFFICIAL COPY O F F I C I A L C O P Y

ANDROSCOGGIN COUNTY

TING A. Chaunord

REGISTER OF DEEDS



January 26, 2023

#### John Blais

Deputy Director of Planning, Permitting and Code City of Auburn, Maine 60 Court St. Auburn, Maine 04210

RE: John F. Murphy Homes, Inc. - Financing for Proposed Taylor Brook House

Dear Mr. Blais:

John F. Murphy Homes, Inc. ("JFM") intents to construct a new 8 bed Intermediate Care Facility ("ICF") to replace our existing ICF facility currently located at 2 Teakwood Knoll in Lewiston, ME. We plan to build this new facility on land located between 952 & 988 Hotel Rd. in Auburn, Maine. This facility serves individuals with Intellectual Disabilities or Autistic Spectrum Disorder and operates under Section 50 of the MaineCare Benefits Manual. The residents at 2 Teakwood Knoll would relocate to this new facility upon completion.

We expect the construction costs to be between \$4.9M - \$5.1M. In November 2022 we closed on financing from Maine Health & Higher Education Financing Authority. The amount borrowed exceeds the expected construction costs. However, in the event that cost exceed our financing, JFM maintains an average daily cash balance with Maine Community Bank (aka - Mechanics Savings Bank) in excess of 25% of the estimated construction costs. Cash reserves will be used for any overages.

Please do not hesitate to contact me should you have any questions.

Sincerely,

Andrew Cowan, CPA Chief Financial Officer John F. Murphy Homes, Inc. 800 Center St. Auburn, ME 207-440-6213



January 26, 2023

#### **John Blais**

Deputy Director of Planning, Permitting and Code Department City of Auburn 60 Court St. Auburn, Maine 04210

Re: John F. Murphy Homes, Inc.

Proposed Taylor Brook House

Dear John:

We understand John F. Murphy Homes is working on an application to construct a new 8 bed Intermediate Care Facility ("ICF") to replace their existing ICF facility currently located at 2 Teakwood Knoll in Lewiston, ME. They plan to build this new facility on land located between 952 & 988 Hotel Rd. in Auburn, Maine. The budgeted construction costs are between \$4.9M - \$5.1M.

Funding for the project has been provided by Maine Health & Higher Education Financing Authority. In the event that costs exceed the financing available, John F. Murphy Homes, Inc. maintains cash balance with Mechanics Savings, a division of Maine Community Bank in excess of 25% of the estimated construction costs. These cash reserves will be used for any cost overages.

If you have questions, or need further information, I can be reached at 207-333-4551.

Very truly yours,

**MECHANICS SAVINGS** 

JoAnne P. Campbell

JoAnne P. Campbell Senior Vice President Commercial Lending







P.O. BOX Q LIVERMORE FALLS, ME 04254 367 US ROUTE 1, S. BUILDING, FALMOUTH, ME 04105 Tel: (207) 897-6752/FAX: (207) 897-5404 Www.main-landdci.com

# Wetland, Streams, and Cursory Vernal Pool Delineation Report Stoneybrook Land Use, Inc. Hotel Road, Auburn, Maine

2/23/2023

#### **INTRODUCTION**

A site visit was made by Main-Land Development Consultants (Main-Land) to map potential natural resource features on the project site. The project site consists of one parcel located between Hotel Road and Taylor Brook in Auburn. The approximately 13-acre parcel is shown as Lot 1 on Tax Map 70. Wetland delineation, stream identification, and a cursory vernal pool screening were included in this mapping process.

The purpose of this report is to document identified wetlands and water resources that fall under the federal jurisdiction of the U.S. Army Corps of Engineers (USACE) and the Clean Water Act (CWA), in addition to the state jurisdiction of the Maine Department of Environmental Protection (Maine DEP) and the Natural Resources Protection Act (NRPA).

#### **METHODOLGY**

#### **Preliminary Data**

Prior to performing the field delineation, steps were taken to gather and evaluate preliminary data on the project site. Data made available by the Maine Office of GIS was reviewed, as well as from sources such as the National Wetlands Inventory (NWI) wetlands, USDA Natural Resource Conservation Soil Survey Maps, and digital aerial photography.

#### **Wetland and Stream Delineation**

On November 10<sup>th</sup>, 2022, a wetland and stream delineation was performed within the project site. Wetlands were identified and delineated in accordance with the *1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands* and the *2012 Regional Supplement to The Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region.* Eric Whitney, L.S.E, S.S., flagged the perimeter of wetland boundaries at an average interval of 30 feet per flag. Locations of the set flags were recorded with the use of a Trimble Geo 7x Handheld GPS unit. Hydric soils, hydrophytic vegetation, and hydrology indicators are three requirements that must all be present during the natural resources survey for the determination of wetland classification.

The stream delineation methodology follows the guidance provided by the Maine DEP Natural Resource Protection Act (NRPA) "*Identification Guide for Rivers, Streams, and Brooks*", and the definition of a stream in Maine State Statute, as follows:

**River, stream or brook**. "River, stream or brook" means a channel between defined banks. A channel is created by the action of surface water and has 2 or more of the following characteristics.

- A. It is depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map or, if that is not available, a 15-minute series topographic map.
- B. It contains or is known to contain flowing water continuously for a period of at least 6 months of the year in most years.
- C. The channel bed is primarily composed of mineral material such as sand and gravel, parent material or bedrock that has been deposited or scoured by water.
- D. The channel contains aquatic animals such as fish, aquatic insects or mollusks in the water or, if no surface water is present, within the stream bed.
- E. The channel contains aquatic vegetation and is essentially devoid of upland vegetation.

"River, stream or brook" does not correlate to a ditch or other drainage way constructed, or constructed and maintained, solely for the purpose of draining stormwater or a grassy swale.

Wetland and Stream features are classified using the Classification of Wetlands and Deepwater Habitats of the United States, Cowardin et al. 1979.

#### **Cursory Vernal Pool Survey**

A cursory vernal pool survey was completed using guides and standards established by the DEP and Army Corps of Engineers (ACOE). Significant Vernal Pools are defined by the NRPA as "naturally occurring, temporary or semi-permanent pools that provide habitat for a specific abundance of vernal pool amphibian species". If any potential vernal pools were identified during this review, then a full survey (amphibian breeding area survey) during the Spring must be completed to verify.

#### **Wetlands of Special Significance (WOSS)**

Wetlands were evaluated under criteria of Wetlands of Special Significance (WOSS). Wetlands of Special Significance are defined in NRPA Chapter 310: Wetlands and Waterbodies Protection Section 4. According to Chapter 310, WOSS include all coastal wetlands and great ponds, and freshwater wetlands that exhibit one or more of the following characteristics:

- 1. Critically imperiled or imperiled community. The freshwater wetland contains a natural community that is critically imperiled (S1) or imperiled (S2) as defined by the Natural Areas Program.
- 2. Significant wildlife habitat. The freshwater wetland contains significant wildlife habitat as defined by 38 M.R.S.A. § 480-B (10).
- 3. Location near coastal wetland. The freshwater wetland area is located within 250 feet of a coastal wetland.
- 4. Location near GPA great pond. The freshwater wetland area is located within 250 feet of the normal



- high water line, and within the same watershed, of any lake or pond classified as GPA under 38 M.R.S.A. § 465-A.
- 5. Aquatic vegetation, emergent marsh vegetation or open water. The freshwater wetland contains under normal circumstances at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, unless the 20,000 or more square foot area is the result of an artificial ponds or impoundment.
- 6. Wetlands subject to flooding. The freshwater wetland area is inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency or other site-specific information.
- 7. Peatlands. The freshwater wetland is or contains peatlands, except that the department may determine that a previously mined peatland, or portion thereof, is not a wetland of special significance.
- 8. River, stream or brook. The freshwater wetland area is located within 25 feet of a river, stream or brook.

#### **RESULTS**

#### **Project Area Overview**

The objective of this delineation is to determine the feasibility of development on the project site. The project site is accessed by and is east of Hotel Road. Taylor Brook abuts the property to the north. Around half of the property remains forested as of November 10<sup>th</sup>, 2022, with the rest having been previously cleared and maintained as a field area. The surrounding properties are generally developed as residential homes.

#### Wetlands

Two freshwater wetland complexes were identified within the project area during the natural resource survey. One of the wetland complexes, 43,111 SF in area, exists adjacent to Taylor Brook and is classified as a broad-leaved deciduous, seasonally flooded/saturated Palustrine Emergent (PEM1E) wetland. PEM wetlands are characterized by erect, herbaceous hydrophytes, excluding mosses and lichens. The second wetland complex identified is 288,571 SF in size and is classified as deciduous Palustrine Forested (PFO7). PFO wetlands are characterized by woody vegetation that is at least 20 feet tall.

The PEM wetland area located by the road is classified as such due to the presence of herbaceous vegetation. This area has been maintained as a cleared area. If allowed to regrow, the area would become forested or scrub-shrub.

#### **Streams**

Taylor Brook is located within the project site. The stream is classified as a perennial stream with a silt bottom. Emergent and scrub-shrub wetlands are associated with this stream.

#### **Vernal Pools**

At the time of the cursory vernal pool survey there were no potential vernal pools identified.

#### **Wetlands of Special Significance (WOSS)**

After reviewing data provided by the State of Maine Inland Fisheries and Wildlife (IF&W), it was noted that Inland Waterfowl and Wading Bird Habitat was mapped within the subject property. Wetlands within this significant habitat meet the WOSS classification. The Inland Waterfowl and Wading Bird Habitat boundary



is also delineated as the Resource Protection Zone on the Existing Condition Site Plan.

### **SUMMARY**

A wetland, stream, and cursory vernal pool delineation was completed for the project site. The delineation was completed on November 10<sup>th</sup>, 2022. Within the project site **NRPA wetlands, a stream, and WOSS wetland characteristics were identified during the wetland delineation**. The wetland complexes are classified as palustrine forested and palustrine emergent. Please see the associated site plan for locations of natural resource features.

Eric R.T. Whitney S.S., I.S

Project Environmental Scientist

## **Site Photos**



Photo 1. Wetland area from parking.



Photo 2. General area of proposed development.



Photo 3. Wetland boundary with road on right.



Photo 4. PEM wetland complex around Taylor Brook.

## **Section 6: Site Lighting**

The following section contains cut sheets of the lighting fixtures proposed as part of the lighting plan. Fixture types are identified in the legend of the Lighting Plan and fixture locations are also shown on the project Site Plans.





## LTR-6RD

**FEATURES** 

LITEISTRY 6" ROUND DOWNLIGHT

#### LOCATION: DATE: TYPE: PROJECT:

## LITEISTRY



Plenum applications

• Variety of dimming protocol options including 0-10V, DALI, DMX, and Lutron EcoSystem · NX Lighting Controls wired and wireless controls

• 6" architectural LED downlight delivering 600 - 9000 lm • Five beam distributions from 0.3 to 1.1 Spacing Criteria • Quiet reflector appearance with superior 50° optical cutoff

· Available for New Construction (non-IC), IC and Chicago





• 2700K - 5000K, 80+ and 90+ CRI options











CATALOG #:

\*Select models

#### SERVICE PROGRAMS





#### **CONTROL TECHNOLOGY**



#### **SPECIFICATIONS**

#### CONSTRUCTION

- Standard Non-IC. Chicago Plenum and IC options
- · Painted black durable steel platform with pre-installed bar hangers
- Pre-wired junction box with snap-on covers for easy access
- · Snap-in connection from driver compartment allows easy installation
- · Light Engine connections use plenum rated (CMP) cable

#### OPTICS

- · Visually pleasing 50° cutoff to source and source image
- · The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- · Optical grade silicone lens integral to light engine
- · High purity spun aluminum reflector, self-flanged
- · Flush Mount flange option with mud-in ring available
- · Large selection of anodized finishes and colors
- · Painted cones and flange options available

#### **ELECTRICAL**

- Chip-on-board LED with 2 SDCM
- · Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >55,000 hours (TM-21)
- Universal voltage 120V-277V driver, 347V optional
- · UL Class 2, inherent short circuit and overload protection
- Flicker free 0-10V dimming with 1% or <1% performance
- · DALI, DMX, and Lutron EcoSystem options
- NX or Lutron Vive control options available
- · Integral and remote controller and battery pack options available
- Refer to additional spec sheets for information on SpectraSync™ Tunable White or Dim-to-Warm or solutions

#### INSTALLATION

- Accommodates ceiling thickness up to 2" (SL, ML, HL); up to 1.25" (VL, XL) (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept 0.5" EMT conduit or 1.5" or 0.75" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6).
- Light Engine/Driver fully serviceable from above or below the ceiling

#### **CERTIFICATIONS**

- cCSAus certified to UL 1598
- For ≥70L: Marked spacing required 36" fixture center to center; 36" fixture center to building member; 0.5" above fixture
- · Suitable for wet locations, covered ceiling. EM/ EMR: Suitable for damp locations.
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- · When used with CE Bezel Trim Accessories: IP66/IP69K rating; also meets IK10 per IEC 60068-2-75 impact testing
- · Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- · ENERGY STAR® certified models available (For list and additional information, visit www.energystar.gov)
- · This product qualifies as a "designated country construction material" per F AR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 6/6/2020.

#### WARRANTY

5 year warranty

KEY DATA	4
Lumen Range	600-9000
Wattage Range	8-99
Efficacy Range (LPW)	94-104*
Reported Life (Hours)	L90/>55,000
Input Current (mA)	65-825 (120V)

\*Based on Specular, 35K, 80 CRI





# LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

	= Service	Program	STOCK	QS <sub>10</sub>	
CATALO	G #:				
TYPE:		PROJECT:			
DATE:		LOCATION:			

#### **ORDERING GUIDE**

Example: LTR-6RD-H-SL10L-DM1-LTR-6RD-T-SL35K8MD-S

CATALOG #

#### **HOUSING**

LTR-6RD-H		_				
Aperture/Shape/Function			Lum	en Package	Lumer	n Output
LTR-6RD-H	6" Round Downlight New		SL	Standard Lumen	06L	600
	Construction			Lumen	10L	1000
	Housing				15L	1500
			ML	Medium	20L	2000
				Lumen	25L	2500
					30L	3000
			HL	High	35L	3500
				Lumen	40L	4000
					45L	4500
			VL	Very High	50L	5000
				Lumen	55L	5500
					60L	6000
			XL	Extra high	70L	7000
				Lumen 11	80L	8000
					90L	9000
TRIM .						

-								
ı	Driver C	Options	Control Options		Voltage		Housing Options	
	DM1	0-10V Dimming to 1%	NXE	NX Wired Dual RJ45 SmartPORTS,		andard 0-277V	СР	Chicago Plenum <sup>7,9</sup>
	DM01	0-10V Dimming to < 1% <sup>2</sup>		without Sensor 3	34		IC	IC rated <sup>8, 9</sup>
	DMX	DMX with RDM dimming to < 0.1% <sup>2</sup>	NXW	NX Networked Wireless Radio	34	34/0	EM	Emergency Battery Pack with integral
	DALI EDM	DALI Dimming to 1% <sup>2</sup> Lutron Hi-l ume	Module NXRM2				test switch and indicator light <sup>9</sup>	
	20	EcoSystem Dimming to 1% <sup>2</sup>		Programming, without Sensor <sup>3</sup>			EMR	Emergency Battery Pack with remote
			LV	Lutron Vive Enabled.				test switch and indicator light <sup>9</sup>
			LVE	0-10V (requires DM1 driver)			DTS	Device Transfer Switch with Dimming Bypass <sup>9,12</sup>
			LVE	Enabled, EcoSystem,			GTD	Generator Transfer Device <sup>9</sup>
				(requires EDM)			F	Fuse <sup>9</sup>

## LTR-6RD-T

Aperture/Sha	ape/Function
LTR-6RD-T	6" Round Downlight Light Engine/Trim Assembly

Lum	en Package	ССТ		CR		Distrib	ution
SL	Standard Lumen	27K	2700K	8	80+CRI	VNR	Very Narrow (0.3 SC/18°)
ML	Medium Lumen	30K	3000K	9	90+CRI	NR	Narrow (0.5 SC/29°)
HL	High Lumen	35K	3500K			MD	Medium (0.6 SC/37°)
VL	Very High Lumen	40K	4000K			WD	Wide (0.9 SC/59°)
XL	Extra High Lumen <sup>11</sup>	50K	5000K <sup>1</sup>			xw	Extra Wide (1.1 SC/76°)

#### TRIM CONTINUED

										_
Reflec	tor Finish	Reflector Color F		Flange	Flange Color Options		Lower Trim Options		ctor Options	
	th not applicable with d reflectors (WC or BC)		Standard Clear	Stand	ard matches reflector color	EM	Pre-punched reflector for	AM	Antimicrobial Coating <sup>5</sup>	
painte	, ,	CG	Champagne Gold	WT	White Flange <sup>4</sup>		EM integral test switch and			
S	Specular	BL	Black	вт	Black Flange <sup>4</sup>		indicator			
SS	Semi-Specular	LW	Light Wheat		black i larige	FM	Flush Mount Mud-in Ring 10			
MFC	American Matte™	PW	Pewter			WF	Wide Flange			
VS	Softglow®	WC	Painted White Cone and Flange							
VSS	SoftSheen™	вс	Painted Black Cone and Flange							

## Accessories

- B24 Set of two (2) 24" bar hangers for T-bar ceilings

  B6 Set of two bar hangers for ceiling joist up to 24" centers
- FMR6-R Flush Mount Mud-In Ring, 6" Round
- LiteGear
   LiteGear® Inverter, 125VA-250VA

   LPS Series
   LightPower Micro-Inverter, 20VA-55VA
- MOR6-R-WH Metal Oversized Ring, 6" Round, White (10" outside diameter)
- MOR6-R-BL Metal Oversized Ring, 6" Round, Black (10" outside diameter)

  LTR-SCA6-\_\_ Sloped Ceiling Adapter, 6", White <sup>13</sup>
- (See next page for Bezel Trim Accessories for Complex Environments) 14

#### Notes:

- 1 5000K available in 80+ CRI only.
  - PEDM available in 10L-35L. DMX not available on >35L. DM01, DALI not available on >55L.
- 3 NX requires DM1 driver option, not available on >60L.
- 4 WT not needed for WC, BT not needed for BC.
- 5 AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
- $\label{eq:controls} \textbf{6} \qquad \textbf{347V requires DM1 driver option; available 06L-30L not available with Controls, F, GTD, DTS, EM, EMR.}$
- 7 CP available up to 50L; not available with DMX, Controls, or EMR options.
- 8 IC available up to 20L; not available with Controls options.
- 9 Housing options (except Fuse) not available in combination.
- 10 Flush Mount Flange (FM) requires FMR accessory (sold separately).
- 11 XL (70L-90L) require marked spacing. See line art for more details.
- 12 DTS available with DM1, DM01, or DALI.
- 13 Specify slope angle 5°-35° in 5° increments. Not available with EM, WF, or FM options.
- 14 See next page for option restrictions when using with bezel trim accessories.







DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #	

#### **ACCESSORIES CONTINUED**

#### **Bezel Trim Accessories**

For more demanding environments, LITEISTRY<sup>™</sup> offers bezel trim accessories that can be field installed onto standard housing/trim assemblies and are available with antimicrobial trim finish and/or vandal resistant hardware options.

#### **FEATURES:**

- · Marine grade die cast aluminum bezel trim with low-copper alloy for durability
- Shatter resistant, 1/4" clear polycarbonate lens, completely flush for easy wipe down
- Closed cell silicone gasket protects against dust and water ingress
- · Suitable for wet locations, covered ceiling
- IP66/IP69K rated (room side) when properly installed per installation instructions
- Meets IK10 per IEC 60068-2-75 impact testing
- · Optional anti-microbial (AM) trim finish











Complex Environment (Include	des stainless steel Philips head screws)					
LTR-6RD-CE-WT	Bezel Trim Accessory, IP66/IP69K, 6" Round, White					
LTR-6RD-CE-WTAM	Bezel Trim Accessory, IP66/IP69K, 6" Round, White Antimicrobial					
Vandal Resistant (Includes st	ainless steel Torx® screws with tamper resistant center pin reject)					
LTR-6RD-CEVR-WT	Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 6" Round, White					
LTR-6RD-CEVR-WTAM	Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 6" Round, White Antimicrobial					

Dimensional Data				
Aperture Opening	Ø 5.75" (146.1 mm)			
Overall Flange	Ø 9.42" (293.3 mm)			
Trim Height	0.42" (10.7 mm)			
Ceiling Cutout	Ø 8.25" (209.6 mm)			
Ceiling Thickness	0.50" to 2.00"(12.7 mm to 50.8 mm)			

#### Notes:

- Available up to 4000 Max Lumens.
- 2 Not available in combination with EM, FM, or WF options.
- 3 Not available in combination with FMR, LTR-MOR or LTR-SCA accessories.
- 4 Refer to all Installation Instructions for complete details.

#### **CONTROLS**

#### **NX Lighting Controls:**

Supports applications in a variety of deployment options. Integrates with and enables a wide array of luminaires including those with SpectraSync $^{\text{TM}}$  Color Tuning Technology.



	NX INTEGRATED CONTROLS REFERENCE							
NX Option	Sensor	Networkable	Scheduling	Scheduling Occupancy Daylight Harvesting Dimming On/off Control		Bluetooth® App Programming		
NX Networked	I – Wired							
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC <sup>1</sup>
NX Networked	I – Wireless							
NXW <sup>2</sup>	N/A	Yes	Yes	No	No	Yes	Yes	Yes

without notice. All values are design or typical values when measured under laboratory conditions.

- 1 NXBTC needs to be plugged into an available NX SmartPort $^{\mathtt{m}}$  on the fixture network
- 2 Programming via App requires factory assistance





LTR-6RD
LITEISTRY 6" ROLIND DOWNLIGHT

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### PERFORMANCE DATA TABLE

Performance data provided below is for 3500K, 80 CRI with Specular Clear reflector finish/color

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
		Very Narrow	806	7.8	103
		Narrow	717	7.8	92
06L	600	Medium	746	7.8	96
		Wide	691	7.8	89
		Extra Wide	665	7.8	85
		Very Narrow	1288	12.0	107
		Narrow	1146	12.0	96
10L	1000	Medium	1192	12.0	99
		Wide	1104	12.0	92
		Extra Wide	1063	12.0	89
		Very Narrow	1851	18.7	99
		Narrow	1623	18.7	87
15L	1500	Medium	1712	18.7	92
		Wide	1586	18.7	85
		Extra Wide	1527	18.7	82
		Very Narrow	2355	22.6	104
		Narrow	2263	22.7	100
20L	2000	Medium	2265	22.6	100
		Wide	2180	22.7	96
		Extra Wide	2139	22.7	94
		Very Narrow	3093	27.7	112
		Narrow	2751	27.7	99
25L	2500	Medium	2860	27.7	103
		Wide	2650	27.7	96
		Extra Wide	2551	27.7	92
	_	Very Narrow	3686	34.3	107
		Narrow	3278	34.3	96
30L	3000	Medium	3409	34.3	99
		Wide	3158	34.3	92
		Extra Wide	3040	34.3	89





DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

### PERFORMANCE DATA TABLE CONTINUED

Performance data provided below is for 3500K, 80 CRI with Specular Clear reflector finish/color

Lumen Package	Nominal Lumens	Distribution	Delivered Lumens	Watts	LPW
		Very Narrow	4477	43.0	104
		Narrow	3942	43.0	93
35L	3500	Medium	4140	43.0	96
		Wide	3836	43.0	89
		Extra Wide	3693	43.0	86
		Very Narrow	5117	51.6	99
		Narrow	4552	51.6	88
40L	4000	Medium	4733	51.6	92
		Wide	4385	51.6	85
		Extra Wide	4221	51.6	82
		Very Narrow	5371	55.1	98
		Narrow	4775	55.1	87
45L	4500	Medium	4967	55.1	90
		Wide	4602	55.1	84
		Extra Wide	4430	55.1	80
		Very Narrow	5740	48.7	118
		Narrow	5105	48.7	105
50L	5000	Medium	5308	48.7	109
		Wide	4918	48.7	101
		Extra Wide	4734	48.7	97
		Very Narrow	6365	53.9	119
		Narrow	5662	53.9	105
55L	5500	Medium	5887	53.9	109
		Wide	5454	53.9	101
		Extra Wide	5250	53.9	97
		Very Narrow	7090	60.7	117
		Narrow	6299	60.7	104
60L	6000	Medium	6557	60.7	108
		Wide	6075	60.7	100
		Extra Wide	5848	60.7	96
		Very Narrow	8266	72.1	115
		Narrow	7353	72.1	102
70L	7000	Medium	7645	72.1	106
		Wide	7083	72.1	98
		Extra Wide	6819	72.1	95
		Very Narrow	9301	84.3	111
80L		Narrow	8273	84.3	98
	8000	Medium	8602	84.3	102
		Wide	7970	84.3	95
		Extra Wide	7672	84.3	91
		Very Narrow	10549	98.1	108
		Narrow	9383	98.1	96
90L	9000	Medium	9756	98.1	99
		Wide	9039	98.1	92
		Extra Wide	8701	98.1	89



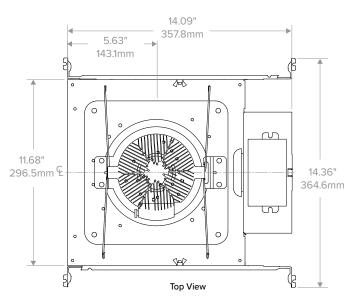


## LTR-6RD

LITEISTRY 6" ROUND DOWNLIGHT

#### **DIMENSIONS**

Lumen Package	"A"
06L-15L	5.90" (149.9mm)
20L-30L	6.68" (169.7mm)
35L-40L	7.86" (199.6mm)
50L-60L	9.04" (229.6mm)



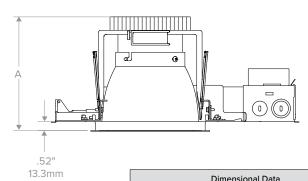
DATE:	LOCATION:
TYPE:	PROJECT:

CATALOG #
-----------

Dimensional Data				
Aperture 5.75" (146.1mm)				
	Standard	7.00" (177.8mm)		
Flange:	Flush Mount	6.54" (166.0mm)		
	With Bezel Trim Accessory**	Ø 9.42" (293.3 mm)		
	Standard	6.50" (165.1mm)		
Ceiling Cutout:	Flush Mount	6.75" (171.5mm)		
	With Bezel Trim Accessory**	Ø 8.25" (209.6 mm)		
	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)		
Ceiling Thickness:	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)		
	With Bezel Trim Accessory**	0.50" to 2.00"( 12.7 mm to 50.8 mm)		

SCA Sloped Ceiling Adapter accessory available, see LTR-SCA specification sheet and installation instructions for dimensional data and other details.

\*\* For complete details on Bezel Trim Accessories, see Accessory section on Page 3 and Bezel Trim Installation Instructions on currentlighting.com/prescolite.



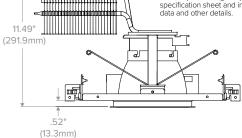
#### LTR-6RD-H (06L - 60L) New Construction

15.56" (395.3mm) 11.68" (296.5mm) (364.6mm) (364.6mm) (357.8mm)
---

Marked spacing required: 36" fixture center to center; 36" center to building member; 0.50" above fixture

Dimensional Data				
,	Aperture	5.75" (146.1mm)		
<u></u>	Standard	7.00" (177.8mm)		
Flange:	Flush Mount	6.54" (166.0mm)		
Ceiling	Standard	6.50" (165.1mm)		
Cutout:	Flush Mount	6.75" (171.5mm)		
Ceiling	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)		
Thickness:	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)		
COACL LOUIS ALL STROOM				

SCA Sloped Ceiling Adapter accessory available, see LTR-SCA specification sheet and installation instructions for dimensional data and other details.



Top View

LTR-6RD-H (70L - 90L) New Construction





## LTR-6RD

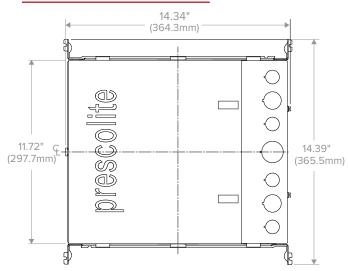
LITEISTRY 6" ROUND DOWNLIGHT

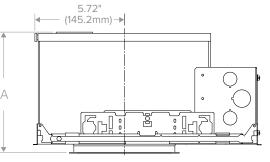
LOCATION: DATE:

CATALOG #:

TYPE:

#### **DIMENSIONS CONTINUED**





PROJECT:

Lumen Package	"A"
Standard	7.68" (195.0mm)
CP option ≥35L	10.06" (255.5mm)

Dimensional Data			
Aperture 5.75" (146.1mm)			
- Flancis	Standard	7.00" (177.8mm)	
Flange:	Flush Mount	6.54" (166.0mm)	
Ceiling	Standard	6.50" (165.1mm)	
Cutout:	Flush Mount	6.75" (171.5mm)	
Ceiling	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)	
Thickness:	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)	

 $SCA\ Sloped\ Ceiling\ Adapter\ accessory\ available,\ see\ LTR\ SCA\ specification\ sheet\ and\ installation\ instructions\ for\ dimensional\ data\ and\ other\ details.$ 

#### **PHOTOMETRY**

#### LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8VNR-S

LTR-6RD-IC / LTR-6RD-CP

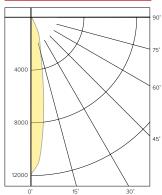
#### **LUMINAIRE DATA**

Test No.	19.00588
Description	2000 lm, Very Narrow, 3500K, 80 CRI
Delivered Lumens	2355
Watts	22.6W
Efficacy	104.0
Mounting	Recessed
Spacing Criterion	0.3
Beam Angle (FWHM)	18

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-40	2290	97.2
0-60	2355	100.0
0-90	2355	100.0
0-180	2355	100.0

#### POLAR GRAPH



#### **CANDELA DISTRIBUTION**

Degree	Candela
0	11881
5	9399
15	2776
25	1236
35	255
45	74
55	0
65	0
75	0
85	0
00	0

#### **LUMINANCE DATA\***

Vertical Angle	Average
45°	6247
55°	0
65°	0
75°	0
85°	0

\*Candela/Square Meter

#### LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8NR-S

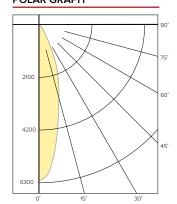
#### **LUMINAIRE DATA**

Test No.	20.01439
Description	2000 lm, Narrow, 3500K, 80 CRI
Delivered Lumens	2263
Watts	22.1W
Efficacy	103.0
Mounting	Recessed
Spacing Criterion	0.5
Beam Angle (FWHM)	29

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-40	2185	96.6
0-60	2260	99.9
0-90	2263	100.0
0-180	2263	100.0

#### POLAR GRAPH



#### **CANDELA DISTRIBUTION**

Degree	Candela
0	6222
5	5603
15	3035
25	1354
35	348
45	83
55	5
65	2
75	1
85	0
90	0

#### **LUMINANCE DATA\***

Vertical Angle	Average
45°	6712
55°	498
65°	271
75°	221
85°	0

\*Candela/Square Meter







LOCATION: DATE:

TYPE: PROJECT:

CATALOG #:

#### PHOTOMETRY CONTINUED

#### LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8MD-S

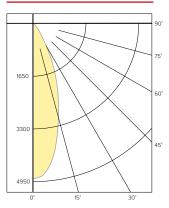
#### **LUMINAIRE DATA**

Test No.	19.00587
Description	2000 lm, Medium, 3500K, 80 CRI
Delivered Lumens	2265
Watts	22.6W
Efficacy	100.0
Mounting	Recessed
Spacing Criterion	0.6
Beam Angle (FWHM)	37

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-40	2171	95.9
0-60	2262	99.9
0-90	2265	100.0
0-180	2265	100.0

#### **POLAR GRAPH**



#### **CANDELA DISTRIBUTION**

Degree	Candela
0	4851
5	4619
15	3007
25	1450
35	386
45	99
55	6
65	2
75	1
85	0
90	0

#### **LUMINANCE DATA\***

Vertical Angle	Average
45°	8357
55°	624
65°	282
75°	231
85°	0

\*Candela/Square Meter

#### LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8WD-S

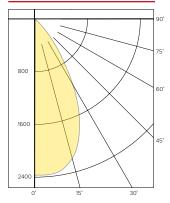
#### **LUMINAIRE DATA**

Test No.	19.00585
Description	2000 lm, Wide, 3500K, 80 CRI
Delivered Lumens	2180
Watts	22.6W
Efficacy	96.1
Mounting	Recessed
Spacing Criterion	0.9
Beam Angle (FWHM)	59

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-40	2014	92.4
0-60	2176	99.8
0-90	2180	100.0
0-180	2180	100.0

#### **POLAR GRAPH**



#### **CANDELA DISTRIBUTION**

Degree	Candela	
0	2368	
5	2371	
15	2189	
25	1591	
35	726	
45	177	
55	10	
65	3	
75	1	
85	0	
90	0	

#### **LUMINANCE DATA\***

Vertical Angle	Average	
45°	14942	
55°	1041	
65°	424	
75°	231	
85°	0	

\*Candela/Square Meter

#### LTR-6RD-H-ML20L-DM1 / LTR-6RD-T-ML35K8XW-S

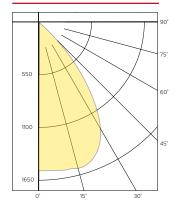
#### **LUMINAIRE DATA**

Test No.	19.00586
Description	2000 lm, Extra Wide, 3500K, 80 CRI
Delivered Lumens	2139
Watts	22.7W
Efficacy	94.4
Mounting	Recessed
Spacing Criterion	1.1
Beam Angle (FWHM)	76

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
0-40	1875	87.7
0-60	2134	99.8
0-90	2139	100.0
0-180	2139	100.0

#### **POLAR GRAPH**



#### **CANDELA DISTRIBUTION**

Degree	Candela	
0	1547	
5	1552	
15	1576	
25	1461	
35	1007	
45	301	
55	9	
65	3	
75	1	
85	0	
90	0	

#### **LUMINANCE DATA\***

Vertical Angle	Average	
45°	25409	
55°	937	
65°	424	
75°	231	
85°	0	

\*Candela/Square Meter

#### **LUMEN MULTIPLIER**

Option	27K8	30K8	35K8	40K8	50K8	27K9	30K9	35K9	40K9
Multiplier	0.94	0.98	1.00	1.01	1.02	0.81	0.84	0.85	0.85

Photometrics are published below at a nominal 3500 Kelvin, 80+ CRI. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.





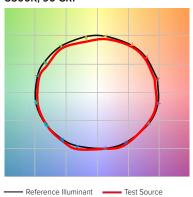


DATE:	LOCATION:
TYPE:	PROJECT:

CATALOG #:

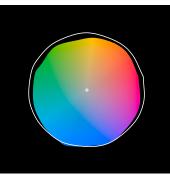
#### TM-30 DATA

**COLOR VECTOR GRAPHIC** 3500K, 90 CRI



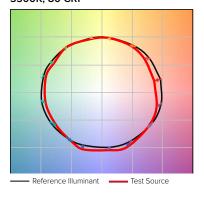
3500k	K, 90 CRI	

**COLOR DISTORTION GRAPHIC** 



TEST RESULTS - 3500K				
Value	80+ CRI	90+ CRI		
$R_f$	84	88		
R <sub>g</sub>	95	95		
CCT (K)	3411	3419		
D <sub>uv</sub>	0.0015	0.0042		
X	0.4120	0.4147		
У	0.3974	0.4052		
CIE R <sub>a</sub>	84	93		
CIE R <sub>9</sub>	11	62		

COLOR VECTOR GRAPHIC 3500K, 80 CRI



**COLOR DISTORTION GRAPHIC** 3500K, 80 CRI







DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **ELECTRICAL DATA**

DRIVER DATA									
Input Voltage	120-277 V	347 V							
Input Frequency	50/60 Hz	50/60 Hz							
Power Factor	≥0.90	≥0.90							
THD	<20%	<20%							
EMI Filtering (FCC 47 CFR Part 15)	Class A	Class A							

<sup>\*</sup> Values for DM1 option shown, values for other dimming options may vary.

#### **ADDITIONAL INFORMATION**

#### **Dimming Compatibility**

For more details and recommended dimmer list, see Dimming Compatibility Information on currentlighting.com/prescolite.

#### **DMX**

See instruction sheet on currentlighting.com/prescolite for connection & installation information.

#### **Central Inverters**

For full fixture output in back-up mode, we recommend you visit currentlighting.com/dual-lite for your Central Lighting Inverter options. Please contact your local Current representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

#### **Bezel Trim Accessories for Complex Environments**

See installation instructions on currentlighting.com/prescolite for complete details.





DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

## PROVIDENCE®



#### Providence Smal

#### **FEATURES**

- · Reliable, uniform, glare free illumination
- Types II, III, IV and V distributions
- 3000K, 4000K, 5000K CCT
- · 0-10V dimming ready
- Integral surge suppression
- 15 standard powder coat finishes
- · Upgrade Kits





#### **SPECIFICATIONS**

#### CONSTRUCTION

- · All housing components aluminum 360 alloy, sealed with continuous silicone rubber gaskets
- · All internal and external hardware is stainless steel
- · Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- · Optical bezel finish is match the luminaire housing

#### LED/OPTICS

- LEDs are mounted to a metal printed circuit board assembly (MCPCB) with a uniform conformal coating over the panel surface and electrical features
- Cartridge is easily disassembled to replace components. Optics are held in place without the use of adhesives
- · Molded silicone gasket ensures a weather-proof seal around each individual LED
- Features revolutionary individual LED optical control based on high performance TIR optical designs
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens

#### INSTALLATION

· Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

#### **ELECTRICAL**

- · Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J
- · Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control
- · Driver and surge suppressor are mounted to a prewired tray with quick disconnects that may be removed from the gear compartment

#### **CONTROLS**

- · Photocell adapter shall include an internal twist lock receptacle. Photocell by others.
- Egress adapter shall require an auxiliary 120 volt supply for operation of an integral MR16 lamp in the event of emergency. The lamp may be aimed and locked into position with an adjustment range of 15°-45°. Adapter shall have a socket that accepts miniature bi-pin MR16 lamps up to 50 watts, lamp by others

#### **CERTIFICATIONS**

- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- · This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020.

#### WARRANTY

5 year warranty

KEY DATA							
LUMEN RANGE	1,275–3,270						
WATTAGE RANGE	25–42						
EFFICACY RANGE (LPW)	46–78						
INPUT CURRENT RANGE (mA)	255/400 mA						
WEIGHT	9 lbs 4 kg						
EPA	.46						





DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

### **ORDERING GUIDE**

Example: PROS-Y3-3030-BLS-BPS-WMA59D	)
	1

CATALOG #

#### HOUSING

	1				1		1			
PROS										
Housing	Dist	ribution	Lumen Package Finish Options Mounting							
PROS Providence Small LED	Y2 Y3 Y4 Y5	Type II Type III Type IV Type V	2030 2040 2050 3030 3040 3050	3000K CCT 25 watts 4000K CCT 25 watts 5000K CCT 25 watts 3000K CCT 43 watts 4000K CCT 43 watts 5000K CCT 43 watts	BLS BLT DBS DBT GTT LGS LGT PSS	Black Gloss Smooth Black Matte Textured Dark Bronze Gloss Smooth Dark Bronze Matte Textured Graphite Matte Textured Light Gray Gloss Smooth Light Gray Matte Textured Platinum Silver Gloss Smooth	FS1 PFN SPK BPS LDL AD4	Fusing Brass Painted Finial Brass Painted Spike Brass Painted Struts Lightly diffused lens Adapter used only with standard AAL arms and post top mount fixtures to slip over a 4"/100mm O.D. pole	Wall Mount WMA59D WMA59U Pole Mount TRA59D	3"/75mm pole or e one t Mount down Mount up t/Side Mounts Mount down
					WHS WHT Color CC	Verde Green Matte Textured White Gloss Smooth White Matte Textured Options Custom Color 1			TRA59U	Mount up

Notes:

1 Consult factory for custom color, marine and corrosive finish options





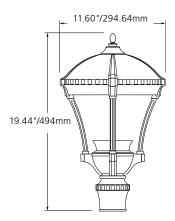
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **DELIVERED LUMENS**

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

				3000K 70CRI			4000K 70CRI					5000K 70CRI										
System Lumen Le	Lens	Distribution		Bug	g Rat	ing	Efficancy		Bu	g Rat	ing	Efficancy		Bug Rating			Efficancy					
	, admage			Lumen	В	U	G	(Lm/W)	Lumen	В	U	G	(Lm/W)	Lumen	В	U	G	(Lm/W)				
			Type 2	1792	1	0	1	72	1957	1	0	1	78	1951	1	0	1	78				
		Clear Lens	Type 3	1830	1	0	1	73	1970	1	0	1	79	1958	1	0	1	78				
		(Standard)	Type 4W	1793	0	0	1	72	1957	0	0	1	78	1960	0	0	1	78				
25	2000		Type 5	1735	1	0	1	69	1894	1	0	1	76	1889	1	0	1	76				
25	2000	2000	2000	2000	Lightly	Type 2	1216	1	1	1	49	1361	1	1	1	54	1387	1	1	1	55	
		Diffused	Type 3	1216	1	1	1	49	1361	1	1	1	54	1386	1	1	1	55				
		Lens	Type 4W	1298	1	1	1	52	1417	1	1	1	57	1419	1	1	1	57				
			Type 5	1139	1	1	1	46	1275	1	1	1	51	1299	1	1	1	52				
			Type 2	2975	1	0	1	69	3247	1	0	1	76	3238	1	0	1	75				
	2000	Clear Lens	Type 3	3038	1	1	1	71	3270	1	0	1	76	3261	1	0	1	76				
		3000	2000			(Standard)	Type 4W	2988	1	0	1	69	3262	1	0	1	76	3253	1	0	1	76
43					Type 5	2892	2	0	1	67	3157	2	0	1	73	3148	2	0	1	73		
43	3000	Lightly Diffused Lens	Type 2	2092	1	1	1	49	2342	1	1	1	54	2386	1	1	1	55				
			Type 3	2091	1	1	1	49	2341	1	1	1	54	2385	1	1	1	55				
			Type 4W	2164	1	1	1	50	2362	1	1	1	55	2356	1	1	1	55				
			Type 5	1959	1	1	1	46	2193	1	1	1	51	2234	1	1	1	52				

#### **DIMENSIONS**





LOCATION: DATE: TYPE: PROJECT:

#### **PHOTOMETRY**

#### PROS-Y2-3040

#### **LUMINAIRE DATA**

Description	3040K, 70CRI
Delivered Lumens	3247
Watts	43.2
Efficacy	75.2
IES Type	TYPE II, MEDIUM
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	2229	68.6%
Downward House Side	1018	31.3%
Downward Total	3247	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3247	100%

Downward Street Side	2229	08.0%
Downward House Side	1018	31.3%
Downward Total	3247	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3247	100%

#### PROS-Y3-3040

#### **LUMINAIRE DATA**

Description	3040K, 70CRI
Delivered Lumens	3270
Watts	43.2
Efficacy	75.7
IES Type	Type III
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	2376	72.6%
Downward House Side	894	27.3%
Downward Total	3270	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3270	100%

#### PROS-Y4W-3040

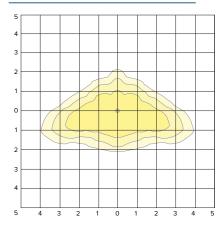
#### LUMINAIRE DATA

Description	3040K, 70CRI
Delivered Lumens	3262
Watts	43
Efficacy	75.9
IES Type	Type IV
BUG Rating	B1-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

#### **ZONAL LUMEN SUMMARY**

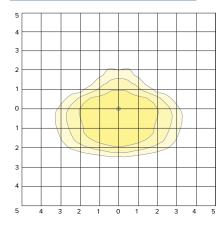
Zone	Lumens	% Luminaire
Downward Street Side	2670	81.9%
Downward House Side	592	18.2%
Downward Total	3262	100.1%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3262	100%

#### ISOFOOT CANDLE PLOT

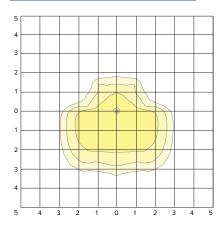


CATALOG #:

#### ISOFOOT CANDLE PLOT



#### ISOFOOT CANDLE PLOT







DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

### **PHOTOMETRY**

#### PROS-Y5-3040

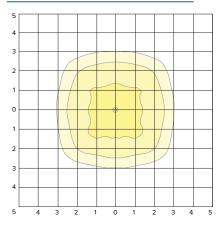
#### **LUMINAIRE DATA**

Description	3040K, 70CRI
Delivered Lumens	3157
Watts	42.8
Efficacy	73.8
IES Type	Type VS
BUG Rating	B2-U0-G1
Mounting Height	15 ft
Grid Scale	15 ft

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	1594	50.5%
Downward House Side	1563	49.5%
Downward Total	3157	100.0%
Upward Street Side	0	0.0%
Upward House Side	0	0.0%
Upward Total	0	0.0%
Total Flux	3157	100%

#### ISOFOOT CANDLE PLOT





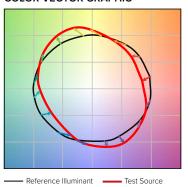


DATE: LOCATION:

TYPE: PROJECT:

#### TM-30 DATA

#### COLOR VECTOR GRAPHIC



## TEST SOURCE

R <sub>f</sub>	68
Rg	99
CCT(K)	3947
Duv	0.0004
х	0.3831
у	0.3793
CIE Ra	72

# SPECTRAL POWER DISTRIBUTION COMPARISON Reference Source Test Source 40% 20%

580

Wavelength (nm)

630

680

730

780

#### **ELECTRICAL DATA**

			Electrical Characteristics							Dimming										
Configuration		LED System	Line Vo	oltage		A	Amps A0	2		Min. POWER	Max THD	Dimming		irce nt Out		olute age				
Orderin	ng Code	mA	Watts	VAC	Hz	120	208	220	240	277	FACTOR	(%)	Range	Min	Max	Min	Max			
2020																				
2040	2000 series	255	25			0.35	0.15	0.35	0.15	0.15										
2050				120 277	EO/60						>.9	20	10% to 100%	OmA	1m A	0V	10V			
3020				120-277	30/60						2.9	20	10% 10 100%	OITIA	1mA	UV	100			
3040	3000 series	400	42			0.21	0.09	0.21	0.09	0.09										
3050																				

CATALOG #:

380

430

TM-21 LIFE	TIME CALCU	LATION - PRO	JECTED LUM	EN MAINTEN	ANCE (25°C /	77°F)
HOURS	0	25,000	36,000	50,000	100,000	REPORTED L70
Projected Lumen Maintenance	100%	99.0%	99.5%	98.0%	95.0%	>60000





## **RATIO Wall**

RWL1/RWL2 LED WALLPACK

## **FEATURES**

- Low profile LED wall luminaire with a variety of IES distributions for lighting applications such as retail, commercial and industrial building mount
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- · Visual comfort standard
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, Wiscape and 7-Pin with networked controls
- Battery Backup options available for emergency code compliance
- · Quick-mount adapter allows easy installation/maintenance
- 347V and 480V versions for industrial applications and Canada
- Stock versions available in 3500lm and 5500lm configurations at 4000K









#### **CONTROL TECHNOLOGY**



#### **SPECIFICATIONS**

#### CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating.

#### **OPTICS**

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 48 or 160 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI/80 CRI)
   CCT
- · Zero uplight distributions
- LED optics provide IES type II, III and IV distributions. Type II only available in RWL2 configurations.

#### INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- · Designed for direct j-box mount.
- · Integral back box contains 1/2" conduit hubs
- Integral back box standard with Dual Driver, Dual Power Feed, NX, Wiscape and battery versions (battery versions for RWL1 only)

#### **ELECTRICAL**

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option for all wattages above 35W.

#### **ELECTRICAL (CONTINUED)**

- Ambient operating temperature -40°C to 40°C
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Driver RoHS and IP66
- Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised
- Dimming drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than 6" standard.

#### **CONTROLS**

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- Button photocontrol is suitable for 120-277V operation
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- NX Distributed Intelligence<sup>™</sup> available with in fixture wireless control module, features dimming and occupancy sensor wiSCAPE<sup>®</sup> available with in fixture wireless control module, features dimming and occupancy sensor
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Battery Backup suitable for operating temperatures -25°C to 40°C. RWL1 battery is 12.5W RWL2 battery is 18W

#### CONTROLS (CONTINUED)

LOCATION:

PROJECT:

DATE:

CATALOG #:

- Dual Driver and Dual Power Feed options creates product configuration with 2 internal drivers for code compliance
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application.

#### **CERTIFICATIONS**

- Listed to UL1598 and CSAC22.2#250.0-24 for wet locations
- IP65 rated housing
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations.
   Please refer to the DLC website for specific product qualifications at www.designlights.org

#### WARRANTY

5 year limited warranty

KEY DATA						
Lumen Range	1,300–18,800					
Wattage Range	10–155					
Efficacy Range (LPW)	119–148					
Weights lbs. (kg)	6.5/16.5 (2.9/7.5)					





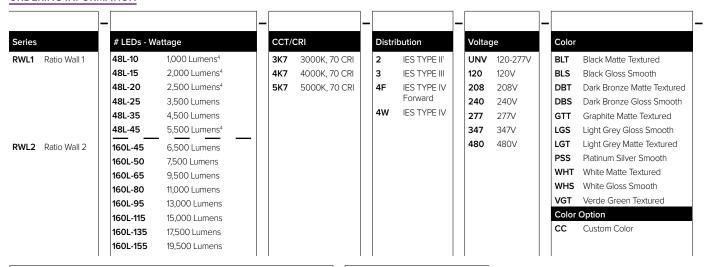
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **ORDERING GUIDE**

Example: RWL1-48L-10-3K7-2-UNV-BLS-E

CATALOG #

#### ORDERING INFORMATION



### Control Options Network **NXWE**

NX Wireless Enabled (module + radio)<sup>4,7</sup>

NXSPW\_F NX Wireless, PIR Occ. Sensor, Daylight Harvesting<sup>4,5,7</sup> NXSP\_F NX, PIR Occ. Sensor, Daylight Harvesting<sup>4,5,7</sup>

Wireless Controls, wiSCAPE™ 2,6 WIR

Stand Alone

SCP-8F Remote control programmable line voltage sensor<sup>3,4</sup> SCP-20F Remote control programmable line voltage sensor3,4 BTS-14F

Bluetooth® Programmable, PIR Occupancy/Daylight Sensor 10 BTS-40F Bluetooth® Programmable, PIR Occupancy/Daylight Sensor 10 BTSO-12F  $Bluetooth^{\scriptsize @}$  Programmable, PIR Occupancy/Daylight Sensor, up to

12'mounting height 10

**Control Options** 7PR\_ 7-Pin Receptacle<sup>6</sup>

#### Options\*

Fusing<sup>3</sup>

Е Emergency Battery Backup78,9

EΗ Emergency Battery w/ Heater Option<sup>7,8</sup>

Dual Driver<sup>4,6,11</sup> 2DR

2PF Dual Power Feed<sup>4,6,11</sup>

Button Photocontrol<sup>8</sup>

- Only available with RWL2
- wiSCAPE Gateway required for system programming
- Specific voltage selection is required
- Not available with 347/480V
- Replace "\_" with "14" for up to 14' mounting height, "40" for up to 40' mounting height
- This item is located in the integral backbox which will be automatically added onto the fixture if choser
- This item is located in the integral backbox for RWL1 configurations only.
- Option only available at 120 or 277V
- 2DR and 2PF can't be combined with E and EH due to space limitations
- Not available in RWL1 or 2 PF
- Available only in UNV in 25, 35 and 45 Watt in RWL1; Not available in RWL1 10, 15 and 20 Watt.
- Based on space limitations, some options may not be able to be combined

#### STOCK ORDERING INFORMATION

Catalog Number	Lumens	Wattage	LED Count	CCT/CRI	Voltage	Distribution	Finish
RWL1-48L-25-4K-3	3500lm	25	48L	4000K/70CRI	120-277V	Type III	Dark Bronze Textured
RWL1-48L-25-4K-4W	3500lm	25	48L	4000K/70CRI	120-277V	Type IV Wide	Dark Bronze Textured
RWL1-48L-45-4K-3	5500lm	45	48L	4000K/70CRI	120-277V	Type III	Dark Bronze Textured
RWL1-48L-45-4K-4W	5500lm	45	48L	4000K/70CRI	120-277V	Type IV Wide	Dark Bronze Textured

#### **CONTROLS**

**Control Options** 

**Standalone** 

Order at least one per project location to program and control **SCPREMOTE** 

#### ACCESSORIES AND REPLACEMENT PARTS - MADE TO ORDER

Catalog Number	Description
WP-BB-XXX	Accessory for conduit entry <sup>1</sup>

Notes

replace "xxx" with color option





DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

### PERFORMANCE DATA

	Nominal	System	Dist.	5K (500	OK NO	MINA	L 70 C	:RI)	4K (400	OK NOI	MINA	_ 70 C	RI)	3K (300	OK NO	MINAI	_ 70 C	RI)
Description	Wattage	Watts	Туре	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G
	10	101	3	1362	135	0	0	1	1355	134	0	0	1	1303	129	0	0	1
	10	10.1	4W	1343	133	0	0	1	1336	132	0	0	1	1285	127	0	0	1
	15	14 5	3	1972	136	1	0	1	1962	135	1	0	1	1887	130	1	0	1
	15	14.5	4W	1945	134	0	0	1	1935	133	0	0	1	1861	128	0	0	1
	20	19.9	3	2722	137	1	0	1	2709	136	1	0	1	2605	131	1	0	1
RWL1	20	19.9	4W	2685	135	1	0	1	2672	134	1	0	1	2569	129	1	0	1
KVVLI	25	28.0	3	3749	134	1	0	1	3732	133	1	0	1	3588	128	1	0	1
	23	20.0	4W	3698	132	1	0	1	3680	131	1	0	1	3538	126	1	0	1
	35	36.9	3	4751	129	1	0	2	4728	128	1	0	2	4546	123	1	0	1
		30.3	4W	4685	127	1	0	2	4663	126	1	0	2	4483	121	1	0	2
	45	46.5	3	5812	125	1	0	2	5784	124	1	0	2	5562	120	1	0	2
	15	40.5	4W	5731	123	1	0	2	5704	123	1	0	2	5485	118	1	0	2
			2	6701	145	1	0	2	6668	145	1	0	2	6412	139	1	0	2
	45	46.1	3	6812	148	1	0	2	6780	147	1	0	2	6519	141	1	0	2
			4W	6678	145	1	0	2	6646	144	1	0	2	6390	139	1	0	2
		54.0	2	7747	143	1	0	2	7710	143	1	0	2	7413	137	1	0	2
	50		3	7876	146	1	0	2	7838	145	1	0	2	7537	140	1	0	2
			4W	7720	143	1	0	2	7683	142	1	0	2	7388	137	1	0	2
			2	9539	142	1	0	2	9494	141	1	0	2	9129	136	1	0	2
	65	67.2	3	9699	144	2	0	2	9652	144	2	0	2	9281	138	2	0	2
			4W	9507	141	2	0	2	9461	141	2	0	2	9097	135	2	0	2
			2	11228	139	2	0	2	11174	138	2	0	2	10745	133	2	0	2
	80	80.8	3	11416	141	2	0	2	11361	141	2	0	2	10924	135	2	0	2
RWL2			4W	11190	138	2	0	2	11136	138	2	0	2	10708	133	2	0	2
			2	13148	141	2	0	2	13085	140	2	0	2	12582	135	2	0	2
	95	93.2	3	13368	143	2	0	2	13304	143	2	0	2	12792	137	2	0	2
			4W	13103	141	2	0	2	13040	140	2	0	2	12539	135	2	0	2
			2	15102	138	2	0	3	15030	137	2	0	3	14452	132	2	0	3
	115	109.8	3	15354	140	2	0	3	15281	139	2	0	3	14693	134	2	0	3
			4W	15050	137	2	0	3	14978	136	2	0	3	14402	131	2	0	3
			2	17533	128	2	0	3	17449	127	2	0	3	16778	122	2	0	3
	135	137.1	3	17826	130	2	0	3	17740	129	2	0	3	17058	124	2	0	3
			4W	17473	127	2	0	3	17389	127	2	0	3	16720	122	2	0	3
			2	19495	124	2	0	3	19402	124	2	0	3	18656	119	2	0	3
	155	156.8	3	19821	126	2	0	3	19726	126	2	0	3	18967	121	2	0	3
			4W	19542	125	2	0	3	19448	124	2	0	3	18700	119	2	0	3





DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #	

# LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Te	emperature	Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

#### PROJECTED LUMEN MAINTENANCE

A	OPERATING HOURS							
Ambient Temperature	0	25,000	TM-21-11 L90 36,000	50,000	100,000	L70 (Hours)		
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000		
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000		

### **ELECTRICAL DATA**

# OF LEDS	Nominal Wattage	Input Voltage	Oper. Current (Amps)	System Power (Watts)	
		120	0.08		
		208	0.05		
	10	240	0.04	10.1	
	10	277	0.04	10.1	
		347	0.03		
		480	0.02		
		120	0.12		
		208	0.07		
	15	240	0.06	14.5	
	15	277	0.05	14.5	
		347	0.04		
		480	0.03		
		120	0.17		
		208	0.10		
	20	240	0.08	19.9	
	20	277	0.07	19.9	
		347	0.06		
RWL1		480	0.04		
KVVLI		120	0.23		
		208	0.13		
	25	240	0.12	28.0	
	23	277	0.10	20.0	
		347	0.08		
		480	0.06		
		120	0.31		
		208	0.18		
	35	240	0.15	36.9	
	33	277	0.13	30.9	
		347	0.11		
		480	0.08		
		120	0.39		
		208	0.22		
	45	240	0.19	46.5	
	45	277	0.17	40.5	
		347	0.13		
		480	0.10		

# OF LEDS	Nominal Wattage	Input Voltage	Oper. Current (Amps)	System Power (Watts)
		120	0.38	
		208	0.22	
	45	240	0.19	46.1
	45	277	0.17	46.1
		347	0.13	
		480	0.10	
		120	0.45	
		208	0.26	
		240	0.23	
	50	277	0.19	54.0
		347	0.16	
		480	0.11	
		120	0.56	
		208	0.32	1
		240	0.28	1
	65	277	0.24	67.2
		347	0.19	
		480	0.14	1
		120	0.67	
		208	0.39	
	80	240	0.34	
		277	0.29	80.8
		347	0.23	
5,,,,,		480	0.17	
RWL2		120	0.78	
		208	0.45	
		240	0.39	
	95	277	0.34	93.2
		347	0.27	1
		480	0.19	
		120	0.92	
		208	0.53	
		240	0.46	
	115	277	0.40	109.8
		347	0.32	
		480	0.23	
		120	1.14	
		208	0.66	
	125	240	0.57	1074
	135	277	0.49	137.1
		347	0.40	
		480	0.29	
		120	1.31	
		208	0.75	
	455	240	0.65	450.0
	155	277	0.57	156.8
		347	0.45	
		480	0.33	



DATE: LOCATION: PROJECT:

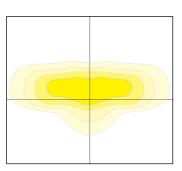
CATALOG #:

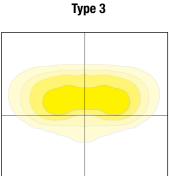
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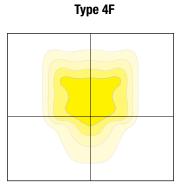
#### **PHOTOMETRY**

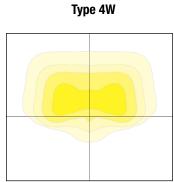
### **Mounting Height: 30ft**

Type 2



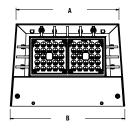


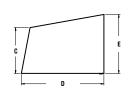




#### **DIMENSIONS**

RWL1

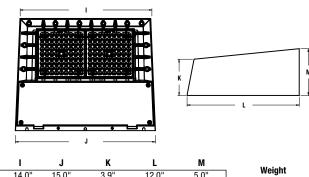




Α	В	C	D	E
8.7"	9.7"	3.9"	7.0"	5.0"
221mm	246mm	99mm	178mm	127mm

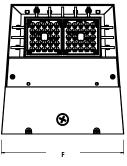
Weight 6.5 lbs (2.95 kgs)

RWL2

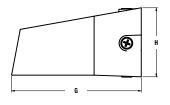


	J	N.	L	IVI
14.0"	15.0"	3.9"	12.0"	5.0"
356mm	381mm	99mm	305mm	127mm

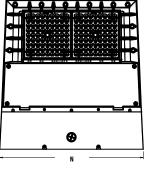
RWL1 with **Integral Back Box** 



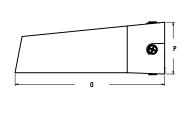




#### **RWL2** with **Integral Back Box**







16.5 lbs (7.48 kgs)

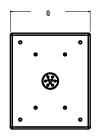


DATE: LOCATION:

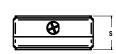
TYPE: PROJECT:

#### **DIMENSIONS (CONTINUED)**

#### **Back Box Accessory**





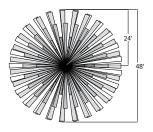


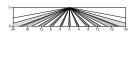
Q	R	S
4.9"	5.9"	2.1"
124mm	150mm	53mm

CATALOG #:

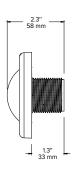
#### **ADDITIONAL INFORMATION**

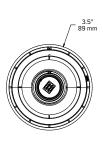
#### NXSP-14F



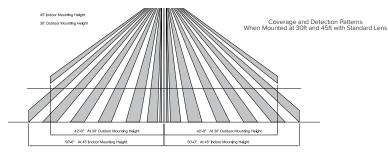


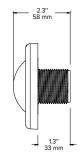
Sensor Lens Coverage and Detection Patterns When Mounted at 8ft with Low Mount Lens

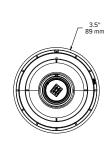




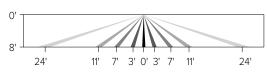
### NXSP-40F



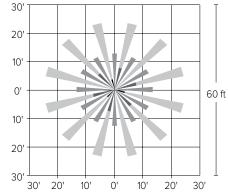


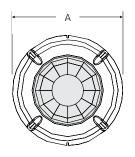


#### SCP-8F









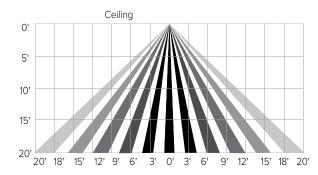


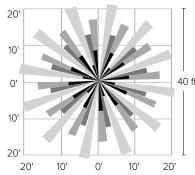
А	В
2.3"	.8"
(59mm)	(20mm)

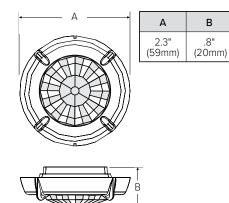


# RATIO WALL RWL1/RWL2 LED WALLPACK

### SCP-20F









VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

# MICROSTRIKE STRIKE

#### **FEATURES**

- · Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- · Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Lighting Controls™, wiSCAPE and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- · Field interchangeable mounting provides additional flexibility after the fixture has shipped















#### **SPECIFICATIONS**

#### CONSTRUCTION

- · Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- · External hardware is corrosion resistant

#### **OPTICS**

- Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with midpower LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- · One-piece silicone gasket ensures a weatherproof seal
- · Zero up-light at 0 degrees of tilt
- · Field rotatable optics

#### INSTALLATION

- Mounting patterns for each arm can be found on page 11
- · Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles.

#### INSTALLATION (CONTINUED)

- · All mounting hardware included
- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper is recommended

#### **ELECTRICAL**

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised

#### CONTROLS

- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules control accessories sold separately
- 0-10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard

#### **CONTROLS (CONTINUED)**

- NX Lighting Controls™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration

- **CERTIFICATIONS** DLC® (DesignLights Consortium Qualified), with both Premium and Standard Qualified configurations. Please refer to the DLC website for specific product qualifications at http://www.designlights.org
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- · Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020.

#### WARRANTY

5 year warranty

KEY DATA							
Lumen Range	5,000-80,000						
Wattage Range	36–600						
Efficacy Range (LPW)	92–155						
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)						





MICROSTRIKE OPTICS - ORDERING GUIDE

LOCATION: DATE: TYPE: PROJECT:

CATALOG #:

**Example:** VP-2-320L-145-3K7-2-R-UNV-A3-BLT

CATALOG #

VP	_		_		_			_			_			_		_			]_
Series		Optic Platform		Size		Light Engine		С	CT/C	RI		Distrib	oution	C	Optic Rotation		Volta	ge	
<b>VP</b> Viper	1	Micro Strike		<b>1</b> Size 1		160L-35 <sup>6</sup>	5500 lumens	Α	ŀΡ	AP-Amber		2	Type 2	Г	BLANK		UNV		1
						160L-50 <sup>6</sup>	7500 lumens			Phosphor Converted		3	Type 3	١.	No Rotation			277V	
						160L-75	10000 lumens	١,	71/0			4F	Type 4	-	. Optic rotation left		120	120V	
						160L-100	12500 lumens	2	27K8	2700K, 80 CRI			Forward	R			208	208V	
						160L-115	15000 lumens	31	K7	3000K,		4W	Type 4	"	rotation		240	240V	
						160L-135	18000 lumens	"	,,,,	70 CRI			Wide		right		277	277V	
						160L-160	21000 lumens	31	K8	3000K,		5QW	Type 5 Square				347	347V	
				2 Size 2		320L-145	21000 lumens			80 CRI			Wide				480	480V	
						320L-170	24000 lumens	3!	5K8	3500K,									
						320L-185	27000 lumens			80 CRI									
						320L-210	30000 lumens	31	K9	3000K,									
						320L-235	33000 lumens			90 CRI									
						320L-255	36000 lumens	41	IK7	4000K, 70 CRI									
						320L-315 <sup>6</sup>	40000 lumens	1/1	IK8	4000K,									
				<b>3</b> Size 3		480L-285	40000 lumens	7	rico.	80 CRI									
						480L-320	44000 lumens	41	K9	4000K,									
						480L-340	48000 lumens			90 CRI									
						480L-390	52000 lumens	5	K7	5000K,									
						480L-425	55000 lumens			70 CRI									
						480L-470	60000 lumens	5	K8	5000K,									
				<b>4</b> Size 4		720L-435	60000 lumens			80 CRI									
						720L-475	65000 lumens												
						720L-515	70000 lumens												
						720L-565 <sup>6</sup>	75000 lumens												
						720L-600 <sup>6</sup>	80000 lumens												
						CLO	Custom Lumen Output 1												

	•
Mounti	ng
Α	Arm mount for square pole/flat surface
<b>A</b> _	Arm mount for round pole <sup>2</sup>
ASQU	Universal arm mount for square pole
A_U	Universal arm mount for round pole <sup>2</sup>
AAU	Adjustable arm for pole mounting (universal drill pattern)
AA_U	Adjustable arm mount for round pole <sup>2</sup>
ADU	Decorative upswept Arm (universal drill pattern)
AD_U	Decorative upswept arm mount for round pole <sup>2</sup>
MAF	Mast arm fitter for 2-3/8" OD horizontal arm
K	Knuckle
Т	Trunnion
WB	Wall Bracket, horizontal tenon with MAF
WM	Wall mount bracket with decorative

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Gloss Textured
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color	Option
СС	Custom Color

Options								
F	Fusing							
2PF	Dual Power Feed							
2DR	Dual Driver							
TE	Tooless Entry							
ВС	Backlight Control							
ТВ	Terminal Block							

Network Co	ntrol Options
NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming <sup>13,4</sup>
NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming <sup>13,4</sup>
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor <sup>3,4</sup>
WIR	wiSCAPE® In-Fixture Module 3,4
WIRSC	wiSCAPE® Module and Occupancy Sensor <sup>3,4</sup>
Stand Alone	Sensors
BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
7PR	7-Pin Receptacle <sup>4</sup>
7PR-SC	7-Pin Receptacle with shorting cap 4
3PR	3-Pin twist lock <sup>4</sup>
3PR-SC	3-Pin receptacle with shorting cap 4
3PR-TL	3-Pin PCR with photocontrol <sup>4</sup>
Programme	d Controls
ADD	AutoDim Timer Based Dimming 4
ADT	AutoDim Time of Day Dimming 4
Photocontro	ds

<sup>1 –</sup> Items with a grey background can be done as a custom order. Contact brand representative for more

Wall mount bracket with adjustable

4 - Not available with 2PF option 5 – Not available with Dual Driver option

upswept arm

WA

Button Photocontrol 4,7



information

2 - Replace "\_" with "2" for 2.5"-3.4" OD pole, "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole

<sup>3 –</sup> Networked Controls cannot be combined with other control options

<sup>6 –</sup> Some voltage restrictions may apply when combined with controls

<sup>7 –</sup> Not available with 480V



VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### STRIKE OPTIC - ORDERING GUIDE

**Example:** VP-ST-1-36L-39-3K7-2-UNV-A-BLT

_		_		_			] 			_			_		]-[		
er	Optic Platform ST Strike		Size 1 Siz	7e 1	Light Engine	5500 lumens		CCT/C	monochromatic		Distril R	Auto Front Row	C	Optic Rotation BLANK		Voltag UNV	
	JI Stire		. 512		36L-55 <sup>8</sup>	7500 lumens			amber, 595nm		2	Type 2		No Rotation		0111	277\
					36L-85	10000 lumens		27K8	2700K, 80 CRI	3	3	Type 3	L			120	120V
					36L-105	12500 lumens		3K7	3000K, 70 CRI	4	<b>I</b> F	Type 4 Forward	F	left Optio rotation		208	208
			L		36L-120	14000 lumens		3K8	3000K, 80 CRI	4	١W	Type 4 Wide	, r	Optic rotation right		240	240\
			2 Siz	ze 2	72L-115	15000 lumens		3K9	3000K, 90 CRI	!	5QN	Type 5 Square		9		277	277\
					72L-145	18000 lumens		35K8	3500K, 80 CRI			Narrow				347	347\
					72L-180	21000 lumens		4K7	4000K, 70 CRI		5QW	Type 5 Square Wide				480	480
					72L-210	24000 lumens		4K8	4000K, 80 CRI	!	5W	Type 5 Wide (Round)					
					72L-240	27000 lumens		4K9	4000K, 90 CRI	!	SRW	Type 5 Rectangular					
			3 Siz	ze 3	108L-215 <sup>8</sup>	27000 lumens		5K7	5000K, 70 CRI		2	Corner Optic					
					108L-250	30000 lumens		5K8	5000K, 80 CRI	1	С	Tennis Court Optic					
					108L-280	33000 lumens											
					108L-325	36000 lumens											
			<b>4</b> Siz	ze 4	108L-365 162L-320	40000 lumens 40000 lumens											
					162L-365 <sup>10</sup>	44000 lumens											
					162L-405	48000 lumens											
					162L-445	52000 lumens											
					162L-485	55000 lumens											
					162L-545 8	60000 lumens											
					CLO	Custom Lumen Output 1											

Mount	ing
Α	Arm mount for square pole/flat surface
A_	Arm mount for round pole <sup>3</sup>
ASQU	Universal arm mount for square pole
A_U	Universal arm mount for round pole <sup>3</sup>
AAU	Adjustable arm for pole mounting (universal drill pattern)
AA_U	Adjustable arm mount for round pole $^{3}$
ADU	Decorative upswept Arm (universal drill pattern)
AD_U	Decorative upswept arm mount for round pole <sup>3</sup>
MAF	Mast arm fitter for 2-3/8" OD horizontal arm
K	Knuckle
Т	Trunnion
WB	Wall Bracket, horizontal tenon with MAF
WM	Wall mount bracket with decorative upswept arm
WA	Wall mount bracket with adjustable arm

•		
	Color	
	BLT	Black Matte Textured
	BLS	Black Gloss Smooth
	DBT	Dark Bronze Matte Textured
	DBS	Dark Bronze Gloss Smooth
	GTT	Graphite Matte Textured
	LGS	Light Grey Gloss Smooth
	LGT	Light Grey Gloss Textured
	PSS	Platinum Silver Smooth
	WHT	White Matte Textured
	WHS	White Gloss Smooth
	VGT	Verde Green Textured
	Color	Option

Custom Color

Optio	ns
F	Fusing
E	Battery Backup <sup>1,2,7,8,9</sup>
2PF	Dual Power Feed
2DR	Dual Driver
TE	Tooless Entry
ВС	Backlight Control
ТВ	Terminal Block

Network Co	ontrol Options
NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming 13.4
NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming 13.4
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor $^{3.4}$
WIR	wiSCAPE® In-Fixture Module 3,4
WIRSC	wiSCAPE® Module and Occupancy Sensor 3.4
Stand Alone	e Sensors
BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming® Photocell and 360° Lens
BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
7PR	7-Pin Receptacle <sup>4</sup>
7PR-SC	7-Pin Receptacle with shorting cap <sup>4</sup>
3PR	3-Pin twist lock <sup>4</sup>
3PR-SC	3-Pin receptacle with shorting cap 4
3PR-TL	3-Pin PCR with photocontrol <sup>4</sup>
Programme	d Controls
ADD	AutoDim Timer Based Dimming <sup>4</sup>
ADT	AutoDim Time of Day Dimming 4
Photocontro	ols.

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information 2 – Battery temperature rating -20C to 55C 3 – Replace "\_" with "2" for 2.5"-3.4" OD pole, "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole

4 – Networked Controls cannot be combined with other control options 5 – Not available with 2PF option

6 - Not available with 480V

7 – Not available with 347 or 480V 8 – Not available with Dual Driver option

9 – Only available in Size 1 housing 10 – Some voltage restrictions may apply when combined with controls



Button Photocontrol 4,7



VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **ORDERING GUIDE (CONTINUED)**

CATALOG # Current Control Solutions — Accessories (Sold Separately) Option Color NX Lighting Controls SHD Shield Size 1 HSS-90-B House Side Shield 90° Back BLS Black NXOFM-On-fixture Module (7-pin), On / Off / Dim, Gloss Smooth 2 Size 2 HSS-90-F House Side Shield 90° Front 1R1D-UNV Daylight Sensor with NX Radio and BLT Black Bluetooth® Radio, 120-480VAC **3** Size 3 HSS-90-S House Side Shield 90° Side Matte Textured 4 Size 4 HSS-270-BSS House Side Shield 270° Back/Side/Side wiSCAPE® Lighting Control DBS Dark Bronze HSS-270-FSS House Side Shield 270° Front/Side/Side Gloss Smooth WIR-RME-L On-fixture Module (7-pin or 5-pin), HSS-270-FSB House Side Shield 270° Front/Side/Back On / Off / Dim, Daylight Sensor with DBT Dark Bronze wiSCAPE Radio, 110-480VAC HSS-360 House Side Shield 360° Matte Textured Back Light Control Graphite ВС SCP-REMOTE Remote Control for SCP/\_F option. Matte Textured MTG Mounting Α Arm Mount for square pole/flat surface Order at least one per project to Light Gray program and control the occupancy **ASQU** Universal Arm Mount for square pole sensor AAU Adjustable Arm for pole mounting For additional information related to these accessories please visit PSS Platinum Silver currentlighting.com/beacon. Options provided for use with integrated sensor, please view specification sheet ordering information table for details. ADU Decorative upswept Arm Smooth **RPA** Round Pole Adapter WHS White MAF Mast Arm Fitter for 2-3/8" OD horizontal Gloss Smooth arm WHT White Matte Textured Knuckle Т Trunnion Green Landscape WB Wall Bracket (compatible with universal arm mounts) LEG Legacy Colors CC Custom Color Accessory Type Option BIRD SPK Bird Spike MSC Miscellaneous

#### **CONTROLS**





Control Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	On/Off Control	Programming	Pair with Sensor	Sensor Mounting Height
NXW	-	~	~	-	-	~	~	-	-
NXWS_F	NXSMP2	~	<b>V</b>	~	~	~	V	-	16ft, 40ft
BTSO12F	BTSMP-OMNI-O	-	-	~	~	~	Bluetooth	-	12ft
BTS_F	BTSMP	_	-	~	<b>V</b>	~	Bluetooth	-	14ft, 40ft
ADD	-	-	V	-	-	~	-	<b>V</b>	-
ADT	-	-	V	-	-	~	-	<b>V</b>	-
7PR	-	Paired with external control	Paired with external control	-	Paired with external control	Paired with external control		V	-
7PR-SC	-	-	-	-	-	-	-	V	-
3PR	-	-	-	-	-	Paired with external control		V	-
3PR-SC	-	-	-	-	-	-	-	~	-
3PR-TL	-	-	-	-	V	~	-	<b>✓</b>	-
WIR	-	V	<b>V</b>	-	V	~	Gateway	-	-
WIRSC	BTSMP	V	<b>V</b>	~	V	~	Gateway	-	14ft, 40ft





VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **DELIVERED LUMENS**

For delivered lumens, please see Lumens Data PDF on www.Currentlighting.com

## PROJECTED LUMEN MAINTENANCE

Ambient Temp.	bient Temp. 0 25,000		25,000 *TM-21-11 36,000 50,000		100,000	Calculated L <sub>70</sub> (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

#### LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient	Temperature	Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Micro Strike Lumen Multiplier							
ССТ	70 CRI	70 CRI 80 CRI 90 CI					
2700K	- 0.841 -						
3000K	0.977 0.861 0.64		0.647				
3500K	- 0.900		_				
4000K	000K 1 0.926		0.699				
5000K	1 0.937 0.791						
Mono	Monochromatic Amber Multiplier						
Amber		0.250					

Strike Lumen Multiplier						
ССТ	70 CRI	80 CRI	90 CRI			
2700K	-	0.859	_			
3000K	K 0.941 0.912		0.703			
3500K	OK – 0.906		_			
4000K	000K 1 0.894		0.734			
5000K	1	0.879	0.711			
Monochromatic Amber Multiplier						
Amber		0.255				



VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:

### **ELECTRICAL DATA: MICRO STRIKE**

# OF LEDS	160								
NOMINAL WATTAGE	35	35 50 75 100 115 135 160							
SYSTEM POWER (W)	34.9	50.5	72.1	97.2	111.9	132.2	157.8		
INPUT VOLTAGE (V)		CURRENT (Amps)							
120	0.29	0.42	0.63	0.83	0.96	1.13	1.33		
208	0.17	0.24	0.36	0.48	0.55	0.65	0.77		
240	0.15	0.21	0.31	0.42	0.48	0.56	0.67		
277	0.13	0.18	0.27	0.36	0.42	0.49	0.58		
347	0.10	0.14	0.22	0.29	0.33	0.39	0.46		
480	0.07	0.10	0.16	0.21	0.24	0.28	0.33		

CATALOG #:

# OF LEDS	320								
NOMINAL WATTAGE	145	145 170 185 210 235 255 315							
SYSTEM POWER (W)	150	166.8	185.7	216.2	240.9	261.5	312		
INPUT VOLTAGE (V)				CURRENT (Amps)					
120	1.21	1.42	1.54	1.75	1.96	2.13	2.63		
208	0.70	0.82	0.89	1.01	1.13	1.23	1.51		
240	0.60	0.71	0.77	0.88	0.98	1.06	1.31		
277	0.52	0.61	0.67	0.76	0.85	0.92	1.14		
347	0.42	0.49	0.53	0.61	0.68	0.73	0.91		
0 17									

# OF LEDS	480					
NOMINAL WATTAGE	285	320	340	390	425	470
SYSTEM POWER (W)	286.2	316.7	338.4	392.2	423.2	468
INPUT VOLTAGE (V)		CURRENT (Amps)				
120	2.38	2.67	2.83	3.25	3.54	3.92
208	1.37	1.54	1.63	1.88	2.04	2.26
240	1.19	1.33	1.42	1.63	1.77	1.96
277	1.03	1.16	1.23	1.41	1.53	1.70
347	0.82	0.92	0.98	1.12	1.22	1.35
480	0.59	0.67	0.71	0.81	0.89	0.98

# OF LEDS	720				
NOMINAL WATTAGE	435	475	515	565	600
SYSTEM POWER (W)	429.3	475	519.1	565.2	599.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	3.63	3.96	4.29	4.71	5.00
208	2.09	2.28	2.48	2.72	2.88
240	1.81	1.98	2.15	2.35	2.50
277	1.57	1.71	1.86	2.04	2.17
347	1.25	1.37	1.48	1.63	1.73
480	0.91	0.99	1.07	1.18	1.25





VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:

### **ELECTRICAL DATA: STRIKE**

# OF LEDS	36				
NOMINAL WATTAGE	39	55	85	105	120
SYSTEM POWER (W)	39.6	56.8	83.6	108.2	120.9
INPUT VOLTAGE (V)			CURRENT (Amps)		
120	0.33	0.46	0.71	0.88	0.96
208	0.19	0.26	0.41	0.50	0.55
240	0.16	0.23	0.35	0.44	0.48
277	0.14	0.20	0.31	0.38	0.42
347	0.11	0.16	0.24	0.30	0.33
480	0.08	0.11	0.18	0.22	0.24

CATALOG #:

	Г				
# OF LEDS		72			
NOMINAL WATTAGE	115	145	180	210	240
SYSTEM POWER (W)	113.7	143.2	179.4	210.2	241.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	1.00	1.21	1.50	1.75	1.79
208	0.58	0.70	0.87	1.01	1.03
240	0.50	0.60	0.75	0.88	0.90
277	0.43	0.52	0.65	0.76	0.78
347	0.35	0.42	0.52	0.61	0.62
480	0.25	0.30	0.38	0.44	0.45

# OF LEDS	108				
NOMINAL WATTAGE	215	250	280	325	365
SYSTEM POWER (W)	214.8	250.8	278.3	324.7	362.6
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	2.00	2.08	2.33	3.04	2.67
208	1.15	1.20	1.35	1.75	1.54
240	1.00	1.04	1.17	1.52	1.33
277	0.87	0.90	1.01	1.32	1.16
347	0.69	0.72	0.81	1.05	0.92
480	0.50	0.52	0.58	0.76	0.67

# OF LEDS		162				
NOMINAL WATTAGE	320	365	405	445	485	545
SYSTEM POWER (W)	322.1	362.6	403.6	445.1	487.1	543.9
INPUT VOLTAGE (V)				CURRENT (Amps)		
120	2.71	2.67	3.38	3.71	4.04	4.54
208	1.56	1.54	1.95	2.14	2.33	2.62
240	1.35	1.33	1.69	1.85	2.02	2.27
277	1.17	1.16	1.46	1.61	1.75	1.97
347	0.94	0.92	1.17	1.28	1.40	1.57
480	0.68	0.67	0.84	0.93	1.01	1.14





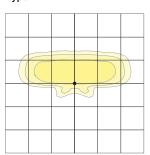
VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

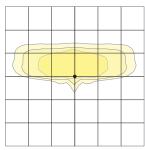
#### MICRO STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.

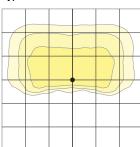
Type 2



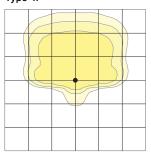
Type 3



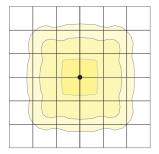
Type 4 Wide



Type 4F



Type 5QW





VIPER LUMINAIRE

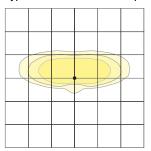
DATE:	LOCATION:
TYPE:	PROJECT:

CATALOG #:

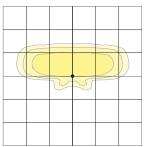
#### **OPTIC STRIKE PHOTOMETRY**

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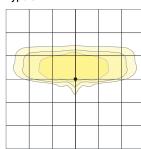
Type FR - Front Row/Auto Optic



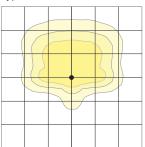
Type 2



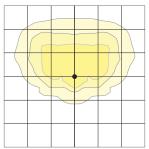
Type 3



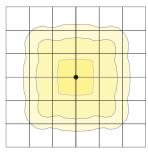
Type 4 Forward



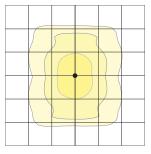
Type 4 Wide



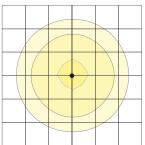
Type 5QM



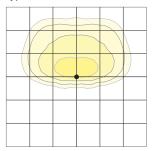
Type 5R (rectangular)



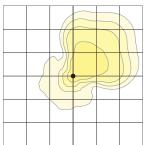
Type 5W (round wide)



Type TC



Type Corner





# PER Area/Site

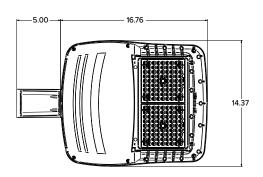
VIPER LUMINAIRE

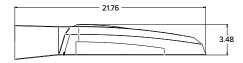
LOCATION: DATE: TYPE: PROJECT:

CATALOG #:

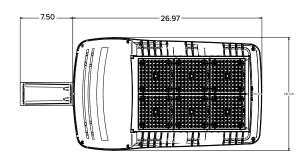
#### **DIMENSIONS**

#### SIZE 1

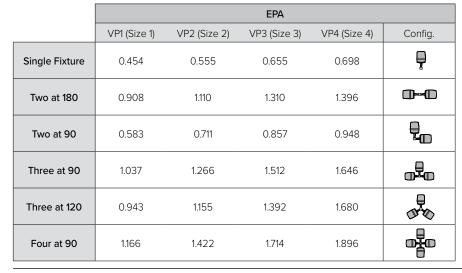




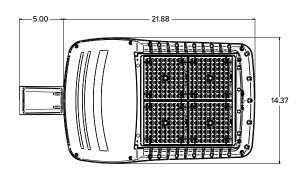
#### SIZE 3

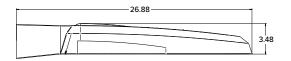




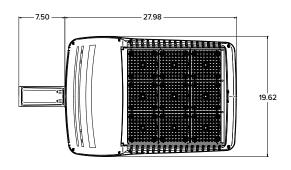


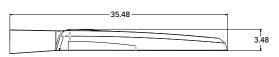
#### SIZE 2





#### SIZE 4





	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9





### VIPER Area/Site

VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### MOUNTING



#### A-STRAIGHT ARM MOUNT

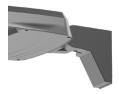
Fixture ships with integral arm for ease of installation. Compatible with Current Outdoor B3 drill pattern. For round poles add applicable suffix (2/3/4/5)



#### **ASQU-UNIVERSAL ARM MOUNT**

Universal mounting block for ease of installation. Compatible with drill patterns from 2.5" to 4.5" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5)

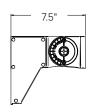


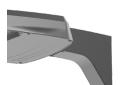


#### AAU-ADJUSTABLE ARM FOR POLE MOUNTING

Rotatable arm mounts directly to pole. Compatible with drill patterns from 2.5" to 4.5" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5). Rotatable in 15° aiming angle increments. Micro Strike configurations have a 45° aiming limitation

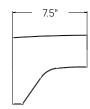
Strike configurations have a 30° aiming limitation.





#### **ADU-DECORATIVE UPSWEPT ARM**

Upswept Arm compatible with drill patterns from 2.5" to 4.5". For round poles add applicable suffix (2/3/4/5).





#### MAF-MAST ARM FITTER

Fits 2-3/8" OD horizontal tenons.





#### K-KNUCKLE

Knuckle mount 15° aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.





#### T-TRUNNION

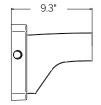
Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a  $45^{\circ}$  aiming limitation. Strike configurations have a  $30^{\circ}$  aiming limitation.





#### WM-WALL MOUNT

Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.





# **VIPER Area/Site**

VIPER LUMINAIRE

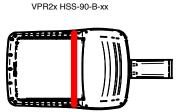
DATE: LOCATION:

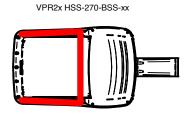
TYPE: PROJECT:

CATALOG #:

#### **ADDITIONAL INFORMATION (CONTINUED)**

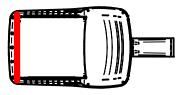
#### HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

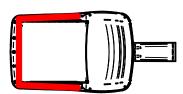






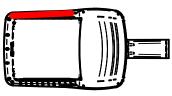
VPR2x HSS-90-F-xx

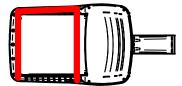




VPR2x HSS-270-FSS-xx

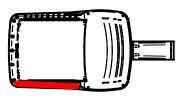
VPR2x HSS-90-S-xx

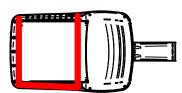




VPR2x HSS-270-FSB-xx

VPR2x HSS-90-S-xx





VPR2x HSS-270-FSB-xx





DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **ADDITIONAL INFORMATION (CONTINUED)**

#### PROGRAMMED CONTROLS

ADD-AutoDim Timer Based Options

• Light delay options from 1-9 hours after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1-9 hours after the light has been dimmed previously.

#### EX: ADD-6-5-R6

ADD Control Options	Configurations Choices Example Choice Picked	
Auto-Dim Options	1-9 Hours	6 - Delay 6 hours
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50% brightness
Auto-Dim Return	Delay 0-9 Hours	R6 - Return to full output after 6 hours

ADT-AutoDim Time of Day Based Option

• Light delay options from 1AM-9PM after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1AM-9PM after the light has been dimmed previously.

#### EX: ADT-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	12-3 AM and 6-11 PM	6 - Dim at 6PM
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50%
Auto-Dim Return	12-6 AM and 9-11P	R6 - Return to full output at 6AM





DATE:	TYPE:	
NAME:		
PROJECT:		

Incandescent

# P5582-31

#### Welbourne

The Welbourne collection features hexagonal framework and clear beveled glass panels. Cast aluminum construction with durable powder coat finish. One-light hanging lantern.

Hexagonal framework.Vine inspired scrolls.Clear beveled glass panels.

Category: Outdoor

Finish: Textured Black (painted)

**Construction:** Die-cast aluminum construction **Glass/Shade:** Clear Beveled glass panels



Diameter: 9-3/8" Height: 14-1/16"

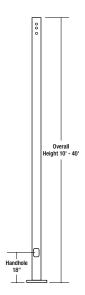
Overall Ht. W/Chain: 53"

MOUNTING	ELECTRICAL	LAMPING	ADDITIONAL INFORMATION
Ceiling chain mounted	Pre-wired	Quantity:	UL-CUL Damp location listed
Mounting strap for outlet box included	10 feet of wire supplied	One 100w max. Medium Base  E26 base porcelain socket	1 year warranty
Three feet of 9 gauge chain supplied	120 V	120 base porceium socket	
Canopy covers a standard 4" octagonal recessed outlet box			
4.5" W.			



# S-B Series Poles

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	



#### **APPLICATIONS**

· Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

#### CONSTRUCTION

- SHAFT: One-piece straight steel with square cross section, flat sides and minimum 0.23" radius on all corners; Minimum yield of 46.000 psi (ASTM-A500, Grade B): Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER: Two-piece square aluminum base cover included standard
- POLE CAP: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE: Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554), Galvanized hardware with two washers and two nuts per bolt for leveling

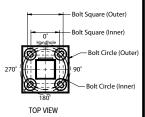
Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38 1 x 36 x 4 — TAB-36-M38

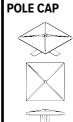
#### **FINISH**

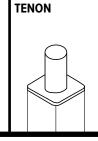
- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in multiple standard colors; Custom colors available; RAL number preferable

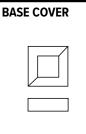
#### **WAREHOUSE 'STOCKED' POLES:**

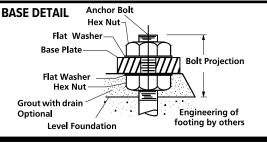
- SSSH20-40A-4-HV-DB-RDC, SSSH25-40A-4-HV-DB-RDC and SSSH30-50B-4-HV-DB-RDC
- The HV designation in the above catalog numbers is a combination drill pattern of the Current S2 pattern and the Beacon B3/B4 Viper pattern (rectangular arm mounting)











#### ORDERING INFORMATION **ORDERING EXAMPLE:**

SSS -B 25 40 SHAFT

A/B/C

**THICKNESS** 

Ordering matrix

Reference

2L **MOUNTING** 

1 Single arm mount

Two fixtures at 180°

Two fixtures at 90° Three fixtures at 90°

**B3** 

**BLT** 

UL

Reference page 2 for available configurations

**SERIES HEIGHT** SSS-B Square Straight Reference page 2 Reference page 2 Steel Pole Ordering matrix Ordering matrix

MOUNTING ORIENTATION □•□

- Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by the "TR" notation. Example: SSS-B-25-40-A-1-B1-TR-BBT
- Specify option location using logic found on page 2 (Option Orientation)
- VM1 recommended on poles 20' and taller with EPA of less than 1.

4	Four fixtures at 90°
TA	Tenon (2.38" OD x 4" Tall)
ТВ	Tenon (2.88" OD x 4" Tall)
TC	Tenon (3.5" OD x 6" Tall)

TR1 Removable Tenon (2.375 x 4.25)

OT Open Top (includes pole cap)

	FINISH		OPTIONS
BLT	Black Matte Textured	GFI <sup>2</sup>	
BLS	Black Gloss Smooth		Receptacle and Cover
DBT	Dark Bronze Matte Textured	EHH <sup>2</sup>	Extra Handhole
DRS	Dark Bronze Gloss Smooth	C05 <sup>2</sup>	.5" Coupling
	Graphite Matte Textured	C07 <sup>2</sup>	.75" Coupling
	•	C20 <sup>2</sup>	2" Coupling
	Light Grey Gloss Smooth	MPB <sup>2</sup>	Mid-pole Luminaire
PSS	Platinum Silver Smooth	5	Bracket
WHT	White Matte Textured	VM2	2nd mode vibration
WHS	White Gloss Smooth		damper
VGT	Verde Green Textured	LAB	Less Anchor Bolts
Color	Ontion	UL	UL Certified

#### **ACCESSORIES - Order Separately**

Catalog Number	Description
VM1 <sup>3</sup>	1st mode vibration damper
VM2SXX	2nd mode vibration damper

**DRILL PATTERN** 

B1 Cruzer, "AM" arm

CC Custom Color

- B3 2 bolt (2-1/2" spacing), Viper "A" arm
- S2 2 bolt (3-1/2" spacing), Viper "AD" arm



# SSS-B Series Poles

DATE:	LOCATION:

PROJECT:

CATALOG #:

TYPE:

#### **ORDERING INFORMATION Cont.**

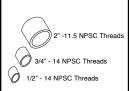
Catalan Numban	Height		Nominal	Wall Thick-	Bolt Circle	Bolt Circle	Bolt Square	Base Plate		Dala Davida saliasa	
Catalog Number	Feet	Meters	Shaft Dimensions	ness	(suggested)	(range)	(range)	Square	Anchor bolt size	Bolt Projection	Pole weight
SSS-B-10-40-A-XX-XX	10	3.0	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	77
SSS-B-12-40-A-XX-XX	12	3.7	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	90
SSS-B-14-40-A-XX-XX	14	4.3	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	103
SSS-B-16-40-A-XX-XX	16	4.9	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	116
SSS-B-18-40-A-XX-XX	18	5.5	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	129
SSS-B-20-40-A-XX-XX	20	6.1	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	142
SSS-B-25-40-A-XX-XX	25	7.6	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	175
SSS-B-14-40-B-XX-XX	14	4.3	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	152
SSS-B-16-40-B-XX-XX	16	4.9	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	171
SSS-B-18-40-B-XX-XX	18	5.5	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	190
SSS-B-20-40-B-XX-XX	20	6.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	209
SSS-B-25-40-B-XX-XX	25	7.6	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	257
SSS-B-30-40-B-XX-XX	30	9.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	304
SSS-B-16-50-B-XX-XX	16	4.9	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	219
SSS-B-18-50-B-XX-XX	18	5.5	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	243
SSS-B-20-50-B-XX-XX	20	6.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	267
SSS-B-25-50-B-XX-XX	25	7.6	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	327
SSS-B-30-50-B-XX-XX	30	9.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	387
SSS-B-25-50-C-XX-XX	25	7.6	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	427
SSS-B-30-50-C-XX-XX	30	9.1		.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	507
333-D-3U-5U-C-XX-XX	30	9.1	5" square	.25	11	10.25 - 13.25	1.25 - 9.37	11.50	1 X 30 X 4	4.5	507
SSS-B-20-60-B-XX-XX	20	6.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	329
SSS-B-25-60-B-XX-XX	25	7.6	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	404
SSS-B-30-60-B-XX-XX	30	9.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	479
SSS-B-35-60-B-XX-XX	35	10.7	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	554
SSS-B-40-60-B-XX-XX	40	12.2	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	629

NOTE Factory supplied template must be used when setting anchor bolts. Beacon Products will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

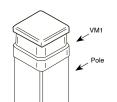
#### **EHH - EXTRA HANDHOLE**



#### C05 - C07 - C20 -**COUPLING**



#### **VM1 - VIBRATION DAMPER 1ST MODE**



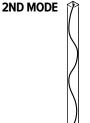
Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is recommended for pole systems 25' and taller with a total EPA of 1.0 or less.

#### **VM2 - VIBRATION DAMPER 2ND MODE**



Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration

#### **VM2SXX - VIBRATION DAMPER**

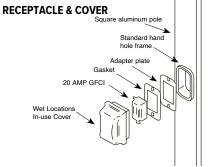


**VM2S08** – 8' VM2S12 - 12' VM2S16 - 16' VM2S20 - 20'

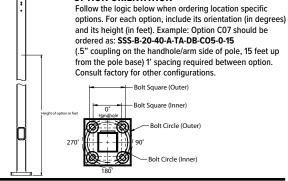
VM2S24 - 24

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration

# GFI - 20 AMP GFCI



# MPB - MID POLE BRACKET Square Steel Pole welded to pole 2" pipe tenon Arm, 3" Sq. x 13.5" long ships separately



**OPTION ORIENTATION** 

For more information about pole vibration and vibration dampers, please consult our website. Due to our continued efforts to improve our products, product specifications are subject to change without notice.





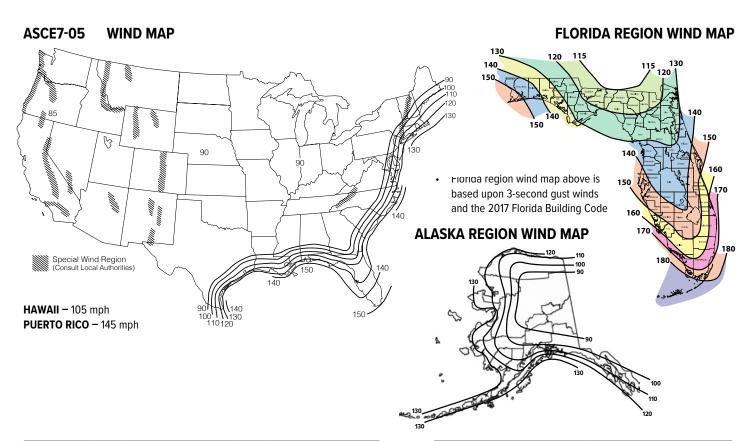
# **SSS-B Series Poles**

SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:



ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds										
		(	Use for al	l location	s except F	lorida)				
Catalog Number	85	90	100	105	110	120	130	140	145	150
SSS-B-10-40-A	25.0	25.0	25.0	22.8	20.6	17.0	14.2	11.9	11.0	10.1
SSS-B-12-40-A	25.0	25.0	20.0	18.0	16.1	13.2	10.8	8.9	8.1	7.4
SSS-B-14-40-A	23.1	20.4	16.1	14.3	12.8	10.2	8.2	6.6	5.9	5.3
SSS-B-16-40-A	19.0	16.7	13.0	11.5	10.1	7.9	6.2	4.7	4.1	3.6
SSS-B-18-40-A	15.6	13.6	10.0	9.0	7.8	5.9	4.4	3.1	2.6	2.1
SSS-B-20-40-A	12.7	10.9	7.9	6.9	5.9	4.2	2.8	1.7	1.3	0.9
SSS-B-25-40-A	7.3	5.9	3.8	2.9	2.1	0.8	NR	NR	NR	NR
SSS-B-14-40-B	25.0	25.0	23.3	20.8	18.6	15.1	12.3	10.2	9.2	8.4
SSS-B-16-40-B	25.0	24.9	19.4	17.3	15.4	12.3	9.9	8.0	7.2	6.4
SSS-B-18-40-B	24.0	20.8	16.1	14.2	12.5	9.8	7.7	6.1	5.3	4.7
SSS-B-20-40-B	20.2	17.5	13.2	11.6	10.1	7.7	5.9	4.4	3.8	3.2
SSS-B-25-40-B	12.8	11.0	7.9	6.7	5.5	3.7	2.3	1.2	0.7	NR
SSS-B-30-40-B	8.0	6.6	4.1	3.1	2.2	0.8	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	24.8	20.1	16.5	13.6	12.3	11.2
SSS-B-18-50-B	25.0	25.0	25.0	22.9	20.4	16.4	13.2	10.7	9.6	8.6
SSS-B-20-50-B	25.0	25.0	21.3	18.9	16.7	13.2	10.4	8.1	7.2	6.3
SSS-B-25-50-B	20.7	17.8	13.3	11.5	9.8	7.2	5.0	3.3	2.6	1.9
SSS-B-30-50-B	13.5	11.3	7.7	6.2	4.9	2.8	1.1	NR	NR	NR
SSS-B-25-50-C	25.0	25.0	19.4	17.1	15.1	11.7	9.0	6.9	6.0	5.1
SSS-B-30-50-C	20.1	17.3	12.7	10.9	9.3	6.6	4.5	2.8	2.1	1.4
SSS-B-20-60-B	25.0	25.0	25.0	25.0	25.0	20.2	16.1	12.9	11.5	10.3
SSS-B-25-60-B	25.0	25.0	20.6	18.0	15.6	11.8	8.7	6.2	5.2	4.2
SSS-B-30-60-B	21.4	18.1	12.9	10.7	8.8	5.7	3.3	1.3	NR	NR
SSS-B-35-60-B	14.0	11.3	6.9	5.2	3.6	1.0	NR	NR	NR	NR
SSS-B-40-60-B	8.1	5.8	2.2	nr	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds (Use for Florida only)								
Catalog Number	115	120	130	140	150	160	170	180
SSS-B-10-40-A	25.0	25.0	25.0	25.0	21.4	18.4	15.9	13.9
SSS-B-12-40-A	25.0	25.0	23.6	19.8	16.7	14.2	12.1	10.4
SSS-B-14-40-A	25.0	23.1	19.0	15.7	13.1	10.9	9.1	7.6
SSS-B-16-40-A	20.8	18.7	15.2	12.3	10.1	8.2	6.7	5.4
SSS-B-18-40-A	16.8	15.0	11.9	9.4	7.5	5.9	4.5	3.4
SSS-B-20-40-A	13.6	11.9	9.2	7.1	5.3	3.9	2.7	1.7
SSS-B-25-40-A	7.4	6.2	4.1	2.5	1.1	NR	NR	NR
SSS-B-14-40-B	25.0	23.6	19.4	16.1	13.4	11.2	9.4	7.8
SSS-B-16-40-B	21.4	19.2	15.6	12.7	10.4	8.5	6.9	5.6
SSS-B-18-40-B	17.2	15.4	12.2	9.7	7.7	6.1	4.7	3.6
SSS-B-20-40-B	13.9	12.3	9.5	7.3	5.5	4.1	2.9	1.9
SSS-B-25-40-B	7.7	6.4	4.3	2.6	1.3	NR	NR	NR
SSS-B-30-40-B	3.2	2.1	NR	NR	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	25.0	21.4	18.2	15.5
SSS-B-18-50-B	25.0	25.0	25.0	24.4	20.4	17.0	14.2	11.9
SSS-B-20-50-B	25.0	25.0	24.4	19.9	16.3	13.4	11.0	8.9
SSS-B-25-50-B	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-B	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-25-50-C	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-C	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-20-60-B	25.0	25.0	25.0	21.9	17.8	14.5	11.7	9.4
SSS-B-25-60-B	23.8	20.9	16.1	12.3	9.2	6.6	4.5	2.8
SSS-B-30-60-B	14.6	12.3	8.4	5.3	2.8	0.8	NR	NR
SSS-B-35-60-B	7.5	5.6	2.4	NR	NR	NR	NR	NR
SSS-B-40-60-B	1.8	NR						





# SSS-B Series Poles

SQUARE STRAIGHT STEEL

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

#### **NOTES**

#### Wind-speed Website disclaimer:

Current has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Current has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Current does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. http://windspeed.atcouncil.org

#### NOTES

- · Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- · Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings.
- · Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

Due to our continued efforts to improve our products, product specifications are subject to change without notice.





# ARMS POLES

and Accessories

# **ARMS**

Contemporary Arms
Period Arms

### **POLES**

Aluminum Poles
Decorative Poles
Multi-Post Poles

# **ACCESSORIES**

Banner Arms Egress Photocells Other



Current @





"to create, inspire and nurture EXCELLENCE in each other"

#### **LONGEVITY**

AAL manufactures its products to have a life span as long as the buildings and spaces they illuminate. The primary material used for all our products is aluminum to resist corrosion and the need for maintenance. Aluminum will not need the periodic refinishing required of steel products that will eventually rust and corrode. All our internal parts and fasteners are made of aluminum or stainless steel.

#### **SUSTAINABILITY**

AAL develops our products with recycling and resource management in mind. We recycle all incoming packaging materials. Our state-of-the-art finishing system uses eco-friendly cleansing and preparation chemicals that are harmless enough to send to the drain without further processing. Finally, AAL makes all products with renewable materials such as aluminum and stainless steel.

#### Efficient, Effective, Environmentally Friendly Period Style Arm Mounted Luminaires 6 7 Contemporary Style Arm Mounted Luminaires 8 How to Use This Guide 10 Period Arms 12 Design Excellence 14 Arm Matrix 34 Contemporary Arms 36 Design Excellence 38 Arm Matrix 60 Poles 62 Aluminum Poles 69 Base Covers Decorative Base Poles 70 81 Multi-Post Poles 86 Pole Options/Accessories 87 Photocell/Egress Photocells/Other Accessories 88

Breadth of Product







89

90







CONTENTS

Banner Arms

Finishes

#### **BREADTH OF PRODUCT**



TRADITIONAL DECORATIVE ARM AND POLE WITH TOWNE COMMONS

AAL products are designed for easy installation and routine maintenance. Product features include tool-less access to the lamp and ballast as well as pre-wired arms and multipost poles.



DECORATIVE POLE

Whether you are creating a traditional or contemporary site theme, AAL offers a complete fixture family package. AAL's fixture + arm + pole + matching bollard, can be specified in multiple configurations and elevated scales throughout the site.



LONG CURVE ARM WITH FLEX



MULTI-POST POLE

# EFFICIENT • EFFECTIVE • ENVIRONMENTALLY FRIENDLY

AAL manufactures all its products to have a life span as long as the buildings or spaces they illuminate. AAL's precision optical systems put light where it is needed resulting in the lowest amount of energy being consumed. AAL offers dark sky friendly versions for controlling light pollution and glare.









- 1. PARKWAY SQUARE™
- 2. PROVIDENCE®
- 3. PROMENADE™
- 4. UNIVERSE®
- 5. LARGENT™
- 6. FLEX<sup>TM</sup>







5







PRMN LED



Parkway Square™, part of AAL's Designer SSL Series, is a masterpiece of advanced design and innovation, capturing all the best of AAL. Featuring distinctive design elements and our newest technology, Parkway Square is available in two luminaire sizes for pole or wall mounting, and along with a matching bollard, provides an all new, whole-site package of luminaires.

**Providence**<sup>®</sup> — Transitional style fixtures that combine modern lighting performance with aesthetics in traditional forms. Part of AAL's Designer SSL Series. Available in 3 sizes, as well as a matching wall sconce and bollard.

**Arts & Crafts®** — A family of fixtures that reflects the style and warmth of the Craftsman era. Available in two sizes as well as a matching bollard. Features a wide variety of shade materials and

Civic Lantern<sup>TM</sup> — An elegantly proportioned coach lantern that features a one-piece clear acrylic light chamber that can house either the patented Moldcast Pericline vertical optical system or AAL horizontal optics.

**Dundee**<sup>TM</sup> — A high performance, decorative outdoor luminaire. Provides more footcandles on the ground than typical decorative fixtures, allowing wider pole spacing and lower wattage lamps.

**Federal Globe**<sup>™</sup> — High performing, precision optics in an elegant and timeless traditional acorn form. Features the patented Moldcast ContraCline® optical system.

**Promenade Series**<sup>TM</sup> — A traditional style family that provides state-of-the-art, focused optical systems so light may be precisely aimed, resulting in smooth, even illumination of the environment.

**Towne Commons**® — Available in a wide range of sizes and configurations featuring a precision reflector system that minimizes light pollution while providing a superior lighting system for illuminating streets and pedestrian areas.

#### CONTEMPORARY STYLE LUMINAIRES



















Universe Collection® — A complete family of decorative, yet highly functional luminaires that transcend architectural styles past and present. Part of AAL's Designer SSL Series. The fixtures are scaled in three sizes with a matching bollard.

**Cubic Indirect**™ — With its angular design and stainless steel vertical struts, the Cubic Indirect is a perfect complement to the rectilinear and angular compositions of modern architecture. The Cubic Indirect is available with highly efficient LEDs, and is perfect for projects that require a sense of mood as much as a sense of light.

**Diretto**<sup>®</sup> — The contemporary styling of Diretto redefines the visual language of contemporary fixtures. The lamp and ballast module's unique design have no flat surfaces and are unified by stainless steel struts. Sustainability features include tool-less servicing with efficient lamp and electronic ballast options.

Flex<sup>™</sup> — The patented contemporary design of Flex provides greater operating efficacy, while the multiple arm designs and mounting options form a versatile "create it yourself" look. Available with single, double, triple or quad mount configuration.

**Indirect**<sup>™</sup> — Combines contemporary styling with soft, low brightness illumination. Available in a fixed or adjustable head with round or square reflector, and highly efficient LED technology. Post and wall mount options are available.

**Largent**<sup>™</sup> — A geometric design using state-of-the-art optical systems to precisely light streets, parks and pedestrian venues. Part of AAL's Designer SSL Series. Available with stacked louvers, diffused lens or a horizontal reflector system.

**Pericline**<sup>™</sup> — This geometrically shaped luminaire features the patented Moldcast high performance optical system. Available in two sizes with either a cylindrical or rectilinear housing, is also available as a wall or pole mount fixture.

**Perspect**™ — Nautical inspired design theme combines a classic look with modern optics. Available with a lightly diffused lens or a frosted dome for a soft glow when illuminated.

**Spectra**<sup>™</sup> — Offers the freedom to specify size, finish and optics to complement any design scheme. Available in three sizes for post or wall mounting, as well as a matching bollard.

#### **HOW TO USE THIS GUIDE**

Creating the look you desire is simple with this Product Selection Guide. Explore the wide range of options available and then choose the arm, pole, base, accessories and finish that best suits the project and fixture you desire. The breadth of AAL's arm, pole and options provides a wide selection that will complement architectural details and site design

#### Follow These Easy Steps:

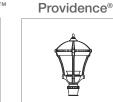
- 1. Choose a contemporary or traditional styled fixture.
- 2. Select mounting and an arm, if desired, that complements the fixture and site theme.
- 3. Select the complementing pole.
- functional options, accessories and finishes.

Civic Lantern™

#### 1. CHOOSE A LUMINAIRE



Dundee







Arts & Crafts®











#### CONTEMPORARY

Parkway Square<sup>™</sup>



Indirect™

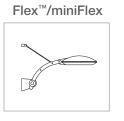
Mitre™

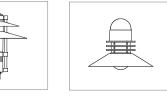


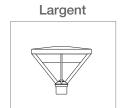
















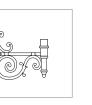


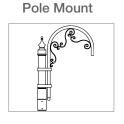
- 4. Make the look your own by adding stylish and

#### 2. SELECT A MOUNT AND ARM

#### **PERIOD**

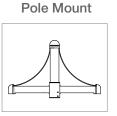
Wall Mount





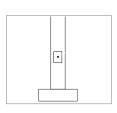
#### **CONTEMPORARY**

Wall Mount



#### 3. SELECT A POLE AND BASE COVER

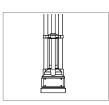
Aluminum





**Decorative Base Series** 



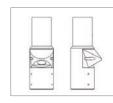


#### 4. SELECT OPTIONS/ACCESSORIES

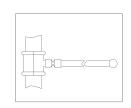
Egress

**Photocell** 





**Banner Arms** 



Ladder Rest / Plant Hangers

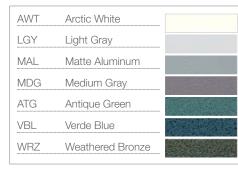


### 5. COLOR

• 🚇 •

All standard and premium AAL colors available. For RAL and custom colors, please submit a four-digit RAL number or color chip for custom colors.

#### STANDARD COLOR



DGN	Dark Green	
CRT	Corten	
BRM	Metallic Bronze	
DBZ	Dark Bronze	
BLK	Black	
MTB	Matte Black	

#### PREMIUM COLOR

ARCHITECTURAL AREA LIGHTING

SFM	Seafoam	
WCP	Weathered Copper	
SHK	Shamrock	
SPP	Salt & Pepper	

Contact a local representative for a color chip.

8 POLES/ARMS/ACCESSORIES

# PERIOD LUMINAIRE Arm Selections

All arm castings are cast from pure, certified #356 aluminum for maximum strength and structural integrity.

Fixtures are either welded to the arm or bolted on, depending on the selection. Custom and modified arms are available in many configurations.

#### WALL MOUNT





#### POLE MOUNT







#### PROS-WMA59U



# SPECIFY THE BEST

AAL traditional cast aluminum arms are unitized one piece designs for maximum strength. The arms are prewired for cost effective installation. Stainless steel mounting hardware is supplied for attaching to AAL poles.



PRMS-TRA5U ALN540-TRA55





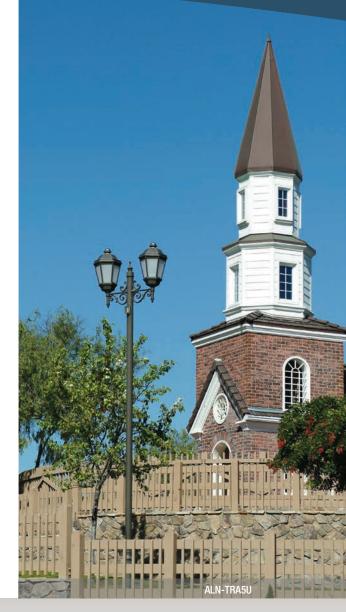
11



# ALL ARMS ARE NOTCREATED EQUAL

#### Accept No Imitations

AAL arms are factory fabricated and assembled for maximum strength and rigidity. All components are welded together as a unitized structure. All arms are prewired for easy, error proof installation with no field assembly required. AAL poles are factory drilled with threaded inserts (stainless steel hardware). Minimize the cost of installation and guarantee a great looking finished project with AAL arms.



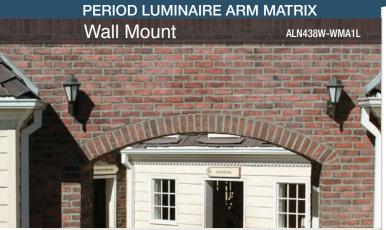
PRMD-TRA9



PRM2-TRA60



POLES/ARMS/ACCESSORIES 13



PROMENADE

PRM2

PRM3

PRM4 PROVIDENCE®

PROL

ARTS & CRAFTS®





PRMS PRMD



SACRD \*Arms for Arts & Crafts are custom designed

CIVIC LANTERN™



FEDERAL GLOBE™



**PROV** 

PROS\* \*Arms for PROS are

custom designed



TOWNE COMMONS®





\*Arms for ALN438 are custom

DUNDEE

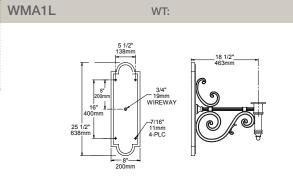


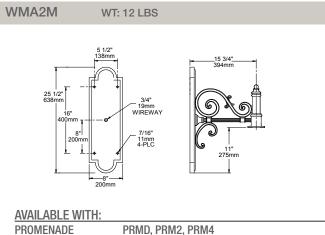
PARKWAY SQUARE PKWM

\*Arms for PKWS and PKWM are custom

WMA1M WT: 12 LBS

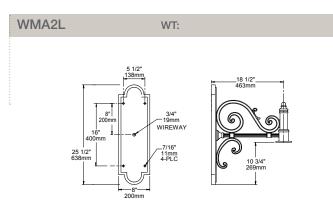
AVAILABLE WITH:	
CIVIC LANTERN	CLL
DUNDEE	ALN610
FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM





ALN440D, ALN445D, ALN540D

TOWNE COMMONS



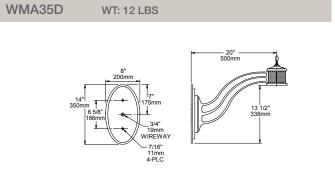
AVAILABLE WITH: PROMEN TOWNE C

NADE	PRMD, PRM2, PRM4	DUNDEE	ALN610
COMMONS	ALN440D, ALN445D, ALN540D	 PROMENADE	PRMN, PRMS
		 TOWNE COMMONS	ALN440, ALN445, ALN540PM
35D	WT: 12 LBS	WMA35U	WT: 12 LBS

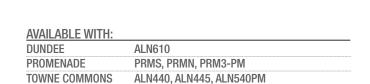
WMA3

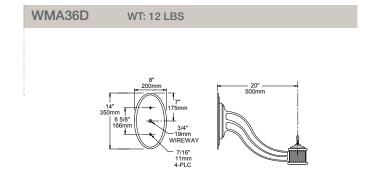
**AVAILABLE WITH:** 

WT: 17 LBS

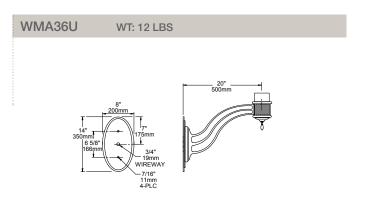


**AVAILABLE WITH:** PROMENADE PRMD, PRM2, PRM3, PRM4





**AVAILABLE WITH:** PROMENADE PRMD, PRM2, PRM3, PRM4



AVAILABLE WITH:	
DUNDEE	ALN610
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM

# PERIOD LUMINAIRE ARM MATRIX Wall Mount PRM3-WMA4



PRMS

PRMD

SACRD \*Arms for Arts &

Crafts are custom

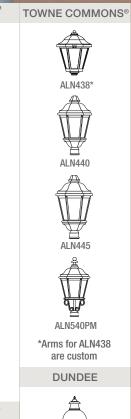
designed

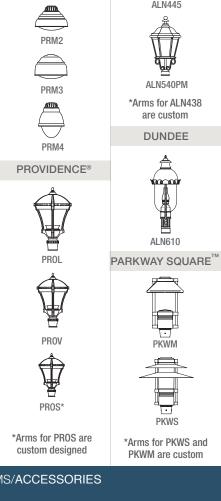
CIVIC LANTERN™

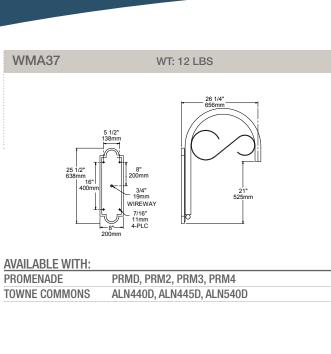
CLL

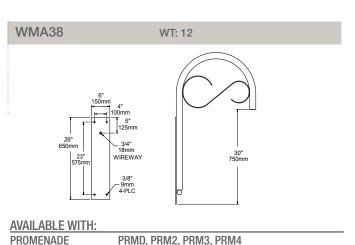
FEDERAL GLOBE"

16







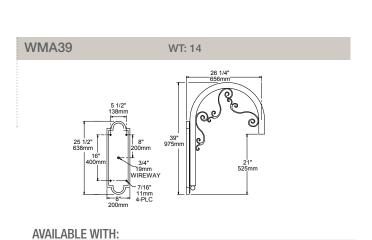


ALN440D, ALN445D, ALN540D

TOWNE COMMONS

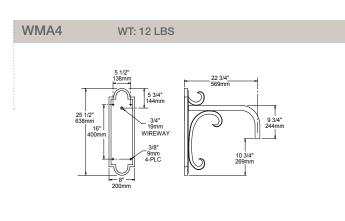
PROMENADE

TOWNE COMMONS



PRM2, PRM4, PRMD

ALN440D, ALN445D, ALN540D



PRMD, PRM2, PRM3, PRM4

ALN440D, ALN445D, ALN540D

**AVAILABLE WITH:** 

TOWNE COMMONS

**AVAILABLE WITH:** 

CLL

FGS

ALN610

PROV, PROL

PRMS, PRMN, PRM3-PM

ALN440, ALN445, ALN540PM

PRMD, PRM2, PRM3, PRM4

ALN440D, ALN445D, ALN540D

CIVIC LANTERN

FEDERAL GLOBE

TOWNE COMMONS

**AVAILABLE WITH:** 

TOWNE COMMONS

PROMENADE

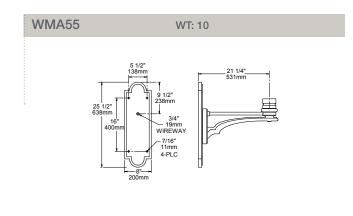
PROMENADE

**PROVIDENCE** 

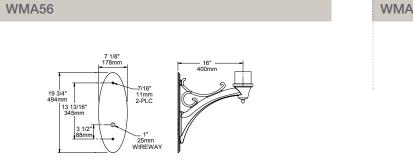
DUNDEE

WMA6

**PROMENADE** 

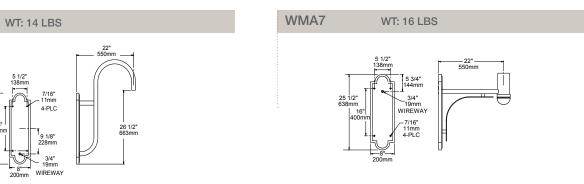


AVAILABLE WITH:	
CIVIC LANTERN	CLL
 DUNDEE	ALN610
 FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV, PROL
TOWNE COMMONS	ALN440, ALN445, ALN540PM



WMA57	WT: 9	
.44°/11	18.0" 11.25" 318mm 11.25" 286mm 11mm WIREWAY HOLE	

CIVIC LANTERN	CLL
DUNDEE	ALN610
FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV
TOWNE COMMONS	ALN440, ALN445, ALN540PM



AVAILABLE WITH:	
DUNDEE	ALN610
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV
TOWNE COMMONS	ALN440, ALN445, ALN540PM

POLES/ARMS/ACCESSORIES



PRMN

PRMS

PRMD

PRM2

PRM3

PRM4

PROVIDENCE®

ALN438\*

ALN440

ALN445

ALN540PM

\*Arms for ALN438

are custom DUNDEE

AUCO

ALN610

PARKWAY SQUARE"

PKWM

\*Arms for PKWS and

PKWM are custom









\*Arms for Arts & Crafts are custom designed





FEDERAL GLOBE"



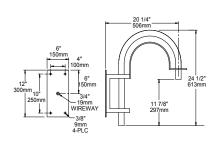
18





\*Arms for PROS are custom designed

WMA8



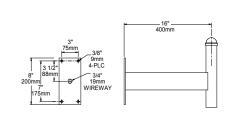
WT: 10 LBS

AVAILABLE WITH:	
PROMENADE I	P

PRMD, PRM3 TOWNE COMMONS ALN440D, ALN445D, ALN540D

WMA9D



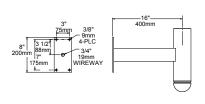


AVAIL	ABLE	WITH:
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AVAILADEL WITH.	
PROMENADE	PRMD, PRM3
TOWNE COMMONS	ALN440D, ALN445D, ALN540D

WMA9U

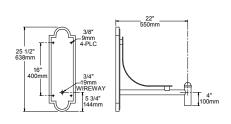
WT: 8 LBS



AVAILABLE	WITH:
DIINDEE	

DUNDEE	ALN610
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV
TOWNE COMMONS	ALN440, ALN445, ALN540PM

WMA10

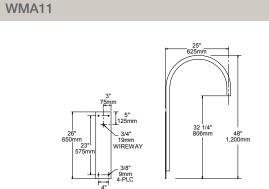


WT:

**AVAILABLE WITH:** 

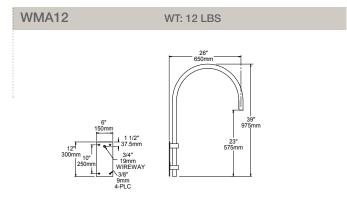
PROMENADE PRMD, PRM3

TOWNE COMMONS ALN440D, ALN445D, ALN540D



**AVAILABLE WITH** 

PROMENADE PRMD, PRM2, PRM3, PRM4 TOWNE COMMONS ALN440D, ALN445D, ALN540D



**AVAILABLE WITH:** 

**PROMENADE** PRMD, PRM2, PRM3, PRM4 **TOWNE COMMONS** ALN440D, ALN445D, ALN540D

WMA16	V	/T: 22
1,100mm 38 950i	150mm 4" 100mm 3/8" 9mm 4-PLC 13/4" 19mm WIREWAY 9" 225mm	28° 700mm

**AVAILABLE WITH:** 

PROMENADE PRMD, PRM2, PRM3, PRM4 TOWNE COMMONS ALN440D, ALN445D, ALN540D

WMA17 WT: 15 \_\_3/8" 9mm 4-PLC

AVAIL	.ABL	E W	/ITH	:

PRMD, PRM2, PRM3, PRM4 PROMENADE TOWNE COMMONS ALN440D, ALN445D, ALN540D WMA18 WT: 18

**AVAILABLE WITH:** 

PROMENADE PRMD. PRM3 TOWNE COMMONS ALN440D, ALN445D, ALN540D





PRMS

PRMD

PRM2

PRM3

PRM4

PROL

PROS\*

\*Arms for PROS are

custom designed

SACRD

\*Arms for Arts &

Crafts are custom

designed

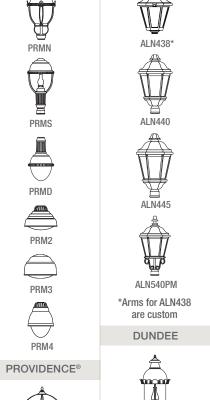
CIVIC LANTERN"

CLL

FEDERAL GLOBE™

FGS

20

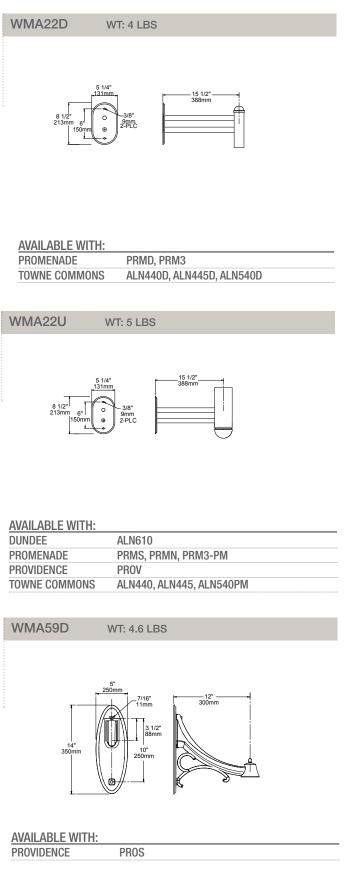


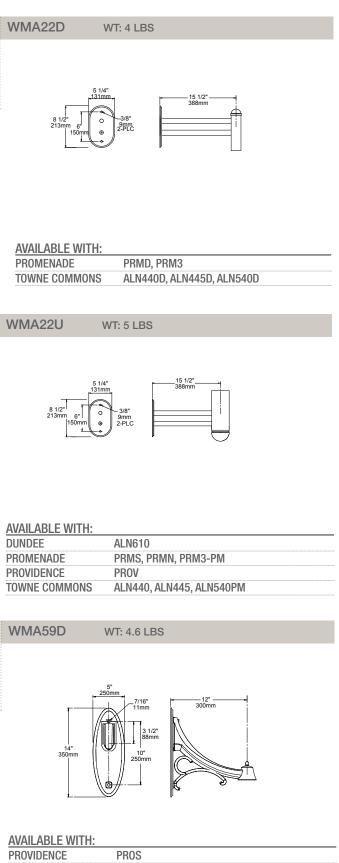
ALN610

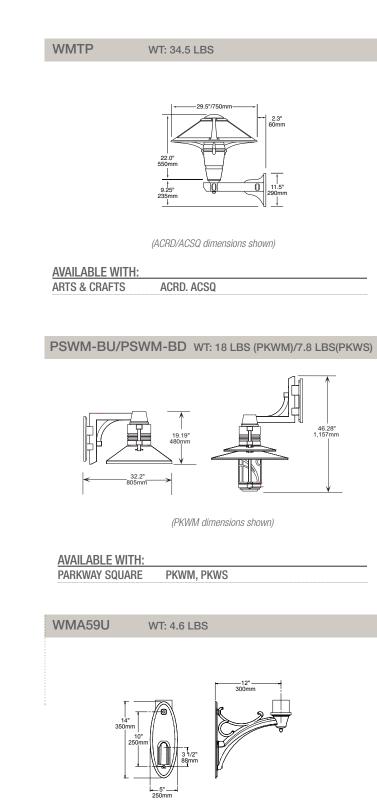
PARKWAY SQUARE

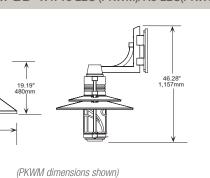
\*Arms for PKWS and

PKWM are custom







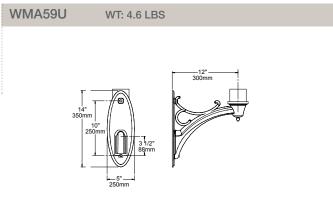


AVAILABLE WITH:		
PARKWAY SQUARE	PKWM, PKWS	

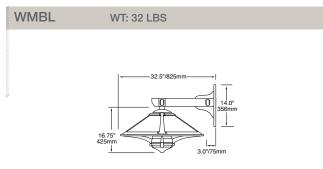
(ACRD/ACSQ dimensions shown)

ACRD. ACSQ

WT: 34.5 LBS

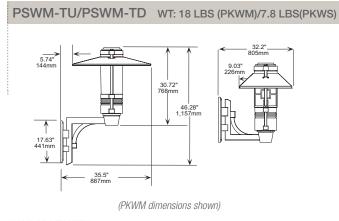


AVAILABLE WITH:		
PROVIDENCE	PR0S	



(ACRD/ACSQ dimensions shown)

AVAILABLE WITH:		
ARTS & CRAFTS	ACRD. ACSQ	

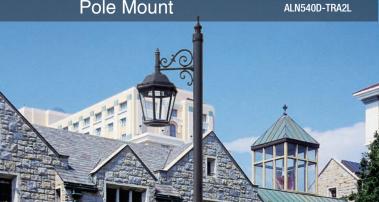


**AVAILABLE WITH:** PARKWAY SQUARE PKWM, PKWS



PSWS/PKWM-TU

# PERIOD LUMINAIRE ARM MATRIX Pole Mount



ARTS & CRAFTS®

PROMENADE™

W

PRMN

PRMS

TOWNE COMMONS®

ALN445

ALN540PM

\*Arms for ALN438

are custom

DUNDEE







\*Arms for Arts & Crafts are custom designed

CIVIC LANTERN"



FEDERAL GLOBE™



22

PR0L

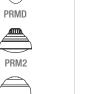




\*Arms for PROS are custom designed

ALN438\*

ALN440

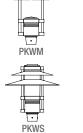




PRM4

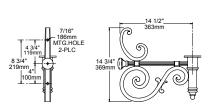
PROVIDENCE®

ALN610 PARKWAY SQUARE"



\*Arms for PKWS and PKWM are custom

TRA1M WT: 7 LBS EPA: .62



4" OR 5" POLE

EPA: .75

AVAILABLE WITH:	
CIVIC LANTERN	CLL
DUNDEE	ALN610
FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM
•	

0 0 0 0 0 0	7/16" 177nm MTG.HOLE 431mm
٠	15 1/2" 10 1/4" 256mm 438mm
	14 3/4"

WT: 9 LBS

TRA1L

TRA2M

4" OR 5" POLE

EPA: .62

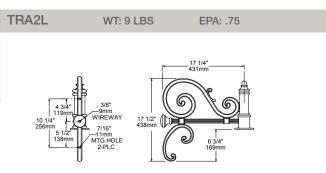
AVAILABLE WITH:	
CIVIC LANTERN	CLL
DUNDEE	ALN610
FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM

WT: 7 LBS

7/16" 363mm  4-1 14 1/2" 363mm  MTG.HOLE 2-PLG 14 3/4" 119mm  4 3/4" 119mm  4 3/4" 119mm
--

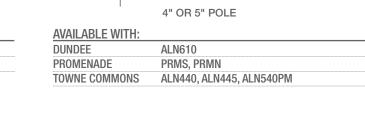
4" OR 5" POLE

AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D



4" OR 5" POLE

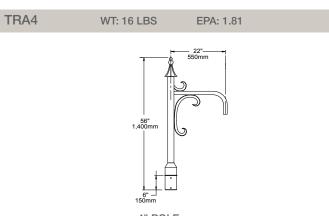
AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D



WT: 14 LBS

EPA: .90

TRA3



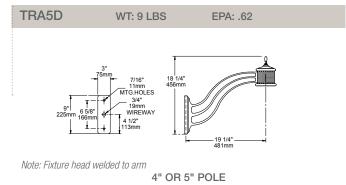
	6" 150mm	
	4" POLE	
AVAILABLE WITH:		
PROMENADE	PRMD, PRM2, PRM3, PRM4	

ALN440D, ALN445D, ALN540D

3" 7/16" 11mm 19 1/4" 481mm 325	INAGU	W1: 9 LBS	EPA: .02
	75mr	11mm MTG.HOLES 3/4" 19mm WIREWAY	

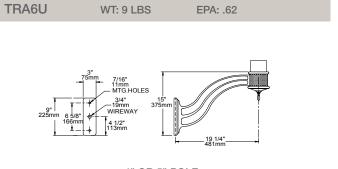
4" OR 5" POLE

AVAILABLE WITH:	
DUNDEE	ALN610
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM



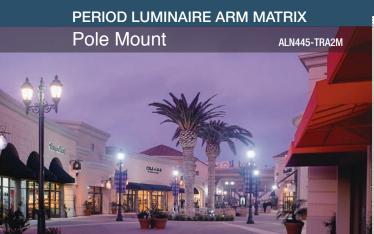
TOWNE COMMONS

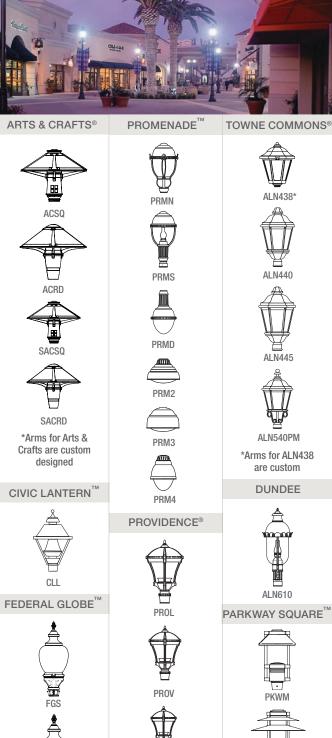
AVAILABLE WITH:		
PROMENADE	PRMD, PRM2, PRM3, PRM4	



4" OR 5" POLE

AVAILABLE WITH:		
DUNDEE	ALN610	
PROMENADE	PRMS, PRMN, PRM3-PM	
TOWNE COMMONS	ALN440, ALN445, ALN540PM	





PROS\*

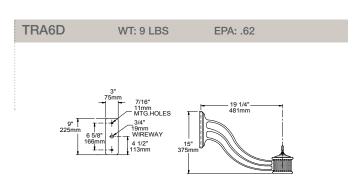
\*Arms for PROS are

custom designed

24

\*Arms for PKWS and

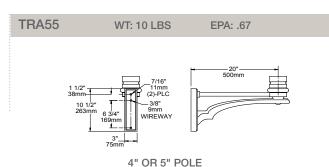
PKWM are custom



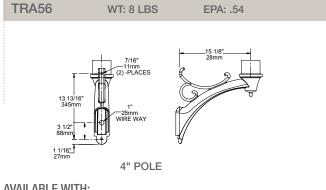
Note: Fixture head welded to arm

AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM3, PRM4

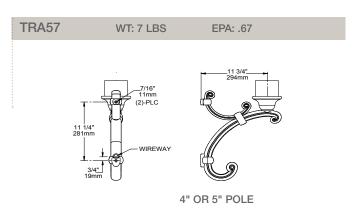
4" OR 5" POLE



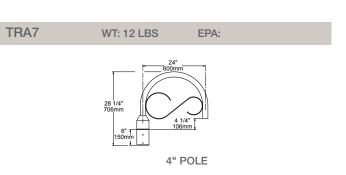
	4 OILS LOFF
AVAILABLE WITH:	
CIVIC LANTERN	CLL
DUNDEE	ALN610
FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV, PROL
TOWNE COMMONS	ALN440, ALN445, ALN540PM



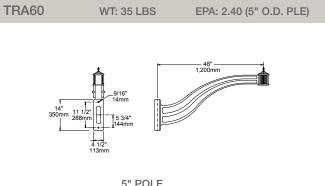
AVAILABLE WITH:	
CIVIC LANTERN	CLL
DUNDEE	ALN610
FEDERAL GLOBE	FGS
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV, PROL
TOWNE COMMONS	ALN440, ALN445, ALN540PM



CIVIC LANTERN CLL DUNDEE ALN610 FEDERAL GLOBE FGS	
DUNDEE ALN610	
FEDERAL GLOBE FGS	
PROMENADE PRMS, PRMN, PRM3-PM	
PROVIDENCE PROV	
TOWNE COMMONS ALN440, ALN445, ALN540PM	

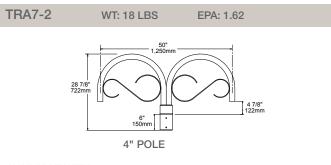


AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM3, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D

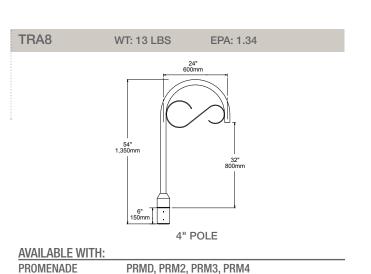


5" POLE Note: Fixture head welded to arm

AVAILABLE WITH:	
PROMENADE	PRM2, PRM4
***************************************	



AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM3, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D



ALN440D, ALN445D, ALN540D

TOWNE COMMONS

TRA8-2	WT: 21 LBS	EPA: 2.68
	56 1/4" 1,400mm	32 1/4" 806mm
AVAILABLE W	4" POLE	
		40 DD840 DD844
PROMENADE		/12, PRM3, PRM4
TOWNE COMM	ONS ALN440D, A	ALN445D, ALN540D

25





PRMN

PRMS

PRMD

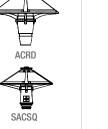
PRM2

PRM3

PRM4 PROVIDENCE®

PROL





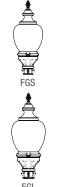


SACRD \*Arms for Arts & Crafts are custom designed





FEDERAL GLOBE<sup>™</sup>



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ALN440

ALN445

ALN610

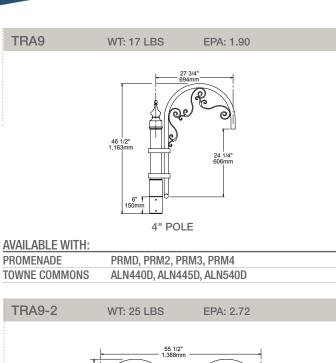
PARKWAY SQUARE™

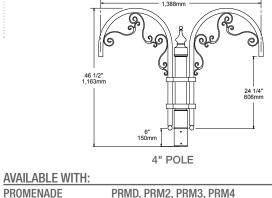
PKWM

PKWS

\*Arms for PKWS and

PKWM are custom

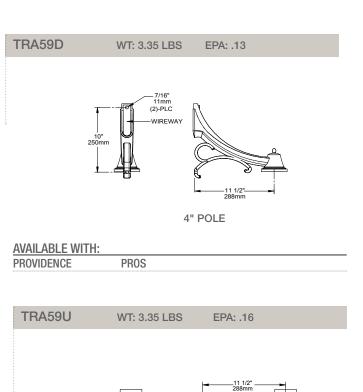


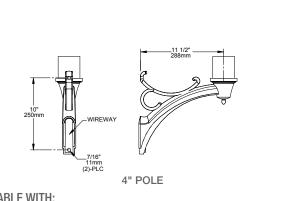


PKWM-PSA-TU



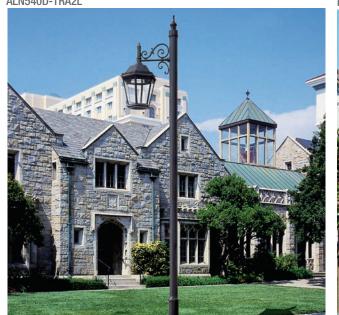
ALN440D, ALN445D, ALN540D





**AVAILABLE WITH:** PROVIDENCE **PROS** 

ALN540D-TRA2L







PKWS-PSA TU

POLES/ARMS/ACCESSORIES ARCHITECTURAL AREA LIGHTING

27

# PERIOD LUMINAIRE ARM MATRIX



ARTS & CRAFTS®

PROMENADE™ PRMN



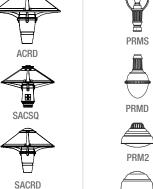
PROV

PROS\*

\*Arms for PROS are

custom designed





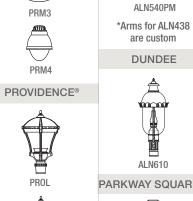
\*Arms for Arts & Crafts are custom designed

CIVIC LANTERN™



FEDERAL GLOBE<sup>™</sup>





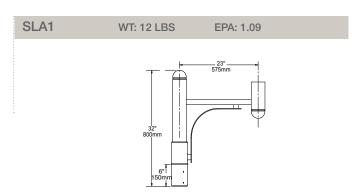


TOWNE COMMONS®

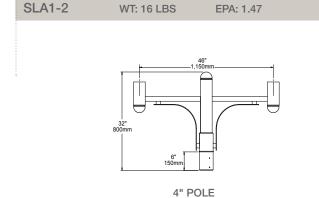
ALN438\*

ALN440

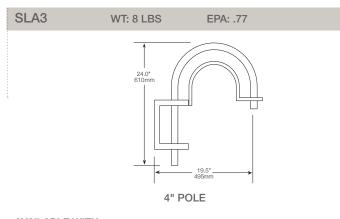
ALN445



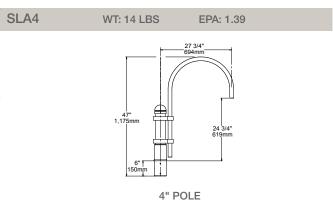
	4" POLE
AVAILABLE WITH:	
DUNDEE	ALN610
PROVIDENCE	PROV, PROL
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM



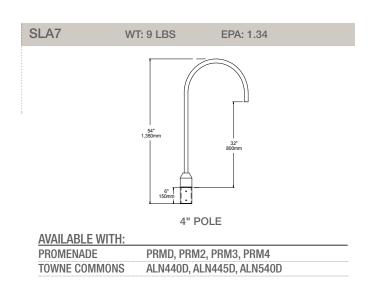
DUNDEE	ALN610
PROVIDENCE	PROV, PROL
PROMENADE	PRMS, PRMN, PRM3-PM
TOWNE COMMONS	ALN440, ALN445, ALN540PM

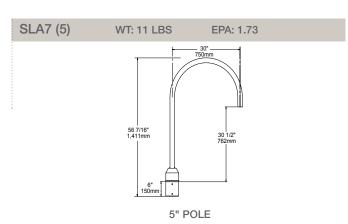


TOWNE COMMONS	ALN440D, ALN445D, ALN540D	
PROMENADE	PRMD, PRM3	
AVAILABLE WITH:		

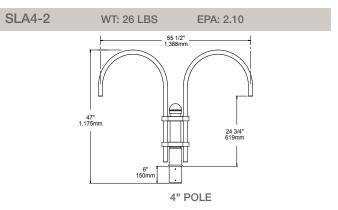


PRMD, PRM2, PRM3, PRM4
ALN440D, ALN445D, ALN540D

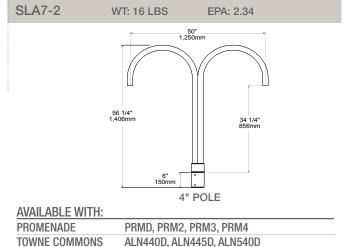


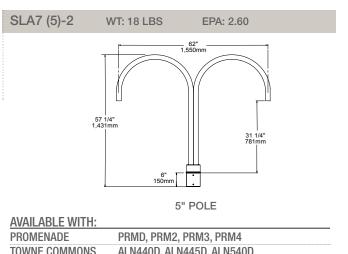


AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM3, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D



AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM3, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D



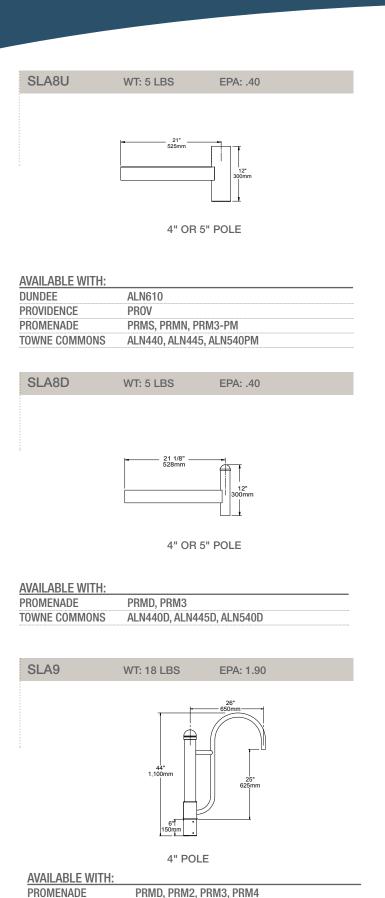


TOWNE COMMONS ALN440D, ALN445D, ALN540D



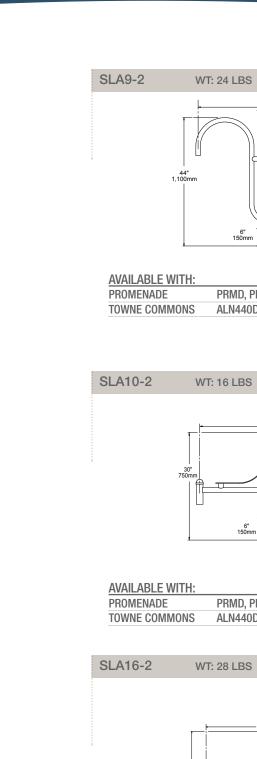


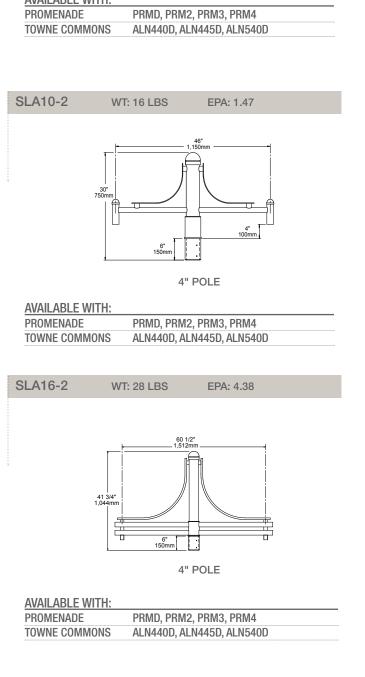




ALN440D, ALN445D, ALN540D

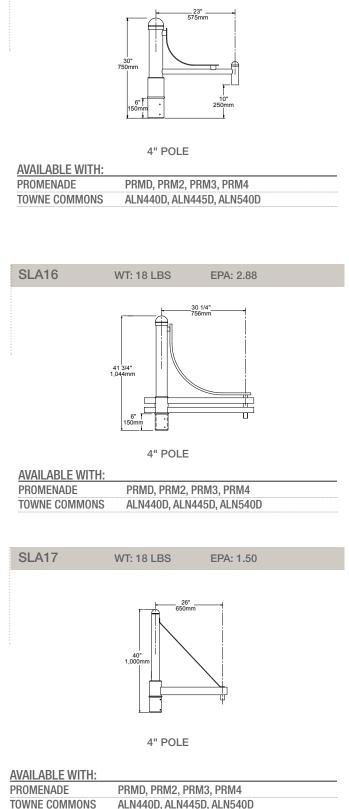
TOWNE COMMONS





EPA: 2.44

4" POLE



31

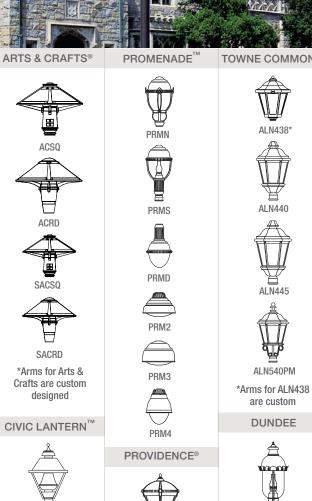
SLA10

WT: 9 LBS

EPA: 1.09

# PERIOD LUMINAIRE ARM MATRIX Pole Mount PRM4-TRA5D





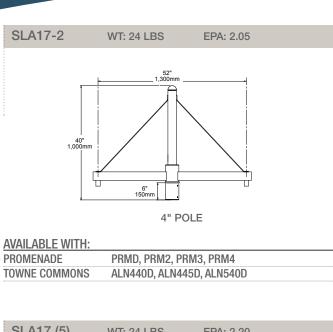
CLL

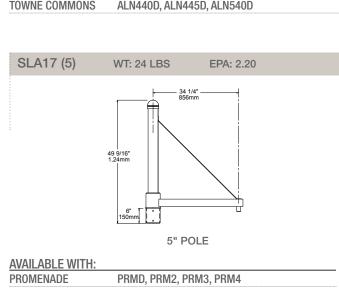
FEDERAL GLOBE<sup>™</sup>

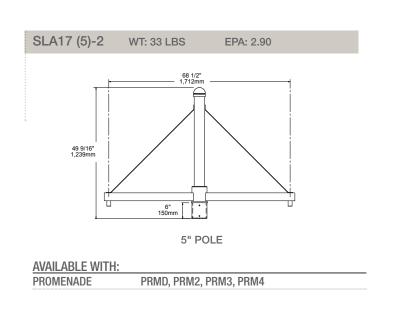
FGS

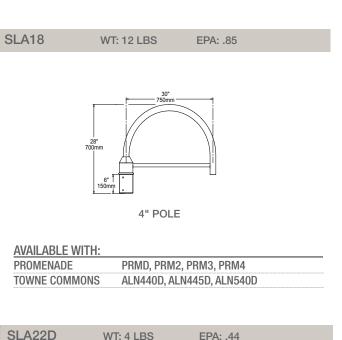
32





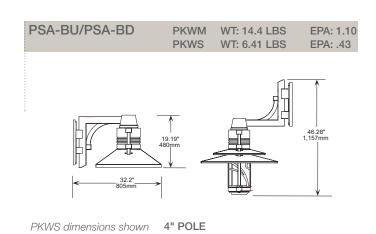








ALN440D, ALN445D, ALN540D



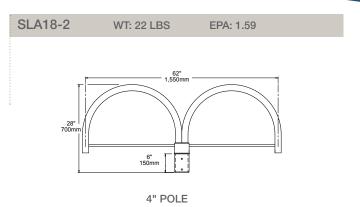
PRMD, PRM3

**AVAILABLE WITH:** 

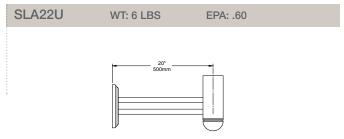
TOWNE COMMONS

**PROMENADE** 

AVAILABLE WITH:	
PARKWAY SQUARE	PKWM, PKWS

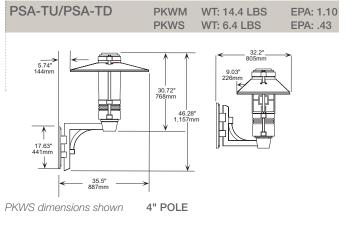


AVAILABLE WITH:	
PROMENADE	PRMD, PRM2, PRM3, PRM4
TOWNE COMMONS	ALN440D, ALN445D, ALN540D



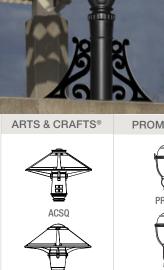
4" OR 5" POLE

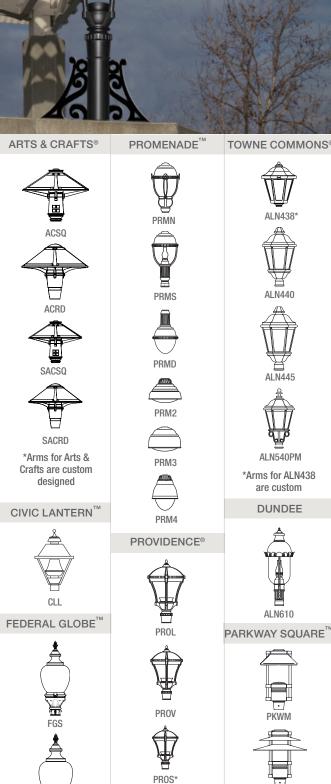
AVAILABLE WITH:	
DUNDEE	ALN610
PROMENADE	PRMS, PRMN, PRM3-PM
PROVIDENCE	PROV
TOWNE COMMONS	ALN440, ALN445, ALN540PM

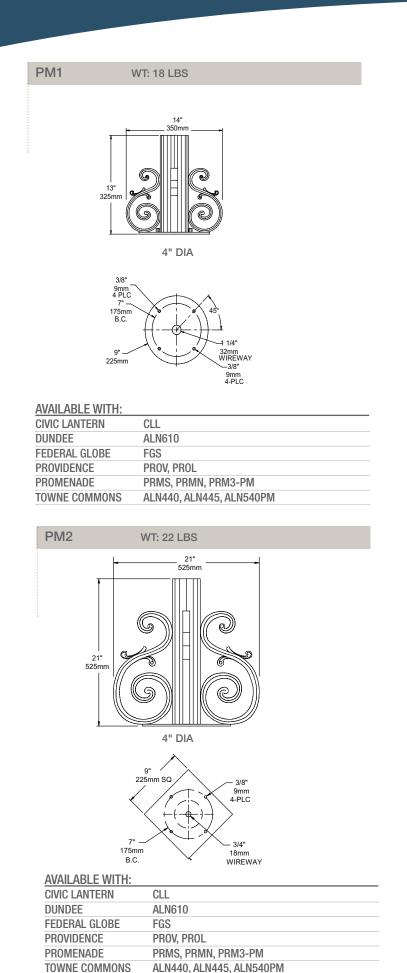


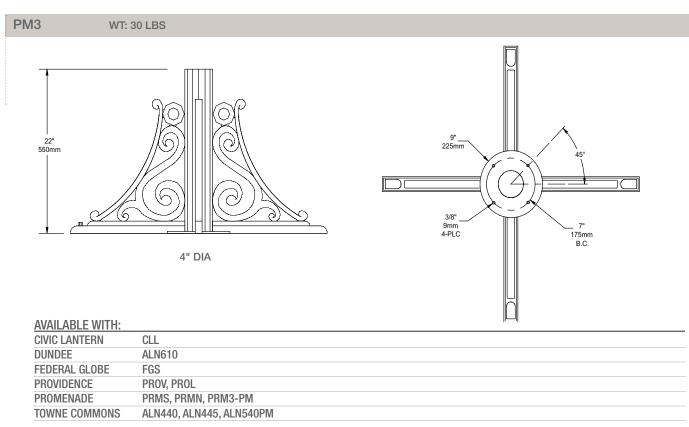
AVAILABLE WITH:	
PARKWAY SQUARE PK	WM, PKWS













\*Arms for PROS are

custom designed

\*Arms for PKWS and

PKWM are custom



# ALL ARMS ARE NOT CREATED EQUAL

Accept no imitations. AAL arms are factory fabricated and assembled for maximum strength and rigidity. All components are welded together as a unitized structure. Easy, error proof installation with no field assembly required and all arms are prewired. Minimize the cost of installation and guarantee a great looking finished project with AAL arms.



INDA-WMA



SVTL-SLA22U



For pole mounted arms the hardware is proved for attachment to AAL poles.

ARCHITECTURAL AREA LIGHTING 37



for the fixture.

LARGENT®



38

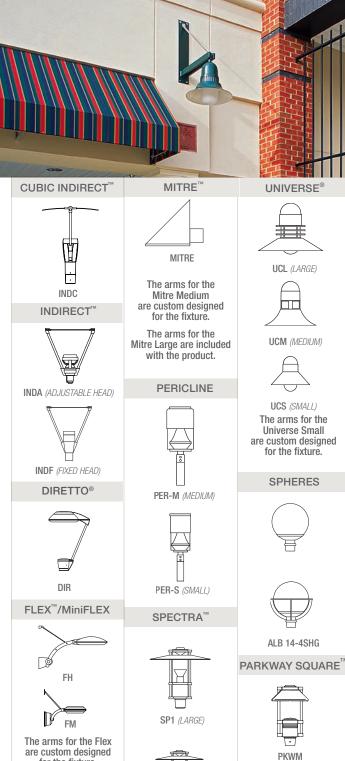
SP2 (SMALL) The arms for the Spectra are custom designed for the fixture.

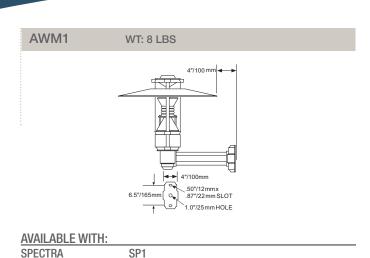
PKWS

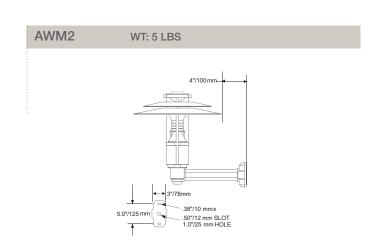
\*Arms for PKWS and

PKWM are custom

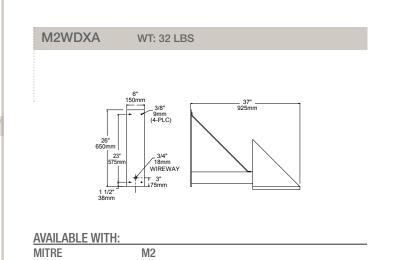
designed

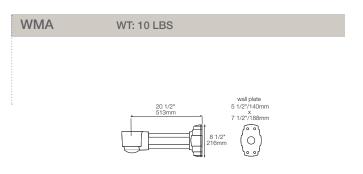




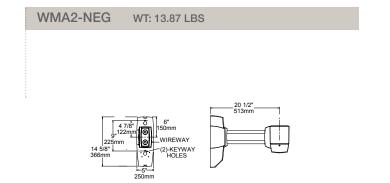




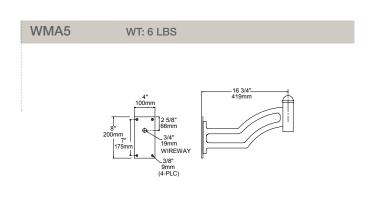




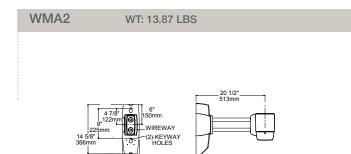




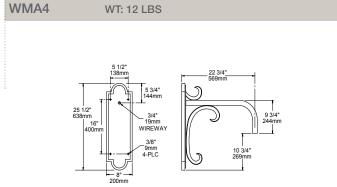




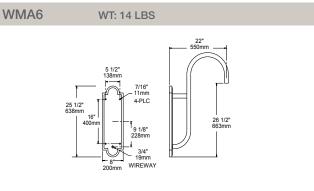
AVAILABLE WITH:	
UNIVERSE	UCM, UCL





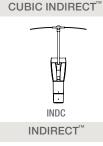


AVAILABLE WITH:	
UNIVERSE	UCM, UCL



AVAILABLE WITH:	
UNIVERSE	UCM, UCL







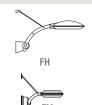
INDA (ADJUSTABLE HEAD)



DIRETTO®



FLEX<sup>™</sup>/MiniFLEX



The arms for the Flex are custom designed for the fixture.

LARGENT®



MITRE™

UNIVERSE®

UCL (LARGE)

Ш

UCM (MEDIUM)

UCS (SMALL) The arms for the Universe Small are custom designed for the fixture.

SPHERES

ALB 18

ALB 14-4SHG

PARKWAY SQUARE"

PKWM

WMA9D

The arms for the Mitre Medium are custom designed for the fixture.

MITRE

The arms for the Mitre Large are included with the product.

**PERICLINE** 



PER-M (MEDIUM)



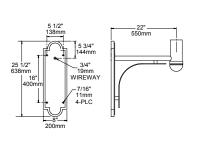
SPECTRA"



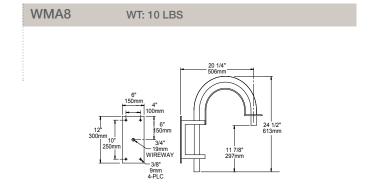
SP2 (SMALL)



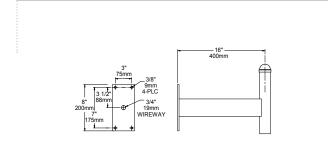
WMA7 WT: 16 LBS



<b>AVAILABLE WITI</b>	<del>l</del> :
LARGENT	SLVT
SPHERE	ALB14, ALB18

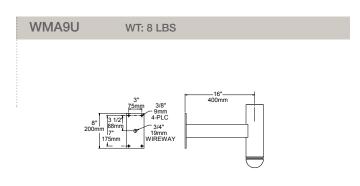




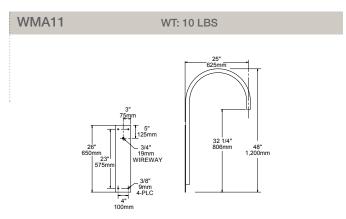


WT: 6 LBS

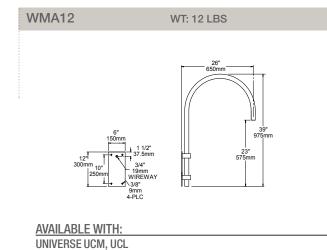
AVAILABLE WITH:	
UNIVERSE UCM, UCL	



AVAILABLE \	WITH:	
LARGENT	SLVT	
SPHERES	ALB14, ALB18	



**AVAILABLE WITH:** UNIVERSE UCM, UCL

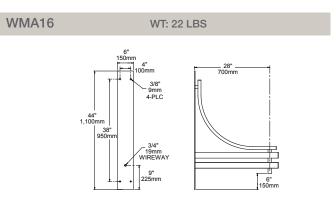


UCM, UCL

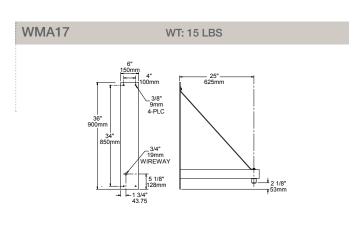
WT: 16 LBS

WMA10

**AVAILABLE WITH:** UNIVERSE







**AVAILABLE WITH:** UNIVERSE UCM, UCL

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MITRE

The arms for the Mitre Medium are custom designed for the fixture.

MITRE™

UNIVERSE®

UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL) The arms for the Universe Small are custom designed for the fixture.

**PKWS** 

\*Arms for PKWS and

PKWM are custom

designed

UNIVERSE

The arms for the Mitre Large are included with the product.

PERICLINE

SP2 (SMALL)

The arms for the

Spectra are custom

designed for the fixture.

INDA (ADJUSTABLE HEAD)

INDC

INDIRECT"

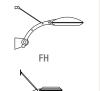


INDF (FIXED HEAD)

DIRETTO®



FLEX<sup>™</sup>/MiniFLEX



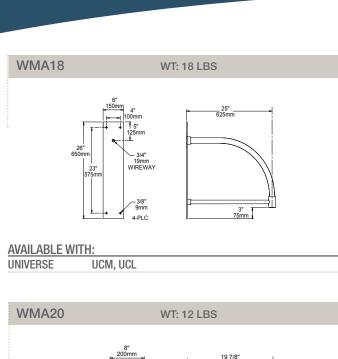
The arms for the Flex are custom designed for the fixture.

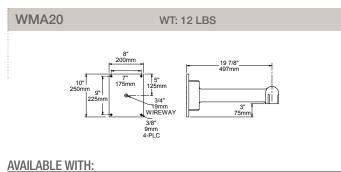
LARGENT®

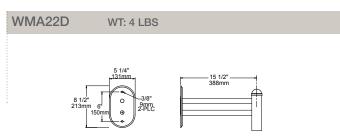


42

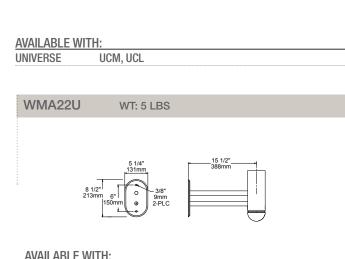
SPHERES PER-M (MEDIUM) ALB 18 PER-S (SMALL) SPECTRA™ ALB 14-4SHG PARKWAY SQUARE SP1 (LARGE) PKWM



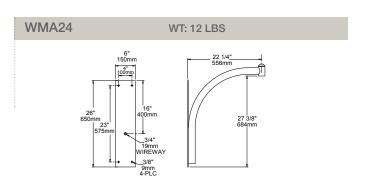




UCM, UCL

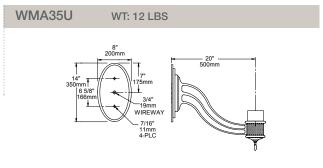


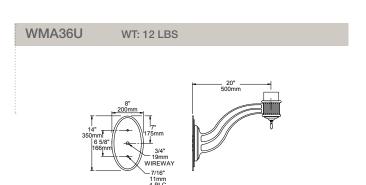




**AVAILABLE WITH:** 

UNIVERSE UCM, UCL





WMA37	WT: 12 LBS
5 1/2" 138mm 16" 400mm 16" 400mm 3/4" 19mm WIREWAY 7116" 11mm 4-PLC	26 1/4" 656mm 21" 525mm

SLVT

ALB18

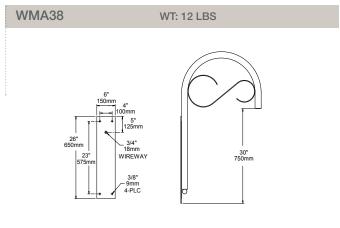
**AVAILABLE WITH:** 

LARGENT

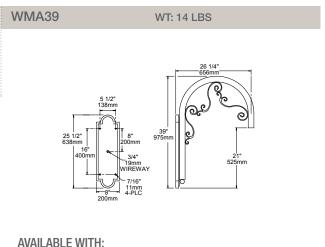
SPHERES

AVAILABLE WITH:		
LARGENT	SLVT	
SPHERES	ALB18	

AVAILABLE WITH:	
UNIVERSE	UCM, UCL



AVAILABLE WITH:	
UNIVERSE	UCM, UCL



AVAILABLE WITH:	
UNIVERSE	UCM, UCL

#### **CONTEMPORARY LUMINAIRE ARM MATRIX**

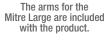




INDIRECT™







PERICLINE

PER-M (MEDIUM)

PER-S (SMALL)

SPECTRA™

SP1 (LARGE)

INDA (ADJUSTABLE HEAD)

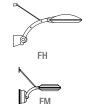


INDF (FIXED HEAD)

**DIRETTO**®



FLEX<sup>™</sup>/MiniFLEX



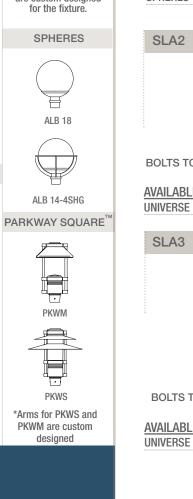
The arms for the Flex are custom designed for the fixture.

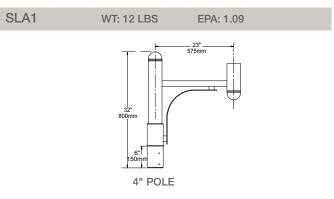




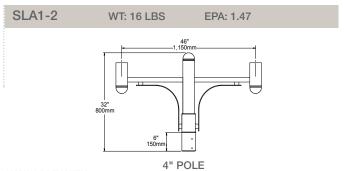




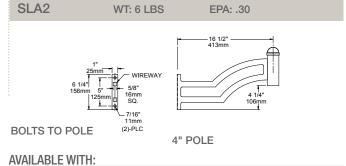


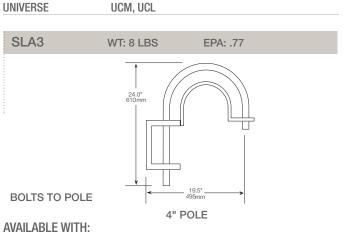


AVAILABLE W	/ITH:	
LARGENT	SLVT	
SPHERES	ALB14, ALB18	

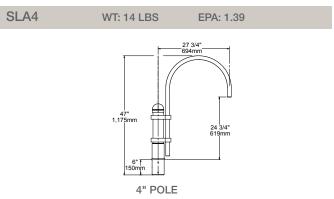


AVAILABLE W	/ITH:	4" POLE
LARGENT	SLVT	
SPHERES	ALB14, ALB18	

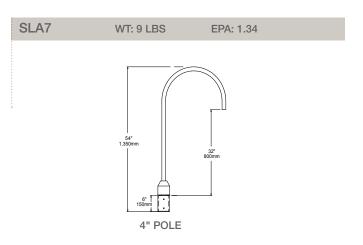




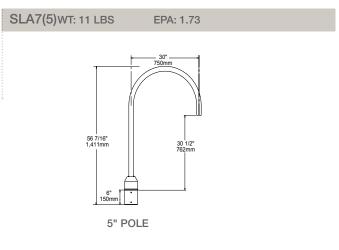
UCM, UCL



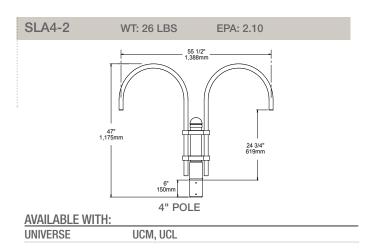
	7 1 (	7LL
AVAILABLE WITH:		
UNIVERSE	UCM, UCL	

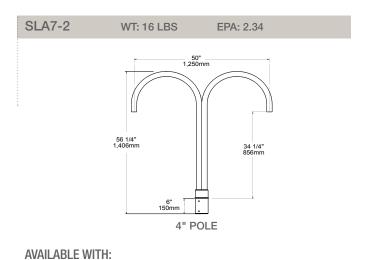






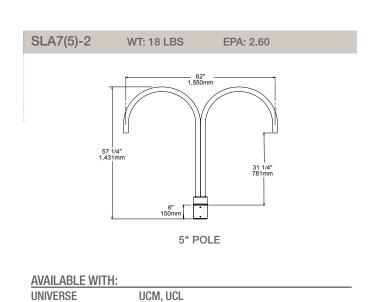
AVAILABLE WITH:	
UNIVERSE	UCM, UCL



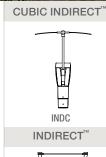


UCM, UCL

UNIVERSE









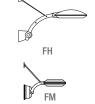
INDA (ADJUSTABLE HEAD)



**INDF** (FIXED HEAD) DIRETTO®



FLEX<sup>™</sup>/MiniFLEX



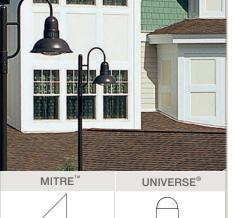
The arms for the Flex are custom designed for the fixture.

LARGENT®



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SP2 (SMALL) The arms for the Spectra are custom designed for the fixture.



UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL) The arms for the Universe Small are custom designed for the fixture.

SPHERES

ALB 18

ALB 14-4SHG PARKWAY SQUARE



The arms for the Mitre Medium are custom designed for the fixture.

The arms for the Mitre Large are included with the product.

PERICLINE



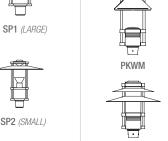
PER-M (MEDIUM)



PER-S (SMALL)

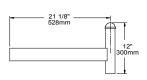
SPECTRA<sup>T</sup>





PKWS \*Arms for PKWS and PKWM are custom designed





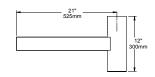
**BOLTS TO POLE** 

4" OR 5" POLE

**AVAILABLE WITH:** 

UCM, UCL UNIVERSE

SLA8U WT: 5 LBS EPA: .40



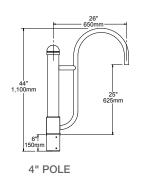
**BOLTS TO POLE** 

4" OR 5" POLE

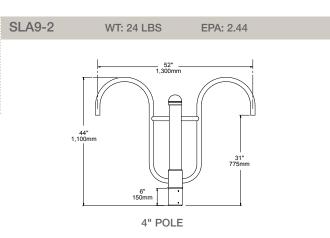
AVAILABLE WITH:

LARGENT	SLVT
SPHERES	ALB14, ALB18

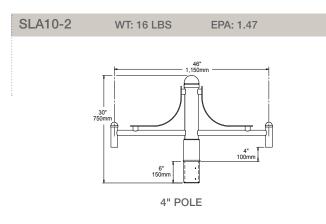
SLA9 WT: 18 LBS EPA: 1.90



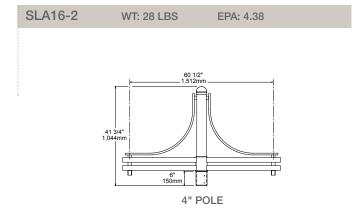




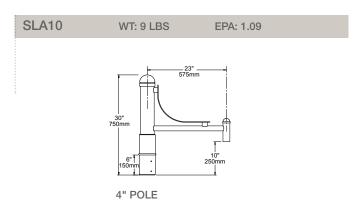
AVAILABLE WITH:	
UNIVERSE	UCM, UCL



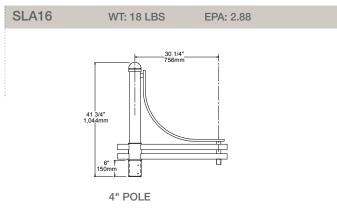




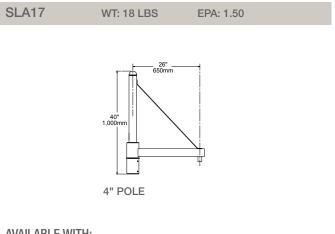
AVAILABLE WITH:	
UNIVERSE	UCM, UCL



AVAILABLE WITH:	
UNIVERSE	UCM, UCL



**AVAILABLE WITH:** UNIVERSE UCM, UCL



AVAILABLE WITH:	
UNIVERSE	UCM, UCL

#### CONTEMPORARY LUMINAIRE ARM MATRIX





INDIRECT"

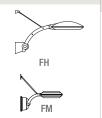


INDA (ADJUSTABLE HEAD)





FLEX<sup>™</sup>/MiniFLEX



The arms for the Flex are custom designed for the fixture.

LARGENT®







UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL)

The arms for the Universe Small are custom designed for the fixture.

**SPHERES** 

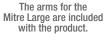
ALB 18

ALB 14-4SHG PARKWAY SQUARE

PKWM



The arms for the Mitre Medium are custom designed for the fixture.



PERICLINE



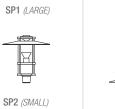
PER-M (MEDIUM)



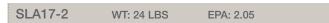
PER-S (SMALL)

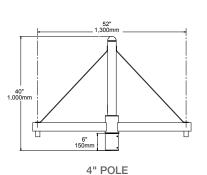
SPECTRA™





The arms for the PKWS Spectra are custom \*Arms for PKWS and designed for the fixture. PKWM are custom designed

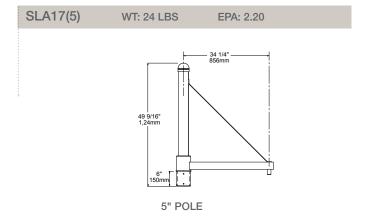




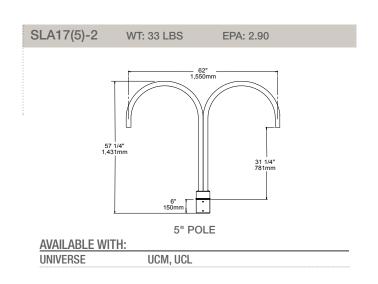
AVAILABLE WITH:		
UNIVERSE	UCM, UCL	

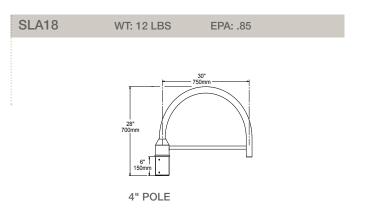
**AVAILABLE WITH:** 

UNIVERSE

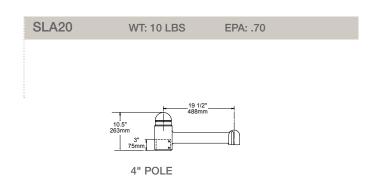


UCM, UCL

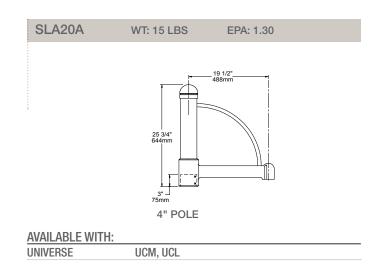


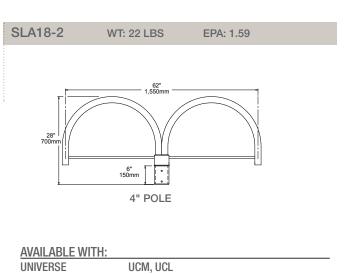


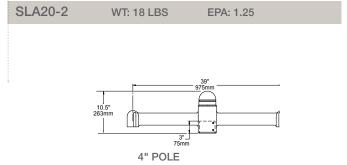




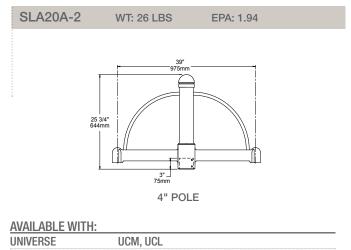




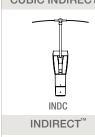




AVAILABLE WITH:	
UNIVERSE	UCM, UCL







INDA (ADJUSTABLE HEAD)



**INDF** (FIXED HEAD) DIRETTO®



DIR

FLEX<sup>™</sup>/MiniFLEX



The arms for the Flex are custom designed for the fixture.

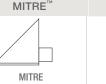
LARGENT®



50







The arms for the Mitre Medium are custom designed for the fixture.

The arms for the Mitre Large are included with the product.

PERICLINE



PER-M (MEDIUM)



SPECTRA™

SP1 (LARGE)



ALB 18

UCL (LARGE)

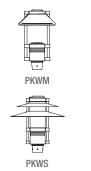
UCM (MEDIUM)

UCS (SMALL) The arms for the Universe Small are custom designed

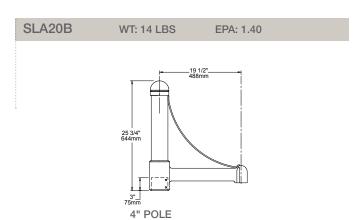
for the fixture.

**SPHERES** 

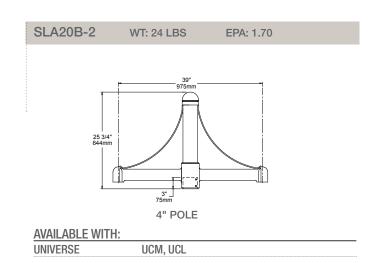
PARKWAY SQUARE

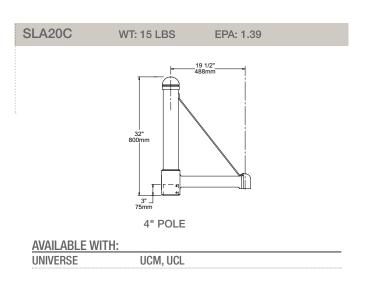


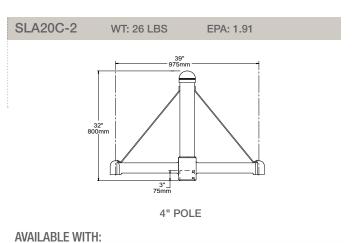




AVAILABLE WITH:	
UNIVERSE	UCM, UCL



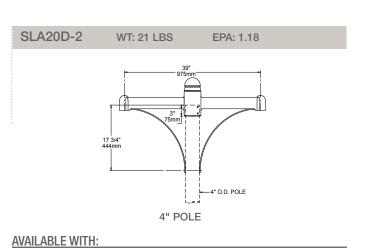


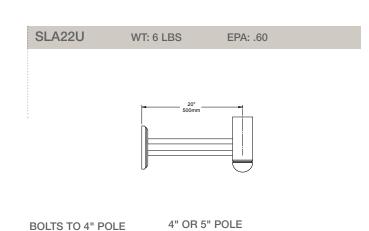


UCM, UCL

UNIVERSE

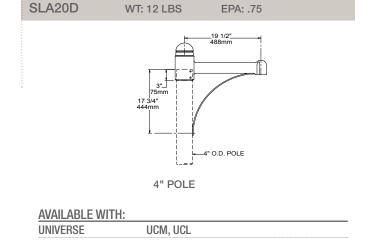
UNIVERSE

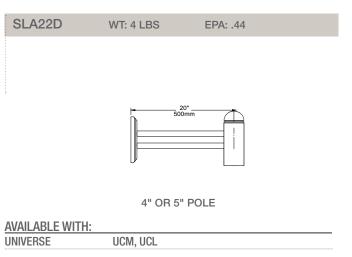


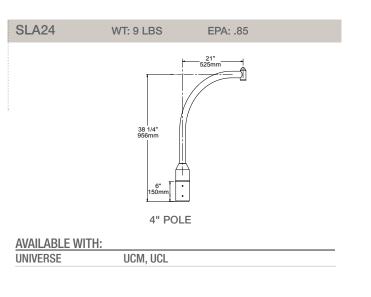


UCM, UCL





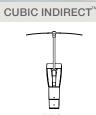




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### CONTEMPORARY LUMINAIRE ARM MATRIX





INDC
INDIRECT™



INDA (ADJUSTABLE HEAD)



INDF (FIXED HEAD)

DIRETTO®



DIR

FLEX<sup>™</sup>/MiniFLEX



The arms for the Flex are custom designed for the fixture.

LARGENT®



SP2 (SMALL)

The arms for the Spectra are cust designed for the fix





UNIVERSE®

UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL)
The arms for the Universe Small

are custom designed for the fixture.

SPHERES

ALB 18

ALB 14-4SHG

PARKWAY SQUARE

The arms for the Mitre Medium are custom designed for the fixture.

The arms for the Mitre Large are included with the product.

PERICLINE



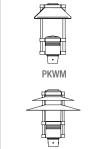
PER-M (MEDIUM)



PER-S (SMALL)

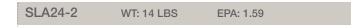
SPECTRA™

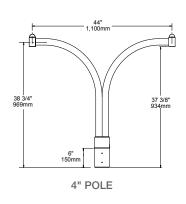




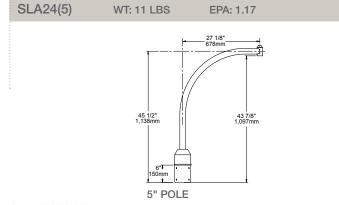
The arms for the Spectra are custom designed for the fixture.

\*Arms for PKWS and PKWM are custom designed





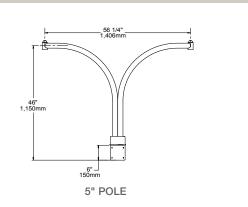
AVAILABLE WITH:		
UNIVERSE	UCM, UCL	





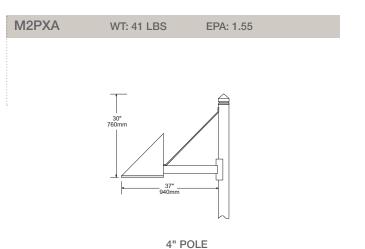
WT: 16 LBS

SLA24(5)-2

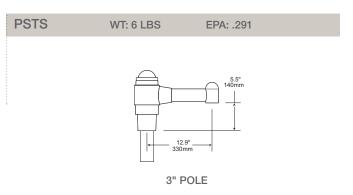


EPA: 1.81

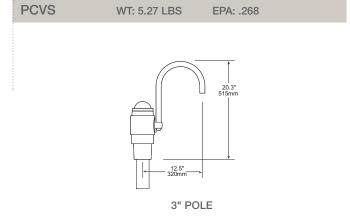




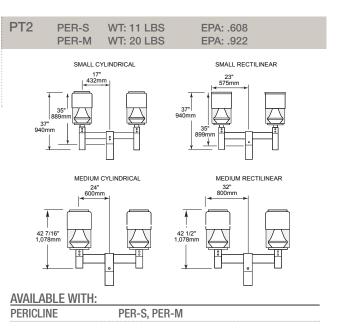


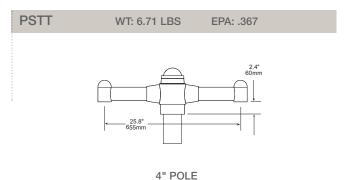




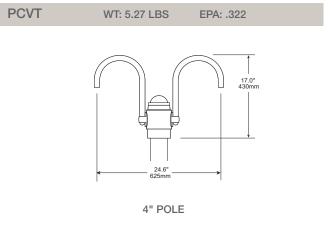


AVAILABLE WITH:	
UNIVERSE	UCS









#### **CONTEMPORARY LUMINAIRE ARM MATRIX** Pole Mount SP1-TAP1





INDIRECT™

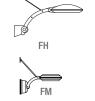
INDA (ADJUSTABLE HEAD)



**DIRETTO®** 



FLEX<sup>™</sup>/MiniFLEX



The arms for the Flex are custom designed for the fixture.

LARGENT®



54





UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL)

The arms for the Universe Small

are custom designed

for the fixture.

SPHERES

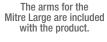
ALB 18

ALB 14-4SHG

PARKWAY SQUARE

The arms for the Mitre Medium are custom designed for the fixture.

MITRE



PERICLINE

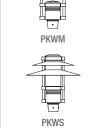


PER-M (MEDIUM)

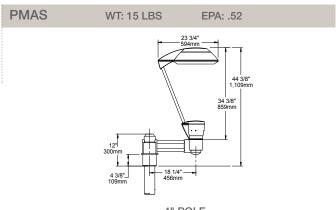


SPECTRA™



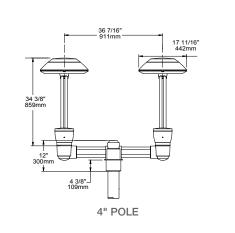


\*Arms for PKWS and PKWM are custom designed

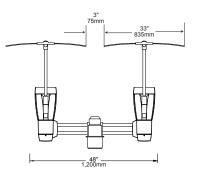


AVAILABLE WITH:		4" POLE	
DIRETTO	DIR		
PMAT	DIR	WT: 24 LBS	EPA: .52

INDC WT: 24 LBS

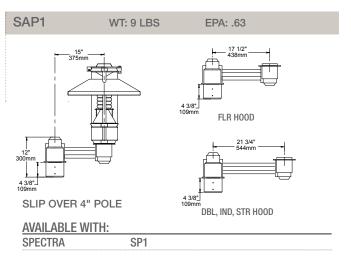


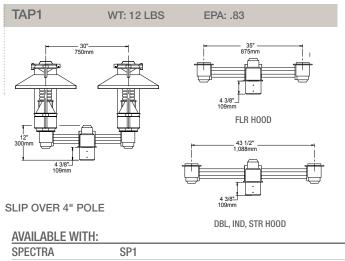
EPA: .82

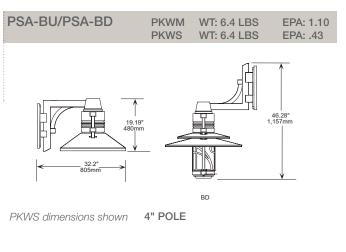


4" POLE

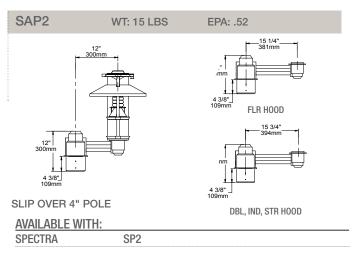
DIR
INDA, INDF
INDC

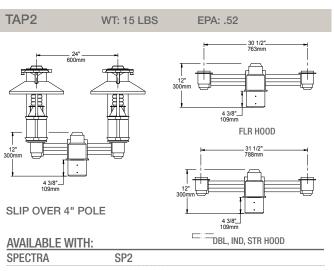


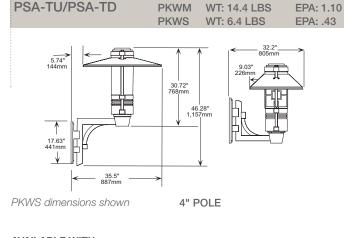












**AVAILABLE WITH:** PARKWAY SQUARE PKWM, PKWS

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POLES/ARMS/ACCESSORIES ARCHITECTURAL AREA LIGHTING

#### CONTEMPORARY LUMINAIRE ARM MATRIX Pole Mount

FH3-TLC5

UNIVERSE®

UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL) The arms for the

Universe Small are custom designed

for the fixture.

**SPHERES** 

ALB 18

ALB 14-4SHG PARKWAY SQUARE"







INDIRECT"



INDA (ADJUSTABLE HEAD)



**INDF** (FIXED HEAD) DIRETTO®



DIR

FLEX<sup>™</sup>/MiniFLEX

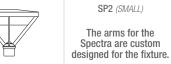


The arms for the Flex are custom designed for the fixture.

LARGENT®



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MITRE"



The arms for the Mitre Medium are custom designed for the fixture.

The arms for the Mitre Large are included with the product.

PERICLINE



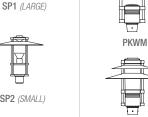
PER-M (MEDIUM)



PER-S (SMALL)

SPECTRA™

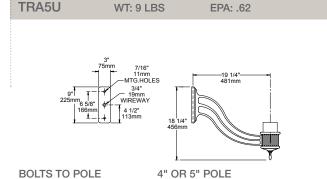




PKWS \*Arms for PKWS and PKWM are custom designed

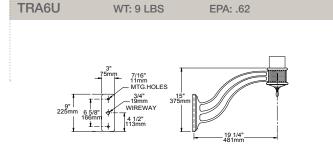
TRA4 WT: 16 LBS EPA: 1.81

AVAILABLE WITH:	4 1 022
PERSPECT	SL PLD
UNIVERSE	UCM, UCL



	BOLIS	TO POLE

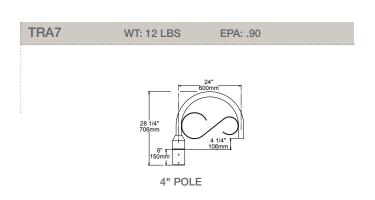
AVAILABLE WIT	H:	
LARGENT	SLVT	
PERSPECT	SL PL	
SPHERES	ALB18	



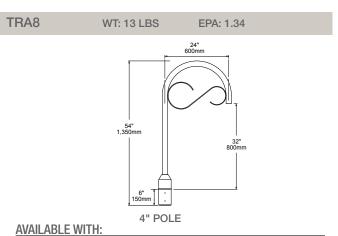
**BOLTS TO POLE** 

SLVT	
SL PL	
ALB18	
	SLVT SL PL ALB18

4" OR 5" POLE



AVAILABLE WITH:	
PERSPECT	SL PLD
UNIVERSE	UCM, UCL

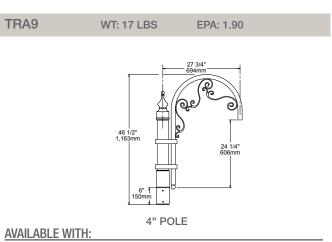


SL PLD

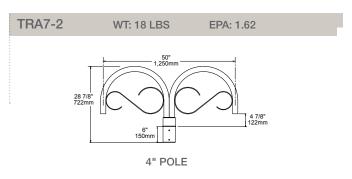
UCM, UCL

PERSPECT

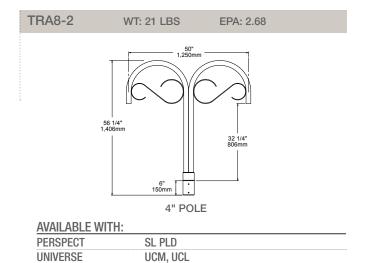
UNIVERSE

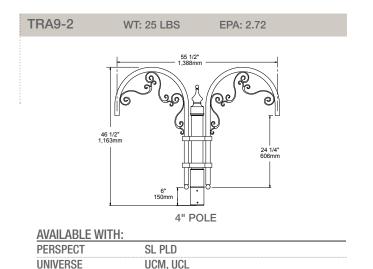


	4" P(	JLE
AVAILABLE WITH:		
PERSPECT	SL PLD	
UNIVERSE	UCM, UCL	



<b>AVAILABLE WITI</b>	Н:	
PERSPECT	SL PLD	
UNIVERSE	UCM, UCL	





ARCHITECTURAL AREA LIGHTING



POLES/ARMS/ACCESSORIES





# CUBIC INDIRECT<sup>™</sup>



INDIRECT™



INDA (ADJUSTABLE HEAD)



DIRETTO®



FLEX<sup>™</sup>/MiniFLEX



The arms for the Flex are custom designed for the fixture.

#### **LARGENT®**





# MITRE™

UNIVERSE®

UCL (LARGE)

UCM (MEDIUM)

UCS (SMALL) The arms for the Universe Small are custom designed for the fixture.

SPHERES

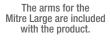
ALB 18

ALB 14-4SHG PARKWAY SQUARE

> \*Arms for PKWS and PKWM are custom designed



The arms for the Mitre Medium are custom designed for the fixture.



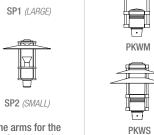
PERICLINE





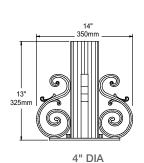
SPECTRA™

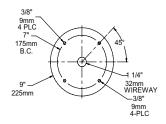




The arms for the Spectra are custom designed for the fixture.

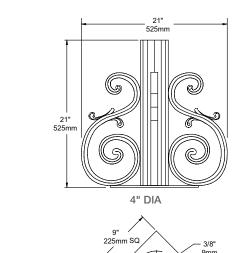
PM1 WT: 18 LBS





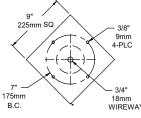
<b>AVAILABLE</b>	WITH:
LARGENT	

# PM2 WT: 22 LBS



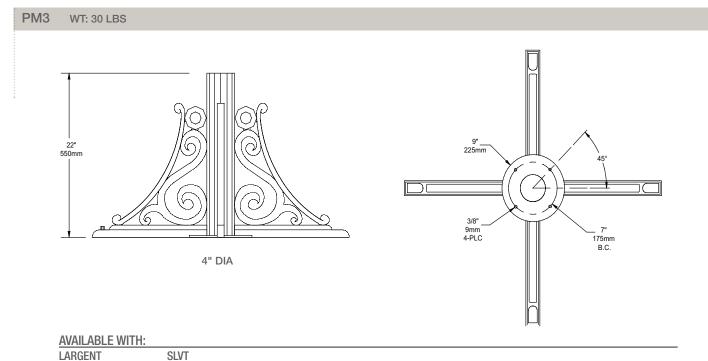
SLVT

SLVT



AVAILABLE	WITH:
LARGENT	

#### PIER MOUNT





SLVT-PM2

58 POLES/ARMS/ACCESSORIES

ARCHITECTURAL AREA LIGHTING

#### WIND MAP

All fixtures and arms are assigned an EPA value (Effective Projected Area) which is defined as the maximum two dimensional area multiplied by the drag coefficient (Cd) designated by AASHTO.

The sum of the fixture and arm EPA must not exceed the maximum allowable pole EPA at the selected design wind speed.

#### **NOTES**

- The wind map presented is intended to be used as a general guide for selection of a design wind speed. Always consult the local authority that has jurisdiction over the special wind region in order to determine the correct design wind speed.
- Maximum allowable EPA values are calculated based on a 50 year recurrence interval in accordance with AASHTO 2001, 4th Edition (American Association of State Highway and Transportation Officials).
- Wind speed values are 3-second gust speeds for poles mounted at ground level for exposure C category.

### American Association of State Highway and Transportation

444 N. Capitol Street, NW, Suite 249, Washington, D.C. 20001 (202) 624-5800, www.aashto.org

#### WARNINGS

• Caution must be exercised in the selection of a design wind speed where the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed prediction is limited such as:

Mountainous terrain

Gorges

Oceans or large bodies of water

Large areas of open land

Areas that are prone to hurricanes, typhoons, cyclones, tornadoes or any extreme environmental condition

- Poles that are to be installed on structures higher than ground level (such as buildings and bridges) may be subjected to vibration, oscillations, and other fatigue effects, which are not covered by the
- The use of banners or other appendages may severely affect the loading of a pole. No banner or other appendages should be attached to an AAL pole unless designed and approved by AAL.
- Pole foundations should be designed and constructed based on local conditions and/or codes. AAL does not offer recommendations for the foundation of the pole.
- Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.



Wind map is for basic reference only. Please consider any unusual circumstances where normal wind loads may exceed expectations and select product accordingly.



PRM4-TRA35D

AAL poles are designed for maximum strength to resist wind loads and perform well with the endless variety of fixtures, arms and accessories. Whether the pole is ten feet or twenty-five feet tall, the same robust design and structural integrity is built into every pole at AAL.

At AAL, we design and manufacture aluminum poles for the best balance of strength, corrosion resistance and longevity.

# POLES





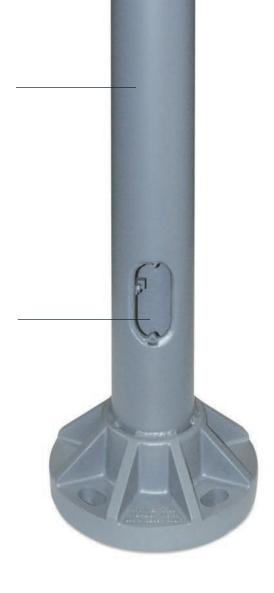
Extruded shafts of high strength 6061 T-6 aluminum.

# AAL **Aluminum Poles**

All hand holes (access cover) are reinforced with a cast aluminum ring welded around the perimeter of the opening.

#### AAL AVAILABLE ALU-MINUM POLES

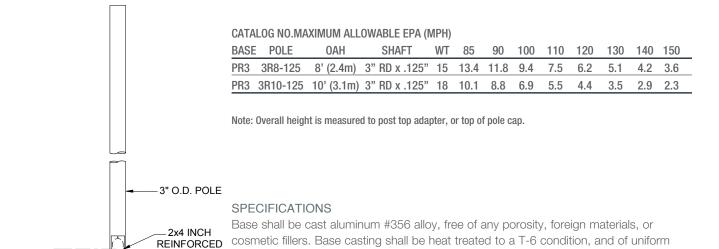
- PS3
- PR3
- PS4
- PR4
- PS5
- PR5



#### PR3

ANCHOR BOLT **PROJECTION** 

3" ROUND (RD) POLE



HANDHOLE wall thickness, with no warping or mold shifting.

**BOTTOM VIEW** (INDICATES POLE IS LAYING DOWN WITH HANDHOLE FACING UP)

(10' POLE ONLY)

#### **WARNINGS**

-GROUT UNDER ENTIRE BASE (BY OTHERS)

HANDHOLE LOCATION

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

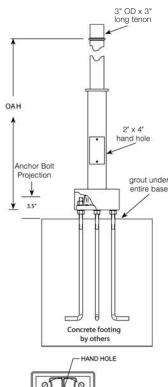
63

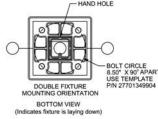
All concrete foundation details are the responsibility of a local structural engineer.

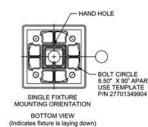
POLES/ARMS/ACCESSORIES ARCHITECTURAL AREA LIGHTING

#### PS3

3" SQUARE (SQ) POLE







All concrete foundation details are the responsibility of a local structural engineer.

#### CATALOG NO.MAXIMUM ALLOWABLE EPA (MPH)

BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
PS3	3S8-125	8' (2.4m)	3" SQ x .125"	28	10.6	9.4	7.5	6.1	4.9	4.0	3.3	2.7
PS3	3S10-125	10' (3.1m)	3" SQ x .125"	32	7.3	6.4	3.8	3.8	3.0	2.3	1.8	1.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### **CAUTION**

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

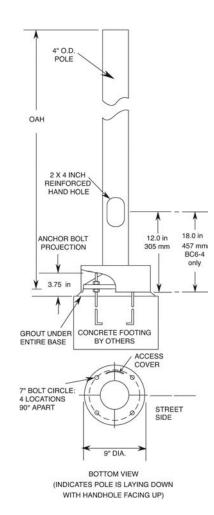
Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

#### NOTES:

PS3 is used for Parkway Square Accent (Small) Scale - PKWS, and Spectra Small Scale - SP2.

#### PR4

4" ROUND (RD) POLE



#### CATALOG NO.MAXIMUM ALLOWABLE EPA (MPH)

BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
PR4	4R8-125	8' (2.4m)	4" RD x .125"	22	12.3	10.9	8.7	7	5.7	4.8	4.1	3.6
PR4	4R10-125	10' (3.1m)	4" RD x .125"	25	9.1	8	6.3	4.9	4.0	3.3	2.8	2.4
PR4	4R12-125	12' (3.7m)	4" RD x .125"	28	6.9	6	4.5	3.4	2.6	2.1	1.8	1.5
PR4	4R14-125	14' (4.3m)	4" RD x .125"	32	5.2	4.4	3.2	2.3	1.5	1.2	1	0.8
PR4	4R16-125	16' (4.9m)	4" RD x .125"	35	3.9	3.2	2.1	1.3	0.8	0.5	0.4	0.2
PR4	4R8-226	8' (2.4m)	4" RD x .226"	32	21.5	19.2	15.5	12.7	10.6	9.0	7.7	6.7
PR4	4R10-226	10' (3.1m)	4" RD x .226"	38	16.5	14.6	11.7	9.4	7.8	6.6	5.6	4.8
PR4	4R12-226	12' (3.7m)	4" RD x .226"	44	13.0	11.4	9	7.2	5.8	4.9	4.1	3.5
PR4	4R14-226	14' (4.3m)	4" RD x .226"	51	10.3	9.1	7	5.4	4.3	3.6	3	2.5
PR4	4R16-226	16' (4.9m)	4" RD x .226"	57	8.3	7.2	5.4	4.1	3.1	2.5	2.1	1.8
PR4	4R18-226	18' (5.5m)	4" RD x .226"	63	6.6	5.6	4.1	2.9	2.1	1.6	1.3	1
PR4	4R20-226	20' (6.2m)	4" RD x .226"	70	5.1	4.3	3.0	1.9	1.2	0.9	0.6	0.4

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

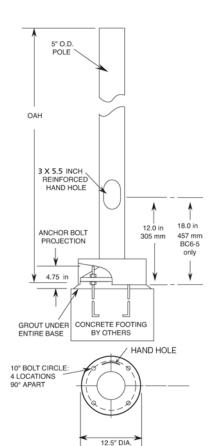
If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

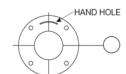
65

#### PR5

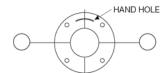
5" ROUND (RD) POLE



BOTTOM VIEW (INDICATES POLE IS LAYING DOWN WITH HAND HOLE FACING UP)



SINGLE FIXTURE MOUNTING ORIENTATION BOTTOM VIEW (INDICATES POLE IS LAYING DOWN WITH HAND HOLE FACING UP)



DOUBLE FIXTURE MOUNTING ORIENTATION
BOTTOM VIEW
(INDICATES POLE IS LAYING DOWN
WITH HAND HOLE FACING UP)

All concrete foundation details are the responsibility of a local structural engineer.

#### CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH) BASE POLE 0AH SHAFT WT 85 90 100 110 120 130 140 150 PR5 5R8-188 5" RD x .188" 47 30 26.7 21.7 18 15.2 13.0 11.1 9.7 8' (2.4m) 10' (3.1m) 5" RD x .188" 54 23.1 20.5 16.6 13.8 11.5 9.8 8.4 7.3 PR5 5R10-188 12' (3.7m) 5" RD x .188" 61 18.3 16.2 13.0 10.8 9.0 7.6 6.5 5.6 PR5 5R12-188 PR5 5R14-188 14' (4.3m) 5" RD x .188" 68 14.8 13 10.4 8.5 7 5.9 5 4.3 16' (4.9m) 5" RD x .188" 75 12 10.5 8.2 6.7 5.5 4.6 3.9 3.3 PR5 5R16-188 PR5 5R18-188 18' (5.5m) 5" RD x .188" 82 9.6 8.2 6.4 5.2 4.2 3.5 2.9 2.4 PR5 5R20-188 20' (6.2m) 5" RD x .188" 88 7.6 6.4 4.9 3.9 3.1 2.5 2 1.7 22' (6.8m) 5" RD x .188" 95 6 5.0 3.6 2.7 2.1 1.7 1.3 1 PR5 5R24-188 24' (7.4m) 5" RD x .188" 101 4.5 3.6 2.4 1.9 1.3 1.0 0.7 0.5 PR5 5R25-188 25' (7.7m) 5" RD x .188" 105 3.9 3 1.9 1.4 1.0 0.6 0.4 0.2 PR5 5R14-250 14' (4.3m) 5" RD x .250" 83 19.5 17.5 14 11.6 9.7 8.2 7 6 PR5 5R16-250 16' (4.9m) 5" RD x .250" 92 16.3 14.3 11.4 9.4 7.8 6.6 5.6 4.8 PR5 5R18-250 18' (5.5m) 5" RD x .250" 100 13.4 11.7 9.2 7.5 6.2 5.2 4.4 3.7 PR5 5R20-250 20' (6.2m) 5" RD x .250" 109 10.9 9.4 7.3 5.9 4.8 4 3.3 2.8 PR5 5R22-250 22' (6.8m) 5" RD x .250" 118 8.85 7.5 5.7 4.5 3.7 3 2.4 2 PR5 5R24-250 24' (7.4m) 5" RD x .250" 127 7.1 5.9 4.4 3.4 2.7 2.1 1.7 1.3 PR5 5R25-250 25' (7.7m) 5" RD x .250" 131 6.3 5.2 3.8 2.9 2.2 1.7 1.3 1

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

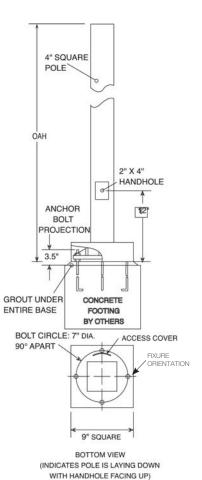
The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

PS4

4" SQUARE (SQ) POLE



CATA	LOG NO.					MAX	XIMUM	ALLO\	NABLE	EPA (N	/IPH)	
BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
PS4	4S10-125	10' (3.1M)	4" SQ X .125"	28	15.4	13.5	10.4	8.1	6.4	5.0	4.0	3.1
PS4	4S12-125	12' (3.7M)	4" SQ X .125"	32	11.8	10.2	7.6	5.7	4.3	3.2	2.3	1.6
PS4	4S14-125	14' (4.3M)	4" SQ X .125"	37	9.1	7.7	5.5	3.9	2.6	1.7	0.95	0.33
PS4	4S16-125	16' (4.9M)	4" SQ X .125"	42	6.9	5.7	3.8	2.3	1.3	0.46	-	-
PS4	4S18-125	18' (5.5M)	4" SQ X .125"	48	4.9	3.9	2.2	0.95	0.01	-	-	-
PS4	4S20-125	20' (6.2M)	4" SQ X .125"	53	3.2	0.75	-	-	-	-	-	-

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

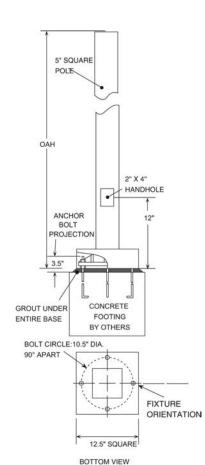
The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

#### PS<sub>5</sub>

5" SQUARE (SQ) POLE



(INDICATES POLE IS LAYING DOWN

WITH HANDHOLE FACING UP)

#### CATALOG NO.MAXIMUM ALLOWABLE EPA (MPH)

BASE	POLE	OAH	SHAFT	WT	70	80	90	100
PS5	5S10-188	10' (3.1M)	5" SQ X .127"	61	32.2	24.5	18.0	14.5
PS5	5S12-1885	12' (3.7M)	5" SQ X .127"	69	29.0	21.5	15.7	12.5
PS5	5S14-1885	14' (4.3M)	5" SQ X .127"	78	25.5	18.5	13.5	10.5
PS5	5S16-188	16' (4.9M)	5" SQ X .127"	86	21.7	15.7	11.3	8.5
PS5	5S18-188	18' (5.5M)	5" SQ X .127"	95	18.5	12.8	9.0	6.5
PS5	5S20-188	20' (6.2M)	5" SQ X .127"	103	15.0	9.7	6.5	4.2

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

All concrete foundation details are the responsibility of a local structural engineer.

#### **BASE COVERS**



BC1-4 Fits over a 4"/100mm round pole. BC1-5 Fits over a 5"/125mm round pole. 13"/330mm diameter x 8"/200mm high. One piece spun aluminum.

BC6-4 Fits over a 4"/100mm round pole.

BC6-5 Fits over a 5"/125mm round pole.

\*AAL poles configured with BC6 shall have

Fits over a 4"/100mm round pole.

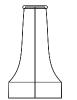
12"/305mm diameter x 36"/915mm high

Two piece cast clamshell.

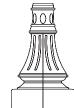
17"/430mm DIA x 13"/330mm high

Two piece clamshell

hand hole location at 18"



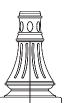
BC5-4 Fits over a 4"/100mm round pole. Fits over a 5"/125mm round pole. 14"/100mm diameter x 24"/610mm high. Two piece cast clamshell.



BC7-4 Fits over a 4"/100mm round pole. BC7-5 Fits over a 5"/125mm round pole. 18"/460mm diameter x 30"/760mm high. Two piece cast clamshell with a one piece upper collar.



ACBCR Fits over a 4"/100mm round pole. ACBCS Fits over a 4"/100mm square pole. 18"/460mm high x 14"/356mm diameter. One piece cast cover with a two piece cast upper collar.



approved by AAL.

an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.





#### ACRD-PS4-ACBRD

### **SPECIFICATIONS**

**DESCRIPTION** 

Two piece base covers are cast #356 aluminum that fit over standard 4"/100mm or 5"/125mm round poles. Covers are attached with stainless steel hardware. Consult your AAL catalog for complete details on round poles.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless

If the products are to be used on

# DECORATIVE POLES

Extruded shafts of high strength 6061 T-6 aluminum.

# AAL Decorative Base Poles

# AAL AVAILABLE DECORATIVE POLES

- DB1 DB8
- DB2 DB9
- DB3 DB10
- DB4DB5
- DB6

The anchor bolt lugs are cast as an integral part of the base structure, rather than welded on as separate pieces which can weaken the structure.

• DB12



The pole shafts are set deeply welded into the base casting for maximum strength.

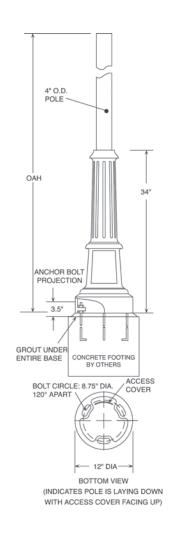
All decorative cast bases provide large internal\* cavities for remote ballasts and managing large wiring conduits.

\*Except for DB6, DB10, DB12

All castings are produced with certified A356 Marine Grade aluminum alloy for maximum strength.

#### DB1

4" ROUND (RD) & FLUTED (FL) DECORATIVE BASE



CATAI	LOG NO.					MA	XIMUM	ALLO\	NABLE	EPA (N	/IPH)	
BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
DB1	4R10-125	10' (3.1m)	4" RD x .125"	44	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB1	4R12-125	12' (3.7m)	4" RD x .125"	48	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB1	4R14-125	14' (4.3m)	4" RD x .125"	51	12.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB1	4R16-125	16' (4.9m)	4" RD x .125"	55	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB1	4R10-226	10' (3.1m)	4" RD x .226"	55	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB1	4R12-226	12' (3.7m)	4" RD x .226"	61	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB1	4R14-226	14' (4.3m)	4" RD x .226"	67	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB1	4R16-226	16' (4.9m)	4" RD x .226"	74	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB1	4F10-188	10' (3.1m)	4" FL x .188"	51	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB1	4F12-188	12' (3.7m)	4" FL x .188"	56	17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB1	4F14-188	14' (4.3m)	4" FL x .188"	61	14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB1	4F16-188	16' (4.9m)	4" FL x .188"	67	11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

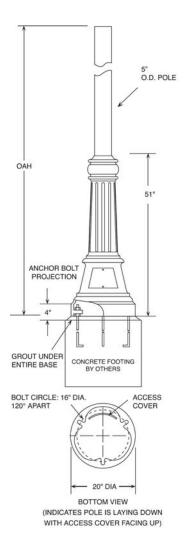
#### CAUTION

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

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5" ROUND (RD) & FLUTED (FL) **DECORATIVE BASE** 



CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH)								/IPH)				
BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	130	140	150
DB2	5R14-188	14' (4.3m)	5" RD x .188"	116	32.3	28.5	22.7	18.6	15.5	13.1	11.2	9.6
DB2	5R16-188	16' (4.9m)	5" RD x .188"	123	27.3	23.9	19.0	15.5	12.8	10.8	9.2	7.9
DB2	5R18-188	18' (5.5m)	5" RD x .188"	129	22.8	19.8	15.6	12.7	10.5	8.8	7.4	6.4
DB2	5R20-188	20' (6.2m)	5" RD x .188"	136	18.9	16.4	12.8	10.3	8.5	7.0	5.9	5.0
DB2	5R22-188	22' (6.8m)	5" RD x .188"	142	15.8	13.5	10.4	8.3	6.8	5.6	4.7	3.9
DB2	5R24-188	24' (7.4m)	5" RD x .188"	148	13.1	11.1	8.4	6.6	5.3	4.3	3.6	3.0
DB2	5R25-188	25' (7.7m)	5" RD x .188"	151	11.9	10.0	7.5	5.9	4.7	3.8	3.1	2.5
DB2	5R14-250	14' (4.3m)	5" RD x .250"	132	35.7	31.5	25.2	20.6	17.2	14.5	12.4	10.7
DB2	5R16-250	16' (4.9m)	5" RD x .250"	140	30.5	26.8	21.3	17.4	14.5	12.2	10.4	9.0
DB2	5R18-250	18' (5.5m)	5" RD x .250"	150	25.8	22.5	17.8	14.5	12.0	10.1	8.6	7.3
DB2	5R20-250	20' (6.2m)	5" RD x .250"	158	21.8	18.9	14.8	12.0	9.9	8.3	7.0	6.0
DB2	5R22-250	22' (6.8m)	5" RD x .250"	167	18.5	15.9	12.4	9.9	8.1	6.7	5.7	4.8
DB2	5R24-250	24' (7.4m)	5" RD x .250"	176	15.7	13.4	10.3	8.2	6.6	5.5	4.5	3.8
DB2	5R25-250	25' (7.7m)	5" RD x .250"	180	14.5	12.3	9.3	7.4	6.0	4.9	4.0	3.4
DB2	5F14-188	14' (4.3m)	5" FL x .188"	116	21.4	18.7	14.8	12.1	10.0	8.2	6.9	5.8
DB2	5F16-188	16' (4.9m)	5" FL x .188"	123	17.8	15.5	12.1	9.8	8.0	6.6	5.4	4.5
DB2	5F18-188	18' (5.5m)	5" FL x .188"	129	14.5	12.5	9.7	7.8	6.3	5.1	4.1	3.3
DB2	5F20-188	20' (6.2m)	5" FL x .188"	136	11.8	10.0	7.6	6.1	4.8	3.7	3.0	2.3
DB2	5F22-188	22' (6.8m)	5" FL x .188"	142	9.4	7.9	5.8	4.6	3.9	2.6	2.0	1.4
DB2	5F24-188	24' (7.4m)	5" FL x .188"	148	7.4	6.1	4.3	3.3	2.4	1.7	1.1	0.6
DB2	5F25-188	25' (7.7m)	5" FL x .188"	151	6.6	5.2	3.6	2.7	1.9	1.2	0.7	0.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

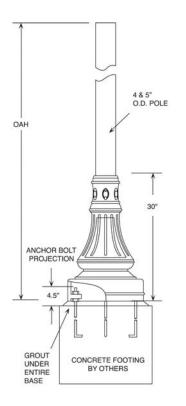
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

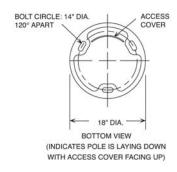
Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolts for poles 14 feet high or less are 3/4" x 24" x 3". Anchor bolt for poles more than 14 feet high are 1"x 36" x 4".

All concrete foundation details are the responsibility of a local structural engineer.

#### DB3

4" & 5" ROUND (RD) & FLUTED (FL) DECORATIVE BASE





All concrete foundation details are the responsibility of a local structural engineer.

CATALOG NO.				MA	XIMUM	ALLO\	NABLE	EPA (N	/IPH)	
BASE POLE OAH	SHAFT	WT	85	90	100	110	120	130	140	150
DB3 4R10-125 10' (3.1m)	4" RD x .125'	' 73	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB3 4R12-125 12' (3.7m)	4" RD x .125'	' 77	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB3 4R14-125 14' (4.3m)	4" RD x .125'		12.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB3 4R16-125 16' (4.9m)	4" RD x .125'	' 84	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB3 4R10-226 10' (3.1m)	4" RD x .226'	' 85	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB3 4R12-226 12' (3.7m)	4" RD x .226'	' 92	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB3 4R14-226 14' (4.3m)	4" RD x .226'	' 98	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB3 4R16-226 16' (4.9m)	4" RD x .226'	'104	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB3 4R18-226 18' (5.5m)	4" RD x .226'	' 110	11.7	10.0	7.5	5.6	4.3	3.5	2.9	2.4
DB3 4R20-226 20' (6.2m)	4" RD x .226'		9.5	8.1	5.9	4.2	3.1	2.4	1.9	1.6
DB3 4F10-188 10' (3.1m)	4" FL x .188"	80	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB3 4F12-188 12' (3.7m)	4" FL x .188"		17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB3 4F14-188 14' (4.3m)	4" FL x .188"		14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB3 4F16-188 16' (4.9m)	4" FL x .188"		11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2
DB3 4F18-188 18' (5.5m)	4" FL x .188"		9.4	8.0	5.6	4.3	3.1	2.3	1.7	1.2
DB3 4F20-188 20' (6.2m)	4" FL x .188"		7.4	6.2	4.3	2.9	1.9	1.2	0.7	0.4
DB3 5R14-188 14' (4.3m)	5" RD x .188'		32.3	28.5	22.7	18.6	15.5	13.1	11.2	9.6
DB3 5R16-188 16' (4.9m)	5" RD x .188'		27.3	23.9	19.0	15.5	12.8	10.8	9.2	7.9
DB3 5R18-188 18' (5.5m)	5" RD x .188'		22.8	19.8	15.6	12.7	10.5	8.8	7.4	6.4
DB3 5R20-188 20' (6.2m)	5" RD x .188'		18.9	16.4	12.8	10.3	8.5	7.0	5.9	5.0
DB3 5R22-188 22' (6.8m)	5" RD x .188'		15.8	13.5	10.4	8.3	6.8	5.6	4.7	3.9
DB3 5R24-188 24' (7.4m)	5" RD x .188'	' 134	13.1	11.1	8.4	6.6	5.3	4.3	3.6	3.0
DB3 5R25-188 25' (7.7m)	5" RD x .188'		11.9	10.0	7.5	5.9	4.7	3.8	3.1	2.5
DB3 5R14-250 14' (4.3m)	5" RD x .250'		35.7	31.5	25.2	20.6	17.2	14.5	12.4	10.7
DB3 5R16-250 16' (4.9m)	5" RD x .250'		30.5	26.8	21.3	17.4	14.5	12.2	10.4	9.0
DB3 5R18-250 18' (5.5m)	5" RD x .250'		25.8	22.5	17.8	14.5	12.0	10.1	8.6	7.3
DB3 5R20-250 20' (6.2m)	5" RD x .250'		21.8	18.9	14.8	12.0	9.9	8.3	7.0	6.0
DB3 5R22-250 22' (6.8m)	5" RD x .250'	' 148	18.5	15.9	12.4	9.9	8.1	6.7	5.7	4.8
DB3 5R24-250 24' (7.4m)	5" RD x .250'		15.7	13.4	10.3	8.2	6.6	5.5	4.5	3.8
DB3 5R25-250 25' (7.7m)	5" RD x .250'		14.5	12.3	9.3	7.4	6.0	4.9	4.0	3.4
DB3 5F14-188 14' (4.3m)	5" FL x .188"		21.4	18.7	14.8	12.1	10.0	8.2	6.9	5.8
DB3 5F16-188 16' (4.9m)	5" FL x .188"		17.8	15.5	12.1	9.8	8.0	6.6	5.4	4.5
DB3 5F18-188 18' (5.5m)	5" FL x .188"		14.5	12.5	9.7	7.8	6.3	5.1	4.1	3.3
DB3 5F20-188 20' (6.2m)	5" FL x .188"		11.8	10.0	7.6	6.1	4.8	3.7	3.0	2.3
DB3 5F22-188 22' (6.8m)	5" FL x .188"		9.4	7.9	5.8	4.6	3.9	2.6	2.0	1.4
DB3 5F24-188 24' (7.4m)	5" FL x .188"		7.4	6.1	4.3	3.3	2.4	1.7	1.1	0.6
DB3 5F25-188 25' (7.7M)	5" FL X .188"	138	6.6	5.2	3.6	2.7	1.9	1.2	0.7	0.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

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The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

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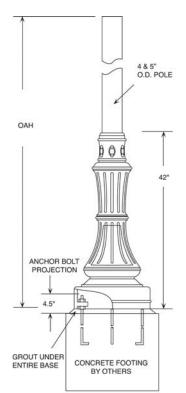
#### **CAUTION**

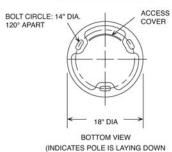
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolts for poles 14 feet high or less are 3/4" x 24" x 3". Anchor bolt for poles more than 14 feet high are 1"x 36" x 4".

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4" & 5" ROUND (RD) & FLUTED (FL) DECORATIVE BASE





WITH ACCESS COVER FACING UP)

74

CATAL	.0G NO.				MAXI	MUM A	ALLOW	ABLE I	EPA (M	PH)	
BASE	POLE	OAH	SHAFT WT	85	90	100	110	120	130	140	150
DB4	4R10-125	10' (3.1m)	4" RD x .125" 81	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB4	4R12-125	12' (3.7m)	4" RD x .125" 85	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB4	4R14-125	14' (4.3m)	4" RD x .125" 88	12.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB4	4R16-125	16' (4.9m)	4" RD x .125" 92	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB4	4R10-226	10' (3.1m)	4" RD x .226" 91	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB4	4R12-226	12' (3.7m)	4" RD x .226" 97	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB4	4R14-226	14' (4.3m)	4" RD x .226" 104	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB4	4R16-226	16' (4.9m)	4" RD x .226" 110	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB4	4F10-188	10' (3.1m)	4" FL x .188" 87	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB4	4F12-188	12' (3.7m)	4" FL x .188" 92	17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB4	4F14-188	14' (4.3m)	4" FL x .188" 98	14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB4	4F16-188	16' (4.9m)	4" FL x .188" 103	11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2
DB4	5R14-188	14' (4.3m)	5" RD x .188" 105	32.3	28.5	22.7	18.6	15.5	13.1	11.2	9.6
DB4	5R16-188	16' (4.9m)	5" RD x .188" 112	27.3	23.9	19.0	15.5	12.8	10.8	9.2	7.9
DB4	5R18-188	18' (5.5m)	5" RD x .188" 119	22.8	19.8	15.6	12.7	10.5	8.8	7.4	6.4
DB4	5R20-188	20' (6.2m)	5" RD x .188" 125	18.9	16.4	12.8	10.3	8.5	7.0	5.9	5.0
DB4	5R22-188	22' (6.8m)	5" RD x .188" 131	15.8	13.5	10.4	8.3	6.8	5.6	4.7	3.9
DB4	5R24-188	24' (7.4m)	5" RD x .188" 137	13.1	11.1	8.4	6.6	5.3	4.3	3.6	3.0
DB4	5R25-188	25' (7.7m)	5" RD x .188" 140	11.9	10.0	7.5	5.9	4.7	3.8	3.1	2.5
DB4	5R14-250	14' (4.3m)	5" RD x .250" 117	35.7	31.5	25.2	20.6	17.2	14.5	12.4	10.7
DB4	5R16-250	16' (4.9m)	5" RD x .250" 126	30.5	26.8	21.3	17.4	14.5	12.2	10.4	9.0
DB4	5R18-250	18' (5.5m)	5" RD x .250" 135	25.8	22.5	17.8	14.5	12.0	10.1	8.6	7.3
DB4	5R20-250	20' (6.2m)	5" RD x .250" 144	21.8	18.9	14.8	12.0	9.9	8.3	7.0	6.0
DB4	5R22-250	22' (6.8m)	5" RD x .250" 152	18.5	15.9	12.4	9.9	8.1	6.7	5.7	4.8
DB4	5R24-250	24' (7.4m)	5" RD x .250" 161	15.7	13.4	10.3	8.2	6.6	5.5	4.5	3.8
DB4	5R25-250	25' (7.7m)	5" RD x .250" 166	14.5	12.3	9.3	7.4	6.0	4.9	4.0	3.4
DB4	5F14-188	14' (4.3m)	5" FL x .188" 105	21.4	18.7	14.8	12.1	10.0	8.2	6.9	5.8
DB4	5F16-188	16' (4.9m)	5" FL x .188" 112	17.8	15.5	12.1	9.8	8.0	6.6	5.4	4.5
DB4	5F18-188	18' (5.5m)	5" FL x .188" 119	14.5	12.5	9.7	7.8	6.3	5.1	4.1	3.3
DB4	5F20-188	20' (6.2m)	5" FL x .188" 125	11.8	10.0	7.6	6.1	4.8	3.7	3.0	2.3
DB4	5F22-188	22' (6.8m)	5" FL x .188" 131	9.4	7.9	5.8	4.6	3.9	2.6	2.0	1.4
DB4	5F24-188	24' (7.4m)	5" FL x .188" 137	7.4	6.1	4.3	3.3	2.4	1.7	1.1	0.6
DB4	5F25-188	25' (7.7m)	5" FL x .188" 140	6.6	5.2	3.6	2.7	1.9	1.2	0.7	0.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### CAUTION

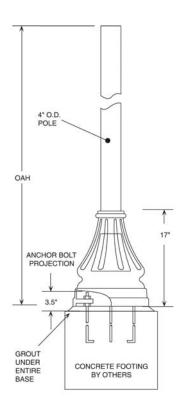
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

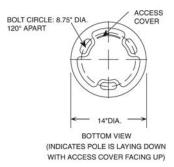
Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolts for poles 14 feet high or less are 3/4" x 24" x 3". Anchor bolt for poles more than 14 feet high are 1"x 36" x 4".

All concrete foundation details are the responsibility of a local structural engineer.

#### DB5

4" ROUND (RD) & FLUTED (FL)
DECORATIVE BASE





DB5       4R12-125       12' (3.7m)       4" RD x .125"       44       10.2       8.9       7.0       5.5       4.5       3.7       3.1       3.2         DB5       4R14-125       14' (4.3m)       4" RD x .125"       48       8.2       7.1       5.5       4.2       3.3       2.7       2.3         DB5       4R16-125       16' (4.9m)       4" RD x .125"       51       6.7       5.7       4.3       3.2       2.4       1.9       1.6												
BASE	POLE	OAH	SHAFT	WT	85	90	100	110	120	13	0 140	150
DB5	4R10-125	10' (3.1m)	4" RD x .125"	40	12.9	11.4	9.0	7.2	5.9	4.9	4.2	3.7
DB5	4R12-125	12' (3.7m)	4" RD x .125"	44	10.2	8.9	7.0	5.5	4.5	3.7	3.1	2.7
DB5	4R14-125	14' (4.3m)	4" RD x .125"	48	8.2	7.1	5.5	4.2	3.3	2.7	2.3	1.9
DB5	4R16-125	16' (4.9m)	4" RD x .125"	51	6.7	5.7	4.3	3.2	2.4	1.9	1.6	1.3
DB5	4R10-226	10' (3.1m)	4" RD x .226"	53	15.9	14.0	11.1	9.0	7.4	6.2	5.3	4.6
DB5	4R12-226	12' (3.7m)	4" RD x .226"	59	12.8	11.3	8.9	7.1	5.7	4.8	4.1	3.5
DB5	4R14-226	14' (4.3m)	4" RD x .226"	65	10.6	9.3	7.2	5.6	4.5	3.7	3.1	2.7
DB5	4R16-226	16' (4.9m)	4" RD x .226"	71	8.3	8.2	6.3	4.9	3.8	3.1	2.7	2.2
DB5	4F10-188	10' (3.1m)	4" FL x .188"	48	14.7	13.0	10.3	8.3	6.8	5.7	4.7	4.1
DB5	4F12-188	12' (3.7m)	4" FL x .188"	53	11.7	10.3	8.1	6.4	5.1	4.3	3.5	2.9
DB5	4F14-188	14' (4.3m)	4" FL x .188"	59	9.5	8.3	6.4	5.0	3.9	3.2	2.6	2.1
DB5	4F16-188	16' (4.9m)	4" FL x .188"	64	7.8	6.7	5.1	3.9	2.9	2.3	1.8	1.5

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

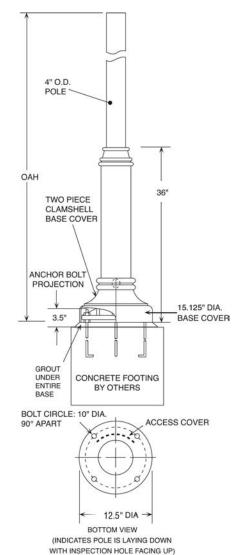
#### CAUTION

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

75

4" ROUND (RD) & FLUTED (FL) DECORATIVE BASE



CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH) POLE SHAFT WT 85 90 100 110 120 130 140 150 DB6 4R10-125 10' (3.1M) 4" RD X .125" 50 19.4 17.1 13.5 10.8 8.9 7.4 6.3 5.5 DB6 4R12-125 12' (3.7M) 4" RD X .125" 54 15.3 13.4 10.5 8.3 6.7 5.6 4.7 4.0 DB6 4R14-125 14' (4.3M) 4" RD X .125" 57 12.3 10.7 8.2 6.3 5.0 4.1 3.4 2.9 4R16-125 16' (4.9M) 4" RD X .125" 61 10.0 8.6 6.4 4.8 3.6 2.9 2.4 2.0 4F10-188 10' (3.1M) 4" FL X .188" 56 22.1 19.5 15.4 12.4 10.2 8.5 7.1 6.1 DB6 4F12-188 12' (3.7M) 4" FL X .188" 62 17.6 15.4 12.1 9.6 7.7 6.4 5.3 4.4 DB6 4F14-188 14' (4.3M) 4" FL X .188" 67 14.3 12.5 9.6 7.5 5.9 4.8 3.9 3.2 4F16-188 16' (4.9M) 4" FL X .188" 72 11.7 10.1 7.6 5.8 4.4 3.5 2.7 2.2 4R10-226 10' (3.1M) 4" RD X .226" 60 23.8 21.0 16.7 13.5 11.1 9.3 8.0 6.9 DB6 4R12-226 12' (3.7M) 4" RD X .226" 66 19.2 16.9 13.3 10.6 8.6 7.2 6.1 5.3 DB6 4R14-226 14' (4.3M) 4" RD X .226" 73 15.9 13.9 10.8 8.4 6.8 5.6 4.7 4.0 DB6 4R16-226 16' (4.9M) 4" RD X .226" 79 12.4 12.3 9.4 7.3 5.7 4.7 4.0 3.3

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### CAUTION

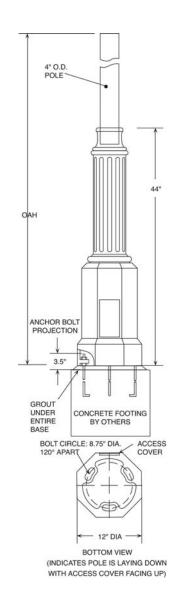
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

All concrete foundation details are the responsibility of a local structural engineer.

#### DB8

4" ROUND (RD) & FLUTED (FL)
DECORATIVE BASE



CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH)  BASE POLE OAH SHAFT WT 85 90 100 110 120 130 140 15											
BASE	POLE	OAH	SHAFT WT	85	90	100	110	120	130	140	150
DB8	4R10-125	10' (3.1m)	4" RD x .125" 49	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB8	4R12-125	12' (3.7m)	4" RD x .125" 52	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB8	4R14-125	14' (4.3m)	4" RD x .125" 56	12.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB8	4R16-125	16' (4.9m)	4" RD x .125" 59	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB8	4R10-226	10' (3.1m)	4" RD x .226" 58	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB8	4R12-226	12' (3.7m)	4" RD x .226" 64	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB8	4R14-226	14' (4.3m)	4" RD x .226" 71	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB8	4R16-226	16' (4.9m)	4" RD x .226" 77	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB8	4F10-188	10' (3.1m)	4" FL x .188" 55	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB8	4F12-188	12' (3.7m)	4" FL x .188" 60	17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB8	4F14-188	14' (4.3m)	4" FL x .188" 65	14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB8	4F16-188	16' (4.9m)	4" FL x .188" 70	11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

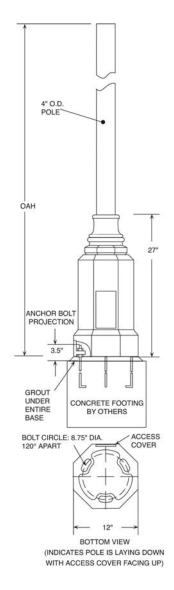
If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### **CAUTION**

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

4" ROUND (RD) & FLUTED (FL) DECORATIVE BASE



CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH) POLE SHAFT WT 85 90 100 110 120 130 140 150 DB9 4R10-125 10' (3.1m) 4" RD x .125" 43 19.4 17.1 13.5 10.8 8.9 7.4 6.3 5.5 DB9 4R12-125 12' (3.7m) 4" RD x .125" 47 15.3 13.4 10.5 8.3 6.7 5.6 4.7 4.0 DB9 4R14-125 14' (4.3m) 4" RD x .125" 50 12.3 10.7 8.2 6.3 5.0 4.1 3.4 2.9 DB9 4R16-125 16' (4.9m) 4" RD x .125" 54 10.0 8.6 6.4 4.8 3.6 2.9 2.4 2.0 4F10-188 10' (3.1m) 4" FL x .188" 50 22.1 19.5 15.4 12.4 10.2 8.5 7.1 6.1 DB9 4F12-188 12' (3.7m) 4" FL x .188" 56 17.6 15.4 12.1 9.6 7.7 6.4 5.3 4.4 DB9 4F14-188 14' (4.3m) 4" FL x .188" 61 14.3 12.5 9.6 7.5 5.9 4.8 3.9 3.2 4F16-188 16' (4.9m) 4" FL x .188" 66 11.7 10.1 7.6 5.8 4.4 3.5 2.7 2.2 4R10-226 10' (3.1m) 4" RD x .226" 54 23.8 21.0 16.7 13.5 11.1 9.3 8.0 6.9 4R12-226 12' (3.7m) 4" RD x .226" 61 19.2 16.9 13.3 10.6 8.6 7.2 6.1 5.3 DB9 4R14-226 14' (4.3m) 4" RD x .226" 67 15.9 13.9 10.8 8.4 6.8 5.6 4.7 4.0 DB9 4R16-226 16' (4.9m) 4" RD x .226" 73 12.4 12.3 9.4 7.3 5.7 4.7 4.0 3.3

#### NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### CAUTION

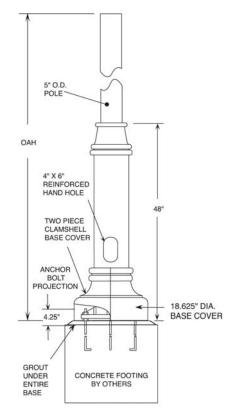
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

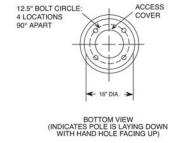
Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

All concrete foundation details are the responsibility of a local structural engineer.

#### DB<sub>10</sub>

5" ROUND (RD) & FLUTED (FL) DECORATIVE BASE





CATAL	OG NO.				MA	XIMUN	I ALLO	NABLE	EPA (N	/IPH)	
BASE	P0LE	0AH	SHAFT W	T 85	90	100	110	120	130	140	150
DB10	5R14-188	14' (4.3m)	5" RD x .188" 89	32.3	28.5	22.7	18.6	15.5	13.1	11.2	9.6
DB10	5R16-188	16' (4.9m)	5" RD x .188" 95	27.3	23.9	19.0	15.5	12.8	10.8	9.2	7.9
DB10	5R18-188	18' (5.5m)	5" RD x .188" 10	22.8	19.8	15.6	12.7	10.5	8.8	7.4	6.4
DB10	5R20-188	20' (6.2m)	5" RD x .188" 10	9 18.9	16.4	12.8	10.3	8.5	7.0	5.9	5.0
DB10	5R22-188	22' (6.8m)	5" RD x .188" 11	6 15.8	13.5	10.4	8.3	6.8	5.6	4.7	3.9
DB10	5R24-188	24' (7.4m)	5" RD x .188" 12	3 13.1	11.1	8.4	6.6	5.3	4.3	3.6	3.0
DB10	5R25-188	25' (7.7m)	5" RD x .188" 12	7 11.9	10.0	7.5	5.9	4.7	3.8	3.1	2.5
DB10	5F14-188	14' (4.3m)	5" FL x .188" 89	21.4	18.7	14.8	12.1	10.0	8.2	6.9	5.8
DB10	5F16-188	16' (4.9m)	5" FL x .188" 95	17.8	15.5	12.1	9.8	8.0	6.6	5.4	4.5
DB10	5F18-188	18' (5.5m)	5" FL x .188" 10	2 14.5	12.5	9.7	7.8	6.3	5.1	4.1	3.3
DB10	5F20-188	20' (6.2m)	5" FL x .188" 10	9 11.8	10.0	7.6	6.1	4.8	3.7	3.0	2.3
DB10	5F22-188	22' (6.8m)	5" FL x .188" 11	6 9.4	7.9	5.8	4.6	3.9	2.6	2.0	1.4
DB10	5F24-188	24' (7.4m)	5" FL x .188" 12	3 7.4	6.1	4.3	3.3	2.4	1.7	1.1	0.6
DB10	5F25-188	25' (7.7m)	5" FL x .188" 12	7 6.6	5.2	3.6	2.7	1.9	1.2	0.7	0.3
DB10	5R14-250	14' (4.3m)	5" RD x .250" 10	1 35.7	31.5	25.2	20.6	17.2	14.5	12.4	10.7
DB10	5R16-250	16' (4.9m)	5" RD x .250" 11	0 30.5	26.8	21.3	17.4	14.5	12.2	10.4	9.0
DB10	5R18-250	18' (5.5m)	5" RD x .250" 11	9 25.8	22.5	17.8	14.5	12.0	10.1	8.6	7.3
DB10	5R20-250	20' (6.2m)	5" RD x .250" 12	7 21.8	18.9	14.8	12.0	9.9	8.3	7.0	6.0
DB10	5R22-250	22' (6.8m)	5" RD x .250" 13	18.5	15.9	12.4	9.9	8.1	6.7	5.7	4.8
DB10	5R24-250	24' (7.4m)	5" RD x .250" 14	3 15.7	13.4	10.3	8.2	6.6	5.5	4.5	3.8
DB10	5R25-250	25' (7.7M)	5" RD X .250" 14	15 14.5	12.3	9.3	7.4	6.0	4.9	4.0	3.4

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

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The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

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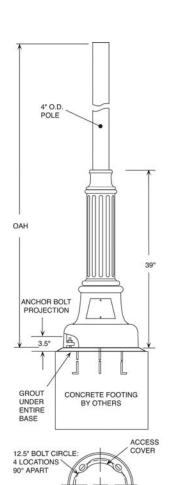
#### **CAUTION**

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolts for poles 14 feet high or less are 3/4" x 24" x 3". Anchor bolt for poles more than 14 feet high are 1" x 36" x 4".

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4" ROUND (RD) & FLUTED (FL) DECORATIVE BASE



BOTTOM VIEW

(INDICATES POLE IS LAYING DOWN WITH ACCESS COVER FACING UP)

CATAL	OG NO.					MA	XIMUM	ALLO\	WABLE	EPA (N	/IPH)	
BASE	POLE	OAH	SHAFT	$\operatorname{WT}$	85	90	100	110	120	130	140	150
DB12	4R10-125	10' (3.1m)	4" RD x .125"	55	19.4	17.1	13.5	10.8	8.9	7.4	6.3	5.5
DB12	4R12-125	12' (3.7m)	4" RD x .125"	59	15.3	13.4	10.5	8.3	6.7	5.6	4.7	4.0
DB12	4R14-125	14' (4.3m)	4" RD x .125"	63	12.3	10.7	8.2	6.3	5.0	4.1	3.4	2.9
DB12	4R16-125	16' (4.9m)	4" RD x .125"	66	10.0	8.6	6.4	4.8	3.6	2.9	2.4	2.0
DB12	4R10-226	10' (3.1m)	4" RD x .226"	68	23.8	21.0	16.7	13.5	11.1	9.3	8.0	6.9
DB12	4R12-226	12' (3.7m)	4" RD x .226"	74	19.2	16.9	13.3	10.6	8.6	7.2	6.1	5.3
DB12	4R14-226	14' (4.3m)	4" RD x .226"	80	15.9	13.9	10.8	8.4	6.8	5.6	4.7	4.0
DB12	4R16-226	16' (4.9m)	4" RD x .226"	87	12.4	12.3	9.4	7.3	5.7	4.7	4.0	3.3
DB12	4R18-226	18' (5.5m)	4" RD x .226"	93	11.7	10.0	7.5	5.6	4.3	3.5	2.9	2.4
DB12	4R20-226	20' (6.2m)	4" RD x .226"	99	9.5	8.1	5.9	4.2	3.1	2.4	1.9	1.6
DB12	4F10-188	10' (3.1m)	4" FL x .188"	63	22.1	19.5	15.4	12.4	10.2	8.5	7.1	6.1
DB12	4F12-188	12' (3.7m)	4" FL x .188"	68	17.6	15.4	12.1	9.6	7.7	6.4	5.3	4.4
DB12	4F14-188	14' (4.3m)	4" FL x .188"	74	14.3	12.5	9.6	7.5	5.9	4.8	3.9	3.2
DB12	4F16-188	16' (4.9m)	4" FL x .188"	79	11.7	10.1	7.6	5.8	4.4	3.5	2.7	2.2

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### WARNINGS

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

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Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### CAUTION

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

All concrete foundation details are the responsibility of a local structural engineer.

# AAL Contemporary & Traditional Multi-Post Poles

# AAL AVAILABLE MULTI-POST POLES

- 2P/3P
- C3P
- C4P/C4PB
- T4P

A one piece cast aluminum fitter accommodates an optional RBC receptacle on the underside of the fitter. All poles are prewired for an easy installation.





The anchor bolts and the integral wiring box with gasketed cover, is concealed by a cast aluminum cover plate to finish the clean contemporay design of AAL's multipost pole.

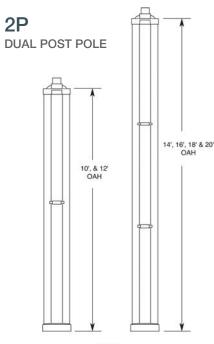


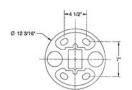


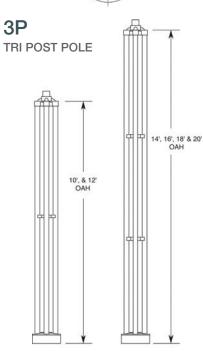
SP2-C3P

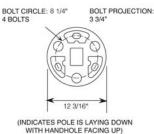
POLES/ARMS/ACCESSORIES 81

#### **MULTI POST POLES**









CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH) 110 130 8' (2.5m) 44 24.9 22 17.4 14 11.4 6.5 2P10 10' (3.1m) 50 19.1 16.7 13.0 10.3 8.2 4.3 2P12 12' (3.7m) 55 15.0 9.9 7.6 5.9 2.6 13.0 4.5 14' (4.3m) 62 11.9 10.2 7.5 5.5 4.0 2.9 1.2 2.0 16' (4.9m) 67 9.3 5.5 3.8 2.5 0.7 0.07 2P18 2.1 1.0 20' (6.2m) 77 4.6 1.8 0.57 28.8 8' (2.5m) 46 25.5 20.3 16.5 13.6 11.4 8.1 51 22.3 15.5 12.4 10.1 10' (3.1m) 19.7 5.7 17.8 12' (3.7m) 57 15.6 12.1 9.5 7.5 6.0 4.8 3.8 14' (4.3m) 14.1 12.2 9.3 7.1 5.5 4.2 2.3 16' (4.9m) 68 10.6 9.0 6.6 4.8 3.4 2.4 1.5 0.85 73 7.4 2.7 1.5 0.70 18' (5.5m) 6.1 4.1 0.03 4.5 3P20 20' (6.2m) 78 3.5 1.9 0.75

NOTE: OVERALL HEIGHT IS MEASURED AS SHOWN (OAH).

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### CAUTION

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts are 3/4" x 24" x 3" hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template are provided.

All concrete foundation details are the responsibility of a local structural engineer.

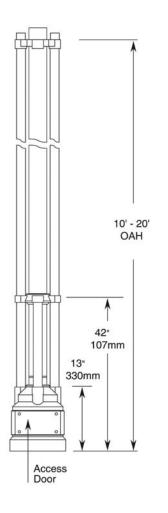
#### OPTIONS/ACCESSORIES

- RB0
- TA TENON ADAPTOR FOR SP2

#### NOTE:

PLEASE REFER TO ACCESSORIES/OPTIONS PAGES FOR DESCRIPTIONS.

#### C3P TRI POST POLE



CATALO(	G NO.					M	AXIMUM	ALLOWAE	BLE EPA (	MPH)
POLE	OAH	WT	85	90	100	110	120	130	140	150
C3P-8	8' (2.5m)	58	46.4	40.9	32.3	26	21.2	17.4	14.4	12
C3P-10	10' (3.1m)	65	35.4	31.0	24.1	19.0	15.1	12.1	9.7	7.7
C3P-12	12' (3.7m)	72	27.6	23.9	18.2	13.9	10.6	8.1	6.1	4.5
C3P-14	14' (4.3m)	79	21.7	18.6	13.6	9.9	7.1	5.0	3.2	1.8
C3P-16	16' (4.9m)	86	17.0	14.2	9.9	6.7	4.2	2.3	0.8	-

NOTE: OVERALL HEIGHT IS MEASURED AS SHOWN (OAH).

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

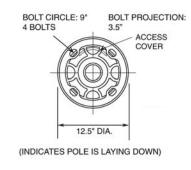
If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

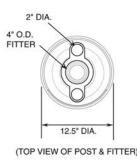
#### CAUTION

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3"

All concrete foundation details are the responsibility of a local structural engineer.



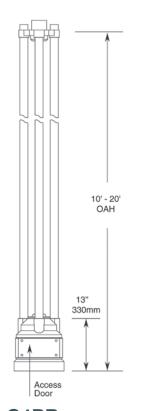


POLES/ARMS/ACCESSORIES

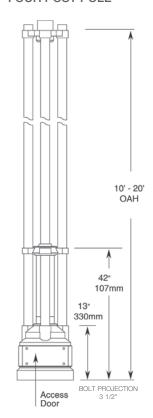
ARCHITECTURAL AREA LIGHTING

#### C4P

FOUR POST POLE



C4PB FOUR POST POLE



CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH) WT 85 90 100 120 130 140 C4P-8 8' (2.5m) 50 47.8 42.3 33.7 27.4 22.6 18.8 15.8 13.4 10' (3.1m) 58 37.1 32.7 11.4 9.5 12' (3.7m) 66 29.8 26.1 12.8 8.2 6.6 14' (4.3m) 71 24.2 21.1 16.1 12.4 5.7 9.6 7.5 4.3 C4P-16 16' (4.9m) 78 19.7 17.0 12.7 95 7.1 37 8' (2.5m) 50 47.8 42.3 33.7 22.6 18.8 15.8 13.4 C4PB-10 10' (3.1m) 65 37.1 32.7 20.7 16.9 13.8 11.4 9.5 C4PB-12 12' (3.7m) 72 29.8 26.1 20.3 16.0 12.8 10.2 8.2 6.6 C4PB-14 14' (4.3m) 79 24.2 21.1 16.1 12.4 9.6 7.5 5.7 4.3 C4PB-16 16' (4.9m) 86 19.7 17.0 12.7

NOTE: OVERALL HEIGHT IS MEASURED AS SHOWN (OAH).

#### **SPECIFICATIONS**

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

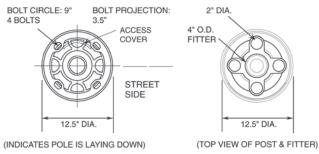
If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### CAUTION

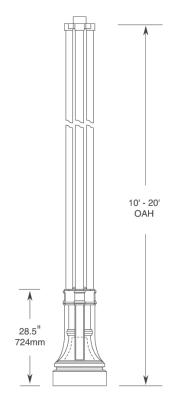
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

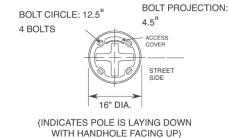
Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3"

All concrete foundation details are the responsibility of a local structural engineer.



# **T4P**TRADITIONAL FOUR POST POLE





CATALOG NO. MAXIMUM ALLOWABLE EPA (MPH) **POLE** OAH 100 110 120 130 T4P-8 8' (2.5m) 103 43.6 38.7 30.9 25.1 20.7 17.3 14.6 T4P-10 10' (3.1m) 18.3 14.8 12.2 117 28.8 22.7 10.1 T4P-12 25.5 22.3 13.6 12' (3.7m) 131 17.3 10.8 8.7 6.9 5.5 T4P-14 14' (4.3m) 145 20.2 17.5 13.3 10.2 7.8 5.1 2.3

10.2

6.1

2.1

13.8

NOTE: OVERALL HEIGHT IS MEASURED AS SHOWN (OAH).

160

16.2

#### **SPECIFICATIONS**

16' (4.9m)

T4P-16

Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

#### **WARNINGS**

Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

#### **CAUTION**

Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Eight galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolt for poles are 3/4" x 24" x 3".

85

All concrete foundation details are the responsibility of a local structural engineer.

84 POLES/ARMS/ACCESSORIES

# **AAL**Accessories

The PCA Photocell Module is an innovative way of overcoming problems with photocells that cycle the lamp because of unwanted light sources in the environment. The PCA Photocell Modules are rotatable 360 degrees, so the photocell can be aimed away from light sources. The Photocell Module accepts a standard twist lock photo cell. The module has a glass window to protect the photocell from the elements and premature failure. The photocell is also shielded from light emissions from the fixture.

The photocell is shielded from the fixture's illumination, even when used with an arm mounted fixture.

The door is held in place with two captive screws and tethered with a stainless steel cable (not shown).

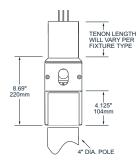
The Photocell Module is rotated by loosening three set screws.





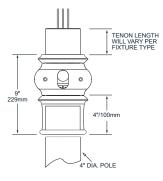
PROV-EPA-T

#### PHOTOCELL OPTIONS



#### PCA-C (CONTEMPORARY)

Rotatable photocell housing. The photocell can be aimed away from stray light sources for an accurate setting. The photocell is also shielded from light emissions from the fixture. The housing slips over a 4"/100mm O.D. pole. a fixture or arm slips over the 4"/100mm O.D. tenon. Includes an internal twist lock receptacle, and an access cover with integral lens and stainless steel tether. Adds 4.5"/114mm to the overall height of the pole/fixture assembly. Prewired on the load side and line side for easy installation. Photocell by others.

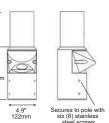


#### PCA-T (TRADITIONAL)

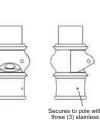
Rotatable photocell housing. The photocell can be aimed away from stray light sources for an accurate setting. The photocell is also shielded from light emissions from the fixture. The housing slips over a 4"/100mm O.D. pole. a fixture slips over the 4"/100mm O.D. tenon. Includes an internal twist lock receptacle, and an access cover with integral lens and stainless steel tether. Adds 5"/125mm to the overall height of the pole/fixture assembly. Prewired on the load side and line side for easy installation. Photocell by others.

**EGRESS** 2 styles to complement product: traditional and contemporary

#### **CONTEMPORARY**



### TRADITIONAL



#### ILLUMINATION



#### CONTEMPORARY EGRESS ADAPTER - EPA-C

The Contemporary Egress Post Top Adapter can be integrated into an existing non-egress-fitted pole application to provide code-required egress illumination. This adapter features 360° rotation for easy field adjustments. It also features an adjustable bracket that can be positioned between 15-45 degrees, so concise, direct illumination can be provided onto the path of egress. The Egress PTA is wired to an auxiliary 120 volt power source that activates the lower-wattage MR16 in the event of an emergency or power interruption. The housing slips over a 4"/100mm O.D. pole. It includes an access cover with an integral lens and a lanyard safety cable. The contemporary model is 14 1/2" tall, but only adds 3 5/8" to the overall height of the pole. Prewired on both the load side and line side for easy installation.

#### TRADITIONAL EGRESS ADAPTER - EPA-T

The Traditional Egress Post Top Adapter can be integrated into an existing non-egress-fitted pole application to provide code-required egress illumination. This adapter features 360° rotation for easy field adjustments. It also features an adjustable bracket that can be positioned between 15-45 degrees, so concise, direct illumination can be provided onto the path of egress. The Egress PTA is wired to an auxiliary 120 volt power source that activates the lower-wattage MR16 in the event of an emergency or power interruption. The housing slips over a 4"/100mm O.D. pole. It includes an access cover with an integral lens and a lanyard safety cable. The traditional model is 12" tall, but only adds 3 5/8" to the overall height of the pole. Prewired on both the load side and line side for easy installation.

POLES/ARMS/ACCESSORIES

ARCHITECTURAL AREA LIGHTING

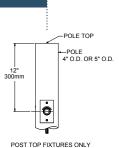
#### **PHOTOCELLS**



#### **BPC12 - BPC27**

Swivel type photocell with adjustable swivel for aiming. Requires field wiring.

Consult factory for specific fixture availability.

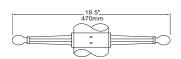


#### PHC

Button type photocell and cast shield. Standard location is 12" down from top of pole. Inline with hand hole.

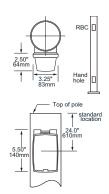
Specify voltage.

#### OTHER ACCESSORIES



LR

Ladder rest. Slips over a 4"/100mm O.D. pole

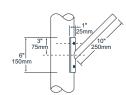


#### **RBC**

88

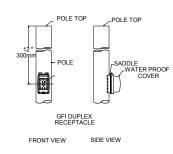
Cast aluminum receptacle housing, integrally welded to the pole. Includes a NEC approved clear weatherproof U.L.Listed in-use cover. Does not include a receptacle or internal wiring.

(Standard RBC is 24" below the top of the pole. Consult factory for alternative locations, which may require additional factory reinforcement)



#### FΗ

Flag holder. (Specify location on pole)



#### GFI (with RBC)

Ground Fault Interrupter. Wet location receptacle. Standard location is 24" down from top of pole. Inline with hand hole.

#### FS1

Single weatherproof fuse holder. Fuse by others.

#### FS2

Double weatherproof fuse holder. Fuse by others.

Note: Fuse supplied and installed by others.

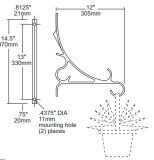


LOCKING TYPE PHOTOCONTROL (BY OTHERS)

ISOMETRIC VIEW

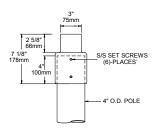
#### **PCR**

Low profile twist lock photocell receptacle with cast pole cap top. Secures to the top of the pole with three stainless steel set screws. Photocell by others.



#### **PLT**

Plant Hanger. For 4"/100mm O.D. poles. (Specify location on pole, holds up to 25 lbs.) For 4" OD or 5" OD pole.



#### AD4

This adapter is used with AAL arms and post top fixtures designed to be installed on 5"/125mm O.D. poles. It adapts the fixture to a 4"/100mm pole or arm.

This adapter is used with AAL arms and post top fixtures designed to be installed on 4"/100mm O.D. poles. It adapts a 4"/100mm fixture to a 5"/125mm pole

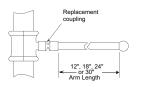
#### **ACCESSORIES**

#### **BANNER ARMS**

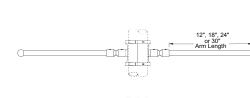
**BREAKAWAY ARMS** 

#### CATALOG NO. **BANNER ARMS** BBS4-12 Single assembly for 4" 0.D. pole, 12" arm. BBS4-18 Single assembly for 4" O.D. pole, 18" arm. BBS4-24 Single assembly for 4" 0.D. pole, 24" arm. BBS4-30 Single assembly for 4" O.D. pole, 30" arm. BBS5-12 Single assembly for 5" O.D. pole, 12" arm. BBS5-18 Single assembly for 5" O.D. pole, 18" arm. BBS5-24 Single assembly for 5" O.D. pole, 24" arm. BBS5-30 Single assembly for 5" O.D. pole, 30" arm. BBD4-12 Twin assembly for 4" O.D. pole, 12" arms. (2) BBD4-18 Twin assembly for 4" O.D. pole, 18" arms. (2) BBD4-24 Twin assembly for 4" O.D. pole, 24" arms. (2) BBD4-30 Twin assembly for 4" 0.D. pole, 30" arms.

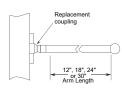
CATALOG NO.	
BANNER ARMS	
BSQ4-12	SINGLE ASSEMBLY FOR 4" SQ. POLE, 12"
ARM.	
BSQ4-18	SINGLE ASSEMBLY FOR 4" SQ. POLE, 18"
ARM.	
BSQ4-24	SINGLE ASSEMBLY FOR 4" SQ. POLE, 24"
ARM.	
BSQ4-30	SINGLE ASSEMBLY FOR 4" SQ. POLE, 30"
ARM.	



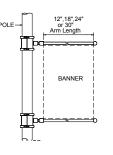
BBS Sinale Assembly



BBD Twin Assembly



BSQ Square Pole



BBS (2) Two Arms

89

#### **DESCRIPTION**

(2)

Round AAL banner arms are clamshell designs for 4"/100mm or 5"/125mm diameter poles. Banner arm for square pole is secured to the side of the pole with two bolts. The banner arms are easily added or removed from the pole. The breakaway coupling is designed to fail before over-stressing the pole. An internal, stainless steel cable keeps the arm attached to the pole assembly.

The failure point for the coupling is affected by the banner size, pole height and vertical location of the banner on the pole. The loading is also affected by securing the banner at the top only, or the top and bottom. Contact the factory for the maximum banner size recommended for your application.

#### **Standard Colors**

Colors are for reference only, as monitor or printer configuration may distort and/or change color appearance. Contact a local representative for a color chip

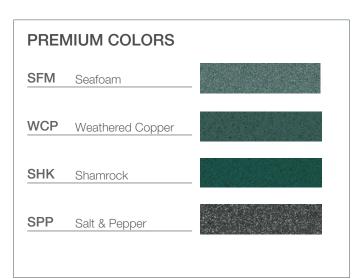


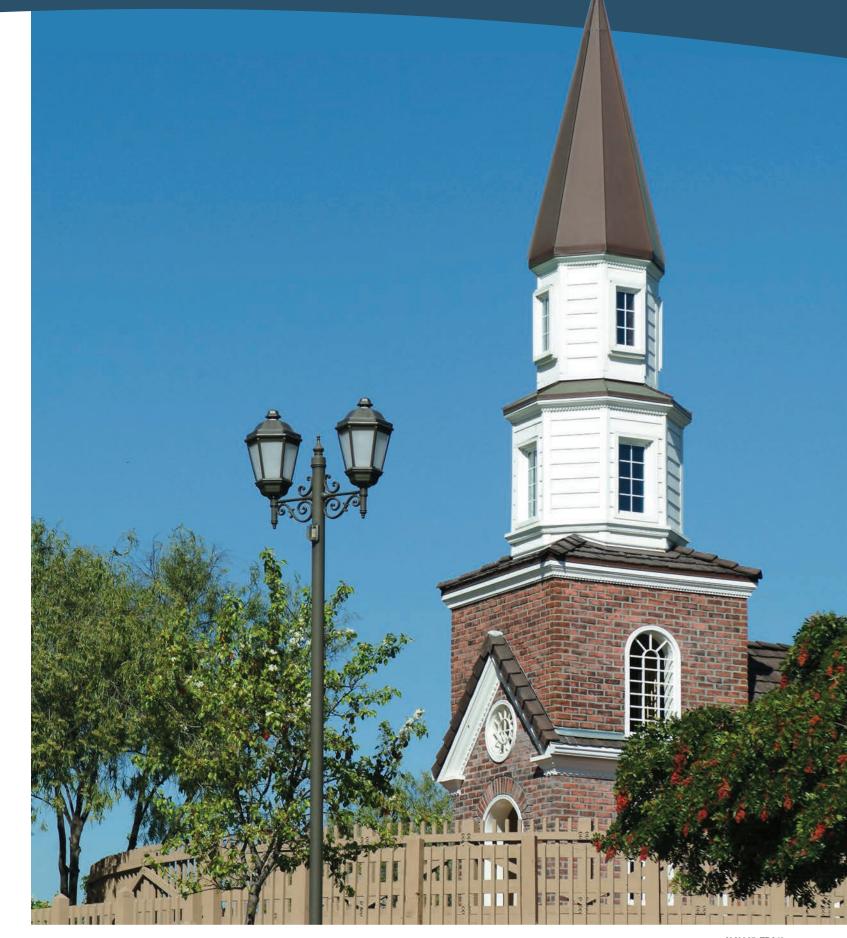
# STANDARD COLORS **AWT** Arctic White LGY Light Gray MAL Matte Aluminum MDG Medium Gray ATG Antique Green **VBL** Verde Blue **WRZ** Weathered Bronze **DGN** Dark Green **CRT** Corten **BRM** Metallic Bronze **DBZ** Dark Bronze **BLK** Black MTB Matte Black

### **Premium Colors**

Colors are for reference only, as monitor or printer configuration may distort and/or change color appearance. Contact a local representative for a color chip.

All Standard and premium AAL colors available. For RAL and custom colors, please submit a four-digit RAL number or color chip for custom colors.





ALN445-TRA1L

O POLES/ARMS/ACCESSORIES 91



# Current @

#### **Current Lighting Solutions, LLC**

701 Millennium Blvd. Greenville, SC 29607

#### currentlighting.com/architecturalarealighting

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Rev 06/23/22

aal\_polesarms\_lit\_R02

#### Auburn Water and Sewer Districts



# **MEMO**

To: Esther Bizier

From: Michael Broadbent, Superintendent

**CC:** Katherine Cook

Date: February 22, 2023

Re: Proposed John F Murphey Homes, Auburn Maine

Thank you for sending me the utility plan for the proposed John F Murphy Home on Hotel Rd. I offer the following comments on the water and sewer connections. The District has sufficient capacity to serve both water and sewer needs of this development.

#### Water:

The plans show multiple gates (4) on Hotel Road with two separate services coming down the access Road to the building. The District would prefer the connection on Hotel Road to be a tap sleeve with gate. Run one main down the access Road and tap the domestic off outside of the main building. A gate should be installed on the sprinkler main between the domestic service tap and the building. This way both lines can be isolated independently. We also recommend all valves be installed within paved surfaces that will be maintained year-round. This will be a private main extension, the District will provide an estimate for the tap and for the pressure and bacteria tests on the main. Once the main is ready to be activated we'll provide a meter estimate to the owner of the property.

#### Sewer:

The sewer connection to the cross country manhole is acceptable, however the flow line of the service must discharge directly into the flow line of the District's existing main without restricting access within the structure. There are a couple of sharp bends in the proposed service, the District recommends another manhole on the second bend off the northeast corner of the garage.

The owner will be responsible for sewer connection and capacity fees, these fees are based off the size of the domestic water meter in the facility. To review the fee schedule, visit our website, fees must be paid prior to activation of the services.

Malul skeller

#### STORMWATER MANAGEMENT GENERAL STANDARDS NARRATIVE

Taylor Brook House Auburn, Maine

Prepared by:

# MAIN-LAND DEVELOPMENT CONSULTANTS, INC. P.O. Box Q, Livermore Falls, Maine

March 3, 2023

The 12.83 acre project site is located off of Hotel Road in Auburn, Maine and is bounded on the northerly side by Taylor Brook. The property generally a mixture of field and woods. Some emergent wetland is located along the stream and forested wetland extends into the site. There is a Central Maine Power Easement which runs through the site and a City of Auburn sewer main along the northern property boundary. The property is generally moderately sloping with mainly hydrologic soil group "C" sandy loam/silty loam soils. The property drains entirely into Taylor Brook which flows to the Androscoggin River. As such, the property is not within the watershed of a Lake Most at Risk and a Phosphorus Analysis was not required.

The proposed Taylor Brook House is a 13,469 square foot "Care Home" operated by John F. Murphy Homes. In addition to the new building, there is a paved access drive, paved parking, a garage and an outdoor seating area. The project as shown on Site Plans included with this application totals 1.14 acres of non-revegetated impervious area and a total of 2.81 acres of developed area. As such, the project requires stormwater quality treatment of 95% of new impervious area and 80% of new developed area to meet the General Standard in Maine DEP Chapter 500 Stormwater Management Law. As part of Chapter 500, the applicant is seeking a Linear Portion of Project exemption for the access drive which requires 75% treatment of linear impervious area and 50% treatment is linear developed area (ditchline).

Stormwater treatment is achieved via four proposed best management practices:

- Grassed Underdrain Soil Filter Pond 1: to treat entrance drive and parking area
- Grassed Underdrain Soil Filter Pond 2: to treat a portion of the new garage and drive through for the garage
- Bioretention Filter/Rain Garden 3: to treat walkways, outdoor seating area and lawn area
- Roof Dripline Filter: to treat the roof of the proposed building

Treatment devices are shown on the project Site Plans and the D2.1 Drainage Plan. Sizing calculations and design details for each treatment device are provided following this narrative.

These stormwater treatment methods provide treatment of 100% of non-linear impervious area, 80.7% of developed area, 84.2% of linear impervious area and 91.9% of linear developed area. These treatment percentages meet the Stormwater Management Law General Standard Requirements and therefore meet City of Auburn ordinances.

#### EROSION AND SEDIMENTATION CONTROL PLAN

#### Taylor Brook House Hotel Road, Auburn, Maine

Prepared By:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC. Livermore Falls, Maine March 3, 2023

#### 1. INTRODUCTION:

"A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S.A. §480-B. Sediment control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken." – Maine DEP Chapter 500 Rules, Appendix A.

This Plan has been developed to insure that construction activities on this project site utilize sound erosion and sedimentation control measures. These measures will prevent or reduce the potential for the deposition of sediments down stream of site. The methods of control consist of preventive measures and remedial measures. Preventive measures are aimed at keeping the soils in their present location through mulching and through the reestablishment of vegetation. Remedial measures deal with the trapping and/or filtering of sediment laden stormwater run-off. Both types of measures will be utilized on this project.

The Erosion and Sedimentation Control Plan is best broken down into Temporary Measures, Winter Stabilization, and Permanent Measures.

#### 2. TEMPORARY EROSION CONTROL:

Temporary control measures may consist of a combination of measures where appropriate and/or as shown on the plans.

#### A. Sediment Filter Berms:

Sediment Filter Berms are the preferred filtering device, but may not be used in wetland areas. The berms shall be placed down slope of all earth moving activities, where water from these disturbed areas will run off. These berms will be placed along an even contour, be at least 24 inches tall, and 3 feet wide at the base. Turn the ends of the berm up-grade to avoid runoff flowing around the berm. In areas of high erosion potential, the berm will be backed by hay bales or silt fencing, as shown on the filter berm detail.

#### B. Silt Fencing:

Silt fencing may be used in place of, or together with, the sediment filter barriers. The silt

fencing will also be anchored at least four inches into the ground and placed along an even contour. Turn the ends of the fence up-grade to avoid runoff flowing around the fence. During frozen conditions, furnish and install Sediment Filter Berms in lieu of silt fencing or hay bales if frozen soil prevents the proper installation of silt fences and hay bales.

#### C. Stone Check dams:

Stone check dams shall be placed in the center of ditches immediately following excavation to provide a means of trapping sediments. (If the ditch has been immediately armored with riprap, check dams are not necessary.) The dams shall consist of small stone placed across the ditch, with a depression at the top of the dam to allow water over the top of the dam, should it become clogged with sediment. See the specifications on the Typical Details Plan for construction details of this measure.

#### D. Temporary Mulch:

Temporary mulch shall be placed on all disturbed areas where seeding, construction or stabilization activities will not take place for over 7 consecutive days. Temporary mulch will also be placed on areas within 75 feet of a natural resource (wetland, stream, etc.) where seeding will not take place for over 48 hours, and on all bare soils outside the road base prior to any predicted significant rain event. A significant rain event is considered to be at least ½ inch of rain or more. Temporary mulch may be hay and shall be applied at a rate of two bales per 1,000 square feet. Soil must not be visible upon completion of application, regardless of rate of application.

#### E. Topsoil Stockpiles:

Topsoil, removed as part of the construction, will be stockpiled on site for use in areas to be re-vegetated. The location of topsoil stockpiles must not be within 75 feet of a defined natural resource (wetland, stream, etc.), or within 75 feet of a swale or ditch.

Stockpiles shall be mulched with hay at two bales per 1,000 square feet. The area down slope from any stockpile areas will be protected by a sediment filter berm or silt fence placed directly below or down gradient from the stockpile. If the stockpile must be left for more than 30 days, the pile will be seeded with rye grass at a rate of two pounds per 1,000 square feet and mulched in accordance with this paragraph.

#### F. Catch Basins.

Catch basin inlets must be protected with a sediment trap until contributing areas, including paved and grassed island areas, are fully stabilized with pavement or grass. Temporary sediment traps shall be Dandy Bags or approved equal, with appropriate overflow slots. Geotextile cut to fit under the catch basin grate shall not be acceptable.

#### G. Maintenance of Temporary Measures:

All temporary measures described above shall be inspected weekly and before/after every significant storm event (1/2 inch of rain or greater) throughout the construction of the project. Repairs or replacements of temporary measures will be made as necessary. Once the site is stable, all temporary devices such as hay bale barriers and silt fencing will be removed.

A log shall be kept summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

#### 3. WINTER STABILIZATION:

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with a combination of pavement, a road gravel base, 90% mature vegetation cover or riprap by November 1 then the site needs to be protected with winter stabilization.

Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is denuded at any one time. Limit the exposed area to those areas in which work is expected to be under taken during the following 15 days. Exposed area shall not be so large that it cannot be mulched in one day prior to any snow event.

Areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed and mulched. Hay and straw mulch rate shall be a minimum of 200 lbs./1,000 s.f. (3 tons/acre) and shall be properly anchored.

The contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

#### 1. Soil Stockpiles

Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 200 lbs/1,000 s.f. (3 tons per acre) or with a four-inch layer of woodwaste erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

Any new soil stockpile will not be placed (even covered with hay or straw) within 100 feet of any natural resources.

#### 2. Natural Resource Protection

Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 90 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats.

During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Silt fencing may not be placed on frozen ground.

Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

#### 3. Mulching

Areas shall be considered denuded until loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 200 lb. per 1.000 square feet or 3 tons/acre (twice the normal accepted rate) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application.

An area shall be considered stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 200 lb. per 1,000 square feet and adequately anchored, such that the ground surface is not visible though the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by either peg line, mulch netting, or wood cellulose fiber. The ground surface shall

not be visible though the mulch.

After November 1<sup>th</sup>, mulch and anchoring of all bare soil shall occur at the end of each final grading work day.

#### 4. Mulching on Slopes and Ditches

Slopes shall not be left exposed for more than 7 days unless fully mulched and anchored. Slopes within 75 feet of a natural resource shall not be left exposed for more than 48 hours. Mulching shall be applied at a rate of 300 lbs/1,000 sq ft on all slopes greater than 8%. Erosion Control mesh shall be used to anchor mulch in all drainage ways and ditches, for slopes exposed to direct winds, and for all other slopes greater that 8 %. Erosion control blanket and check dams (or permanent Rip-Rap) shall be used in lieu of mulch in all drainage ways with slopes of 8 % or more.

A six inch layer of erosion control mix can be used to substitute erosion control blankets on all slopes except ditches.

#### 5. Seeding

Between the dates of October 15 and April 1<sup>st</sup>, loam or seed will not be required. During periods of above freezing temperatures, finished areas shall be fine graded and either protected with mulch or temporarily seeded (see table below) and mulched until such time as the final treatment can be applied. If after November 1<sup>st</sup> the exposed area has been final graded and loamed, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

TEMPORARY SEED MIX

	% BY	%	
TYPE	WEIGHT	PURITY	% GERMINATION
Domestic Rye Grass	60	69.75	90
Perennial Rye Grass	20	28.00	85
Aroostook Rye Grass	20	28.00	85

Dormant seeding may be placed prior to the placement of mulch and fabric netting anchored with staples.

If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter

will be inspected in the spring for adequate catch. Areas not sufficiently vegetated (less than 90 % catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used, all disturbed areas shall be revegetated in the spring.

#### 6. Trench Dewatering and Temporary Stream Diversion

Water from construction trench dewatering or temporary stream diversion will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

#### 7. Inspection and Monitoring

Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snow storm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function.

In the spring, following the temporary/final seeding and mulching, the contractor shall inspect and repair any damages and/ or un-established spots. Established vegetative cover means a minimum of 90 % of areas vegetated with vigorous growth.

#### 8. Standard for the timely stabilization of ditches and channels

All stone-lined ditches and channels shall be constructed and stabilized by November 1. All grass-lined ditches and channels shall be constructed and stabilized by September 1. Failure to stabilize a ditch or channel to be grass-lined by September 1, will require one of the following actions to stabilize the ditch for late fall and winter.

<u>Install a sod lining in the ditch</u> – Sod lining shall be installed in ditches by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

<u>Install a stone lining in the ditch</u> –Ditches shall be lined with stone riprap by November 1, as presented below. If necessary, the applicant will regrade the

ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

#### 9. Standard for the timely stabilization of disturbed slopes

Construct and stabilize stone-covered slopes by November 1. The applicant will Seed and mulch all slopes to be vegetated by September 1. Slopes will be considered any area having a grade greater than 15% (6H:1V). If the applicant fails to stabilize any slope to be vegetated by September 1, then the applicant will take one of the following actions to stabilize the slope for late fall and winter.

Stabilize the soil with temporary vegetation and erosion control mats -- Seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats over the mulched slope October 1. The applicant will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed slope by November 1, cover the slope with a layer of wood waste compost or with stone riprap as described below.

Stabilize the slope with sod -- Stabilize the disturbed slope with properly installed sod by October 1. Proper installation includes pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Sod stabilization shall not be used late-season to stabilize slopes having a grade greater than 33% (3H:1V).

Stabilize the slope with wood waste compost (erosion control mix) --Place a sixinch layer of wood waste compost on the slope by November 1. Prior to placing the wood waste compost, remove any snow accumulation on the disturbed slope. Wood waste compost will not be used to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face.

<u>Stabilize the slope with stone riprap</u> -- Place a layer of stone riprap on the slope by November 1, similar to the Stone Lined Ditch the permanent erosion control section.

#### 10. Standard for the timely stabilization of disturbed soils

Seed and mulch all disturbed soils on areas having a slope less than 15% by September 1. Failure to stabilize these soils by this date will require one of the following actions to stabilize the soil for late fall and winter.

Stabilize the soil with temporary vegetation -- Seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting by October 1. Growth of the rye will require monitoring over the following 30 days. If the rye fails to grow at least three inches or cover at least 75% of the disturbed soil before November 1, then mulch the area for overwinter protection as described below.

<u>Stabilize the soil with sod</u> -- Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Stabilize the soil with mulch -- Mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch by November 1. Prior to applying the mulch, remove any snow accumulation on the disturbed area. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

#### 4. PERMANENT EROSION CONTROL:

Permanent measures will consist of the placement of culverts; culvert inlet/outlet stabilization; the construction of grass/stone lined ditches; and the re-vegetation of all areas outside the traveled way of the road, and those areas designated as stone lined ditches.

#### A. Culverts:

All culverts have been sized to handle the peak flows generated by a 25-year, 24-hour rain storm. The locations and sizes of the culverts are shown on the Site Plans.

The inlets and outlets of the culverts will be armored with riprap to prevent scouring. This armoring will consist of placing stone possessing a D50 of 6 inches to a depth of 18 inches to the following dimensions: width equal to twice the diameter of the culvert; length equal to three times the diameter of the culvert, unless noted otherwise.

#### B. Ditches:

Ditches on the project have been designed based on expected flow rates and velocities for the 25-year, 24-hour storm event and the slope of the ditch. Where water velocities are expected to exceed 3.5 feet per second, the ditch has been designed to be stone lined. Ditches with water velocities of less than 3.5 feet per second have been designed to be grass lined.

#### Stone Lined Ditches:

Stone lined ditches will first be lined with a non-woven filter fabric, and then lined with riprap possessing a D50 of approximately 6 inches in diameter. This means that approximately half the stones by weight will be smaller than 6 inches and half will be larger. The minimum stone size should be 1 inch with the largest stone being 9 inches in diameter. The depth of stone in the ditch should average 15 inches.

The final shape of the ditch will consist of the following dimensions: a bottom width of two feet; side slopes possessing a 3:1 horizontal to vertical; and a total depth of 2 feet.

In lieu of stone rip-rap, the ditch may be lined with a permanent erosion control blanket, such as North American Green P300 or approved equal.

#### Grass Lined Ditches:

Grass lined ditches will possess the same final dimensions as the stone lined ditches. The flow area of the ditch will be armored by placing a biodegradable matting or netting (such as American Excelsior Curlex Blanket or equal) in the bottom of the ditch. Placement of this material must take place after seeding. Install according to the manufacturers' recommendations.

Seeding and mulching of grass lined ditches will follow the specifications stated below for re-vegetation.

#### C. Re-vegetation Measures:

All areas to be permanently re-vegetated with grass will first be covered with loam and then fertilized.

Loam will be placed on all areas to be re-vegetated. Loam will be placed to a minimum depth of 4 inches. Loam will be the stockpiled topsoil, if possible.

Test the loam samples for nutrients at a proficient testing laboratory (The University of Maine provides this service). The areas with loam will then be fertilized with the recommended application rate. Lime will also be applied at a rate of 50 pounds per 1,000 square feet. Both the lime and the fertilizer will be mixed thoroughly with the soil.

All areas to be re-vegetated with permanent grass are to be seeded with the seed mix shown on the table below. This mixture will be applied at a rate of 2 pounds per 1,000

square feet.

General Lawn Areas	Chewing Fescue "Dignity"	35%
	Pennlawn Creeping Red Fescue	35%
	Perennial Rye "Tourstar" (Nutrite)	30%

Mulch will then be spread on all seeded areas at a rate of two bales per 1,000 square feet. Regardless of application rate the soil shall not be visible through the mulch.

Seed and mulch will be placed within five days of final grading of topsoil.

Seeded areas will be inspected after 30 days to determine the success of the seeding. If the ground cover is less than 90%, the area will be reseeded.

#### D. Critical Areas:

Slopes in excess of 15% will require the placement of a biodegradable netting or matting over the mulch and seed (if the netting has no mulch in it). If stabilization is to take place after October 1, slopes over 8% will be treated with the matting.

#### E. Maintenance of Permanent Measures:

All measures will be inspected weekly and before and after every significant storm event during construction, and then at least once annually to insure proper function. Any damaged areas will be repaired or replaced as necessary. Any ditches or culverts not functioning as designed will be redesigned and reconstructed according to specifications prepared by a Professional Engineer.

In any event, seeding should take place either between May 1 and June 15, or August 15 and September 1.

#### **HOUSEKEEPING PLAN**

Taylor Brook House Auburn, Maine

Prepared by:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC. P.O. Box Q, Livermore Falls, Maine

March 3, 2023

The purpose of this Plan is to ensure construction activities protect against and do not create or result in materials that could become a source of pollution. These standards apply to spill prevention, groundwater protection, sediment and dust, debris and other materials, excavation de-watering, authorized non-stormwater discharges and unauthorized non-stormwater discharges.

#### **Spill Prevention:**

A SPCC plan is unnecessary. No hazardous materials will be stored on site. The site will primarily be utilized for parking, loading/unloading and storage of non-hazardous material.

#### **Groundwater Protection:**

No stormwater infiltration areas are proposed on this site. Additionally, the site is not located over a Significant Sand and Gravel Aquifer.

#### **Fugitive Sediment and Dust:**

A stabilized construction exit will be maintained for the duration of construction to minimize the tracking of mud and sediment off site. Application of water will be utilized for dust prevention during construction. Application of other chemicals to reduce dust shall not be allowed without Maine DEP approval due to the Taylor Brook watershed.

#### **Debris and Other Materials:**

Construction debris shall be contained within roll-off dumpsters and hauled to a licensed waste facility. The site shall be kept in a tidy condition, free of trash and litter.

#### **Excavation De-Watering:**

If excavation dewatering is warranted, discharge of water from the excavation shall be through an approved filter as noted in the Erosion and Sedimentation Control Plan. The

#### HOUSEKEEPING PLAN BRICKYARD COMMONS

discharge shall be at minimum 100 feet from Taylor Brook and allow flow through a vegetated area prior to confluence with wetland or stream flows.

#### **Authorized Non-Stormwater Discharges:**

There are no authorized non-stormwater discharges existing or proposed for this site.

#### **Unauthorized Non-Stormwater Discharges:**

There are no unauthorized non-stormwater discharges existing or proposed for this site.

#### POST-CONSTRUCTION STORMWATER INSPECTION & MAINTENANCE PLAN

#### Taylor Brook House Auburn, Maine

#### **Narrative**

**Contacts:** 

The following outlines the proposed BMP's and their required inspection, maintenance, and reporting.

Inspections and maintenance will be the responsibility of the Property Owner/Applicant. Written reports of inspections and maintenance work will be kept to show the work has been completed as proposed. These reports will be kept by the Owner/Applicant, along with other relevant City of Auburn documentation.

# Design Engineer:

Esther K. Bizier, P.E.

Main-Land Development Consultants, INC

P.O. Box Q, 69 Main Street Livermore Falls, Maine 04254

Applicant:	John F. Murphy Homes, In	c.

800 Center Street Auburn, ME 04210

Owner:	John F. Murphy Homes, In	nc.
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Post Construction Stormwater Inspector:

	<b>r</b>
Contractors:	

#### **Inspection**

The applicant, John F. Murphy Homes, Inc., is responsible for complying with the City Stormwater Law Permit. The Applicant will be responsible for inspection and maintenance

during construction and post-construction. The Applicant is also responsible for upkeep and compliance post-construction. The development is also subject to State Stormwater Management Law and will be subject to a "Five-year Recertification for Long-Term Maintenance of Stormwater Management Systems" as well as City requirements for stormwater maintenance as a MS4 community.

#### **Purpose**

The purpose of this Plan is to ensure proper function of the infrastructure constructed as part of this project. The infrastructure will include the stormwater control devices including but not limited to: drives and parking; catch basins and stormdrains; drainage ditches; Focal Point, filter pond, and detention pond. The tasks detailed in this Plan are the responsibility of the applicant.

#### **Definitions**

Significant Period of Rain: 1" or more of rain in a 24-hour period.

#### **Inspection Scope**

All areas of the site shall be inspected based on the criteria discussed for each site item or stormwater control measure as found later in the plan. See the Inspection and Maintenance Plan identifying locations of measures requiring inspection. Inspection activities listed herein are to be considered at minimum. Stormwater inspector shall use his or her judgement as to additional inspection or maintenance activities.

#### **Inspection Frequency**

Complete site inspections at the frequency listed in the following Inspection Summary.

#### **Inspection Qualifications**

For Post-Development Inspections, the qualified post-construction stormwater inspector with knowledge of erosion and stormwater control, including the standards and conditions of the project permit shall be retained by the Applicant.

#### **Inspection/Maintenance Responsibility**

It shall be the responsibility of the Applicant to retain the services of a Post-Construction Stormwater Inspector and provide for the repair and maintenance noted by inspections, if any. When maintenance is required by inspection, the Applicant shall perform the required maintenance and/or repairs in a timely fashion and notify the Inspector when the maintenance is complete. The Applicant shall maintain detailed records for the inspections and maintenance performed.

## **Documentation**

Post Construction inspection forms and documentation of corrective actions shall be maintained for at least (5) years.

## **Inspection and Maintenance Plan**

**Roof Dripline Filter** 

The site will be inspected and maintained according to the following schedule and procedures.

## INSPECTION SUMMARY Taylor Brook House

Semi-Annual

<u>Inspections of</u>	<u>Schedule</u>
- Drives & Parking	Annual
- Drainage Ditches	Annual
- Stormdrains	Annual
- Grassed Underdrain Soil Filter 1	Semi-Annual
- Grassed Underdrain Soil Filter 2	Semi-Annual
- Bioretention Filter/Rain Garden	Semi-Annual

## **Drives & Parking:**

#### Inspection:

The roads will be inspected at least annually to ensure proper function and to ensure structural integrity. This inspection will take place in September. Road inspections will be simple visual inspections, looking at the drive or parking surface for cracking, puddling, sedimentation, heaving, potholing, or other signs of degradation.

#### Maintenance:

Maintenance will include sweeping and cleanup of sediments and debris, spot corrections when necessary, crack sealing, and eventual resurfacing insure safe drivability and long lifespan. This should be performed once a year at a minimum and shall occur in April or May.

#### **Drainage Ditches:**

#### Inspection:

Inspect drainage ditches annually to look for erosion, obstruction, debris, or damage to erosion armoring, such as rip-rap.

#### Maintenance:

The drainage ditches shall be re-shaped and re-stabilized if found to be eroding. Accumulated sediment should also be removed from the flow line of the ditch, if it exists.

#### **Storm Drains:**

#### Inspection:

The stormwater collection and conveyance devices will be inspected on an annual basis in April or May of each year. The inspection will include a review of the structural integrity and function of each device, a review of the inlets and outlets storm drains, and a review of the downstream discharge areas of all pipes and channels.

#### Maintenance:

The inlets and outlets of the culverts and storm drains should be cleaned on a regular basis to ensure that sediment and debris does not discharge downstream or does not clog the pipe.

#### **Grassed Underdrain Soil Filter:**

#### Inspection:

The inspection will include a review of the structural integrity of each device, a review of the inlet and outlet of the pond, and a review of the downstream discharge areas of all pipes and channels. Inspections should include a check for signs of snow storage and prohibited vehicle traffic including ATV's and tractors.

For the first three months after construction, inspect the filter bed monthly to verify the filter bed is draining within 24 - 48 hours. Thereafter, inspect semi-annually in May and October.

#### Maintenance:

If water ponds on the filter bed surface for more than 72 hours following a rain event, replace the top three inches of filter media. Dispose of clogged filter media soil according to the erosion and sedimentation control plan.

Remove sediments annually in October.

#### Rain Garden:

#### Inspection:

The inspection will include a review of the structural integrity of each device, a review of the inlet and outlet of the pond, and a review of the downstream discharge areas of all pipes and channels. Inspections should include a check for signs of snow storage and prohibited vehicle traffic including ATV's and riding lawnmowers or tractors.

For the first three months after construction, inspect the filter bed monthly to verify the filter bed is draining within 24 - 48 hours. Thereafter, inspect semi-annually in May and October.

#### Maintenance:

If water ponds on the filter bed surface for more than 72 hours following a rain event, replace the top three inches of filter media. Dispose of clogged filter media soil according to the erosion and sedimentation control plan.

Mulch should be removed and replaced with a 2 to 3 inch layer of fresh mulch annually or as needed.

Fertilization of the filter area should be avoided unless absolutely necessary to establish vegetation. Pruning of excessive growth and weeding to control unwanted or invasive

plants shall be done yearly. Maintaining a healthy vegetative cover will minimize clogging.

Remove sediments annually in October.

Filters with grass surfaces shall be moved no more than twice per growing season using a push mover or weed whacker to maintain a grass height of no less than 6 inches.

#### **Roof Dripline Filter:**

#### **Inspection:**

The inspection will include a visual review of the structural integrity of each device, the outlet, and a review of the downstream discharge areas to ensure they are stable. During inspection ensure no paving or any alterations have been made to the filter and that no gutters have been installed on the roof line.

#### Maintenance:

Keep the stone reservoir surface clean and free of debris. Surface shall be cleaned at least once annually in October to ensure leaf litter is removed. If water begins to pond on the reservoir course, replace layer of stone and the top three inches of the filter layer if clogged.

#### **RE-CERTIFICATION**

Within three months of the 5-year anniversary of the permit date of issuance, and every 5-year anniversary, thereafter, submit a certification to the City of Auburn that contains:

- A statement that the site has been inspected for erosion problems and such problem areas have been appropriately repaired and permanently stabilized.
- A statement that all aspects of the stormwater management system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system.
- A statement that the erosion control plan and the stormwater management plan are being implemented as written, approved, and amended (if applicable) by City of Auburn.

# INSPECTION AND MAINTENANCE LOG

# Taylor Brook House Post Construction Stormwater Inspection & Maintenance Log

Date of Inspection:
Inspected by:
Purpose of Inspection: Monthly, Yearly, Significant Rainfall (circle one)
Drives & Parking
Description of Conditions:
<del></del>
Maintenance & Date of Repairs:
Follow Up Needed:
<del></del>
<del></del>

# **Drainage Ditches**

Description of Conditions:		
Maintenance & Date of Repairs:		
Follow Up Needed/Additional Comments:		

# Culverts Description of Conditions:

Maintenance & Date of Repairs:		
Sediment Inspection & Removal:		

Date & Contractor for Sump Cleaning:	
	_

Follow Up Needed/Additional Comments:					

# **Roof Dripline Filter**

Description of Conditions:		
Maintenance & Date of Repairs:		
Sediment Inspection & Removal:		
Date & Contractor Cleaning:		
Follow Up Needed/Additional Comments:		

## **Grassed Underdrain Soil Filter**

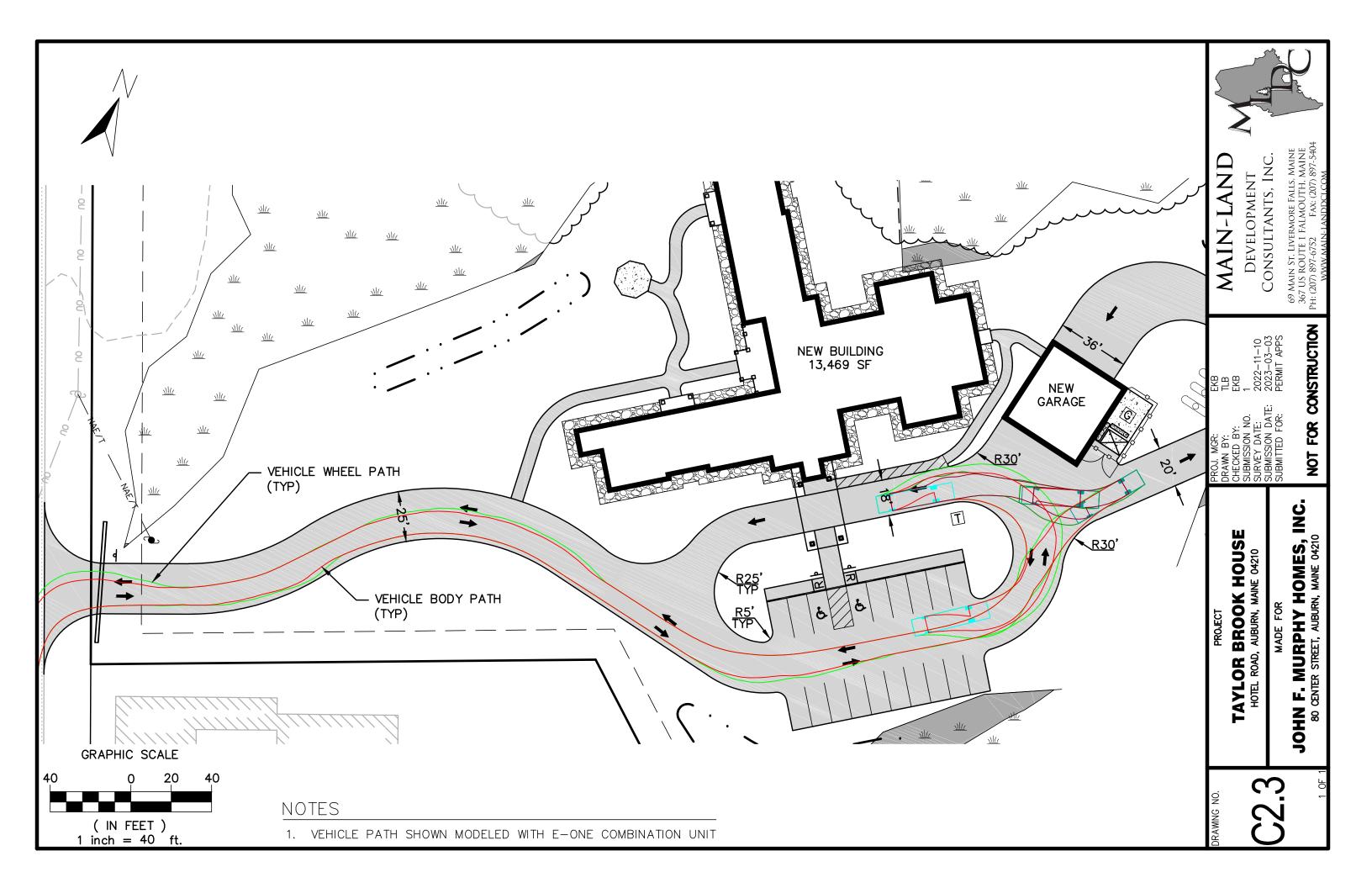
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Maintenance & Date of Repairs:		
Sediment Inspection & Removal:		
Date & Contractor for Sump Cleaning:		
Follow Up Needed/Additional Comments:		

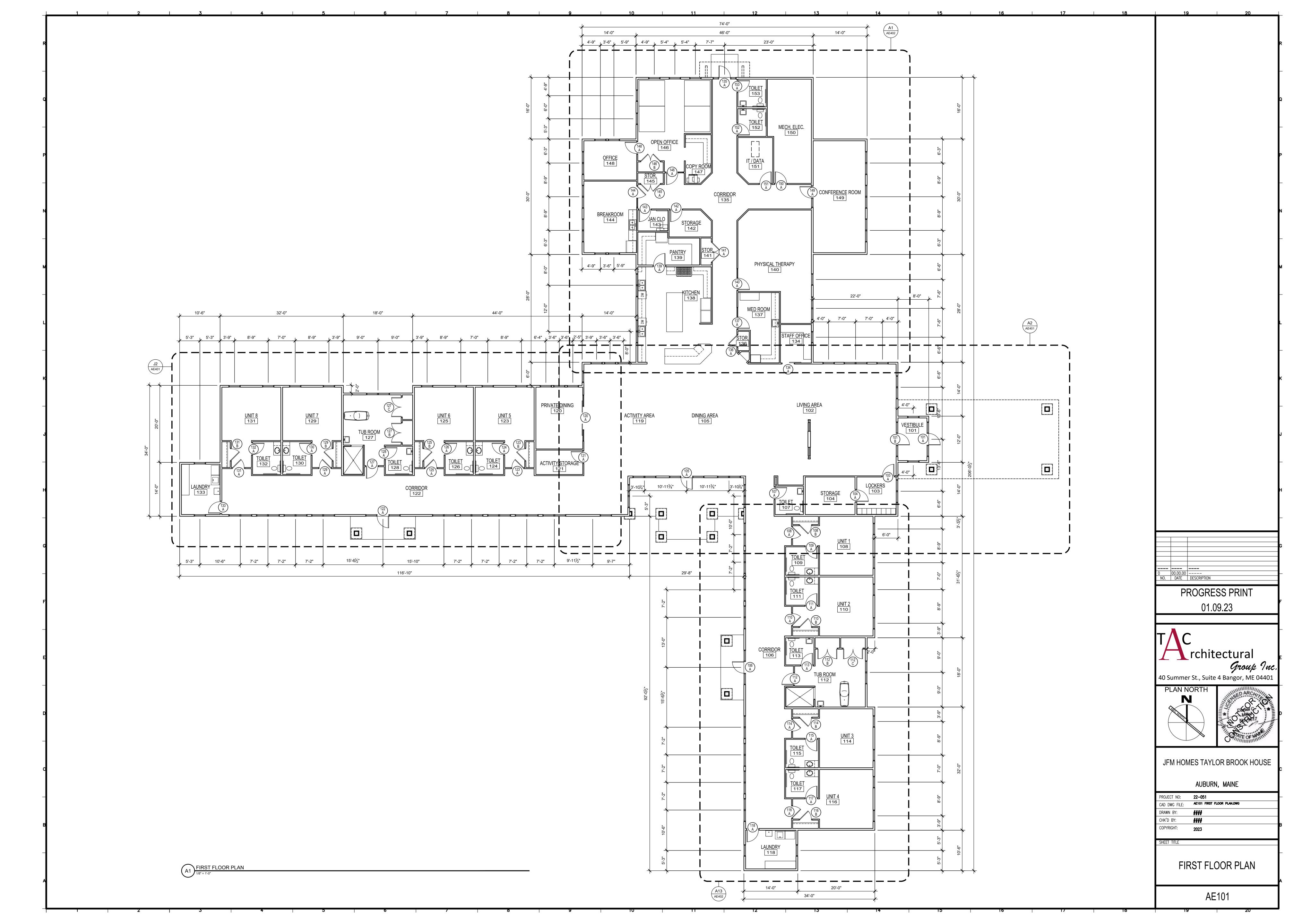
## **Bioretention Filter**

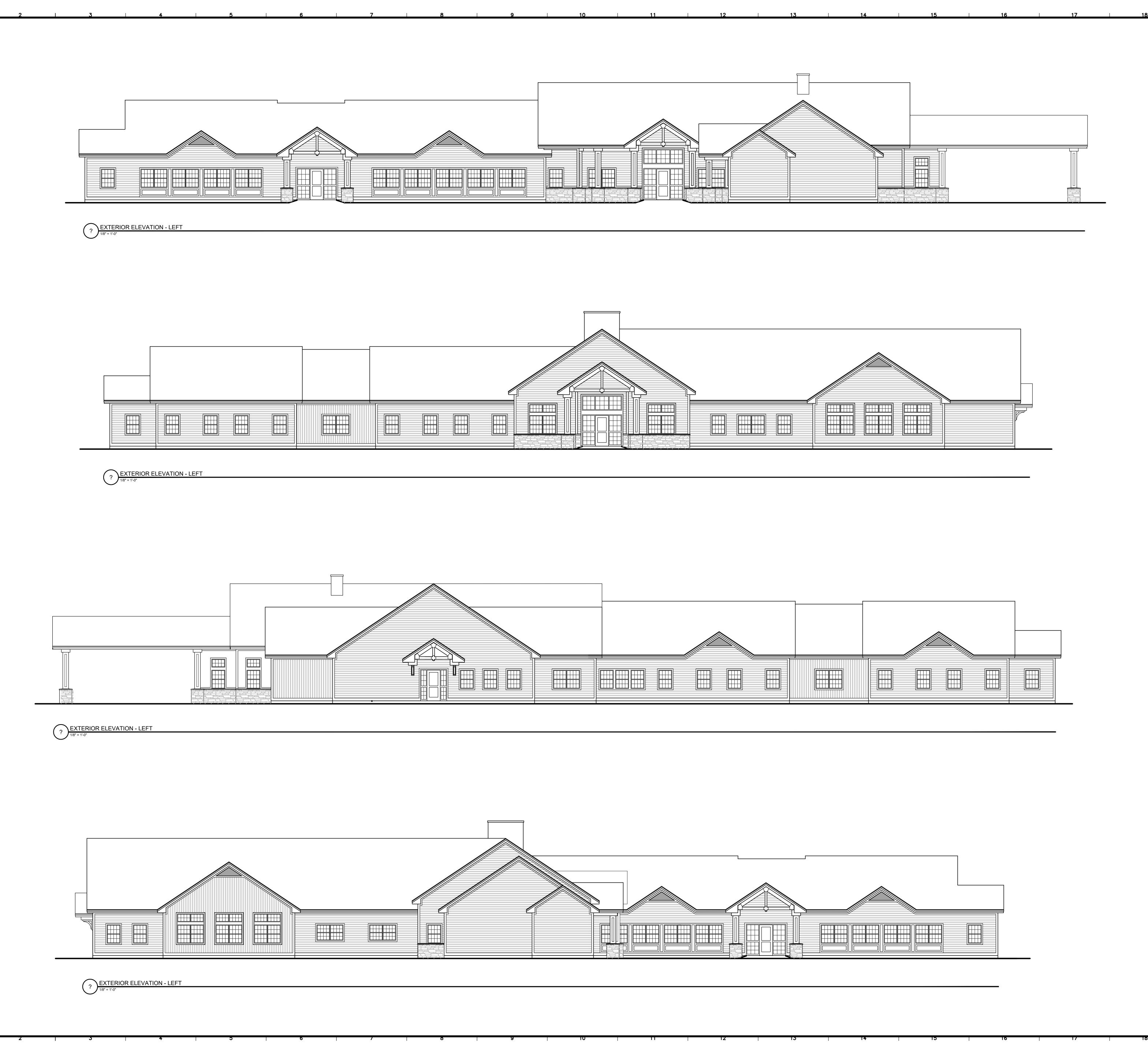
Description of Conditions:		
Maintenance & Date of Repairs:		
Sediment Inspection & Removal:		
Date & Contractor for Sump Cleaning:		
Follow Up Needed/Additional Comments:		

#### **Section 12: Vehicle Access & Movement**

As described in the Cover Letter, vehicles will access the site via a 25 foot wide, two-way paved entrance off of Hotel Road. The building has a canopy area for resident pick-up and drop-off at the buildings main entrance. The driveway, garage and pick-up/drop-off area were designed to allow the facility bus, van or personal vehicles to easily drive through and around the site without backing up. Other large service vehicles, such as a garbage truck or fuel truck are intended to drive through the parking area, pull in front of the garage, back up to their service area and then drive out through the parking area. The canopy does have a clearance of 12 feet, so in an emergency, vehicles such as an ambulance could access the main entrance. A sketch showing proposed drive path for the pull-up, back around movement is found in this section.



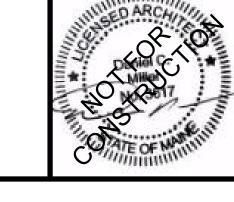




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PROGRESS PRINT 01.09.23

TAC
rchitectural
Group Inc.
40 Summer St., Suite 4 Bangor, ME 04401



JFM HOMES TAYLOR BROOK HOUSE

AUBURN, MAINE

CAD DWG FILE:

AE201 EXTERIOR ELEVATIONS.DWG

DRAWN BY:

EED

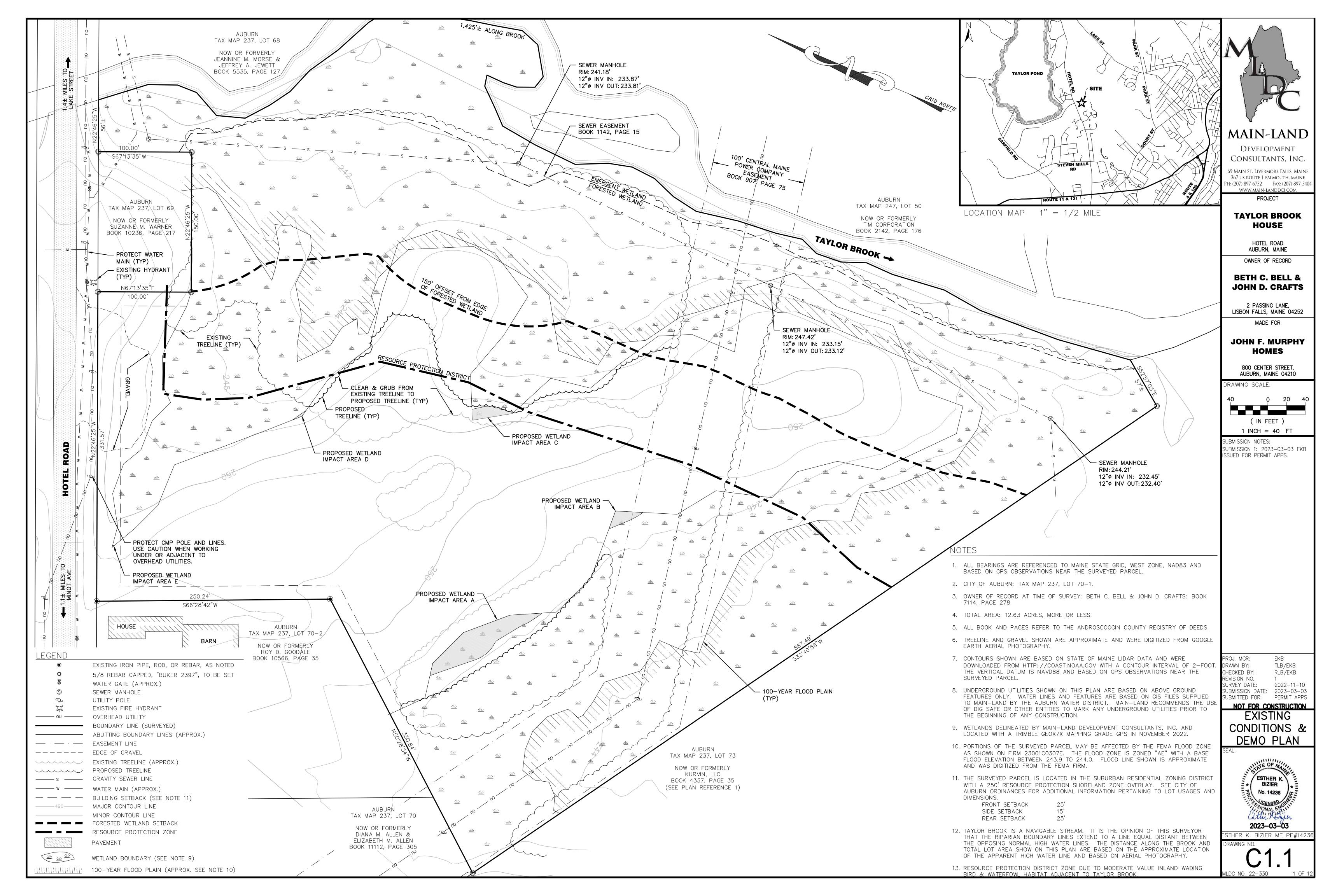
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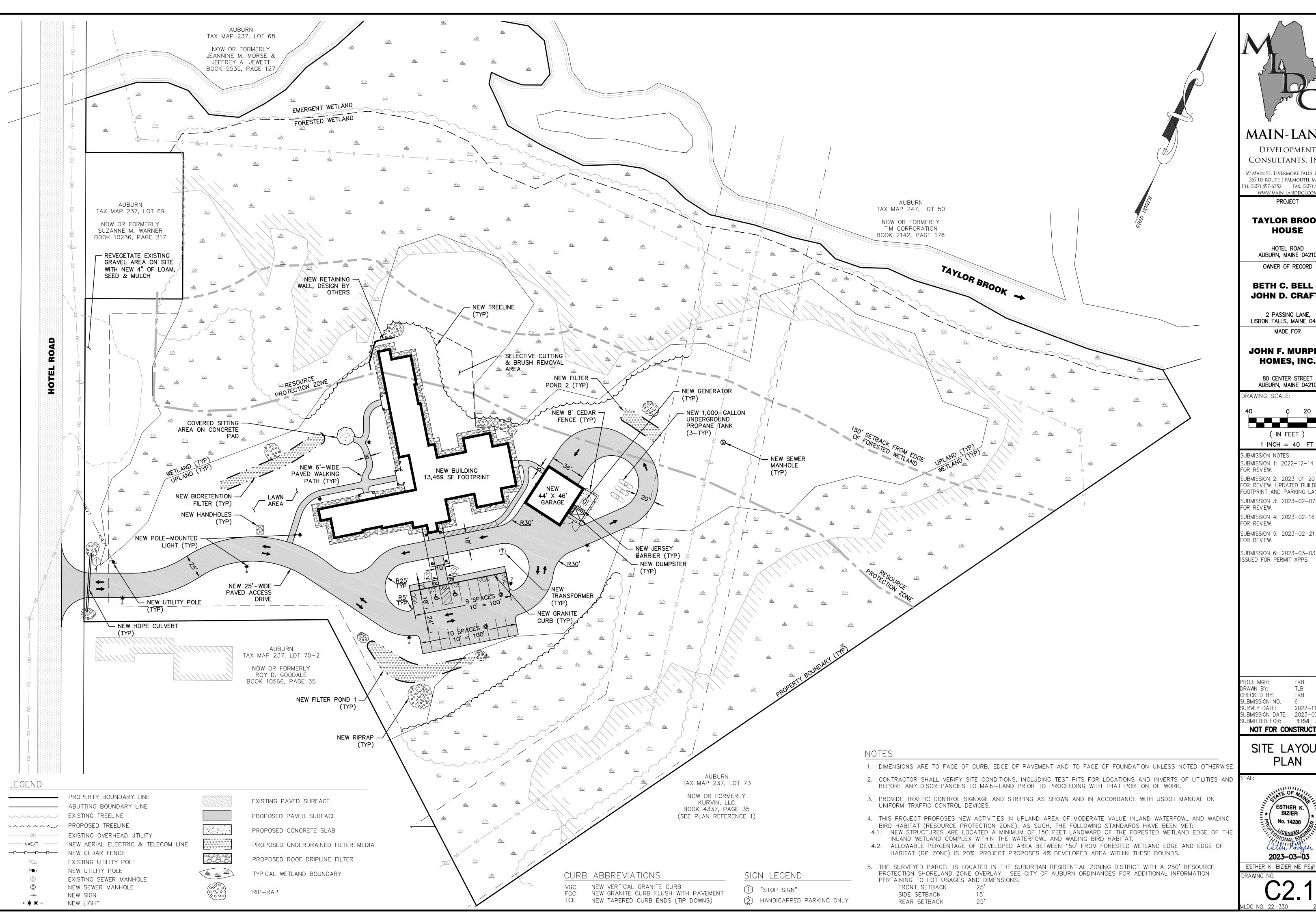
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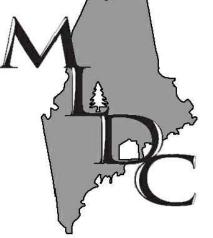
SHEET TITL

**EXTERIOR ELEVATIONS** 

AE201







# MAIN-LAND

DEVELOPMENT Consultants, Inc.

69 Main St. Livermore Falls, Maine 367 us route 1 falmouth, maine PH: (207) 897-6752 FAX: (207) 897-5404

WWW.MAIN-LANDDCI.COM PROJECT

# **TAYLOR BROOK** HOUSE

HOTEL ROAD AUBURN, MAINE 04210

OWNER OF RECORD

# BETH C. BELL & JOHN D. CRAFTS

2 PASSING LANE, LISBON FALLS, MAINE 04252 MADE FOR

# **JOHN F. MURPHY** HOMES, INC.

80 CENTER STREET AUBURN, MAINE 04210

DRAWING SCALE:

( IN FEET )

SUBMISSION NOTES: SUBMISSION 1: 2022-12-14 TLB

SUBMISSION 2: 2023-01-20 TLB FOR REVIEW. UPDATED BUILDING FOOTPRINT AND PARKING LAYOUT SUBMISSION 3: 2023-02-07 TLB

FOR REVIEW. SUBMISSION 4: 2023-02-16 TLB

SUBMISSION 5: 2023-02-21 TLB

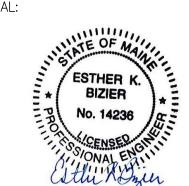
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DRAWN BY: CHECKED BY: SUBMISSION NO. SURVEY DATE:

SUBMISSION DATE: 2023-03-03 PERMIT APPS NOT FOR CONSTRUCTION

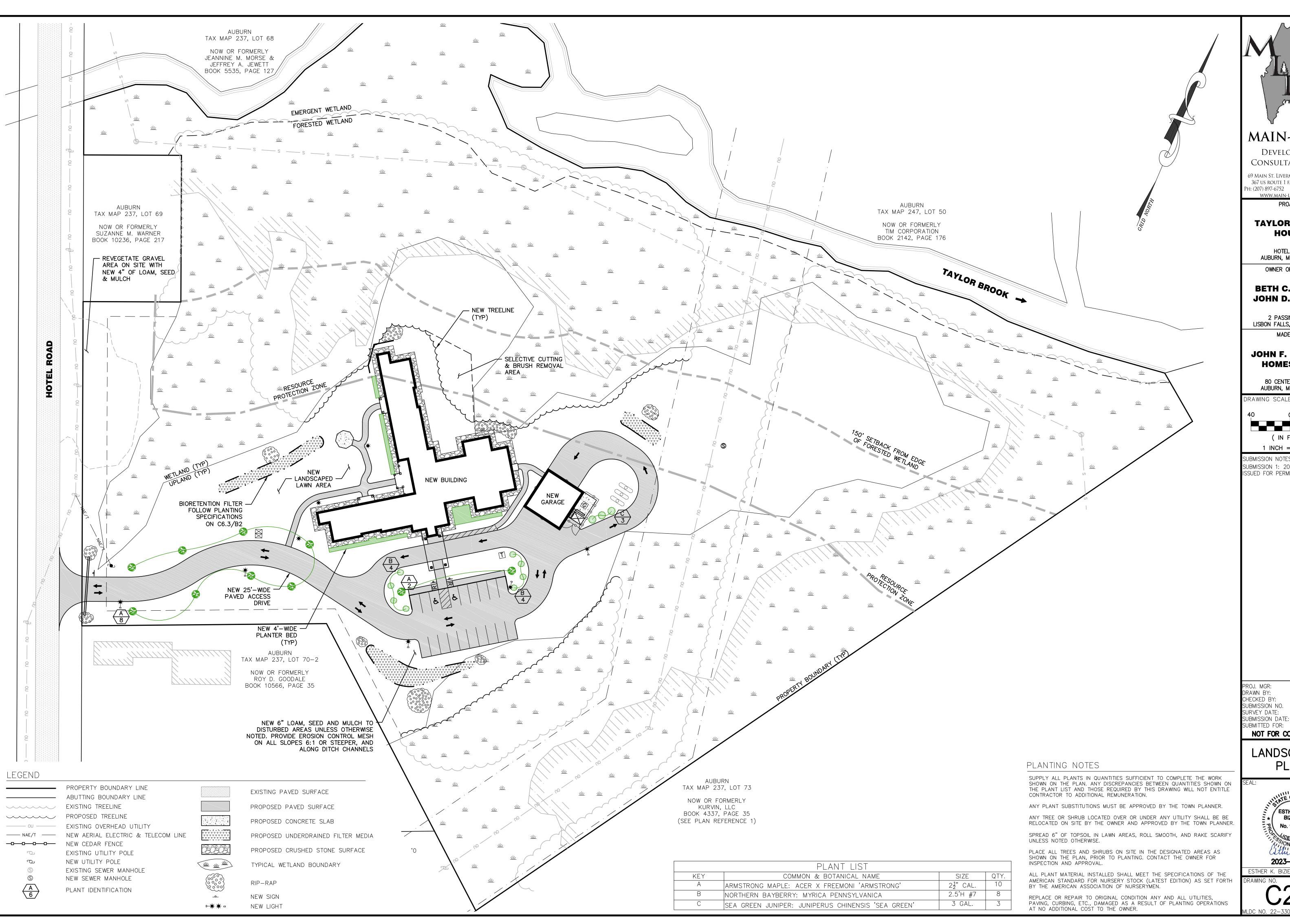
2022-11-10

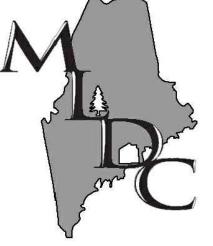
# SITE LAYOUT **PLAN**



2023-03-03

ESTHER K. BIZIER ME PE#14236 DRAWING NO.





# MAIN-LAND

DEVELOPMENT Consultants, Inc.

69 Main St. Livermore Falls, Maine 367 us route 1 falmouth, maine H: (207) 897-6752 FAX: (207) 897-5404

> WWW.MAIN-LANDDCI.COM PROJECT

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HOTEL ROAD AUBURN, MAINE 04210

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2 PASSING LANE, LISBON FALLS, MAINE 04252

MADE FOR

# **JOHN F. MURPHY** HOMES, INC.

80 CENTER STREET AUBURN, MAINE 04210

DRAWING SCALE:

( IN FEET )

1 INCH = 40 FTSUBMISSION NOTES:

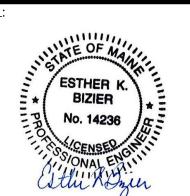
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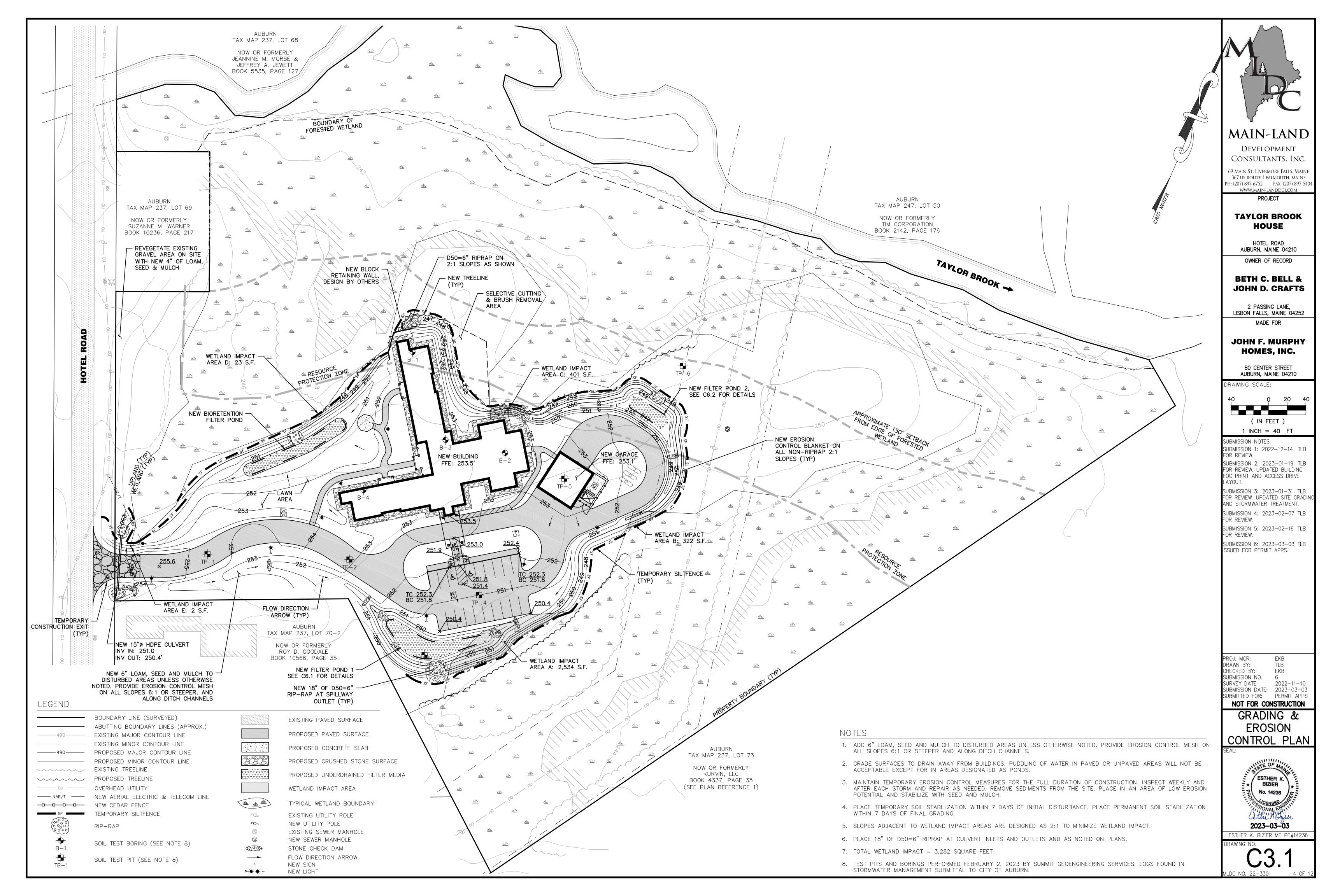
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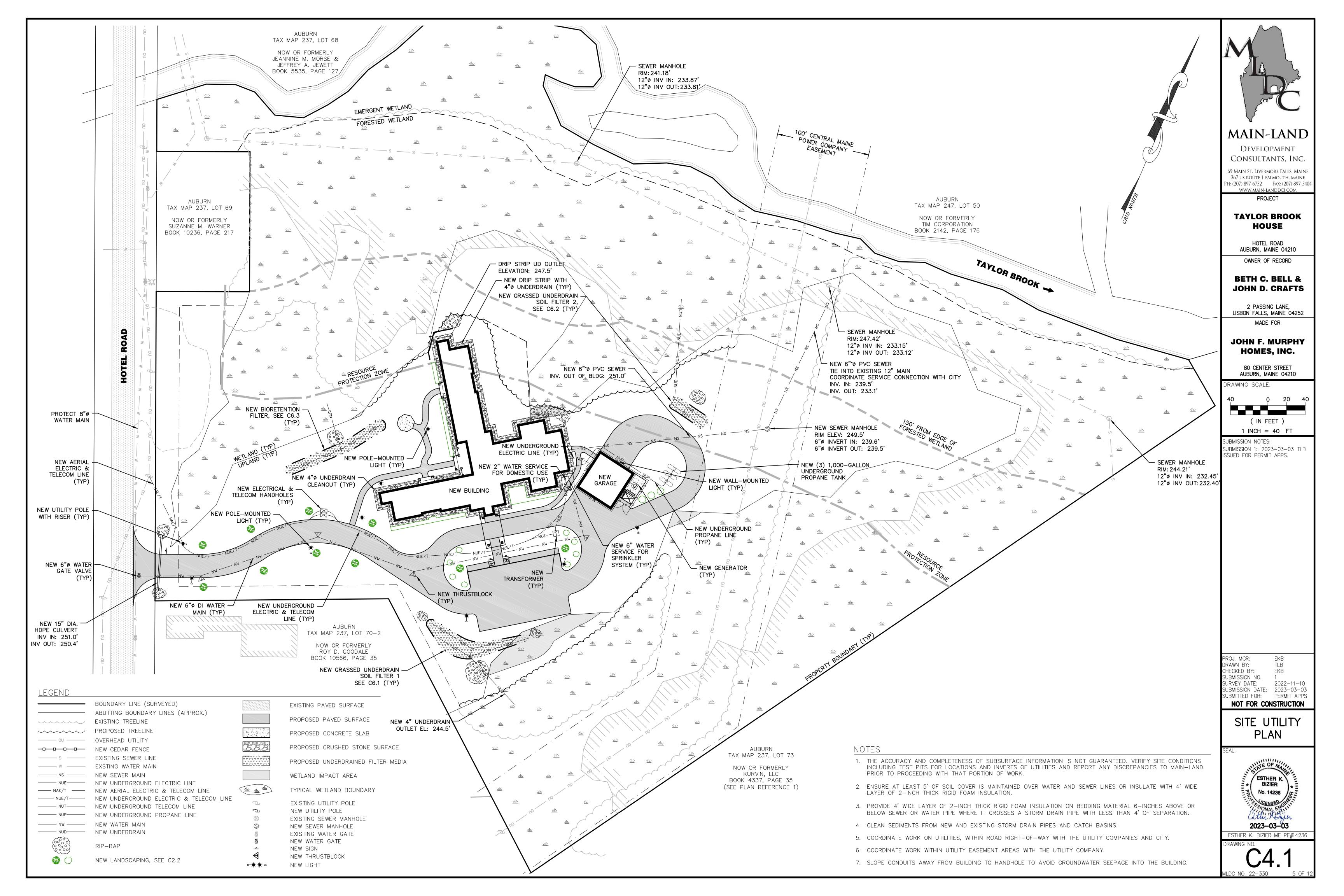
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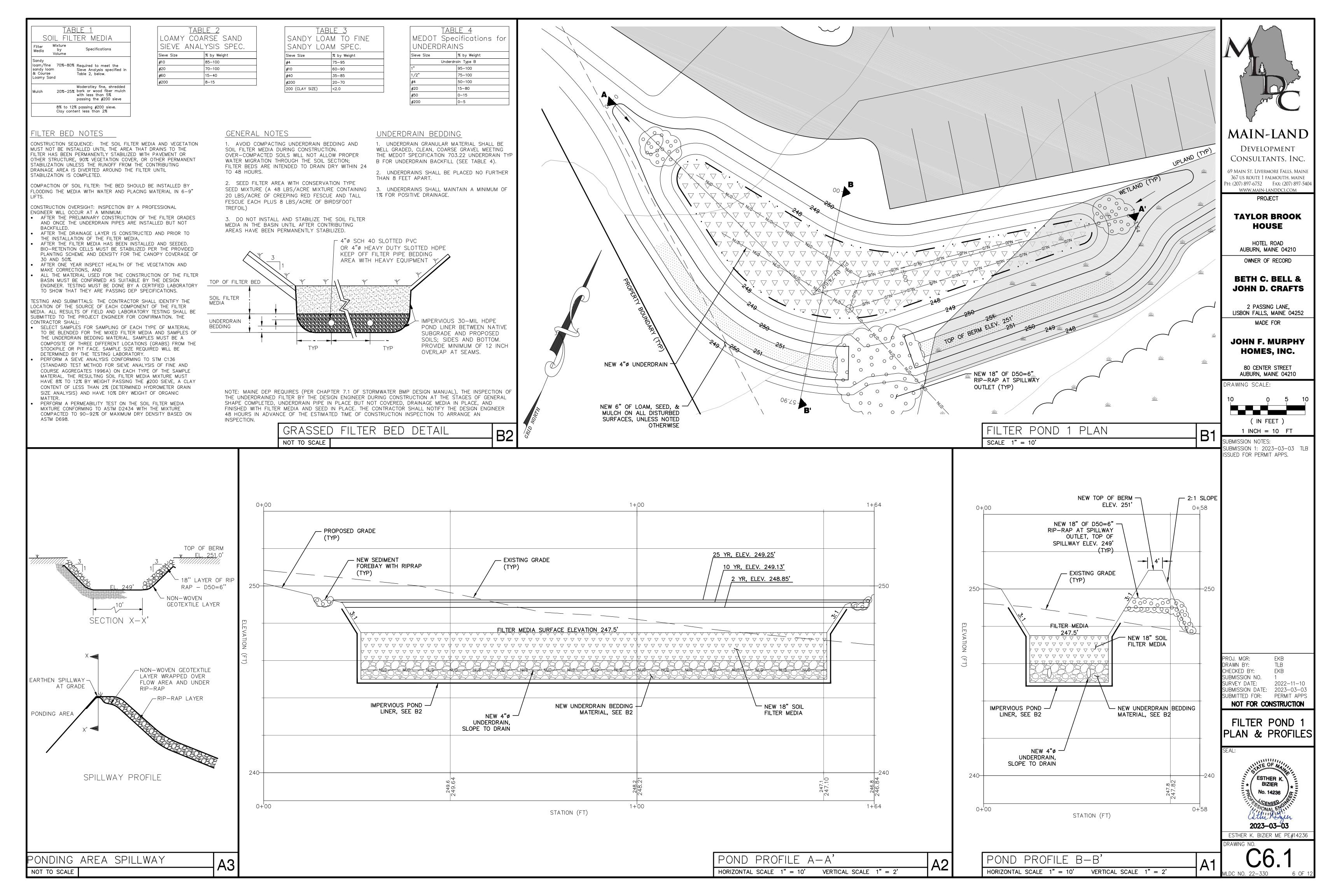
# LANDSCAPING **PLAN**

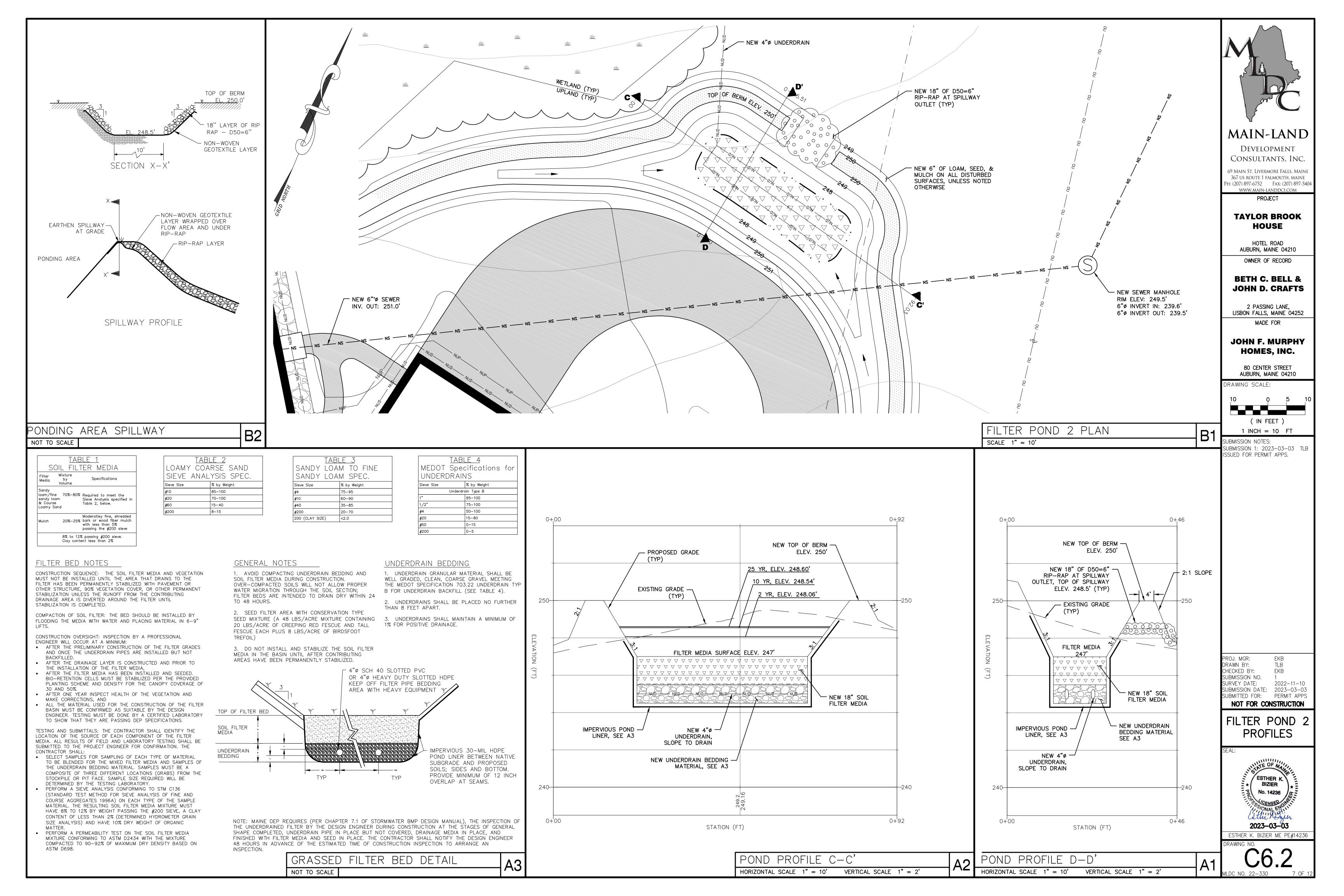


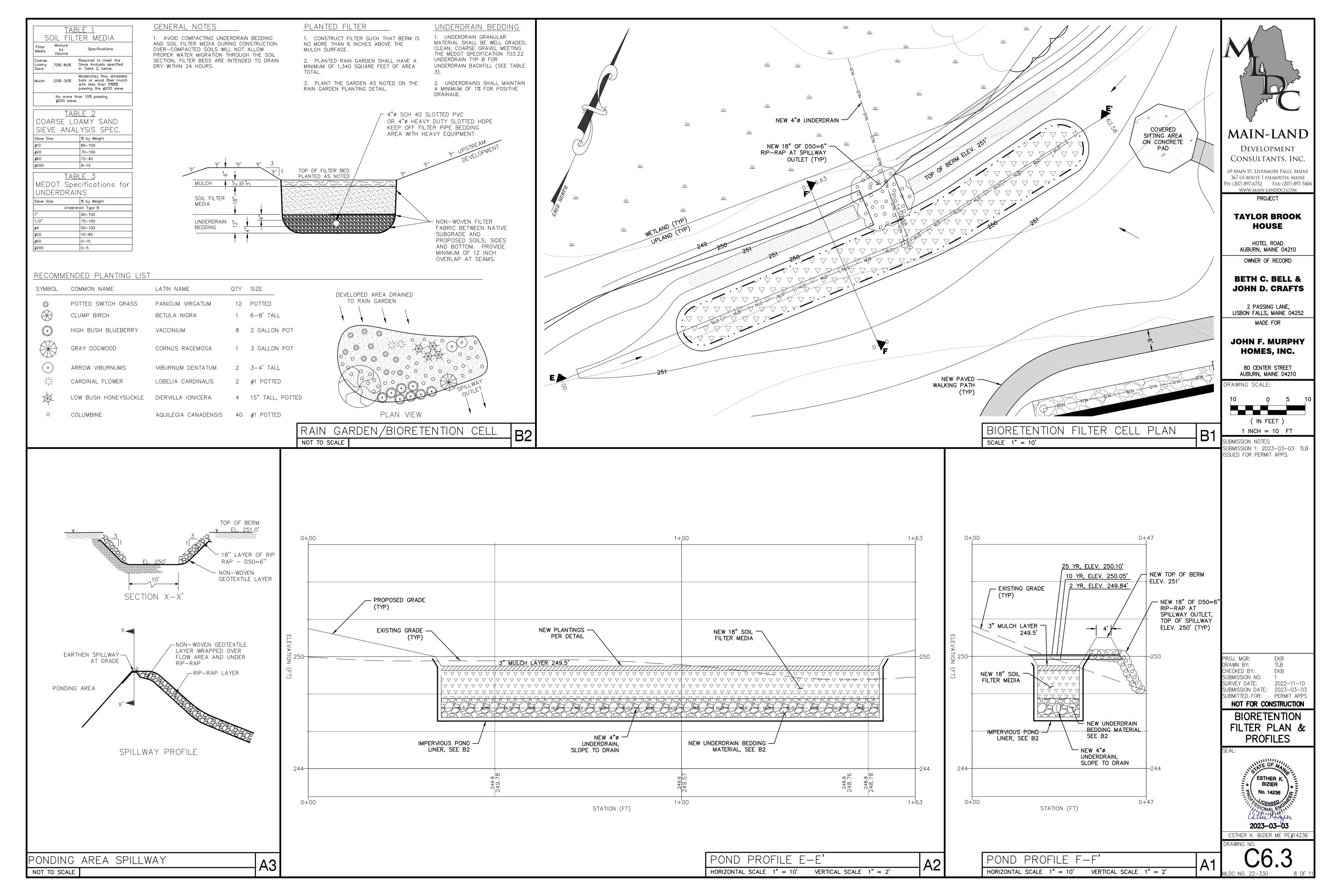
2023-03-03 ESTHER K. BIZIER ME PE#14236

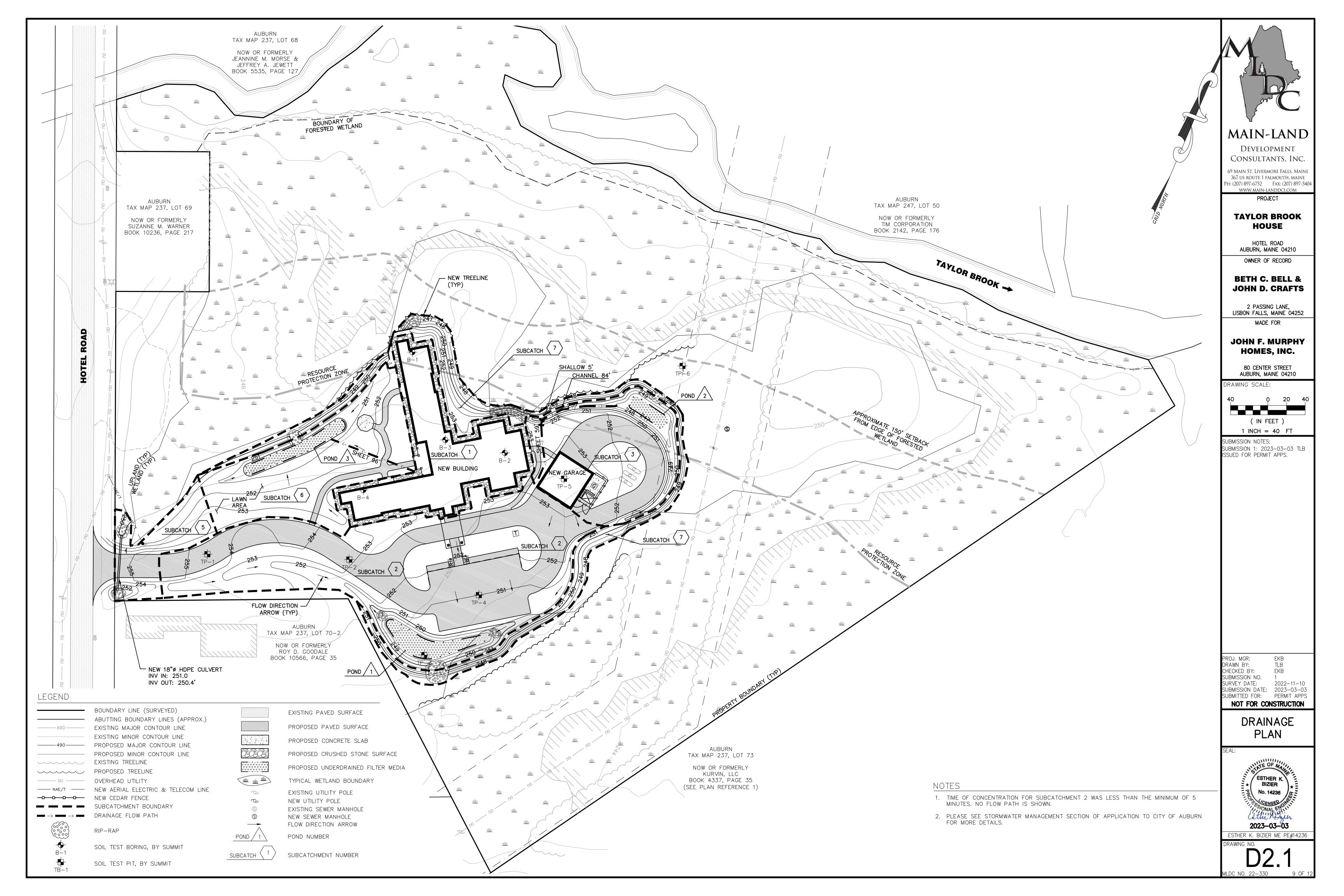


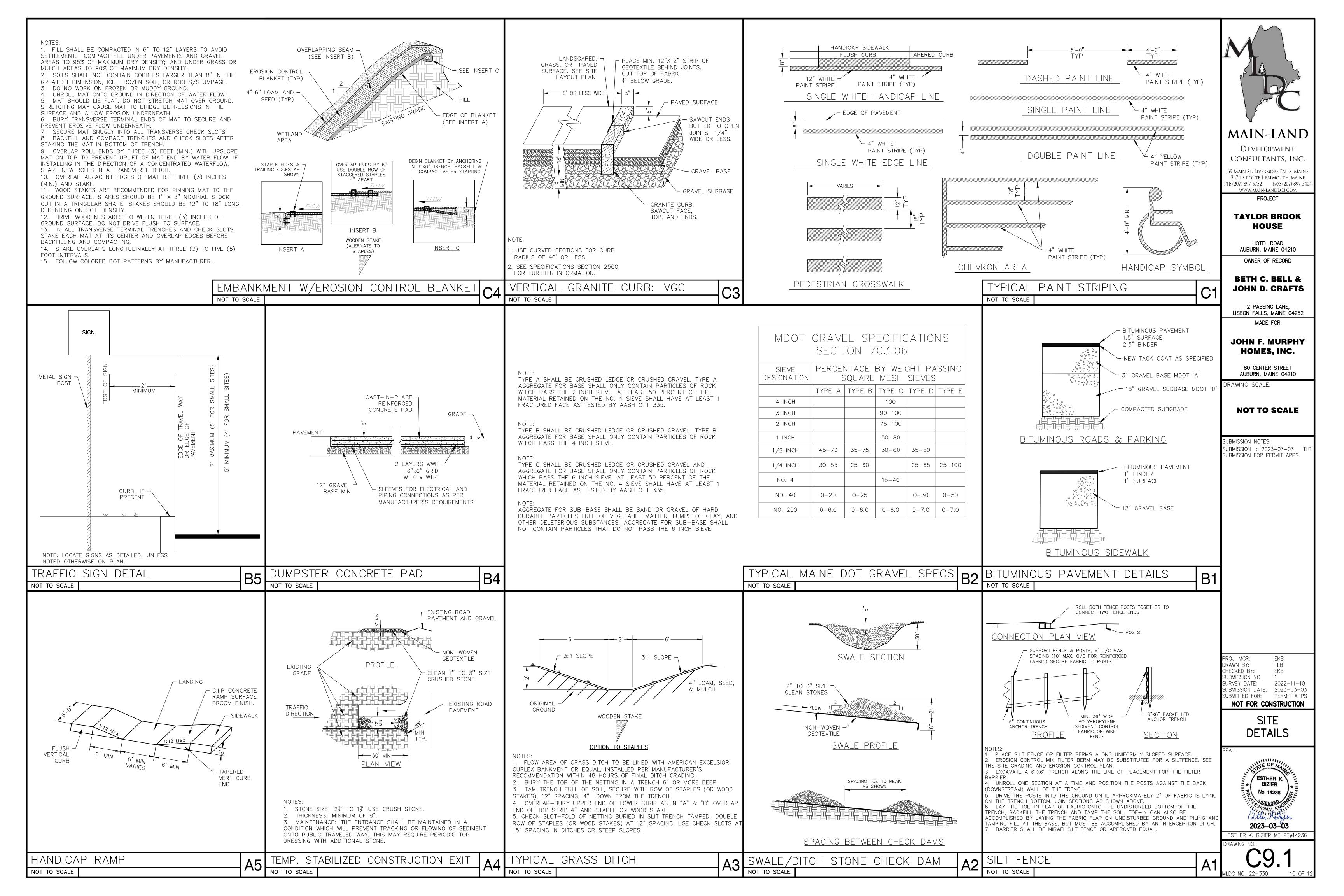


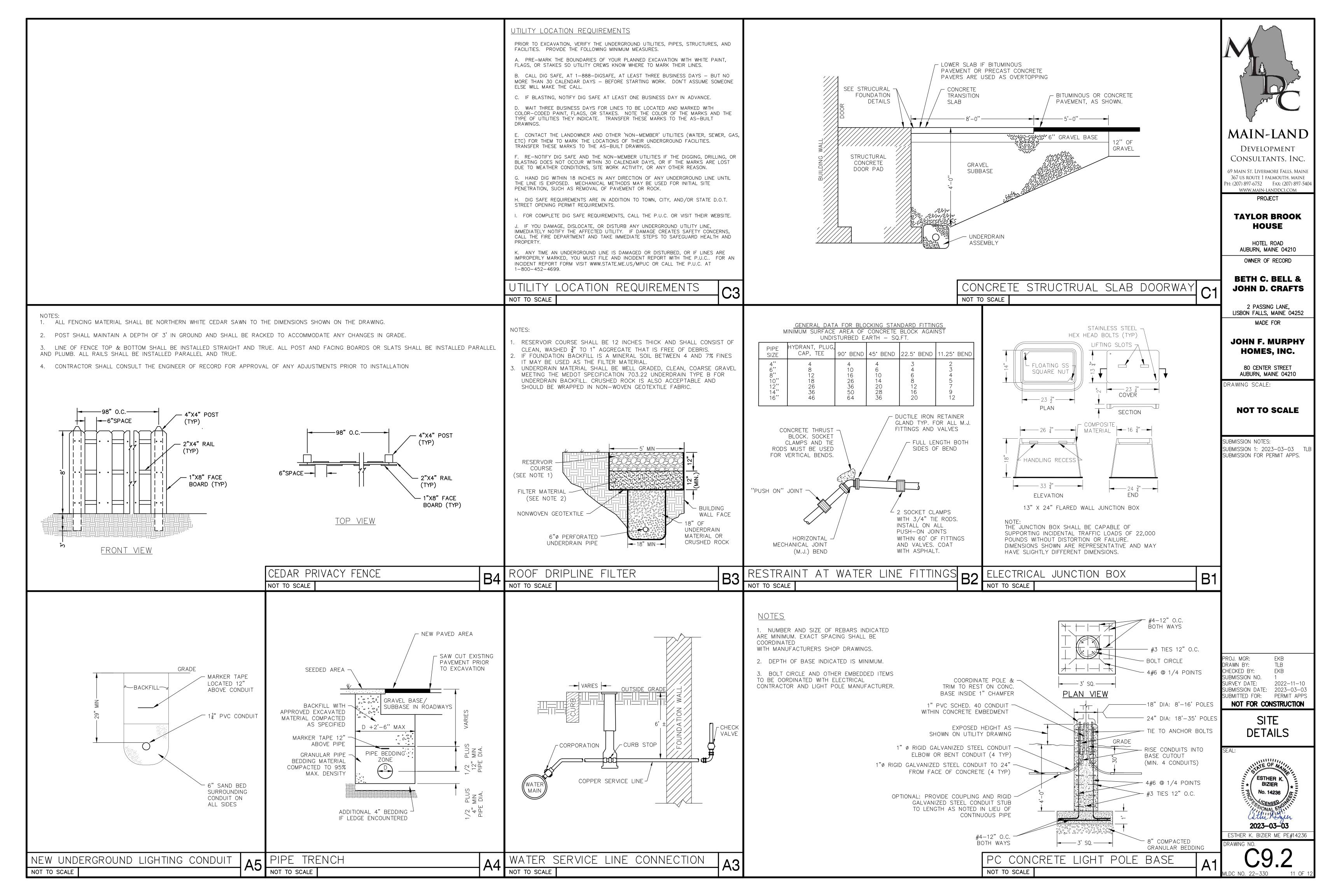












## EROSION AND SEDIMENTATION CONTROL PLAN

Taylor Brook House Hotel Road, Auburn, ME 04210

Prepared By:

#### MAIN-LAND DEVELOPMENT CONSULTANTS, INC. Livermore Falls, Maine March 3, 2023

# 1. INTRODUCTION:

"A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S.A. §480-B. Sediment control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken." - Maine DEP Chapter 500 Rules, Appendix A.

This Plan has been developed to ensure that construction activities on this project site utilize sound erosion and sedimentation control measures. These measures will prevent or reduce the potential for the deposition of sediments down stream of site. The methods of control consist of preventive measures and remedial measures. Preventive measures are aimed at keeping the soils in their present location through mulching and through the reestablishment of vegetation. Remedial measures deal with the trapping and/or filtering of sediment laden stormwater run-off. Both types of measures will be utilized on this project.

The Erosion and Sedimentation Control Plan is best broken down into Temporary Measures, Winter Stabilization, and Permanent Measures.

#### TEMPORARY EROSION CONTROL:

Temporary control measures may consist of a combination of measures where appropriate and/or as shown on the plans.

## A. Silt Fencing:

Silt fencing may be used in place of, or together with, the sediment filter barriers. The silt fencing will also be anchored at least four inches into the ground and placed along an even contour. Turn the ends of the fence up-grade to avoid runoff flowing around the fence. During frozen conditions, furnish and install Sediment Filter Berms in lieu of silt fencing or hay bales if frozen soil prevents the proper installation of silt fences and hay

## B. Temporary Mulch:

Temporary mulch shall be placed on all disturbed areas where seeding, construction or stabilization activities will not take place for over 7 consecutive days. Temporary mulch will also be placed on areas within 75 feet of a natural resource (wetland, stream, etc.) where seeding will not take place for over 48 hours, and on all bare soils outside the road base prior to any predicted significant rain event. A significant rain event is considered to be at least ½ inch of rain or more. Temporary mulch may be hay and shall be applied at a rate of two bales per 1,000 square feet. Soil must not be visible upon completion of application, regardless of rate of application.

## C. Concrete Washout

To avoid contamination of groundwater or surface water utilize a containment structure to retain, collect and allow concrete to solidify. Locate concrete washout containment structure in designated area of site. Washout structure shall be located greater than 50 feet from a storm drain or discharge point unless the pit is lined with anchored 10mm plastic sheeting and overflow of the containment structure is prevented.

Size washout station to handle all wash water, solids and rainfall without overflowing. Approximately 7 gallons of water are required to clean concrete truck chute and approximately 50 gallons of water are required to clean the concrete truck hopper. Size to allow 4" of freeboard between top of liquid and top of structure.

Inspect structure daily for leaks and breaches. Remove solidified excess concrete from washout structure and dispose of property off site or in designated area.

# D. Maintenance of Temporary Measures:

All temporary measures described above shall be inspected weekly and before/after every significant storm event (1/2 inch of rain or greater) throughout the construction of the project. Repairs or replacements of temporary measures will be made, as necessary. Once the site is stable, all temporary devices such as hay bale barriers and silt fencing will be removed.

A log shall be kept summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

# 3. WINTER STABILIZATION:

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with a combination of pavement, a road gravel base, 90% mature vegetation cover or riprap by November 1 then the site needs to be protected with winter stabilization.

Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is denuded at any one time. Limit the exposed area to those areas in which work is expected to be undertaken during the following 15 days. Exposed area shall not be so large that it cannot be mulched in one day prior to any snow event.

Areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed and mulched. Hay and straw mulch rate shall be a minimum of 200 lbs./1,000 s.f. (3 tons/acre) and shall be properly anchored.

The contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

# Soil Stockpiles

Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 200 lbs/1,000 s.f. (3 tons per acre) or with a four-inch layer of woodwaste erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

Any new soil stockpile will not be placed (even covered with hay or straw) within 100 feet of any natural resources.

# 2. Natural Resource Protection

Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 90 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats.

During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Silt fencing may not be placed on frozen ground.

Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

## Mulching

Areas shall be considered denuded until loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 200 lb. per 1.000 square feet or 3 tons/acre (twice the normal accepted rate) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application.

An area shall be considered stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 200 lb. per 1,000 square feet and adequately anchored, such that the ground surface is not visible though the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by either peg line, mulch netting, or wood cellulose fiber. The ground surface shall not be visible though the mulch.

After November 1<sup>St</sup>, mulch and anchoring of all bare soil shall occur at the end of each final grading

# Seeding

Between the dates of October 15 and April 1<sup>St</sup>, loam or seed will not be required. During periods of above freezing temperatures, finished areas shall be fine graded and either protected with mulch or temporarily seeded (see table below) and mulched until such time as the final treatment can be applied. If after November 1<sup>St</sup> the exposed area has been final graded and loamed, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

#### TEMPORARY SEED MIX

ТҮРЕ	% BY WEIGHT	% PURITY	GERMINATION
Domestic Rye Grass	60	69.75	90
Perennial Rye Grass	20	28.00	85
Aroostook Rye Grass	20	28.00	85

Dormant seeding may be placed prior to the placement of mulch and fabric netting anchored with staples.

If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter will be inspected in the spring for adequate catch. Areas not sufficiently vegetated (less than 90 % catch) shall be revegetated by replacing loam, seed, and

If dormant seeding is not used, all disturbed areas shall be revegetated in the spring.

# Trench Dewatering and Temporary Stream Diversion

Water from construction trench dewatering or temporary stream diversion will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

## 6. Inspection and Monitoring

Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snowstorm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function.

In the spring, following the temporary/final seeding and mulching, the contractor shall inspect and repair any damages and/ or un-established spots. Established vegetative cover means a minimum of 90 % of areas vegetated with vigorous growth.

# Standard for the timely stabilization of ditches and channels

All stone-lined ditches and channels shall be constructed and stabilized by November 1. All grass-lined ditches and channels shall be constructed and stabilized by September 1. Failure to stabilize a ditch or channel to be grass-lined by September 1, will require one of the following actions to stabilize the ditch for late fall and winter.

Install a sod lining in the ditch - Sod lining shall be installed in ditches by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

Install a stone lining in the ditch -Ditches shall be lined with stone riprap by November 1, as presented below. If necessary, the applicant will regrade the ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

# Standard for the timely stabilization of disturbed slopes

Construct and stabilize stone-covered slopes by November 1. The applicant will Seed and mulch all slopes to be vegetated by September 1. Slopes will be considered any area having a grade greater than 15% (6H:1V). If the applicant fails to stabilize any slope to be vegetated by September 1, then the applicant will take one of the following actions to stabilize the slope for late fall and winter.

Stabilize the soil with temporary vegetation and erosion control mats -- Seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats over the mulched slope October 1. The applicant will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed slope by November 1, cover the slope with a layer of wood waste compost or with stone riprap as described below.

Stabilize the slope with sod -- Stabilize the disturbed slope with properly installed sod by October 1. Proper installation includes pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Sod stabilization shall not be used late season to stabilize slopes having a grade greater than 33% (3H:1V).

Stabilize the slope with wood waste compost (erosion control mix) -- Place a six-inch layer of wood waste compost on the slope by November 1. Prior to placing the wood waste compost, remove any snow accumulation on the disturbed slope. Wood waste compost will not be used to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face.

Stabilize the slope with stone riprap -- Place a layer of stone riprap on the slope by November 1, similar to the Stone Lined Ditch the permanent erosion control section.

# Standard for the timely stabilization of disturbed soils

Seed and mulch all disturbed soils on areas having a slope less than 15% by September 1. Failure to stabilize these soils by this date will require one of the following actions to stabilize the soil for late fall and

Stabilize the soil with temporary vegetation -- Seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting by October 1. Growth of the rye will require monitoring over the following 30 days. If the rye fails to grow at least three inches or cover at least 75% of the disturbed soil before November 1, then mulch the area for over-winter protection as described below. Stabilize the soil with sod -- Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Stabilize the soil with mulch -- Mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch by November 1. Prior to applying the mulch, remove any snow accumulation on the disturbed area. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed

## 4. PERMANENT EROSION CONTROL:

Permanent measures will consist of the placement of culverts; culvert inlet/outlet stabilization and the re-vegetation of

# A. Re-vegetation Measures

All areas to be permanently re-vegetated with grass will first be covered with loam and then fertilized.

Loam will be placed on all areas to be re-vegetated. Loam will be placed to a minimum depth of 4 inches. Loam will be the stockpiled topsoil, if possible.

Test the loam samples for nutrients at a proficient testing laboratory (The University of Maine provides this service). The areas with loam will then be fertilized with the recommended application rate. Lime will also be applied at a rate of 50 pounds per 1,000 square feet. Both the lime and the fertilizer will be mixed thoroughly with the soil.

All areas to be re-vegetated with permanent grass are to be seeded with the seed mix shown on the table below. This mixture will be applied at a rate of 2 pounds per 1,000 square feet.

General Lawn Areas	Chewing Fescue "Dignity"	35%
	Pennlawn Creeping Red Fescue	35%
	Perennial Rye "Tourstar" (Nutrite)	30%

Mulch will then be spread on all seeded areas at a rate of two bales per 1,000 square feet. Regardless of application rate the soil shall not be visible through the mulch.

Seed and mulch will be placed within five days of final grading of topsoil.

Seeded areas will be inspected after 30 days to determine the success of the seeding. If the ground cover is less than 90%, the area will be reseeded.

## B. Critical Areas:

Slopes in excess of 15% will require the placement of a biodegradable netting or matting over the mulch and seed (if the netting has no mulch in it). If stabilization is to take place after October 1, slopes over 8% will be treated with the matting.

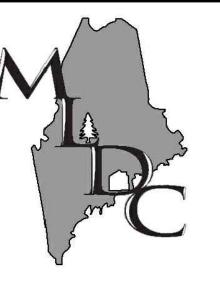
#### C. Litter Control

The property owner will perform daily cleanup of the site. During the spring, following snow melt, perform a thorough cleaning of the property paying particular attention to the drainage ditch to the east. Dispose of litter and trash in the onsite dumpster.

## D. Maintenance of Permanent Measures:

All measures will be inspected weekly and before and after every significant storm event during construction, and then at least once annually to insure proper function. Any damaged areas will be repaired or replaced, as necessary. Any ditches or culverts not functioning as designed will be redesigned and reconstructed according to specifications prepared by a Professional Engineer.

In any event, seeding should take place either between May 1 and June 15, or August 15 and September 1.



# MAIN-LAND

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PROJECT

# **TAYLOR BROOK** HOUSE

HOTEL ROAD AUBURN, MAINE 04210

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DRAWING SCALE:

# NOT TO SCALE

SUBMISSION NOTES: SUBMISSION 1: 2023-03-03 TL SUBMISSION FOR PERMIT APPS.

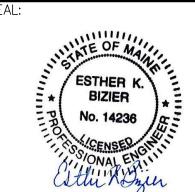
PROJ. MGR: DRAWN BY: CHECKED BY: SUBMISSION NO. SURVEY DATE: SUBMISSION DATE: 2023-03-03

SUBMITTED FOR:

NOT FOR CONSTRUCTION EROSION & **SEDIMENTATION** CONTROL PLAN

TLB

PERMIT APPS



2023-03-03

ESTHER K. BIZIER ME PE#14236



# STORMWATER MANAGEMENT SUBMITTAL

# TAYLOR BROOK HOUSE AT HOTEL ROAD, AUBURN, MAINE

Prepared for: John F. Murphy Homes, Inc.

March 3, 2023

## STORMWATER MANAGEMENT: TABLE OF CONTENTS

# Taylor Brook House for John F. Murphy Homes – Auburn, Maine

Tab Number	Section

1Stormwater Narrat
2Stormwater Treatment Tab
3Filter Pond 1 Des
4Filter Pond 2 Desi
5Bioretention Filter Desi
6Roof Dripline Filter Sizi
7Erosion Control P
Housekeeping Pl
Inspection & Maintenance P
8Boring & Test Pit Logs and Pl
9D2.1 Drainage Pl

#### STORMWATER MANAGEMENT GENERAL STANDARDS NARRATIVE

Taylor Brook House Auburn, Maine

Prepared by:

# MAIN-LAND DEVELOPMENT CONSULTANTS, INC. P.O. Box Q, Livermore Falls, Maine

March 3, 2023

The 12.83 acre project site is located off of Hotel Road in Auburn, Maine and is bounded on the northerly side by Taylor Brook. The property generally a mixture of field and woods. Some emergent wetland is located along the stream and forested wetland extends into the site. There is a Central Maine Power Easement which runs through the site and a City of Auburn sewer main along the northern property boundary. The property is generally moderately sloping with mainly hydrologic soil group "C" sandy loam/silty loam soils. The property drains entirely into Taylor Brook which flows to the Androscoggin River. As such, the property is not within the watershed of a Lake Most at Risk and a Phosphorus Analysis was not required.

The proposed Taylor Brook House is a 13,469 square foot "Care Home" operated by John F. Murphy Homes. In addition to the new building, there is a paved access drive, paved parking, a garage and an outdoor seating area. The project as shown on Site Plans included with this application totals 1.14 acres of non-revegetated impervious area and a total of 2.81 acres of developed area. As such, the project requires stormwater quality treatment of 95% of new impervious area and 80% of new developed area to meet the General Standard in Maine DEP Chapter 500 Stormwater Management Law. As part of Chapter 500, the applicant is seeking a Linear Portion of Project exemption for the access drive which requires 75% treatment of linear impervious area and 50% treatment is linear developed area (ditchline).

Stormwater treatment is achieved via four proposed best management practices:

- Grassed Underdrain Soil Filter Pond 1: to treat entrance drive and parking area
- Grassed Underdrain Soil Filter Pond 2: to treat a portion of the new garage and drive through for the garage
- Bioretention Filter/Rain Garden 3: to treat walkways, outdoor seating area and lawn area
- Roof Dripline Filter: to treat the roof of the proposed building

Treatment devices are shown on the project Site Plans and the D2.1 Drainage Plan. Sizing calculations and design details for each treatment device are provided following this narrative.

These stormwater treatment methods provide treatment of 100% of non-linear impervious area, 80.7% of developed area, 84.2% of linear impervious area and 91.9% of linear developed area. These treatment percentages meet the Stormwater Management Law General Standard Requirements and therefore meet City of Auburn ordinances.

 Project:
 Taylor Brook House

 Proj Number:
 22-330

#### SUBCATCHMENT SUMMARY AND TREATMENT AREAS

SUBCATCHMENT AREAS from Drainage Plans							TREATED AREAS												
Proposed Developed Areas (acres)				Existing Areas				Proposed and Existing Treated Developed Areas (acres) BMP			BMPs								
Sub		Тс	Linear		Non-Linear	•	Developed		Undevelop	ed			Linear		Non-Linear	•	Developed	Proposed	Treatment
Label	WAP	(min)	Impervious	Developed	Impervious	Developed	Impervious	Developed	Woods C	Fallow C		Total	Impervious	Developed	Impervious	Developed	Total	Treatment Method	Factor
1			0.00	0.00	0.32	0.32	0.00	0	0	0		0.32	0	0	0.32	0.32	0.32	dripline filter	1
2			0.16	0.34	0.41	0.79	0.00	0	0	0		1.13	0.16	0.34	0.41	0.79	1.13	UD Filter 1	1
3			0.00	0.00	0.18	0.42	0.00	0	0	0		0.42	0	0	0.18	0.42	0.42	UD Filter 2	1
5			0.03	0.03	0.00	0.12	0.00	0	0	0		0.15	0	0	0	0	0.00		1
6			0.00	0.00	0.04	0.44	0.00	0	0	0		0.44	0	0	0.04	0.44	0.44	Rain Garden 3 (Bio	1
7			0.00	0.00	0.00	0.35	0.00	0	0	0		0.35	0	0	0	0	0.00		1
	·	·	0.19	0.37	0.95	2.44	0.00	0.00	0.00		0.00	2.81	0.16	0.34	0.95	1.97	2.31	·	

PROPOSED TREATMENT PERCENTAGES						
	Linear		Non-Linear			
	Impervious	Developed	Impervious	Developed		
Proposed:	0.19	0.37	0.95	2.44		
Treated:	0.16	0.34	0.95	1.97		
Percentage:	84.2%	91.9%	100.0%	80.7%		

#### FILTER DESIGNS

# UD Filter 1

Channel Protection Volume	acres:		
Impervious Area	0.57	1" Volume=	2069 cf
Developed non-impervious area	0.56	0.4" Volume=	813 cf
		Total Volume=	<b>2882</b> cf
Area Sizing	sq. ft:		
5% of the Impervious Area	1241		
2% of the Developed non-impervious Area	488		
Total surface area of the filter media top:	1729	square feet	
Sediment Forebay			
Impervious area to be sanded:	0.5	7 acres	
Sand Application Rate, per storm	50	00 lbs per acre	
Sand Desity, +/-	9	0 pcf	
Number of Storms	1	0 annually	
Forebay Size	3	<b>2</b> cf	
Designed Volume:	352	27 cf	
Designed Filter Area:	174	9 sf	

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## **Rainfall Events Listing (selected events)**

Event#	Event	Storm Type	Curve	Mode	Duration	B/B	Depth	AMC
	Name				(hours)		(inches)	
 1	25-yr	Type III 24-hr		Default	24.00	1	5.40	2

#### stormwater sizing

#2

Secondary

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#### Summary for Pond 1P: UD Filter 1

Inflow Area = 1.130 ac, 50.44% Impervious, Inflow Depth = 3.84" for 25-yr event

Inflow = 5.18 cfs @ 12.07 hrs, Volume= 0.362 af

Outflow = 4.24 cfs @ 12.13 hrs, Volume= 0.362 af, Atten= 18%, Lag= 3.2 min

Primary = 0.20 cfs @ 12.13 hrs, Volume= 0.229 af Secondary = 4.04 cfs @ 12.13 hrs, Volume= 0.132 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs Peak Elev= 249.25' @ 12.13 hrs Surf.Area= 3,187 sf Storage= 4,290 cf

Plug-Flow detention time= 148.9 min calculated for 0.362 af (100% of inflow)

Center-of-Mass det. time= 149.0 min ( 949.6 - 800.6 )

Volume	Inv	<u>ert Avail.Sto</u>	orage Storage	e Description
#1	247.	50' 11,2	56 cf Custom	n Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)		Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
247.50		1,749	0	0
248.00		2,141	973	973
249.0	00	2,968	2,555	3,527
250.0	00	3,850	3,409	6,936
251.0	00	4,790	4,320	11,256
Device	Routing	Invert	Outlet Device	es
#1	Primary	247.50'	2.000 in/hr E	xfiltration over Surface area above 244.80'
	•		•	to Groundwater Elevation = 244.00' rface area = 0 sf

249.00' 143.0 deg x 10.0' long Sharp-Crested Vee/Trap Weir

Primary OutFlow Max=0.20 cfs @ 12.13 hrs HW=249.25' (Free Discharge) 1=Exfiltration (Controls 0.20 cfs)

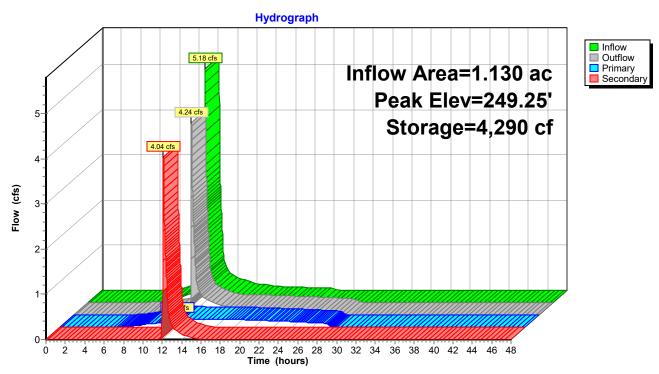
Secondary OutFlow Max=4.03 cfs @ 12.13 hrs HW=249.25' (Free Discharge) 2=Sharp-Crested Vee/Trap Weir (Weir Controls 4.03 cfs @ 1.52 fps)

Cv= 2.47 (C= 3.09)

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#### Pond 1P: UD Filter 1



# stormwater sizing

Volume

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#### **Summary for Pond 1P: UD Filter 1**

Inflow Area = 1.130 ac, 50.44% Impervious, Inflow Depth = 2.82" for 10-yr event

Inflow = 3.84 cfs @ 12.07 hrs, Volume= 0.266 af

Outflow = 2.88 cfs @ 12.14 hrs, Volume= 0.185 af, Atten= 25%, Lag= 4.0 min

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Secondary = 2.88 cfs @ 12.14 hrs, Volume= 0.185 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs Peak Elev= 249.20' @ 12.14 hrs Surf.Area= 3,143 sf Storage= 4,135 cf

Plug-Flow detention time= 160.1 min calculated for 0.185 af (70% of inflow)

Avail Storage Storage Description

Center-of-Mass det. time= 65.4 min (874.8 - 809.4)

Invert

VOIUITIE	IIIVEI	L Avaii.Sto	rage Storage	Description	
#1	247.50	11,25	56 cf Custom	Stage Data (Pris	smatic) Listed below (Recalc)
Elevation	on S	urf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
247.5	50	1,749	0	0	
248.0	00	2,141	973	973	
249.0	00	2,968	2,555	3,527	
250.0	00	3,850	3,409	6,936	
251.0	00	4,790	4,320	11,256	
Device	Routing	Invert	Outlet Devices	S	
#1	Primary	247.50'			over Surface area above 244.80'
			,		Elevation = 244.00'
				ace area = 0 sf	
#2	Secondary	/ 249.00'			Crested Vee/Trap Weir
			Cv= 2.47 (C=	3.09)	

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=247.50' (Free Discharge) **1=Exfiltration** (Controls 0.00 cfs)

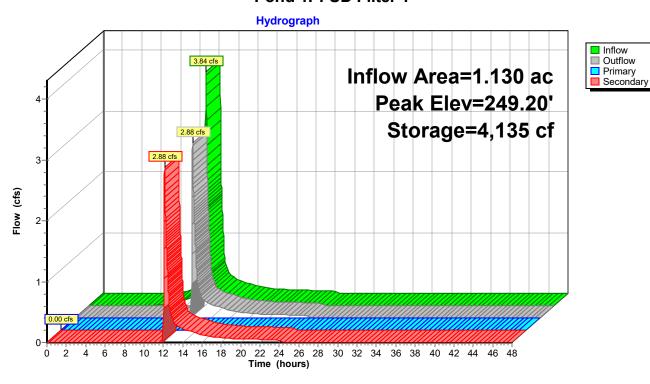
Secondary OutFlow Max=2.87 cfs @ 12.14 hrs HW=249.20' (Free Discharge) 2=Sharp-Crested Vee/Trap Weir (Weir Controls 2.87 cfs @ 1.36 fps)

Page 2

# stormwater sizing

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Pond 1P: UD Filter 1



## FILTER DESIGNS

# UD Filter 2

Channel Protection Volume	oorooi		
	acres:	4 !! \ / a	CEO et
Impervious Area	0.18	1" Volume=	653 cf
Developed non-impervious area	0.24	0.4" Volume=	348 cf
		Total Volume=	<b>1002</b> cf
Area Sizing	sq. ft:		
5% of the Impervious Area	392		
2% of the Developed non-impervious Area	209		
Total surface area of the filter media top:	601	square feet	
Sediment Forebay			
Impervious area to be sanded:	0.1	8 acres	
Sand Application Rate, per storm	50	0 lbs per acre	
Sand Desity, +/-	9	0 pcf	
Number of Storms		0 annually	
Forebay Size		<b>0</b> cf	
•			
Designed Volume:	156	7 cf	
Designed Filter Area:	63	0 sf	
<u> </u>			

# stormwater sizing

Volume

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#### Summary for Pond 2P: UD Filter 2

Inflow Area = 0.420 ac, 42.86% Impervious, Inflow Depth = 3.64" for 25-yr event

Inflow = 1.73 cfs @ 12.10 hrs, Volume= 0.127 af

Outflow = 1.14 cfs @ 12.19 hrs, Volume= 0.127 af, Atten= 34%, Lag= 5.8 min

Primary = 0.10 cfs @ 12.19 hrs, Volume= 0.095 af Secondary = 1.04 cfs @ 12.19 hrs, Volume= 0.032 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs Peak Elev= 248.60' @ 12.19 hrs Surf.Area= 1,525 sf Storage= 1,719 cf

Plug-Flow detention time= 158.1 min calculated for 0.127 af (100% of inflow)

Avail.Storage Storage Description

Center-of-Mass det. time= 158.1 min ( 966.3 - 808.2 )

Invert

		, , , , , , , , , , , , ,			
#1	247.00	)' 4,4	42 cf Custom	Stage Data (Pr	ismatic) Listed below (Recalc)
Elevation	on S	Surf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
247.0	00	630	0	0	
248.0	00	1,180	905	905	
248.5	50	1,466	662	1,567	
249.0	00	1,757	806	2,372	
250.0	00	2,383	2,070	4,442	
Device	Routing	Invert	Outlet Device	S	
#1	Primary	247.00'	2.000 in/hr Ex	filtration over	Surface area above 244.50'
					Elevation = 244.00'
				face area = 0 sf	
#2	Secondar	y 248.50'	143.0 deg x 1	0.0' long Sharp	-Crested Vee/Trap Weir

Primary OutFlow Max=0.10 cfs @ 12.19 hrs HW=248.60' (Free Discharge) 1=Exfiltration (Controls 0.10 cfs)

Secondary OutFlow Max=1.03 cfs @ 12.19 hrs HW=248.60' (Free Discharge) 2=Sharp-Crested Vee/Trap Weir (Weir Controls 1.03 cfs @ 0.98 fps)

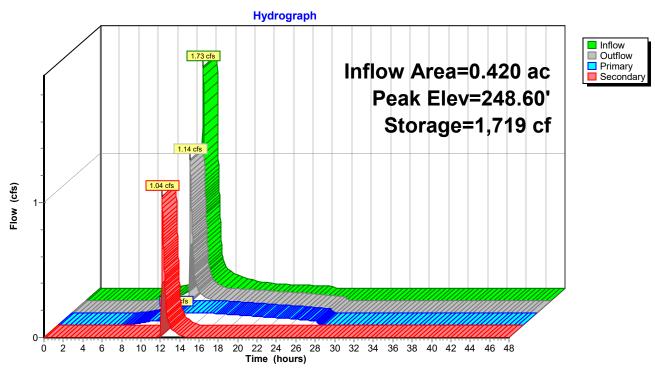
Cv= 2.47 (C= 3.09)

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# stormwater sizing

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Summary for Pond 2P: UD Filter 2

Inflow Area = 0.420 ac, 42.86% Impervious, Inflow Depth = 2.64" for 10-yr event

Inflow 1.26 cfs @ 12.10 hrs, Volume= 0.092 af

Outflow 0.65 cfs @ 12.26 hrs, Volume= 0.056 af, Atten= 49%, Lag= 9.5 min

Primary 0.000 af 0.00 cfs @ 0.00 hrs, Volume= Secondary = 0.65 cfs @ 12.26 hrs, Volume= 0.056 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs Peak Elev= 248.57' @ 12.26 hrs Surf.Area= 1,509 sf Storage= 1,677 cf

Plug-Flow detention time= 187.7 min calculated for 0.056 af (61% of inflow)

Center-of-Mass det. time= 82.5 min (899.8 - 817.3)

Volume	Inver	t Avail.Sto	rage Storag	e Description	
#1	247.00	)' 4,4	42 cf Custo	n Stage Data (Prismatic) Listed belo	ow (Recalc)
Elevatio	t)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
247.0	-	630	0	0	
248.0	-	1,180	905	905	
248.5	50	1,466	662	1,567	
249.0	0	1,757	806	2,372	
250.0	0	2,383	2,070	4,442	
Device	Routing	Invert	Outlet Device	es	
#1	Primary	247.00'		Exfiltration X 0.00 over Surface area	a above 244.50'
#2	Secondary	y 248.50'	Excluded Si	to Groundwater Elevation = 244.00' urface area = 0 sf 10.0' long Sharp-Crested Vee/Trap = 3.09)	Weir

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=247.00' (Free Discharge) 1=Exfiltration (Controls 0.00 cfs)

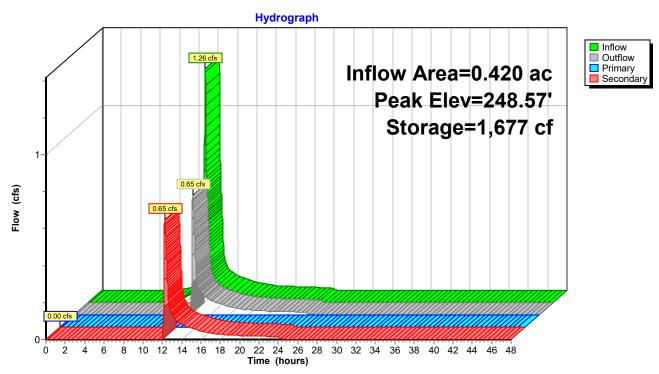
Secondary OutFlow Max=0.64 cfs @ 12.26 hrs HW=248.57' (Free Discharge) 2=Sharp-Crested Vee/Trap Weir (Weir Controls 0.64 cfs @ 0.84 fps)

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# Pond 2P: UD Filter 2



# **FILTER DESIGNS**

# Rain Garden 3 (Bioretention Filter)

Channel Protection Valums	corooi		
Channel Protection Volume	acres:	4837-1	4.45 . (
Impervious Area	0.04	1" Volume=	145 cf
Developed non-impervious area	0.40	0.4" Volume= _	581 cf
		Total Volume=	<b>726</b> cf
Area Sizing	sq. ft:		
7% of the Impervious Area	122		
3% of the Developed non-impervious Area	523		
Total surface area of the filter media top:	645	square feet	
Sediment Forebay			
Impervious area to be sanded:	0.0	4 acres	
Sand Application Rate, per storm	50	0 lbs per acre	
Sand Desity, +/-	9	0 pcf	
Number of Storms	1	0 annually	
Forebay Size		<b>2</b> cf	
•			
Designed Volume:	76	7 cf	
Designed Filter Area:	134	1 sf	
<u>`</u>			

# stormwater sizing

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#### **Summary for Pond 3P: Bioretention Filter**

Inflow Area = 0.440 ac, 9.09% Impervious, Inflow Depth = 1.97" for 10-yr event

Inflow = 0.93 cfs @ 12.12 hrs, Volume= 0.072 af

Outflow = 0.69 cfs @ 12.21 hrs, Volume= 0.055 af, Atten= 27%, Lag= 5.6 min

Primary = 0.69 cfs @ 0.00 hrs, Volume= 0.000 af

Secondary = 0.69 cfs @ 12.21 hrs, Volume= 0.055 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs Peak Elev= 250.08' @ 12.21 hrs Surf.Area= 1,788 sf Storage= 903 cf

Plug-Flow detention time= 139.3 min calculated for 0.055 af (76% of inflow)

Center-of-Mass det. time= 50.5 min (892.2 - 841.7)

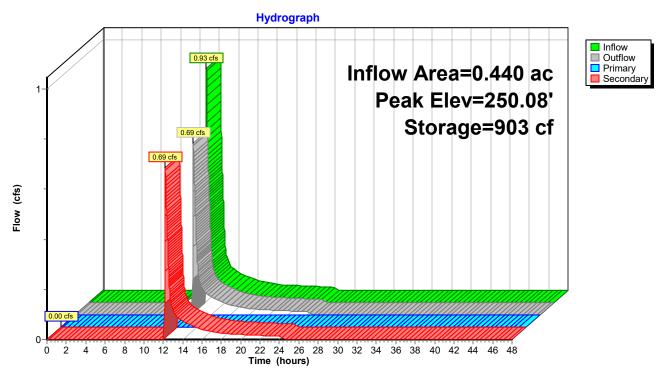
Volume	Invert	Avail.Sto	rage Storage	Description	
#1	249.50'	2,89	97 cf Custom	Stage Data (Pri	smatic) Listed below (Recalc)
Elevatio		rf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
249.5	50	1,341	0	0	
250.0	00	1,725	767	767	
251.0	00	2,536	2,131	2,897	
Device	Routing	Invert	Outlet Device	S	
#1	Secondary	250.00'	143.0 deg x 1	0.0' long Sharp-	Crested Vee/Trap Weir
#2	Primary	249.50'		,	over Surface area above 247.00'

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=249.50' (Free Discharge) **2=Exfiltration** (Controls 0.00 cfs)

Secondary OutFlow Max=0.68 cfs @ 12.21 hrs HW=250.08' (Free Discharge)
1=Sharp-Crested Vee/Trap Weir (Weir Controls 0.68 cfs @ 0.86 fps)

Page 2

#### **Pond 3P: Bioretention Filter**



# stormwater sizing

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Page 1

# **Summary for Pond 3P: Bioretention Filter**

Inflow Area = 0.440 ac, 9.09% Impervious, Inflow Depth = 2.87" for 25-yr event Inflow 1.37 cfs @ 12.12 hrs, Volume= 0.105 af Outflow 1.11 cfs @ 12.19 hrs, Volume= 0.105 af, Atten= 19%, Lag= 4.3 min Primary 0.08 cfs @ 12.19 hrs, Volume= 0.071 af Secondary = 1.02 cfs @ 12.19 hrs, Volume= 0.034 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs Peak Elev= 250.10' @ 12.19 hrs Surf.Area= 1,807 sf Storage= 946 cf

Plug-Flow detention time= 68.1 min calculated for 0.105 af (100% of inflow) Center-of-Mass det. time= 68.1 min (898.9 - 830.8)

Volume	Invert	Avail.Sto	rage Storage I	Description	
#1	249.50'	2,89	7 cf Custom	Stage Data (Pri	smatic) Listed below (Recalc)
Elevatio (feet 249.5	t) 0	rf.Area (sq-ft) 1,341	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
250.0	0	1,725	767	767	
251.0	0	2,536	2,131	2,897	
Device	Routing	Invert	Outlet Devices	3	
#1	Secondary	250.00'	143.0 deg x 10	0.0' long Sharp-	Crested Vee/Trap Weir
#2	Primary	249.50'			surface area above 247.00'

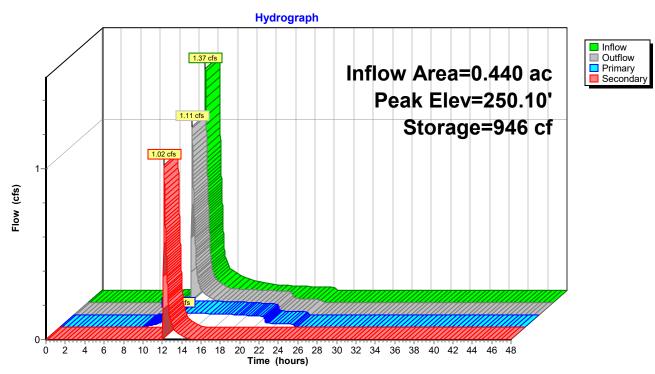
**Primary OutFlow** Max=0.08 cfs @ 12.19 hrs HW=250.10' (Free Discharge) **2=Exfiltration** (Exfiltration Controls 0.08 cfs)

Secondary OutFlow Max=1.02 cfs @ 12.19 hrs HW=250.10' (Free Discharge)
1=Sharp-Crested Vee/Trap Weir (Weir Controls 1.02 cfs @ 0.98 fps)

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**Pond 3P: Bioretention Filter** 



#### **Dripline Filter Sizing**

							Depth BMP	Design Depth of
Building/Subcatchment	Area of Roof, (S.F.)	Volume of runoff	Media Volume	Filter Length	Width of Filter	Area of Filter	Standard (Feet)	Stone (Inches)
Building Dripstrip (around building & covered entrances)	14169	1180.75	2951.88	863	5	4315	0.68	12

40%

Porosity of stone Note: Filter sized to treat first 1" of rainfall 1 inch of rain 0.08 ft

# EROSION AND SEDIMENTATION CONTROL PLAN

# Taylor Brook House Hotel Road, Auburn, Maine

Prepared By:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC. Livermore Falls, Maine March 3, 2023

#### 1. INTRODUCTION:

"A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S.A. §480-B. Sediment control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken." – Maine DEP Chapter 500 Rules, Appendix A.

This Plan has been developed to insure that construction activities on this project site utilize sound erosion and sedimentation control measures. These measures will prevent or reduce the potential for the deposition of sediments down stream of site. The methods of control consist of preventive measures and remedial measures. Preventive measures are aimed at keeping the soils in their present location through mulching and through the reestablishment of vegetation. Remedial measures deal with the trapping and/or filtering of sediment laden stormwater run-off. Both types of measures will be utilized on this project.

The Erosion and Sedimentation Control Plan is best broken down into Temporary Measures, Winter Stabilization, and Permanent Measures.

#### 2. TEMPORARY EROSION CONTROL:

Temporary control measures may consist of a combination of measures where appropriate and/or as shown on the plans.

#### A. Sediment Filter Berms:

Sediment Filter Berms are the preferred filtering device, but may not be used in wetland areas. The berms shall be placed down slope of all earth moving activities, where water from these disturbed areas will run off. These berms will be placed along an even contour, be at least 24 inches tall, and 3 feet wide at the base. Turn the ends of the berm up-grade to avoid runoff flowing around the berm. In areas of high erosion potential, the berm will be backed by hay bales or silt fencing, as shown on the filter berm detail.

#### B. Silt Fencing:

Silt fencing may be used in place of, or together with, the sediment filter barriers. The silt

fencing will also be anchored at least four inches into the ground and placed along an even contour. Turn the ends of the fence up-grade to avoid runoff flowing around the fence. During frozen conditions, furnish and install Sediment Filter Berms in lieu of silt fencing or hay bales if frozen soil prevents the proper installation of silt fences and hay bales.

#### C. Stone Check dams:

Stone check dams shall be placed in the center of ditches immediately following excavation to provide a means of trapping sediments. (If the ditch has been immediately armored with riprap, check dams are not necessary.) The dams shall consist of small stone placed across the ditch, with a depression at the top of the dam to allow water over the top of the dam, should it become clogged with sediment. See the specifications on the Typical Details Plan for construction details of this measure.

#### D. Temporary Mulch:

Temporary mulch shall be placed on all disturbed areas where seeding, construction or stabilization activities will not take place for over 7 consecutive days. Temporary mulch will also be placed on areas within 75 feet of a natural resource (wetland, stream, etc.) where seeding will not take place for over 48 hours, and on all bare soils outside the road base prior to any predicted significant rain event. A significant rain event is considered to be at least ½ inch of rain or more. Temporary mulch may be hay and shall be applied at a rate of two bales per 1,000 square feet. Soil must not be visible upon completion of application, regardless of rate of application.

#### E. Topsoil Stockpiles:

Topsoil, removed as part of the construction, will be stockpiled on site for use in areas to be re-vegetated. The location of topsoil stockpiles must not be within 75 feet of a defined natural resource (wetland, stream, etc.), or within 75 feet of a swale or ditch.

Stockpiles shall be mulched with hay at two bales per 1,000 square feet. The area down slope from any stockpile areas will be protected by a sediment filter berm or silt fence placed directly below or down gradient from the stockpile. If the stockpile must be left for more than 30 days, the pile will be seeded with rye grass at a rate of two pounds per 1,000 square feet and mulched in accordance with this paragraph.

#### F. Catch Basins.

Catch basin inlets must be protected with a sediment trap until contributing areas, including paved and grassed island areas, are fully stabilized with pavement or grass. Temporary sediment traps shall be Dandy Bags or approved equal, with appropriate overflow slots. Geotextile cut to fit under the catch basin grate shall not be acceptable.

#### G. Maintenance of Temporary Measures:

All temporary measures described above shall be inspected weekly and before/after every significant storm event (1/2 inch of rain or greater) throughout the construction of the project. Repairs or replacements of temporary measures will be made as necessary. Once the site is stable, all temporary devices such as hay bale barriers and silt fencing will be removed.

A log shall be kept summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

#### 3. WINTER STABILIZATION:

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with a combination of pavement, a road gravel base, 90% mature vegetation cover or riprap by November 1 then the site needs to be protected with winter stabilization.

Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is denuded at any one time. Limit the exposed area to those areas in which work is expected to be under taken during the following 15 days. Exposed area shall not be so large that it cannot be mulched in one day prior to any snow event.

Areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed and mulched. Hay and straw mulch rate shall be a minimum of 200 lbs./1,000 s.f. (3 tons/acre) and shall be properly anchored.

The contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

#### 1. Soil Stockpiles

Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 200 lbs/1,000 s.f. (3 tons per acre) or with a four-inch layer of woodwaste erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

Any new soil stockpile will not be placed (even covered with hay or straw) within 100 feet of any natural resources.

#### 2. Natural Resource Protection

Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 90 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats.

During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Silt fencing may not be placed on frozen ground.

Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

#### 3. Mulching

Areas shall be considered denuded until loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 200 lb. per 1.000 square feet or 3 tons/acre (twice the normal accepted rate) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application.

An area shall be considered stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 200 lb. per 1,000 square feet and adequately anchored, such that the ground surface is not visible though the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by either peg line, mulch netting, or wood cellulose fiber. The ground surface shall

not be visible though the mulch.

After November 1<sup>th</sup>, mulch and anchoring of all bare soil shall occur at the end of each final grading work day.

#### 4. Mulching on Slopes and Ditches

Slopes shall not be left exposed for more than 7 days unless fully mulched and anchored. Slopes within 75 feet of a natural resource shall not be left exposed for more than 48 hours. Mulching shall be applied at a rate of 300 lbs/1,000 sq ft on all slopes greater than 8%. Erosion Control mesh shall be used to anchor mulch in all drainage ways and ditches, for slopes exposed to direct winds, and for all other slopes greater that 8 %. Erosion control blanket and check dams (or permanent Rip-Rap) shall be used in lieu of mulch in all drainage ways with slopes of 8 % or more.

A six inch layer of erosion control mix can be used to substitute erosion control blankets on all slopes except ditches.

#### 5. Seeding

Between the dates of October 15 and April 1<sup>st</sup>, loam or seed will not be required. During periods of above freezing temperatures, finished areas shall be fine graded and either protected with mulch or temporarily seeded (see table below) and mulched until such time as the final treatment can be applied. If after November 1<sup>st</sup> the exposed area has been final graded and loamed, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

TEMPORARY SEED MIX

	% BY	%	
TYPE	WEIGHT	PURITY	% GERMINATION
Domestic Rye Grass	60	69.75	90
Perennial Rye Grass	20	28.00	85
Aroostook Rye Grass	20	28.00	85

Dormant seeding may be placed prior to the placement of mulch and fabric netting anchored with staples.

If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter

will be inspected in the spring for adequate catch. Areas not sufficiently vegetated (less than 90 % catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used, all disturbed areas shall be revegetated in the spring.

#### 6. Trench Dewatering and Temporary Stream Diversion

Water from construction trench dewatering or temporary stream diversion will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

#### 7. Inspection and Monitoring

Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snow storm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function.

In the spring, following the temporary/final seeding and mulching, the contractor shall inspect and repair any damages and/ or un-established spots. Established vegetative cover means a minimum of 90 % of areas vegetated with vigorous growth.

#### 8. Standard for the timely stabilization of ditches and channels

All stone-lined ditches and channels shall be constructed and stabilized by November 1. All grass-lined ditches and channels shall be constructed and stabilized by September 1. Failure to stabilize a ditch or channel to be grass-lined by September 1, will require one of the following actions to stabilize the ditch for late fall and winter.

<u>Install a sod lining in the ditch</u> – Sod lining shall be installed in ditches by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

<u>Install a stone lining in the ditch</u> –Ditches shall be lined with stone riprap by November 1, as presented below. If necessary, the applicant will regrade the

ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

#### 9. Standard for the timely stabilization of disturbed slopes

Construct and stabilize stone-covered slopes by November 1. The applicant will Seed and mulch all slopes to be vegetated by September 1. Slopes will be considered any area having a grade greater than 15% (6H:1V). If the applicant fails to stabilize any slope to be vegetated by September 1, then the applicant will take one of the following actions to stabilize the slope for late fall and winter.

Stabilize the soil with temporary vegetation and erosion control mats -- Seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats over the mulched slope October 1. The applicant will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed slope by November 1, cover the slope with a layer of wood waste compost or with stone riprap as described below.

Stabilize the slope with sod -- Stabilize the disturbed slope with properly installed sod by October 1. Proper installation includes pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Sod stabilization shall not be used late-season to stabilize slopes having a grade greater than 33% (3H:1V).

Stabilize the slope with wood waste compost (erosion control mix) --Place a sixinch layer of wood waste compost on the slope by November 1. Prior to placing the wood waste compost, remove any snow accumulation on the disturbed slope. Wood waste compost will not be used to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face.

<u>Stabilize the slope with stone riprap</u> -- Place a layer of stone riprap on the slope by November 1, similar to the Stone Lined Ditch the permanent erosion control section.

#### 10. Standard for the timely stabilization of disturbed soils

Seed and mulch all disturbed soils on areas having a slope less than 15% by September 1. Failure to stabilize these soils by this date will require one of the following actions to stabilize the soil for late fall and winter.

Stabilize the soil with temporary vegetation -- Seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting by October 1. Growth of the rye will require monitoring over the following 30 days. If the rye fails to grow at least three inches or cover at least 75% of the disturbed soil before November 1, then mulch the area for overwinter protection as described below.

<u>Stabilize the soil with sod</u> -- Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Stabilize the soil with mulch -- Mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch by November 1. Prior to applying the mulch, remove any snow accumulation on the disturbed area. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

#### 4. PERMANENT EROSION CONTROL:

Permanent measures will consist of the placement of culverts; culvert inlet/outlet stabilization; the construction of grass/stone lined ditches; and the re-vegetation of all areas outside the traveled way of the road, and those areas designated as stone lined ditches.

#### A. Culverts:

All culverts have been sized to handle the peak flows generated by a 25-year, 24-hour rain storm. The locations and sizes of the culverts are shown on the Site Plans.

The inlets and outlets of the culverts will be armored with riprap to prevent scouring. This armoring will consist of placing stone possessing a D50 of 6 inches to a depth of 18 inches to the following dimensions: width equal to twice the diameter of the culvert; length equal to three times the diameter of the culvert, unless noted otherwise.

#### B. Ditches:

Ditches on the project have been designed based on expected flow rates and velocities for the 25-year, 24-hour storm event and the slope of the ditch. Where water velocities are expected to exceed 3.5 feet per second, the ditch has been designed to be stone lined. Ditches with water velocities of less than 3.5 feet per second have been designed to be grass lined.

#### Stone Lined Ditches:

Stone lined ditches will first be lined with a non-woven filter fabric, and then lined with riprap possessing a D50 of approximately 6 inches in diameter. This means that approximately half the stones by weight will be smaller than 6 inches and half will be larger. The minimum stone size should be 1 inch with the largest stone being 9 inches in diameter. The depth of stone in the ditch should average 15 inches.

The final shape of the ditch will consist of the following dimensions: a bottom width of two feet; side slopes possessing a 3:1 horizontal to vertical; and a total depth of 2 feet.

In lieu of stone rip-rap, the ditch may be lined with a permanent erosion control blanket, such as North American Green P300 or approved equal.

#### Grass Lined Ditches:

Grass lined ditches will possess the same final dimensions as the stone lined ditches. The flow area of the ditch will be armored by placing a biodegradable matting or netting (such as American Excelsior Curlex Blanket or equal) in the bottom of the ditch. Placement of this material must take place after seeding. Install according to the manufacturers' recommendations.

Seeding and mulching of grass lined ditches will follow the specifications stated below for re-vegetation.

#### C. Re-vegetation Measures:

All areas to be permanently re-vegetated with grass will first be covered with loam and then fertilized.

Loam will be placed on all areas to be re-vegetated. Loam will be placed to a minimum depth of 4 inches. Loam will be the stockpiled topsoil, if possible.

Test the loam samples for nutrients at a proficient testing laboratory (The University of Maine provides this service). The areas with loam will then be fertilized with the recommended application rate. Lime will also be applied at a rate of 50 pounds per 1,000 square feet. Both the lime and the fertilizer will be mixed thoroughly with the soil.

All areas to be re-vegetated with permanent grass are to be seeded with the seed mix shown on the table below. This mixture will be applied at a rate of 2 pounds per 1,000

square feet.

General Lawn Areas	Chewing Fescue "Dignity"	35%
	Pennlawn Creeping Red Fescue	35%
	Perennial Rye "Tourstar" (Nutrite)	30%

Mulch will then be spread on all seeded areas at a rate of two bales per 1,000 square feet. Regardless of application rate the soil shall not be visible through the mulch.

Seed and mulch will be placed within five days of final grading of topsoil.

Seeded areas will be inspected after 30 days to determine the success of the seeding. If the ground cover is less than 90%, the area will be reseeded.

#### D. Critical Areas:

Slopes in excess of 15% will require the placement of a biodegradable netting or matting over the mulch and seed (if the netting has no mulch in it). If stabilization is to take place after October 1, slopes over 8% will be treated with the matting.

#### E. Maintenance of Permanent Measures:

All measures will be inspected weekly and before and after every significant storm event during construction, and then at least once annually to insure proper function. Any damaged areas will be repaired or replaced as necessary. Any ditches or culverts not functioning as designed will be redesigned and reconstructed according to specifications prepared by a Professional Engineer.

In any event, seeding should take place either between May 1 and June 15, or August 15 and September 1.

#### **HOUSEKEEPING PLAN**

Taylor Brook House Auburn, Maine

Prepared by:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC. P.O. Box Q, Livermore Falls, Maine

March 3, 2023

The purpose of this Plan is to ensure construction activities protect against and do not create or result in materials that could become a source of pollution. These standards apply to spill prevention, groundwater protection, sediment and dust, debris and other materials, excavation de-watering, authorized non-stormwater discharges and unauthorized non-stormwater discharges.

#### **Spill Prevention:**

A SPCC plan is unnecessary. No hazardous materials will be stored on site. The site will primarily be utilized for parking, loading/unloading and storage of non-hazardous material.

#### **Groundwater Protection:**

No stormwater infiltration areas are proposed on this site. Additionally, the site is not located over a Significant Sand and Gravel Aquifer.

#### **Fugitive Sediment and Dust:**

A stabilized construction exit will be maintained for the duration of construction to minimize the tracking of mud and sediment off site. Application of water will be utilized for dust prevention during construction. Application of other chemicals to reduce dust shall not be allowed without Maine DEP approval due to the Taylor Brook watershed.

#### **Debris and Other Materials:**

Construction debris shall be contained within roll-off dumpsters and hauled to a licensed waste facility. The site shall be kept in a tidy condition, free of trash and litter.

#### **Excavation De-Watering:**

If excavation dewatering is warranted, discharge of water from the excavation shall be through an approved filter as noted in the Erosion and Sedimentation Control Plan. The

#### HOUSEKEEPING PLAN BRICKYARD COMMONS

discharge shall be at minimum 100 feet from Taylor Brook and allow flow through a vegetated area prior to confluence with wetland or stream flows.

#### **Authorized Non-Stormwater Discharges:**

There are no authorized non-stormwater discharges existing or proposed for this site.

# **Unauthorized Non-Stormwater Discharges:**

There are no unauthorized non-stormwater discharges existing or proposed for this site.

#### POST-CONSTRUCTION STORMWATER INSPECTION & MAINTENANCE PLAN

# Taylor Brook House Auburn, Maine

#### **Narrative**

**Contacts:** 

The following outlines the proposed BMP's and their required inspection, maintenance, and reporting.

Inspections and maintenance will be the responsibility of the Property Owner/Applicant. Written reports of inspections and maintenance work will be kept to show the work has been completed as proposed. These reports will be kept by the Owner/Applicant, along with other relevant City of Auburn documentation.

# Design Engineer: Esther K. Bizier, P.E. Main-Land Development Consultants, INC P.O. Box Q, 69 Main Street Livermore Falls, Maine 04254 Applicant: John F. Murphy Homes, Inc. 800 Center Street Auburn, ME 04210 Owner: John F. Murphy Homes, Inc. Post Construction Stormwater Inspector: Contractors:

#### **Inspection**

The applicant, John F. Murphy Homes, Inc., is responsible for complying with the City Stormwater Law Permit. The Applicant will be responsible for inspection and maintenance

during construction and post-construction. The Applicant is also responsible for upkeep and compliance post-construction. The development is also subject to State Stormwater Management Law and will be subject to a "Five-year Recertification for Long-Term Maintenance of Stormwater Management Systems" as well as City requirements for stormwater maintenance as a MS4 community.

#### **Purpose**

The purpose of this Plan is to ensure proper function of the infrastructure constructed as part of this project. The infrastructure will include the stormwater control devices including but not limited to: drives and parking; catch basins and stormdrains; drainage ditches; Focal Point, filter pond, and detention pond. The tasks detailed in this Plan are the responsibility of the applicant.

#### **Definitions**

Significant Period of Rain: 1" or more of rain in a 24-hour period.

#### **Inspection Scope**

All areas of the site shall be inspected based on the criteria discussed for each site item or stormwater control measure as found later in the plan. See the Inspection and Maintenance Plan identifying locations of measures requiring inspection. Inspection activities listed herein are to be considered at minimum. Stormwater inspector shall use his or her judgement as to additional inspection or maintenance activities.

#### **Inspection Frequency**

Complete site inspections at the frequency listed in the following Inspection Summary.

#### **Inspection Qualifications**

For Post-Development Inspections, the qualified post-construction stormwater inspector with knowledge of erosion and stormwater control, including the standards and conditions of the project permit shall be retained by the Applicant.

#### **Inspection/Maintenance Responsibility**

It shall be the responsibility of the Applicant to retain the services of a Post-Construction Stormwater Inspector and provide for the repair and maintenance noted by inspections, if any. When maintenance is required by inspection, the Applicant shall perform the required maintenance and/or repairs in a timely fashion and notify the Inspector when the maintenance is complete. The Applicant shall maintain detailed records for the inspections and maintenance performed.

# **Documentation**

Post Construction inspection forms and documentation of corrective actions shall be maintained for at least (5) years.

# **Inspection and Maintenance Plan**

**Roof Dripline Filter** 

The site will be inspected and maintained according to the following schedule and procedures.

# INSPECTION SUMMARY Taylor Brook House

Semi-Annual

<u>Inspections of</u>	<u>Schedule</u>
- Drives & Parking	Annual
- Drainage Ditches	Annual
- Stormdrains	Annual
- Grassed Underdrain Soil Filter 1	Semi-Annual
- Grassed Underdrain Soil Filter 2	Semi-Annual
- Bioretention Filter/Rain Garden	Semi-Annual

# **Drives & Parking:**

#### Inspection:

The roads will be inspected at least annually to ensure proper function and to ensure structural integrity. This inspection will take place in September. Road inspections will be simple visual inspections, looking at the drive or parking surface for cracking, puddling, sedimentation, heaving, potholing, or other signs of degradation.

#### Maintenance:

Maintenance will include sweeping and cleanup of sediments and debris, spot corrections when necessary, crack sealing, and eventual resurfacing insure safe drivability and long lifespan. This should be performed once a year at a minimum and shall occur in April or May.

#### **Drainage Ditches:**

#### **Inspection:**

Inspect drainage ditches annually to look for erosion, obstruction, debris, or damage to erosion armoring, such as rip-rap.

#### Maintenance:

The drainage ditches shall be re-shaped and re-stabilized if found to be eroding. Accumulated sediment should also be removed from the flow line of the ditch, if it exists.

#### **Storm Drains:**

#### Inspection:

The stormwater collection and conveyance devices will be inspected on an annual basis in April or May of each year. The inspection will include a review of the structural integrity and function of each device, a review of the inlets and outlets storm drains, and a review of the downstream discharge areas of all pipes and channels.

#### Maintenance:

The inlets and outlets of the culverts and storm drains should be cleaned on a regular basis to ensure that sediment and debris does not discharge downstream or does not clog the pipe.

#### **Grassed Underdrain Soil Filter:**

#### Inspection:

The inspection will include a review of the structural integrity of each device, a review of the inlet and outlet of the pond, and a review of the downstream discharge areas of all pipes and channels. Inspections should include a check for signs of snow storage and prohibited vehicle traffic including ATV's and tractors.

For the first three months after construction, inspect the filter bed monthly to verify the filter bed is draining within 24 - 48 hours. Thereafter, inspect semi-annually in May and October.

#### Maintenance:

If water ponds on the filter bed surface for more than 72 hours following a rain event, replace the top three inches of filter media. Dispose of clogged filter media soil according to the erosion and sedimentation control plan.

Remove sediments annually in October.

#### Rain Garden:

#### Inspection:

The inspection will include a review of the structural integrity of each device, a review of the inlet and outlet of the pond, and a review of the downstream discharge areas of all pipes and channels. Inspections should include a check for signs of snow storage and prohibited vehicle traffic including ATV's and riding lawnmowers or tractors.

For the first three months after construction, inspect the filter bed monthly to verify the filter bed is draining within 24 - 48 hours. Thereafter, inspect semi-annually in May and October.

#### Maintenance:

If water ponds on the filter bed surface for more than 72 hours following a rain event, replace the top three inches of filter media. Dispose of clogged filter media soil according to the erosion and sedimentation control plan.

Mulch should be removed and replaced with a 2 to 3 inch layer of fresh mulch annually or as needed.

Fertilization of the filter area should be avoided unless absolutely necessary to establish vegetation. Pruning of excessive growth and weeding to control unwanted or invasive

plants shall be done yearly. Maintaining a healthy vegetative cover will minimize clogging.

Remove sediments annually in October.

Filters with grass surfaces shall be moved no more than twice per growing season using a push mover or weed whacker to maintain a grass height of no less than 6 inches.

#### **Roof Dripline Filter:**

#### Inspection:

The inspection will include a visual review of the structural integrity of each device, the outlet, and a review of the downstream discharge areas to ensure they are stable. During inspection ensure no paving or any alterations have been made to the filter and that no gutters have been installed on the roof line.

#### Maintenance:

Keep the stone reservoir surface clean and free of debris. Surface shall be cleaned at least once annually in October to ensure leaf litter is removed. If water begins to pond on the reservoir course, replace layer of stone and the top three inches of the filter layer if clogged.

#### **RE-CERTIFICATION**

Within three months of the 5-year anniversary of the permit date of issuance, and every 5-year anniversary, thereafter, submit a certification to the City of Auburn that contains:

- A statement that the site has been inspected for erosion problems and such problem areas have been appropriately repaired and permanently stabilized.
- A statement that all aspects of the stormwater management system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system.
- A statement that the erosion control plan and the stormwater management plan are being implemented as written, approved, and amended (if applicable) by City of Auburn.

# INSPECTION AND MAINTENANCE LOG

# Taylor Brook House Post Construction Stormwater Inspection & Maintenance Log

Date of Inspection:
Inspected by:
Purpose of Inspection: Monthly, Yearly, Significant Rainfall (circle one)
Drives & Parking
Description of Conditions:
Maintenance & Date of Repairs:
E-HH- N J-J
Follow Up Needed:
<del></del>
<del></del>

# **Drainage Ditches**

Description of Conditions:
Maintenance & Date of Repairs:
Collow Up Needed/Additional Comments:

# Culverts Description of Conditions:

Maintenance & Date of Repairs:		
Sediment Inspection & Removal:		

Date & Contractor for Sump Cleaning:	

Follow Up Needed/Additional C	omments:		

# **Roof Dripline Filter**

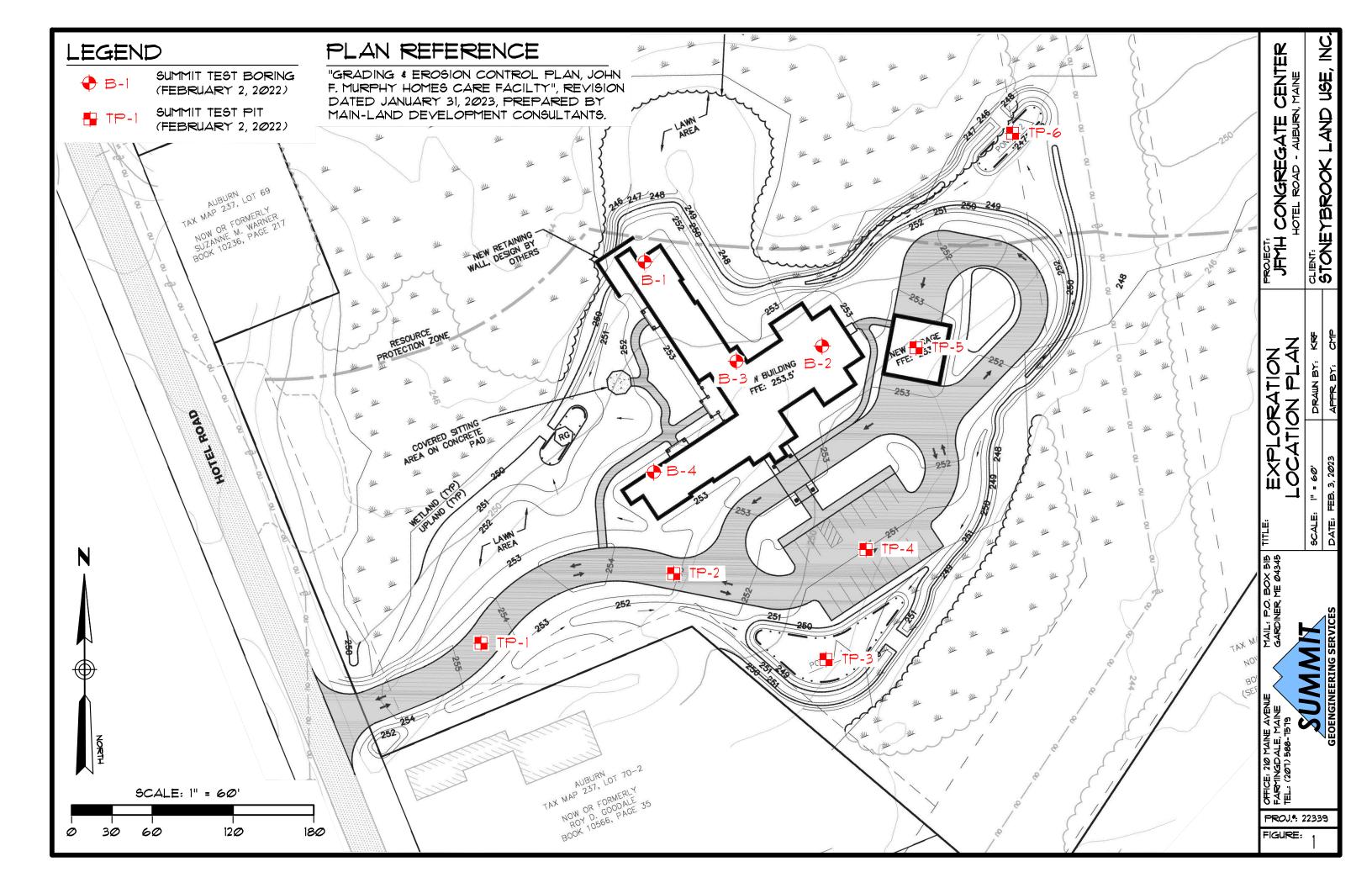
Description of Conditions:
Maintenance & Date of Repairs:
Sediment Inspection & Removal:
Date & Contractor Cleaning:
Follow Up Needed/Additional Comments:

# **Grassed Underdrain Soil Filter**

Description of Conditions:
Maintenance & Date of Repairs:
Sediment Inspection & Removal:
Date & Contractor for Sump Cleaning:
Follow Up Needed/Additional Comments:

## **Bioretention Filter**

Description of Conditions:
Maintenance & Date of Repairs:
Sediment Inspection & Removal:
Date & Contractor for Sump Cleaning:
Follow Up Needed/Additional Comments:



		^				S	OIL BORII	NG LOG	Boring #:	B-1		
		CILA	AAIT			Project:	Proposed Build	ling	Project #:	22339		
		SUM	MIL			Location:	Hotel Road	Sheet:	1 of 1			
		GEOENGINEERI	NG SERVICES			City, State:	Chkd by:	WMP				
Drilling (	Co:	Summit Geoei	naineerina Se	rvices, Inc		City, State: Auburn, ME Chkd by: WMP  Boring Elevation 248 ft +/-						
Driller:		S. Floyd	<u> </u>	,		Reference: Grading & Erosion Control, Main-Land Development, 1/31/23						
Summit	Staff:	C. Plante, EI				Date started:		Date Completed:	2/2/2023			
DR	ILLING	METHOD	SA	AMPLER				ESTIMATED GROUND	WATER DEPTH			
Vehicle:		AMS PP	Length:	24" SS		Date	Depth	Elevation		ference		
Model:		9500 VTR	Diameter:	2"OD/1.5"	'ID	2/2/2023	10 ft	238.0 ft +/-	Estimated in spoon	samples		
Method:		3" Casing	Hammer:	140 lb								
Hammer	Style:	Automatic	Method:	ASTM D15	586							
Depth					Elev.		SAMPL	.E	Geological/	Geological		
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIPT	TION	Test Data	Stratum		
	S-1	24/7	0-2	WH	247.5	Brown fine Sand	dy SILT, many l	eaves & roots, ML		TOPSOIL		
1_				1		Olive brown fine	Sandy SILT, so	ome to little Clay, soft,				
				1		wet, ML				GLACIAL MARINE		
2_				2								
3_												
4_												
5_						:		1 10 1 22				
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6_				3		moist, ML						
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10_	S-3	24/24	10-12	WH	-∑-	Olivo Cilby CLAV	trace fine Can	d, very soft, wet, CL				
11	3-3	24/24	10-12	WH		Olive Silty CLAT	, trace fille Sam	u, very sort, wet, CL				
-11_				WH								
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15					1							
_	S-4	24/24	15-17	WH	]	Gray Silty CLAY,	trace fine Sand	d and organic streaks,				
16_				WH		very soft, wet, 0	CL					
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20					220	-	at 20 ft; push i	into dense stratum				
20_	C -	24/0	20.22		228	No recovery		Class little Core 1				
24	S-5	24/8	20-22	6	-		•	Clay, little Gravel,		CLACIAL TILL		
21_				8	-	compact, satura	itea, SM			GLACIAL TILL		
วา	<b></b>			7	226							
22_				,	220	End	of Boring at 22	ft - No refusal				
						EIIG	or borning at 22	it ino iciusai				
Granula	r Soile	Cohesiv	o Soils	% Comp	ocition	NOTES:	DD - Docket Den	etrometer, MC = Moisture	e Content	Soil Moisture Condition		
Blows/ft.		Blows/ft.	Consistency	ASTM D		.,		t, PI = Plastic Index, FV =		Dry: S = 0%		
	V. Loose	-	V. soft	ASTINID	/LTU/	Bedrock Joints		., PI = Plastic Index, FV = Shear Strength, Su(r) = F		Humid: $S = 1 \text{ to } 25\%$		
5-10	Loose	2-4	V. Soft Soft	< 5% 7	Frace	Shallow = 0 to 35		Silvar Salengar, Su(1) = F	Cinoleca Streat Strength	Damp: $S = 26 \text{ to } 50\%$		
	Compac		Firm	5-15%		Dipping = 35 to 5	•			Moist: $S = 51 \text{ to } 75\%$		
31-50	Dense	9-15	Stiff	15-30%		Steep = $55 \text{ to } 90$	•	nd	AFT	Wet: $S = 76 \text{ to } 99\%$		
	V. Dense		V. Stiff	> 30%		500p = 33 to 30				Saturated: S = 100%		
	. 20100	>30	Hard	. 5070		Boulders = diame	ter > 12 inches (	Cobbles = diameter < 12	inches and > 3 inches	5 = 10070		
		1		I			· ·	$d = \langle No 4 \text{ and } \rangle No 200$				

						S	OIL BORI	NG LOG	Boring #:	B-2		
		-/				Project:	Proposed Build		Project #:	22339		
		SUM	MIT			Location:	Hotel Road	ling	Sheet:	22339 1 of 2		
		GEOENGINEERI	NG SERVICES				Auburn, ME		Chkd by:	WMP		
Drilling	Co:	Summit Geoer	naineerina Se	arvices Inc		Boring Elevation			Clika by.	441.11		
Driller:	co.	S. Floyd	igineering se	rvices, inc	•		Reference: Grading & Erosion Control, Main-Land Development, 1/31/23					
	Staff:	C. Plante, EI				Date started: 2/2/2023 Date Completed: 2/2/2023						
		METHOD	SA	AMPLER			, ,	ESTIMATED GROUND W				
Vehicle:		AMS PP	Length:	24" SS		Date	Depth	Elevation		ference		
Model:		9500 VTR	Diameter:	2"OD/1.5"	ID	2/2/2023	10 ft	241.0 ft +/-	Estimated in spoon			
Method:	:	2 1/4" HSA	Hammer:	140 lb						·		
Hamme	r Style:	Automatic	Method:	ASTM D15	86							
Depth					Elev.		SAMPI		Geological/	Geological		
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP.		Test Data	Stratum		
	S-1	24/15	0-2	1	250			roots, v loose, damp, ML		TOPSOIL		
1_				1		Olive brown Silty	, fine SAND, ve	ery loose, moist, SM		0 0		
_				2						GLACIAL MARINE		
2_	-			2								
3												
_												
4												
-												
5						L			<u>                                      </u>			
	S-2	24/22	5-7	1				to little fine Sand,	PP = 1.5 - 2.8 tsf			
6	1			2		moderately mott	led, firm, mois	t, ML				
_				5								
7_				4								
8	-											
<u>-</u>	1											
9												
_												
10					$\nabla$							
_	S-3	24/13	10-12	2		Grayish brown S	ilty fine SAND,	some Clay and Silty Clay				
11				3		seams, loose, sa	turated, SM					
				2								
12_				3								
13	-											
13_	1											
14												
15												
	S-4	24/24	15-17	WH		Gray Clayey fine	SAND, some S	silt, very loose, saturated,				
16_				WH		SC-SM						
				WH								
17_	1			WH								
18	<b>—</b>											
10_	<del>                                     </del>											
19												
	L											
20						L			<u>                                     </u>			
	S-5	24/24	20-22	WR	<u>-</u>			d and fine Sand seams,				
21_				WH		very soft, wet, C	L					
22	-			WH								
22_	1			WH								
Granul	ar Soils	Cohesiv	e Soils	% Compo	osition	NOTES:	PP = Pocket Per	netrometer, MC = Moisture C	ontent	Soil Moisture Condition		
	. Density	Blows/ft.	Consistency	ASTM D				t, PI = Plastic Index, FV = Fi		Dry: S = 0%		
0-4	V. Loose	-	V. soft			Bedrock Joints	•	Shear Strength, $Su(r) = Rer$		Humid: $S = 1 \text{ to } 25\%$		
5-10	Loose	2-4	Soft	< 5% T	race	Shallow = 0 to 35		3 , .( ,		Damp: S = 26 to 50%		
11-30	Compac	5-8	Firm	5-15%	Little	Dipping = 35 to 5	5 degrees			Moist: S = 51 to 75%		
31-50	Dense	9-15	Stiff	15-30%		Steep = 55 to 90 (	degrees	DRA	\	Wet: $S = 76 \text{ to } 99\%$		
>50	V. Dense		V. Stiff	> 30%	With	L				Saturated: S = 100%		
		>30	Hard	1			-	Cobbles = diameter < 12 inc				
l		l		l		101avci - < 3 111(1)	anu / NU 4, 3df	$id = \langle No 4 and \rangle No 200, Si$	114 Clay - \ 110 200			

						S	OIL BORII	NG LOG	Boring #:	B-2
		SILA	MAIT				Proposed Build		Project #:	22339
		GEOENGINEERI	IVIII				Hotel Road		Sheet:	2 of 2
		GEOENGINEERI	NG SERVICES			City, State:	Auburn, ME		Chkd by:	WMP
Drilling (	Co:	Summit Geoe	ngineering Se	ervices, Inc		Boring Elevation				
Driller:		S. Floyd							d Development, 1/31/23	3
		C. Plante, EI		MDI ED		Date started:	2/2/2023	Date Completed:	2/2/2023	
Vehicle:	ILLING	METHOD AMS PP	Length:	AMPLER 24" SS		Date	Depth	ESTIMATED GROUND Elevation		ference
Model:		9500 VTR	_	2"OD/1.5"	'ור	2/2/2023	10 ft	241.0 ft +/-	Estimated in spoon	
Method:			Hammer:	140 lb		2/2/2020	10.10	2.210.10.17		
Hammer	Style:	Automatic	Method:	ASTM D15	586					
Depth					Elev.		SAMPL	.E	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIPT	TION	Test Data	Stratum
23										GLACIAL MARINE
23_	FV-1					Su = 350 psf				GLACIAL MARINE
24						Su(r) = 50 psf				
_										
25_										
26	FV-2					Su = 350 psf Su(r) = 75 psf				
26_						3u(1) - 75 psi				
27					1					
_	FV-3					Su = 500 psf				
28_						Su(r) = 100 psf				
29										
29_	FV-4					Su = 500 psf				
30						Su(r) = 100 psf				
_										
31_										
32	FV-5					Su = 600  psf Su(r) = 150  psf				
JZ_						3u(1) = 130 psi				
33										
	FV-6					Su = 750 psf				
34_				6	21/	Su(r) = 175 psf				
35				0		Probe with spea	r tip and SPT H	ammer		GLACIAL TILL
_				9						
36_										
27				25 for 4"	214.7	End of	Paring at 26 2 f	ft - Probe refusal		(PROBABLE)
37_						Elia oi	bullig at 30.3 i	t - Probe refusal		BEDROCK
38_										
_										
39_					-					
40					1					
41_										
42										
42_										
43										
_										
44_										
Granula	r Soils	Cohesiv	re Soils	% Comp	osition	NOTES:	PP = Pocket Pen	etrometer, MC = Moistu	re Content	Soil Moisture Condition
Blows/ft.		Blows/ft.	Consistency	ASTM D				t, PI = Plastic Index, FV		Dry: S = 0%
	V. Loose		V. soft					Shear Strength, Su(r) =	Remolded Shear Strength	Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	< 5% 7		Shallow = 0 to 35	•		_	Damp: S = 26 to 50%
11-30 31-50	Compact Dense	5-8 9-15	Firm Stiff	5-15% 15-30%		Dipping = $35$ to $5$ ! Steep = $55$ to $90$ (	-	UD	AFT	Moist: $S = 51$ to 75% Wet: $S = 76$ to 99%
	V. Dense		V. Stiff	> 30%		2.000 - 33 10 30 1				Saturated: S = 100%
		>30	Hard					Cobbles = diameter < 12		
						Gravel = < 3 inch	and > No 4, San	d = < No 4 and > No 200	0, Silt/Clay = < No 200	

						S	OIL BORI	NG LOG	Boring #:	B-3			
		0/11				Project:	Proposed Build		Project #:	22339			
		SUM	MI			Location:	Hotel Road	ung	Sheet:	1 of 1			
		GEOENGINEERI	NG SERVICES			City, State:	Auburn, ME		Chkd by:	WMP			
Drilling (	Co:	Summit Geoer	ngineering Se	ervices, Inc		Boring Elevation			/				
Driller:		S. Floyd				Reference: Grading & Erosion Control, Main-Land Development, 1/31/23							
Summit	Staff:	C. Plante, EI				Date started:							
	ILLING	METHOD		AMPLER			ESTIMATED GROUND WATER DEPTH						
Vehicle:		AMS PP	Length:	24" SS		Date	Depth	Elevation		Reference			
Model: Method:		9500 VTR 3" Casing	Diameter: Hammer:	2"OD/1.5" 140 lb	ID	2/2/2023	6 ft	245.0 ft +/-	Estimated in spoon	samples			
Hammer			Method:	ASTM D15	86								
Depth	Style:	Accornacie	rictiou	7.0111.013	Elev.		SAMPI	E	Geological/	Geological			
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP		Test Data	Stratum			
	S-1	24/18	0-2	1	250.5	Brn f Sandy SIL	T, tr Clay & roo	ts, soft, moist, ML		TOPSOIL			
1_				1		Olive brown Silty	y fine SAND, tra	ace Clay, very loose,					
				3		moist, SM		. —	ļ	GLACIAL MARINE			
2_				3		Olive Silty CLAY,	firm, moist, Cl	L					
3													
3_													
4													
_													
5_													
	S-2	24/16	5-7	3	$\overline{}$			ine Sand and fine Sand	PP = 1.5 - 3.0 tsf				
6_				4 5	$\subseteq$	seams, slightly n	nottled, stiff, sa	aturated, CL					
7				3									
8_													
9_													
10													
10_	S-3	24/20	10-12	WH		Olive brown Silty	/ CLAY little fir	ne Sand seams, very soft,					
11		2 1/20	10 12	1		saturated, CL	, 02,						
				2		1		e Silt, very loose,	]				
12_				2		saturated, SC-SI	М						
13													
15_													
14_													
15_	S-4	24/24	15-17	WH		Cray Silby CLAY	traco fino Can	d, very soft, wet, CL	<b></b>				
16	3-4	24/24	13-17	WH		Gray Silty CLAT,	trace fille Sail	u, very sort, wet, CL					
				WH									
17_				WH									
18_													
19													
20_													
21	LIT 1	20/27	20.22.5	DLICH		Cray Cilby CLAY	yony soft wat	Cl					
21_	UT-1	30/27	20-22.5	PUSH		Gray Silty CLAY,	very sort, wet,	CL					
22													
			_	+	228.5								
		2 :	6.1	0/ 5				5 ft - No refusal		0.1141			
Granula Blows/ft.		Cohesiv Blows/ft		% Compo		NOTES:		netrometer, MC = Moisture (		Soil Moisture Condition  Dry: S = 0%			
0-4	V. Loose	Blows/ft.	V. soft	ASTM D	∠ <del>1</del> 0/	Bedrock Joints		t, PI = Plastic Index, FV = F Shear Strength, Su(r) = Re		Dry: $S = 0\%$ Humid: $S = 1 \text{ to } 25\%$			
5-10	Loose	2-4	Soft	< 5% T	race	Shallow = 0 to 35		Sa singan, Su(i) - Ne		Damp: S = 26 to 50%			
	Compac		Firm	5-15%		Dipping = 35 to 5	•			Moist: S = 51 to 75%			
31-50	Dense	9-15	Stiff	15-30%		Steep = 55 to 90	degrees	DR <i>A</i>	XTI I	Wet: $S = 76 \text{ to } 99\%$			
>50	V. Dense		V. Stiff	> 30%	With	Davids "	40: 1			Saturated: S = 100%			
		>30	Hard	1				Cobbles = diameter $< 12$ ind = $<$ No 4 and $>$ No 200, S					

						S	OIL BORII	NG LOG	Boring #:	B-4		
		SILM	MIT			Project:	Proposed Build	ling	Project #:	22339		
		GEOENGINEERI	IVIII			Location:	Hotel Road Auburn, ME		Sheet:	1 of 2		
		GEOENGINEERI	NG SERVICES			City, State:	WMP					
Drilling C	Co:	Summit Geoei	ngineering Se	ervices, Inc		Boring Elevation 252 ft +/-						
Driller:	CL- CC.	S. Floyd				Reference: Grading & Erosion Control, Main-Land Development, 1/31/23						
Summit !		C. Plante, EI METHOD		AMPLER		Date started:	2/2/2023	Date Completed: ESTIMATED GROUND	2/2/2023			
Vehicle:	ILLING	AMS PP	Length:	24" SS		Date	Depth	Elevation		ference		
Model:		9500 VTR	Diameter:	2"OD/1.5"	'ID	2/2/2023	10 ft	242.0 ft +/-	Estimated in spoon			
Method:		3" Casing	Hammer:	140 lb		, ,		,		F		
Hammer	Style:	Automatic	Method:	ASTM D15	586							
Depth			ı	ı	Elev.		SAMPL		Geological/	Geological		
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)	5 60 1 071	DESCRIPT		Test Data	Stratum		
1	S-1	24/7	0-2	3	251.5	Brn f Sandy SIL		ıy, ML ıce Clay, loose, damp, S	CM.	TOPSOIL		
				6		Olive brown Silty				GLACIAL MARINE		
2				5			, , , ///					
3_												
4_												
5												
<b>-</b>	S-2	24/24	5-7	2		Olive brown Silts	y CLAY, some to	little fine Sand, trace	PP = 1.5 - 2.3 tsf			
6_				3		fine Sand seams		ottled, firm, moist to				
				3		wet, CL						
7_				3								
8												
0_												
9												
10_					$\subseteq$							
	S-3	24/18	10-12	WH		Olive Silty CLAY,	trace fine Sand	d, soft, saturated, CL				
11_				3 2		Olive brown Clay	Vev SAND some	e Silt, loose, saturated,				
12				1		SC-SM	ycy SAND, Some	s sitt, loose, saturated,				
13_												
14_												
15												
	S-4	24/24	15-17	WH		Gray Silty CLAY,	very soft, satu	rated, CL	-			
16_				WH								
				WH								
17_				WH								
18												
	FV-1					Su = 500 psf						
19_		·				Su(r) = 25 psf						
20_	FV-2					Su = 450 psf						
21	1 V-Z					Su = 450  psi Su(r) = 25  psf						
22_		·										
Grand-	r Coile	Cabaci	o Soils	0/ Carrer	ocitio=	NOTES:	DD = Docket D	otromotor MC - Maistrin	Content	Soil Moisture Canditi		
Granula Blows/ft.		Cohesiv Blows/ft.	Consistency	% Compo		NOILS.		etrometer, MC = Moisture , PI = Plastic Index, FV =		Soil Moisture Condition  Dry: S = 0%		
	V. Loose	<2	V. soft	.57110	,	Bedrock Joints		Shear Strength, $Su(r) = R$		Humid: $S = 1 \text{ to } 25\%$		
5-10	Loose	2-4	Soft	< 5% 7	Trace	Shallow = 0 to 35		,	3.	Damp: S = 26 to 50%		
	Compact	5-8	Firm	5-15%		Dipping = 35 to 5			N ET	Moist: S = 51 to 75%		
31-50	Dense	9-15	Stiff	15-30%		Steep = 55 to 90	degrees	DR/	4 <b>Г</b> І	Wet: S = 76 to 99%		
>50	V. Dense	16-30 >30	V. Stiff Hard	> 30%	With	Boulders - diame	ter > 12 inches (	Cobbles = diameter < 12 i		Saturated: S = 100%		
ı		/30	ı ıaı u	I		Gravel = < 3 inch						

		<b>A</b>	•			_	OIL BORI	NC LOC	D : "	B-4		
									Boring #:			
		MIN	MIT			Project:	Proposed Build	ding	Project #:	22339		
		GEOENGINEERI	NG SERVICES				Hotel Road		Sheet:	2 of 2		
						City, State:	Auburn, ME		Chkd by:	WMP		
Drilling		Summit Geoer	ngineering Se	ervices, Inc		Boring Elevation 252 ft +/-						
Driller:		S. Floyd				Reference: Grading & Erosion Control, Main-Land Development, 1/31/23						
		C. Plante, EI				Date started:	2/2/2023	Date Completed:	2/2/2023			
		METHOD		AMPLER		5.	- I	ESTIMATED GROUND		<b>.</b>		
Vehicle: Model:		AMS PP	Length: Diameter:	24" SS 2"OD/1.5"	חזי	Date 2/2/2023	Depth 10 ft	Elevation 242.0 ft +/-	Estimated in spoon	ference		
Method:		9500 VTR 3" Casing	Hammer:	2 OD/1.5	טו	2/2/2023	1010	242.011 +/-	Estimated in spoon	samples		
Hamme			Method:	ASTM D15	586							
Depth	Cocylei	Accornacio	rictiou	7.0111.013	Elev.		SAMPI	   F	Geological/	Geological		
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP'		Test Data	Stratum		
()	FV-3	1 51.71100 (11.7)	2 op a (10)	5.01.0/0	()	Su = 500 psf			. 330 2 414	ou.a.a		
23						Su(r) = 75 psf				GLACIAL MARINE		
24												
_	FV-4					Su = 550 psf						
25						Su(r) = 75 psf						
26												
	FV-5					Su = 550 psf						
27_						Su(r) = 100 psf						
20												
28_	FV-6					Su = 650 psf						
29	1 4-0					Su(r) = 150  psf						
				PUSH		Push with spear	tip probe					
30							ap produc					
-												
31				+	221							
_			Probe	VIBRATE		Denser vibrating	of spear tip p	robe				
32										(PROBABLE)		
										GLACIAL TILL		
33_												
24												
34_												
35												
36												
_												
37												
_				+	214.7							
38						End of	Boring at 37.3	ft - Probe refusal		(PROBABLE)		
										BEDROCK		
39_												
40_												
41												
41_												
42												
'- <u>-</u>												
43												
-												
44												
· •												
Granul		Cohesiv		% Comp		NOTES:		netrometer, MC = Moisture		Soil Moisture Condition		
	Density	Blows/ft.	Consistency	ASTM D	2487	1	•	it, PI = Plastic Index, FV =		Dry: S = 0%		
0-4	V. Loose		V. soft		F	Bedrock Joints		Shear Strength, $Su(r) = F$	Remolded Shear Strength	Humid: S = 1 to 25%		
5-10	Loose	2-4	Soft	< 5% T		Shallow = 0 to 35	•			Damp: S = 26 to 50%		
11-30 31-50	Compac	5-8 9-15	Firm Stiff	5-15% 15-30%		Dipping = 35 to 55	-	nd.	AFT	Moist: S = 51 to 75% Wet: S = 76 to 99%		
>50	Dense V. Dense		V. Stiff	> 30%		Steep = 55 to 90	ucyrees		<b>~!</b>	wet: S = 76 to 99%  Saturated: S = 100%		
/30	v. Delist	>30	v. Suii Hard	/ 30-70	****	Boulders = diamet	ter > 12 inches	Cobbles = diameter < 12	inches and > 3 inches	Julia leur 3 – 10070		
								$d = \langle No 4 \text{ and } \rangle No 200$				

		1	TEST PIT LOG	Test Pit #	TP-1
			JFMH Congregate Center	Project #:	22339
	SUMMIT	1 Toject.	Hotel Road	Groundwate	
	GEOENGINEERING SERVICES		Auburn, ME		ge at 7 ft
Contrac	tor: Gendron & Gendron	Ground S			
Equipm		Referenc	e: Grading & Erosion, Main-La		ent, 1/31/23
Summit	Staff: J. Barnes, EI	Date:	2/2/2023 Weather:	COLD	
Depth	I	DESCR	IPTION		
(ft)	ENGINEERING		GEOLOGIC/	GENERAI	
	Dark brown Silty SAND, trace Clay & rootlets, SM	M	TOPSO	OIL	
1	Light brown Silty fine SAND, loose, damp, SM		GLACIAL N	MARINE	
2			GENERAL I	VII didi VL	
3					
	Olive brown Sandy SILT, blocky, firm, damp, ML	·			
4					
5_				1-2000	
6					
7				<b>建入</b> 数	
	Seepage at 7 ft				
8			多/15/11/11/11/11/11/11/11/11/11/11/11/11/		1
	Olive brown Silty CLAY interlayered with Silty fin	ne Sand,			
9	stiff, wet, CL	ŕ			
10			Library & X Sell	100	
	Gray Silty CLAY, very soft, saturated, CL				
11_					
12					
13					
14	End of Test Pit at 13 ft - No refusal				
15					
16					
17					
	DRAFT				

		1	TEST PIT LOG		Test Pit #	TP-2
	CALLANT		JFMH Congregate Cer		Project #:	22339
	SUMMIT		Hotel Road		Groundwater	
	GEOENGINEERING SERVICES		Auburn, ME		Seepage	e at 5.5 ft
Contrac				252 ft +/-	•	
Equipm			e: Grading & Erosion, 1			ent, 1/31/23
Summit	Staff: J. Barnes, EI	Date:		Weather:	COLD	
Depth		DESCR	PTION			
(ft)	ENGINEERING		GEOL	OGIC/	GENERAL	ı
	Dark brown Silty SAND, with roots, SM			TOPS	OIL	
1	Light brown Silty fine SAND, trace Clay, loose, da	amp to				
	moist, SM		GL	ACIAL N	MARINE	
2	,					
3						
<i></i>	-					
1						
4	-					
_						
5	-			2 100		A NAME AND A PARTY
				. 2		NO TO
6						松平岩岩
					7	Para la
7						
8				11 -		
	Olive brown Silty CLAY, soft, wet, CL					
9	-			1		
10			40000000000000000000000000000000000000			A PARTY OF
			STATE OF THE			
11			ACCEPTANCE OF ANY	樣的。		
11	-					
12						
12	-					
13						
	End of Test Pit at 13 ft - No refusal					
14						
15						
16						
17						
	DRAFT					
	UNALI					

		r	TEST PIT LOG	Test Pit # <b>TP-3</b>				
			JFMH Congregate Center	Project #: 22339				
	SUMMIT	•	Hotel Road	Groundwater:				
	GEOENGINEERING SERVICES		Auburn, ME Ponded at 7 ft					
Contrac	tor: Gendron & Gendron		d Surface Elevation: 248 ft +/-					
Equipm			e: Grading & Erosion, Main-La					
	<del>-</del>	Date:		: COLD				
Depth	D	ESCRI	IPTION					
(ft)	ENGINEERING		GEOLOGIC	/GENERAL				
	Dark brown Silty SAND, some rootlets, tr Clay, mo	ist, SM	TOPS	SOIL				
1	Olive brown Silty fine-medium SAND, slightly mott	tled,						
	loose, moist, SM		GLACIAL	MARINE				
2								
3	Olive brown to gray SILT, some fine Sand, trace Cla							
	blocky, firm, moist, ML	ay,						
4	blocky, fifth, moist, ME							
4_								
_								
5			THE WAR WAR					
				A STATE OF				
6	 		THE WAY TO SEE					
	Olive brown Silty CLAY, little fine Sand seams, hea	avily						
7	mottled, very stiff, moist to wet, CL							
8								
9	Olive brown Sandy CLAY, some Silt, heavily mottle	ed,						
	firm to stiff, moist to wet, CL			<b>全国的</b>				
10			Sha Bir					
	Olive brown Silty SAND, trace Clay, loose, moist to	o wet,						
11	SM							
	End of Test Pit at 11 ft - No refusal							
12								
_								
13								
_								
14								
15								
15—								
16								
10_								
17								
	DDAET							
	DRAFT							

			TEST PIT LOG	Test Pit #	TP-4		
			JFMH Congregate Center	Project #:	22339		
	SUMMIT	1 Toject.	Hotel Road	Groundwate:			
	GEOENGINEERING SERVICES		Auburn, ME		ge at 3 ft		
Contrac	tor: Gendron & Gendron	Ground S	Surface Elevation: 248 ft +/-				
Equipme		Referenc	e: Grading & Erosion, Main-La		ent, 1/31/23		
Summit	Staff: J. Barnes, EI	Date:	2/2/2023 Weather	:: COLD			
Depth		DESCR	IPTION				
(ft)	ENGINEERING		GEOLOGIC	/GENERAI			
	Dark brown Silty SAND, some roots, SM		TOPS	SOIL			
1	Olive brown Silty fine SAND, loose, damp, SM		GLACIAL	MARINE			
2							
3	Seepage at 3 ft						
4	Olive because A constant Classes CH T Area Constant						
5	Olive brown to gray Clayey SILT, trace fine Sand blocky, firm, moist, CL	seams,					
6							
7	Mottled and wet at 6.5 ft						
8							
9		—					
10	Olive brown fine Silty SAND, trace Clay, loose, w	vet, SM					
11	F 1 CT . P 11 C N . C 1						
12	End of Test Pit at 11 ft - No refusal						
13							
14							
15							
16							
17							
	DRAFT						

		1		T			
			TEST PIT LOG	Test Pit #	TP-5		
	SUMMIT	Project:	JFMH Congregate Center	Project #:	22339		
	GEOFIGINFERING SERVICES	Hotel Road Groundwater:					
Contrac	tor: Gendron & Gendron	Auburn, ME Seepage at 8.5 :  Ground Surface Elevation: 250 ft +/-					
Equipm			ce: Grading & Erosion, Main-L		ent. 1/31/23		
	Staff: J. Barnes, EI	Date:		r: COLD	1,01,20		
Depth		DESCR	IPTION				
(ft)	ENGINEERING		GEOLOGIC	/GENERAI			
	Dark brown Silty SAND, little Clay, trace roots, S	SM					
1			TOPS	SOIL			
2	Olive brown Sandy SILT, trace Clay, firm, damp,	ML	GLACIAL	MARINE			
3							
4							
5	Slightly mottled at 4.5 ft			- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			
6							
7							
8	Olive brown SILT, some Clay, trace fine Sand, so	ft. wet.					
9	ML Seepage at 8.5 ft	, ,					
10							
11_							
12	End of Test Pit at 12 ft - No refusal						
13	End of Test I tat 12 it 110 felusal						
14							
15							
16							
17							
	DRAFT						

		1	TEST PIT LO	$\overline{\mathbf{C}}$	Test Pit #	TD (	
SUMMIT		Project:			Project #:	<b>TP-6</b> 22339	
		1 Toject.	Project: JFMH Congregate Center Hotel Road		Groundwate		
GEOENGINEERING SERVICES			Auburn, ME		Seepage at 6 ft		
Contractor: Gendron & Gendron Gr			round Surface Elevation: 248 ft +/-				
Equipment: CAT 320 GC R			Reference: Grading & Erosion, Main-Land Development, 1/31/23				
Summit Staff: J. Barnes, EI		Date:	2/2/2023 Weather: COLD				
Depth	pth DESCRIPTION						
(ft)	ENGINEERING		GEOLOGIC/GENERAL				
1	Dark brown Silty SAND, some roots, damp, SM		TOPSOIL				
2							
3	Olive brown Sandy SILT, blocky, firm, damp, ML		GLACIAL MARINE				
5							
6 7 8	Seepage at 6 ft Stiffer at 6 ft						
9	Olive brown to gray Silty CLAY, very soft, moist	to wet,					
12 <u></u> 13							
14	End of Test Pit at 13 ft - No refusal						
15							
16							
17	DRAFT						

