TOWN OF WATERBURY ZONING PERMIT APPLICATION

Date:	Application #:
Fees Paid:	+ \$15 recording fee =
Parcel ID #:	
Tax Map #:	

Please provide all of the information requested in this application.

Read the Zoning Regulations and familiarize yourself with the requirements. Failure to provide all the required information will delay the process of this application. Based upon the nature of the project you may need to submit additional information. For instructions on how to fill out this form please refer to the Zoning Permit Application Instructions & Fee Schedule available on the municipal website or at the municipal offices. Submit one copy of the completed application and a check payable to the *Town of Waterbury* according to the zoning fee schedule. For questions about the permit process,

please contact the Zoning Administrat	or at 802-244-1012.	1 1
CONTACT INFORMATION		
APPLICANT	PRC	PERTY OWNER (if different from Applicant)
Name:	Nam	ne:
Mailing Address:	Mail	ing Address:
Home Phone :		ne Phone :
Work/Cell Phone:	Wor	k/Cell Phone:
Email:	Ema	il:
PROJECT DESCRIPTION		CHECK ALL THAT APPLY:
Physical location of project (E911 addı	ress):	□ Single-Family Dwelling
Lot size: Zoning Dist	rict:	□ Two-Family Dwelling □ Multi-Family Dwelling
Existing Use: Pr		in maid raining bweining
Brief description of project:		D '1 ('1D '11' 411')
Erief description of project.		□ Comm./ Industrial Building Addition
		□ Accessory Structure (garage, shed)
		□ Accessory Apartment
		======================================
Cost of project: \$ Water system:		repairs and renovation)
EXISITING	PROPOSED	USE
Square footage: Height:	Square footage: H	
Number of bedrooms/baths:	Number of bedrooms/bath	
# of parking spaces:	# of parking spaces:	□ Expand existing use
Setbacks: front:		□ Establish home occupation
sides:/rear:		
ADDITIONAL MUNICIPAL		□ Boundary Line Adjustment (BLA)
	Address Request e of the above	□ Parking Lot
		□ Soil/sand/gravel/mineral extraction
[Additional State Pe	ermits may also be required	Othor

Date created: Oct-Nov 2012 / Revised: July 2019

□ Other

SKETCH PLAN

Please include a sketch of your project, drawn to scale, with all required measurements - see *Zoning Permit Application Instructions*. You may use the space below or attach separate sheets. For plans larger than 11"x17" please provide a digital copy (pdf. file format) in addition to a paper copy.

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Aut	horize	d sigi	natu	ıre:						Date):				□ n/a					



March 29, 2024

Ben Cheney Flywheel Industrial Arts 6451 Northfield Street Montpelier, Vermont 05602

Reference: Stowe Street Alley Sculpture – Structural Steel Drawing Review

Stowe Street, Waterbury, Vermont

Dear Ben,

We have completed our review of the Stowe Alley Sculpture Drawing for the Stowe Street Gateway project in Waterbury, Vermont. Our review is based upon the Stowe Alley Sculpture Dimensions Final for Engineering drawing dated February 13, 2024. Our review was limited to the analysis and design of structural components only, including the steel framing sizing and connections.

Based upon our review, we have provided markups that specify necessary revisions to the steel structure and connections in order for it to meet code requirements. With the implementation of these revisions, the drawings referenced above and the framing detailed therein are in compliance with the code requirements.

If you have any questions concerning our review, please call or write.

Sincerely,

Christopher J. Temple, P.E.

hristopher & Temple

Enclosures:

23160 Stowe Street Alley Steel Comments Revised 3-29-2024



Surveying

Permitting

Site Design

Subdivisions

Timber Design

Expert Testimony

Site Development

Act 250 Permitting

Forensic Engineering

Environmental Permitting

Transportation Engineering

Structural Inspection Services

Commercial Building Design

Construction Oversight

Building Assessment

Pedestrian Bridges

Stream Alterations

Sewer Design

Water Supply

Storm Water

Hydrology

Grading

317 River Street
P.O. Box 1576
Montpelier, VT
05601-1576
phone: 802.223.4727
fax: 802.223.4740

www.dirtsteel.com

GENERAL NOTES

GENERAL:

- 1.1 ALL WORK SHALL BE PERFORMED IN A FIRST CLASS MANNER, AND IN STRICT ACCORDANCE WITH THE "VERMONT FIRE & BUILDING SAFETY CODE - 2015" (WHICH INCORPORATES IBC 2015 WITH LATEST SUPPLEMENTS), AND LOCAL CODES AND ORDINANCES.
- 1.2 BEFORE ORDERING MATERIALS, CONTRACTOR SHALL REVIEW ALL CONSTRUCTION DOCUMENTS, INCLUDING STRUCTURAL, SUBCONTRACTORS SHOP DRAWINGS, AND OTHER RELATED DOCUMENTS, TO VERIFY AND COORDINATE DIMENSIONS, LOCATIONS, PLACEMENT, AND APPLICABILITY OF BUILDING COMPONENTS. THE CONTRACTOR SHALL MAKE FIELD CHECKS TO VERIFY THE ACCURACY OF DIMENSIONS, TOPOGRAPHY, AND OTHER EXISTING CONDITIONS. IF THERE IS ANY DISCREPANCY IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE.
- 1.3 CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES, AND UTILITY LINES FROM ALL DAMAGE.
- 1.4 CONTRACTOR IS RESPONSIBLE FOR ADEQUATE BRACING OF STRUCTURAL MEMBERS, WALLS, AND NON-STRUCTURAL ITEMS DURING CONSTRUCTION.
- 1.5 SCULPTURE IS DESIGNED FOR THE FOLLOWING LIVE LOADS:

WIND DESIGN DATA:

ULTIMATE DESIGN WIND SPEED, V _{III} (3 SECOND GUST)	115 MPH
NOMINAL DESIGN WIND SPEED, Vand	90 MPH
RISK CATEGORY	II
WIND EXPOSURE	В
COMPONENTS AND CLADDING, ULT	16.4 PSF

- 1.6 THE CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS BEFORE SUBMISSION TO THE ENGINEER; THUS, PROVIDING ANY INFORMATION REQUIRED OF THE FABRICATOR SUCH AS FIELD DIMENSIONS, ELEVATIONS, ETC. OTHERWISE THE SHOP DRAWINGS WILL BE REJECTED UNTIL SUCH INFORMATION IS FURNISHED BY THE CONTRACTOR.
- 1.7 THE CONTRACTOR SHALL THOROUGHLY CLEAN THE PREMISES AT COMPLETION OF WORK AND AT TIMES AS DIRECTED BY THE OWNER. LEGALLY DISPOSE OF EXCESS MATERIAL OFF SITE.
- 1.8 JOB-SITE SAFETY CONDITIONS, INCLUDING, BUT NOT LIMITED TO, LATERAL STABILITY AND WIND BRACING, SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

2 SOILS/GEOTECHNICAL:

- 2.1 ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL HAVING A MINIMUM BEARING CAPACITY OF 3,000 PSF, OR ON WELL COMPACTED STRUCTURAL FILL PLACED IN A CONTROLLED MANNER AS SPECIFIED, OR ON SOUND LEVEL ROCK. IT IS ASSUMED THAT THIS WILL BE ATTAINED AT A MINIMUM DEPTH OF 5'-0" BELOW FINISHED EXTERIOR GRADE OR AT THE ELEVATION NOTED ON THE PLANS - LOWER AS NECESSARY. NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS
- 2.2 THE NATIVE SOIL BELOW ALL FOOTINGS SHALL BE PROOF-ROLLED.
- 2.3 ALL FILL MATERIAL PLACED WITHIN THE STRUCTURE FOOTPRINT AND EXTENDING OUT 2'-0" MINIMUM BEYOND THE STRUCTURE PERIMETER SHALL BE WELL COMPACTED, FREE DRAINING, STRUCTURAL FILL.
- 2.4 STRUCTURAL FILL SHALL BE CLEAN, NON-FROST SUSCEPTIBLE SAND AND GRAVEL FREE OF ORGANICS AND OTHER DELETERIOUS MATERIALS MEETING THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT FINER BY WEIGH
3 INCH	100
NO. 4	45 TO 75
NO. 100	0 TO 12
NO. 200	0 TO 6

- 2.5 ALL STRUCTURAL FILL SHALL BE PLACED IN HORIZONTAL LIFTS NOT EXCEEDING 8" IN THICKNESS AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D
- 2.6 CRUSHED STONE SHALL BE CRUSHED, WASHED, HARD, DURABLE ROCK MEETING THE GRADATION REQUIREMENTS FOR ASTM D448-08, NO. 67 STONE. 3 CONCRETE:
- 3.1 ALL CONCRETE AND REINFORCING WORK SHALL BE IN STRICT ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318_14)". FOUNDATION CONCRETE SHALL BE AIR-ENTRAINED WITH AIR CONTENT OF 6% ± 1.5%. CONCRETE SHALL HAVE A CORROSION INHIBITIVE ADMIXTURE. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3.000 PSI AT 28 DAYS UNLESS OTHERWISE SPECIFIED ON THE DRAWING SUBMIT CONCRETE MIX DESIGN FOLLOWING PROCEDURES OUTLINED IN ACI PRC-211.5-14 GUIDE FOR SUBMITTAL OF CONCRETE PROPORTIONS FOR REVIEW BY ENGINEER. CONTRACTOR SHALL TAKE 4 TEST CYLINDERS OF CONCRETE FOR EACH 50 CUBIC YARDS OF CONCRETE OR FOR EACH DAYS POUR IF LESS THAN 50 C.Y. TESTING WILL BE AT OWNER'S EXPENSE.
- 3.2 MAXIMUM W/C RATIOS AS FOLLOWS: 3000 psi CONCRETE: 0.55
- 3.3 CONCRETE SHALL BE PROTECTED FROM FREEZING. CONTRACTOR SHALL FOLLOW THE "RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (ACI 306,
- 3.4 ALL CONCRETE SHALL BE PLACED IN THE DRY PUMP AS NECESSARY.
- 3.5 CONCRETE SHALL BE SO PROPORTIONED SO AS TO HAVE A MAXIMUM SLUMP OF 4", EXCEPT CONCRETE SPECIFIED TO HAVE A PLASTICIZER SHALL HAVE A SLUMP OF 2" +OR- 1".
- 3.6 THE CONCRETE CONTRACTOR SHALL INSTALL (OR GIVE OTHER TRADES AMPLE OPPORTUNITY TO INSTALL) ALL ANCHOR BOLTS, ANCHORS, PLATES, ETC., AS REQUIRED BY OTHER TRADES. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE SETTING SCREEDS AND FORMS. FORM RELEASE OIL SHALL BE AN APPROVED NON-TOXIC LIQUID.
- 3.7 CHAMFER EDGES OF EXPOSED BEAMS AND COLUMNS.
- 3.8 CURING: VERTICAL SURFACES SHALL RECEIVE 2 COATS (ONE AT TIME OF STRIPPING AND ANOTHER 3 DAY LATER) OF AN APPROVED NON-TOXIC LIQUID CURING COMPOUND.
- 3.9 ALL WALLS SHALL BE ADEQUATELY BRACED TO WITHSTAND BACKFILLING AND CONSTRUCTION LOAD PRESSURES. WALLS MUST BE AT LEAST SEVEN DAYS OLD BEFORE BACKFILLING.
- 3.10 DURING PLACEMENT OF CONCRETE, USE TREMIE OR OTHER MEANS TO LIMIT FREE-FALL OF CONCRETE TO 5 FEET.
- 3.11 CONCRETE SHALL BE CONSOLIDATED BY VIBRATION, SPADING, OR RODDING SO THE CONCRETE IS THOROUGHLY WORKED AROUND THE REINFORCEMENT, EMBEDDED ITEMS. AND INTO CORNERS OF FORMS, ELIMINATING ALL AIR OR STONE POCKETS WHICH MAY CAUSE HONEYCOMBING. (CARE SHALL BE TAKEN NOT TO OVER VIBRATE AND CAUSE SEGREGATION).

4 REINFORCING STEEL:

4.1 REINFORCING STEEL SHALL BE NEW BILLET STEEL, ASTM A615-12, Fy=60 KSI. 4.2 THE MINIMUM CLEAR DISTANCE FROM REINF. STEEL TO ADJACENT SURFACE SHALL BE: 3" FROM BOT. OF FOOTINGS; 1_1/2" FROM FACE OF WALLS

EXPOSED TO EARTH OR WEATHER, AND 3/4" FROM INSIDE FACE.

- 4.3 LAP ALL BARS AS SHOWN IN THE LAP SCHEDULE. TOP BARS TO BE LAPPED AT MIDSPAN, AND BOTTOM BARS AT SUPPORTS.
- 4.4 REINFORCEMENT SHALL BE SECURELY TIED IN ITS PROPER PLACE BEFORE AND DURING CONCRETE PLACEMENT OPERATIONS USING APPROVED TIES, CHAIRS, AND SPACERS AS REQUIRED. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD WITHOUT THE APPROVAL OF THE ENGINEER. USE PLASTIC TIPPED ACCESSORIES IN CONCRETE EXPOSED TO WEATHER, WATER, OR VIEW.
- 4.5 WHERE CONTINUOUS BARS ARE CALLED FOR, INDICATED OR OTHERWISE REQUIRED THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS, DOWELED INTO INTERSECTING WALLS AND LAPPED AT NECESSARY SPLICES WITH SPLICES STAGGERED WHEREVER POSSIBLE.

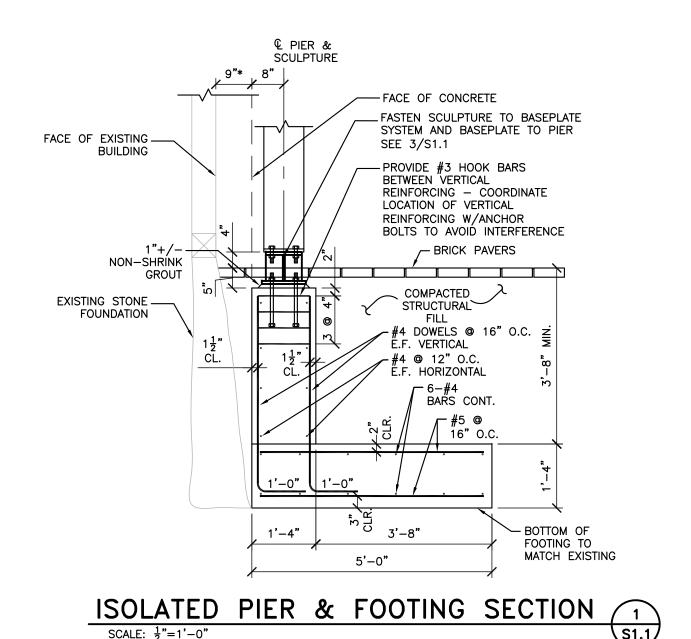
5 CONCRETE ACCESSORIES

5.1 CAST-IN-PLACE ANCHOR RODS SHALL BE MADE FROM ASTM F1554, GRADE 36 MATERIAL UNLESS OTHERWISE NOTED. ANCHOR ROD DIAMETERS, MINIMUM EMBEDMENT LENGTHS AND PROJECTION LENGTHS SHALL BE AS SPECIFIED ON THE DRAWINGS.

5.2 POST-INSTALLED ANCHOR RODS (ALLOWED ONLY WHERE NOTED ON THE DRAWINGS) SHALL BE MADE FROM ASTM A36 MATERIAL UNLESS OTHERWISE NOTED. ANCHOR ROD DIAMETERS, MINIMUM EMBEDMENT LENGTHS AND PROJECTION LENGTHS SHALL BE AS SPECIFIED ON THE DRAWINGS. RODS SHALL BE ATTACHED TO THE CONCRETE WITH HILTI HIT-HY 200 EPOXY ADHESIVE. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

6 STRUCTURAL STEEL:

- 6.1 UNLESS OTHERWISE NOTED STRUCTURAL STEEL SHALL BE ASTM A588 CORROSION-RESISTANT WEATHERING STEEL Fy = 50 KSI. BASEPLATE STEEL SHALL BE HOT DIP GALVANIZED ASTM A572 (50 KSI) STEEL. UNLESS OTHERWISE NOTED, ALL BOLTING SHALL BE 3/4" DIA. A325 GALVANIZED SNUG TIGHT HIGH STRENGTH BOLTS. SHOP CONNECTIONS SHALL BE PRE-QUALIFIED WELDS USING E_70 ELECTRODES BY AWS CERTIFIED WELDERS, OR BOLTED. FIELD CONNECTIONS SHALL BE BOLTED, U.O.N. ALL STRUCTURAL STEEL WORK SHALL BE IN STRICT ACCORDANCE WITH THE A.I.S.C "MANUAL OF STEEL CONSTRUCTION" LATEST EDITION. ALL STEEL SHALL RECEIVE ONE COAT OF RUST INHIBITIVE PRIMER. SUBMIT SHOP DRAWINGS FOR REVIEW OF ENGINEER.
- 6.2 ALL WELDING WHETHER FIELD OR SHOP SHALL BE PREQUALIFIED WELDS WITH E_7018 OR E-7016 ELECTRODES BY AWS PREVIOUSLY CERTIFIED WELDERS.



*NOTE: DIMENSION OF NEW FOOTING MEASURED FROM FACE OF EXISTING BUILDING IS AN ESTIMATE AS THE EXTENTS OF

THE EXISTING HISTORIC STONE FOUNDATION BELOW GRADE

IS UNKNOWN. NOTIFY THE ENGINEER IF EXISTING STONE

FOUNDATION EXTENDS FURTHER THAN 9" FROM FACE OF BUILDING OR EXISTING BOTTOM OF FOUNDATION IS LESS

THAN 5'-0" BELOW FINISH GRADE. DO NOT UNDERMINE

- EXTENTS OF EXISTING CHIMNEY

FACE OF EXISTING CHIMNEY - NO

ENCROACH UPON THIS LINE

FOOTING

5'-0"

1. DESIGN SOIL BEARING PRESSURE 3,000 PSF. NOTIFY ENGINEER IF UNSUITABLE MATERIAL IS

3. ALL FILL, BACKFILL AND BASE MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF IT'S MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D1557 (MODIFIED PROCTOR).

2. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

4. DIMENSIONS SHOWN ON THIS PLAN ARE TO FACE OF CONCRETE. U.O.N.

- EDGE OF EXISTING SIDEWALK -

EXISTING SIDEWALK

CONTRACTOR RESPONSIBLE FOR

MEANS AND METHOD OF STABILIZING EXCAVATION AND MAINTAINING

SCALE: $\frac{1}{2}$ "=1'-0"

1'-10"

PART OF SCULPTURE OR PORTIONS OF FOUNDATION ABOVE GRADE MAY

THE EXISTING FOUNDATION OF ADJACENT BUILDING.

1'-10"±

PROVIDE #4 U-BARS @ -

HORIZONTAL REINFORCING TYP. @ ENDS OF PIER -

16" O.C. LAPPED W/

SEE DETAIL 2/S1.1

CAST IN PLACE ANCHOR-

BOLTS-SEE DETAIL 3/S1.1

FACE OF EXISTING -

FOUNDATION PLAN

ENCOUNTERED.

BUILDING

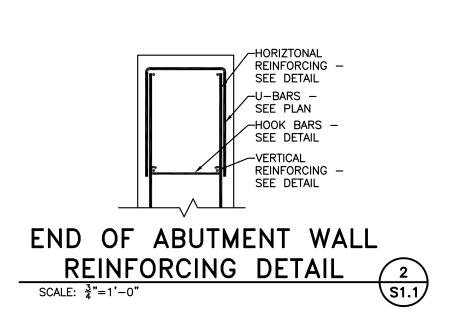
TOP OF PIER =

FACE OF EXISTING -

BUILDING

REINI	FORCIN	G SPLIC	CE LEN	GTHS
Fy=60 KSI	F'c=	3 KSI	F'c=	4 KSI
BAR	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
3	17"	13"	15"	12"
4	23"	18"	20"	15"
5	28"	22"	25"	19"
6	34"	26"	29"	23"
7	49"	38"	43"	33"
8	56"	43"	49"	37"
9	63"	48"	55"	42"
			· ·	

CHART BASED ON THE FOLLOWING: BAR SPACING 5" MINIMUM CLEAR COVER 2 BAR DIAMETERS MINIMUM REFER TO ACI 318-14 FOR OTHER CONDITIONS TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW THE BAR.



ABBREVIATIONS T.O.S. TOP OF SLAB EL. ELEVATION DIM. DIMENSION T.O.W. TOP OF WALL T.O.SH. TOP OF SHELF F.O.C. FACE OF CONCRETE E.O.D. EDGE OF DECK

E.O.S. EDGE OF SLAB

E.F. EACH FACE

CONT. CONTINUOUS

TYP. TYPICAL

F.D.

NTS. NOT TO SCALE

E.W. EACH WAY

T.C.X. TOP CHORD EXTENSION

U.O.N. UNLESS OTHERWISE NOTED

C.J. SLAB CONTROL JOINT

FLOOR DRAIN

CENTERLINE

DIAMETER

DRAWINGS

LIGHT GAUGE

LONG LEG VERTICAL

LONG LEG HORIZONTAL

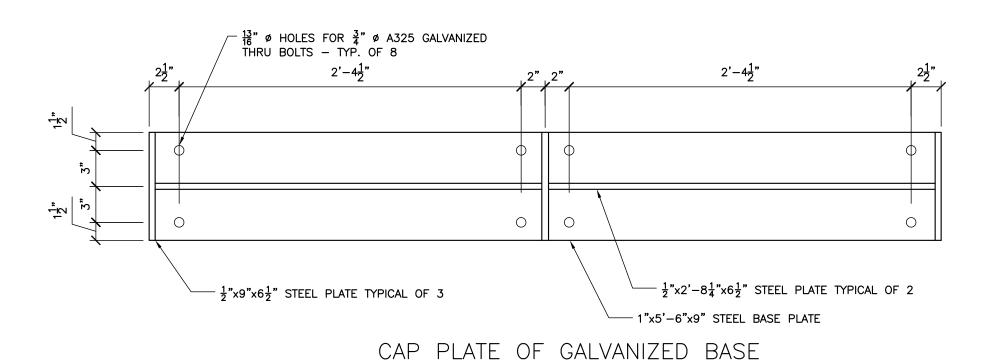
CLEAR

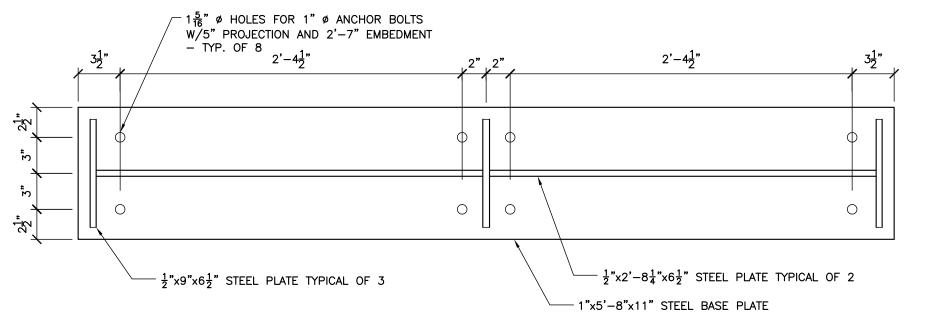
Civil & Structural Engineers **ENGINEERING ASSOCIATES** t 802-223-4727 f 802-223-4740 www.dirtsteel.com 317 River St., P.O. Box 1576, Montpelier, VT 05601-1576

no.	date	revision	
no.	date	revision	
no.	date	revision	
no.	date	revision	

$\frac{13}{12}$ ø HOLES FOR $\frac{3}{4}$ ø A325 GALVANIZED THRU BOLTS - TYP. OF 8 2'-41" $2'-4\frac{1}{2}"$ 0 $\frac{5}{16}$ "x4 $\frac{3}{4}$ " STIFFENER PLATE EACH SIDE OF WEB FROM MIDDLE OF BASE PLATE TO UPPER FLANGE - STEEL WEB OF SCULPTURE - 1"x5'-7"x10" STEEL BASE PLATE - 5. x10" STEEL PLATE FLANGE OF SCULPTURE $\frac{5}{16}$ "x10" STEEL PLATE FLANGE OF SCULPTURE -

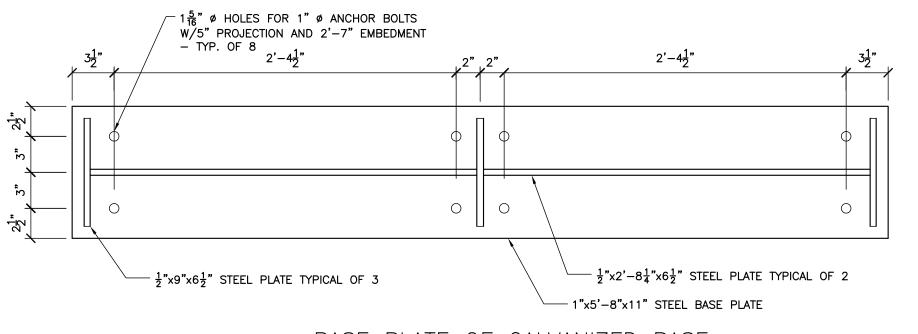
BASEPLATE OF SCULPTURE





BASE PLATE OF GALVANIZED BASE

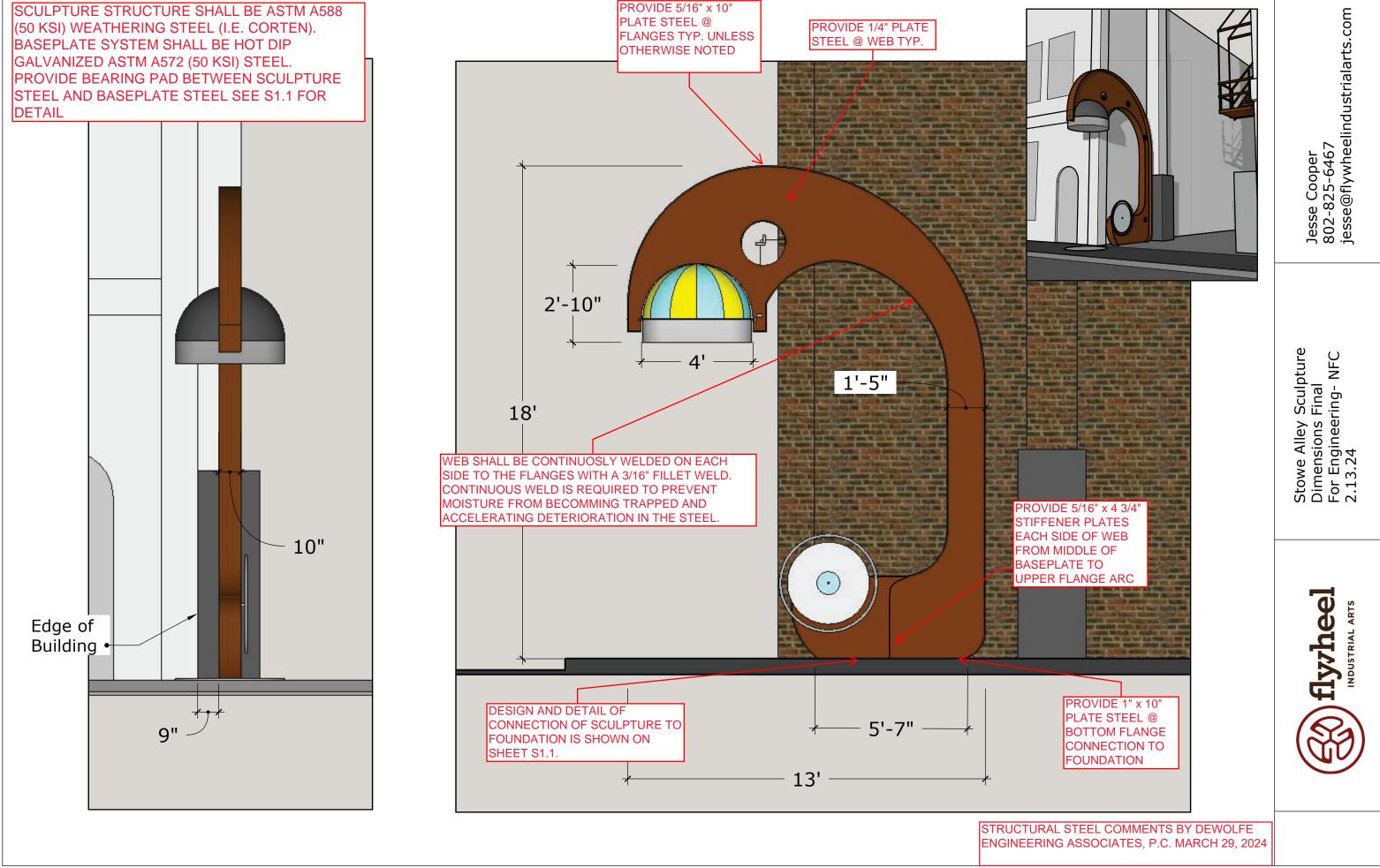




TOWI S

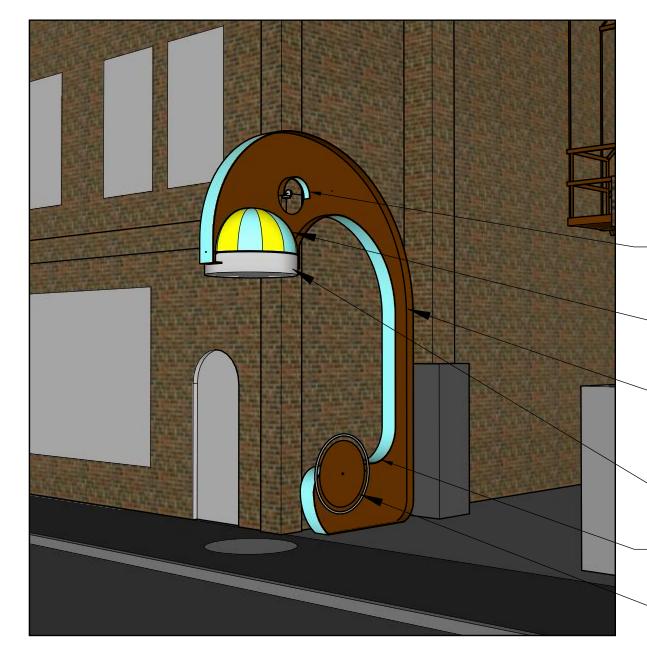
23160 project number: drawn by: checked by: AS NOTED 29 MARCH, 2024 released for: **PROGRESS** sheet description:

Exhibit C

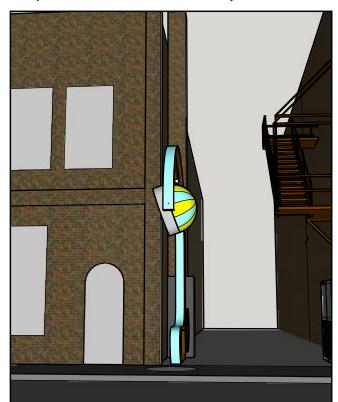


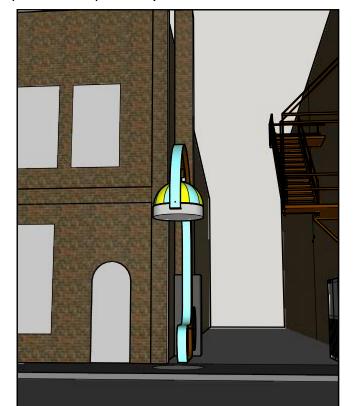
flysheel (INDUSTRIAL ARTS

Stowe Alley Sculpture

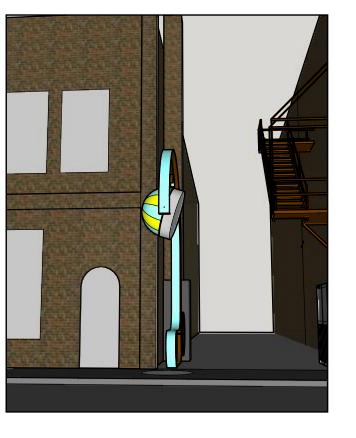


Adjustable Pivot allows mirror to change views up and down the Stowe Street sidewalk; Stops at 90° from horizontal (cannot rotate to upsidedown position)





- Peek-through to gear mechanism, with rain-shedding eye-brow
- → Pivoting dome/mirror unit
- Raw-rusted steel interior surfaces of armature
- Polished stainless steel mirror
- Outer-face of steel flange painted
- Steering wheel, controls mirror pivot



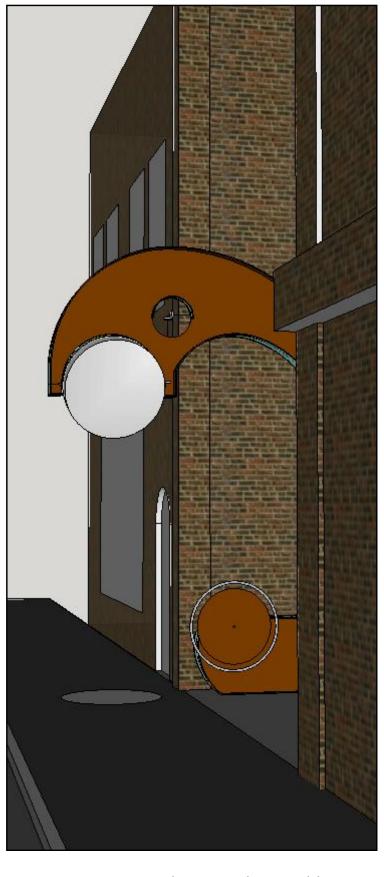
Variety of Color Moments



Front View Blue Stripe + Circus Tent Dome



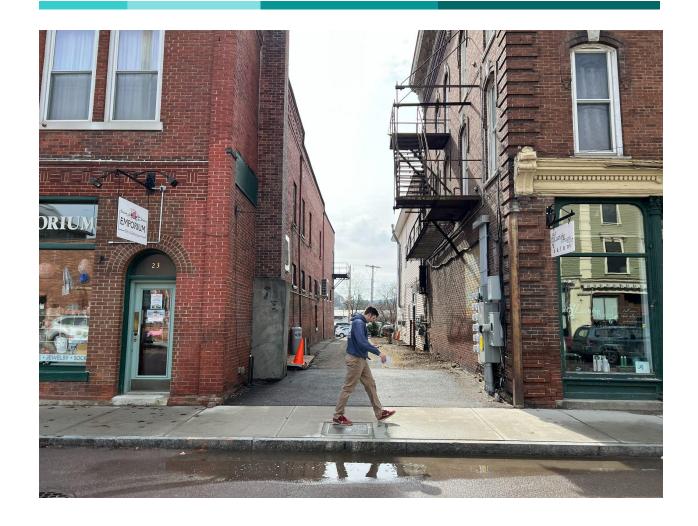
Dome top View



Mirror View- Colors mostly invisible



2



Stowe Street Alley Project Gateway Feature

05.08.2023

Flywheel Industrial Arts, LLC

6451 VT Route 12 Montpelier, VT 05602 ben@flywheelindustrialarts.com 802.274.0349 To whom it may concern,

We believe that creating beautiful and compelling public spaces is the highest architectural honor. Waterbury's Stowe Street Alley is a treasure of unique and historic urban space in a rural state. Flywheel Industrial Arts strives to breathe life into the built environment through art and architecture, and is excited to contribute our passion and experience to this project in collaboration with Revitalizing Waterbury, the Stowe Street Alley Steering Committee, and other artists.

Flywheel Industrial Arts is based in Montpelier, Vermont and specializes in designing and creating architectural elements in steel and wood. Flywheel began in 2019 as a partnership between three craftsmen with a shared vision to bring beauty into the spaces humans occupy through the synergy of their crafts. We now occupy a 4000 sq ft shop with 8 full time employees and our work extends throughout Vermont and New England. Our focus is on complex and artistic projects. Often this looks like modern residential staircases as well as furniture, cabinetry, public sculpture and recreational infrastructure. We work extensively with 3D modeling software to facilitate a collaborative, creative design process with clients that allows us to fabricate unique installations with a high level of precision.

Thank you for your consideration!

Work Samples

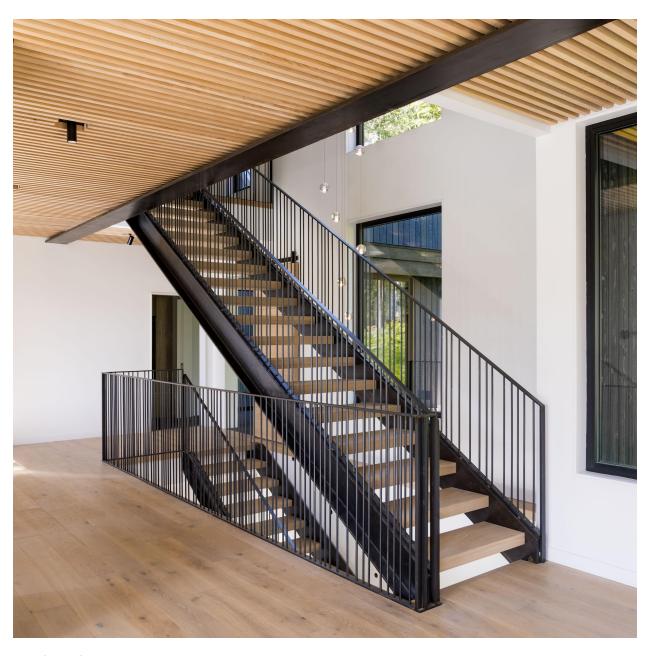


Sky Scratchers

Montpelier, VT 2016

A commission for Langdon Street Alive

A pair of functional sculptures were designed and built as a temporary, site-specific enhancement to the entrance of historic Langdon Street in Montpelier, VT. The sculptures combine steel, fabric-formed concrete, locally milled hardwood and plantings. The project was a collaboration of Flywheel partners Jesse Cooper and Benjamin Cheney prior to forming Flywheel Industrial Arts.



Residential Stairway

Designed by Liz Herman, Architect; Redhouse Builders, Contractor

Fayston, VT, 2019

Flywheel fabricated a monumental 2-story steel and wood stairway for a new residence.



Sculptural Garden Gate

Private Residence; Montpelier, VT, 2021

Forged and Welded Steel gateway forms the entrance to a residential yard and garden.





Richard Erdman Studio

Designed in collaboration with Birdseye Construction; Redhouse Builders, Contractor Williston, VT 2022

Flywheel fabricated and installed a massive steel and wood shelving system to display marble sculptures, as well as a pair of steel and glass pivot doors. These were defining elements for the sculpture gallery of sculptor, Richard Erdman.



Hammered, Welded and Sprung

Kent Museum, Calais Vermont and Highland Center for the Arts, Greensboro , VT 2021

Three 8 foot long clothespin sculptures fabricated in Steel and White Oak spent a year each in 2 outdoor sculpture exhibits. Clothespins had operational springs (inactivated during installation for safety purposes) and could be operated like real clothespins.

Resume

Flywheel Industrial Arts

6451 VT Route 12, Montpelier, VT 05602 www.flywheelindustrialarts.com ben@flywheelindustrialarts.com 802.274.0349

Flywheel is a partnership between:

Benjamin Cheney- Steelworker

Christopher Eaton- Blacksmith

Jesse Cooper- Woodworker

Project Experience

Stairways and Railings

Artfully designed residential installations in structural steel and hardwood

- Designed, built and installed 25+ projects
- Stairways are often the visual and functional centerpiece of a home. Our projects have ranged from simple and elegant \$5,000 railings to meticulously detailed multi-story sculptural stairways costing from \$50k-100k
- Steel forms the free-standing structures- Plain steel with patinas and oil finishes, stainless steel and a full spectrum of sprayed paint finishes
- Elegant, durable hardwoods add character and warmth to treads and handrails

Custom Steel and Wood

We work closely with architects, designers, contractors, homeowners and business owners to fabricate a variety of architectural elements including:

- Doors- Custom steel and glass on hydraulic pivot hardware; custom handles and latch hardware; straight, curved and forged steel elements
- Cabinetry- specializing in unusual, highly customized case-goods that fit seamlessly into spaces.

- Interior and exterior furniture- Steel and hardwood, free-standing pieces for the home, and yard. From architect-designed modern pieces to fun, unusual one-offs
- Structural brackets for timber frames and construction- We work with local contractors and timber framing companies to fabricate engineered steel brackets that make assembly efficient, durable and often add visual interest to structures
- Planters, gateways and trellises- Steel weathers elegantly and can be built to
 withstand many years of exposure. We have built large plate steel planter boxes and
 a variety of custom garden elements that add structure and organization to the
 living landscape
- G-Table- Flywheel's simple and elegant production side table is made from a single band of ¼" x 8" steel bent into a G-shape and topped with 2 tiers of hardwood; Produced on-site and sold in a custom-made packaging.

Public Infrastructure

Design and fabricate structures for the public domain including:

- Park Benches- Downtown Northfield, VT is populated by Flywheel benches in 2 colors. These benches are fabricated in powder-coated steel, with durable heat-treated exterior hardwood. They standout as unusual and durable public infrastructure.
- Bike Racks- Large round steel pipe sliced and mounted to bent steel bases in custom colors
- Building Facade Signs- Montpelier Transit Center; Rabble-Rouser, Montpelier, VT;
 The Front Gallery; Montpelier, VT
- Unique Steel siding systems

Public Art

Flywheel has developed several large-scale exterior art projects:

- Hammered, Welded and Sprung- Large-scale Clothespin Sculptures for annual exhibit at the Kent Museum, Calais, VT and Highland Center for the Arts, Greensboro, VT
- Sky-Scratchers- Public sculpture/bench/planters on as a functional gateway to Montpelier's Langdon Street Arts project
- Fabricators for 'Threshold'- Large-scale Sculptural Doorway designed by artist Mark Reigleman for a public park in the city of New Bedford, MA (in production)

Clients and Collaborators

General Contractors

Sisler Builders

Redhouse Builders

Roots Builders

VT Pro Construction

Forbes Construction

New School Builders

Mindel and Morse Builders

Architects and Designers

Birdseye Construction

Brown and Davis Design

Robert Swinburne

Tektonica Studio Architects

Teri Maher Interiors

Arts Organizations / Artists

Langdon Street Alive

Historic Kents' Corner Inc.

Highland Center for the Arts

Mark Riegelman

Shelburne Museum

Flywheel Industrial Arts recently fabricated and installed a large-scale steel and wood sculpture "Threshold" in New Bedford. MA in 2023. Designed by artist Mark Riegelman and is very similar to the scale of the Stowe Alley sculpture.







Flywheel Industrial Arts Inspiration: Well-known sculptor Mark DiSuverio is a real inspiration and similarly uses structural steel in dynamic large-scale sculptures.



