

CITY OF HUNTINGTON WOODS
ENVIRONMENTAL SUSTAINABILITY COMMITTEE

MINUTES

August 18, 2022

7:00 p.m.

City Hall

- 1. Call to Order:** Ben Falik (Chair) called the Meeting to order at 7:08 pm
- 2. Present:** Ben Falik, (Chair), Daniel Brooks, Mari Masalin-Cooper (Secretary), Rachel Pollack, Chris Wilson (City Manager)
- 3. Absent:** Sarah Jo Sautter, David (Michael) Egan, Betsy Zobi-Tar, Kate Zenlea
- 4. Approval of Agenda:**
Daniel Brooks moved to accept the August 18, 2022 Agenda. No amendment. Ben Falik 2nd, Mari Masalin-Cooper Vote: Unanimous. The Motion Carried.
- 5. Approval of Minutes:**
Daniel Brooks moved to accept the May 19, 2022 minutes without change. Motion Daniel Brooks, Seconded by Ben Falik. Vote: Unanimous. The Motion Carried
- 6. Public Participation on Items Not on the Agenda:**
None.
- 7. PRESENTATION FROM VEREGY ON ENERGY PERFORMANCE CONTRACT**
Dick Williams, Ed Saplela, Tyler Grant. Provided a review of Huntington Woods proposal to study energy use and create ECM (Energy Conservation Measurable). Review of the 2018 Energy Plan and have created a manageable list of 9 of the 13 goals from the 2018 Energy plan. Discussion about managing the city street lighting where there is energy savings, as well as, lighting. Identify doable energy sustainability goals that are using government grants and loans. Loans are proposed to be self-funding and will not impact the city's bond rating.
Attached: VEREGY, Feasibility Study Power Point Presentation. Digital presentation will be posted on line with approved 8/19/2022 minutes.
- 8. Presentation from DG Energy on Energy Reduction Coalition (ERC) Program for LED Lighting Upgrades:**
Presentation DG/Energy - H. Michael Jones and Energy Reduction Coalition, Jim Lamerato – Chief Financial and Operation Officer. ERC (Troy-based) organization provided a Proposal/information on converting the city lighting over to energy saving

lighting. ERC does not require the city to make an investment in the lights. ERC shares in the benefits/savings to DTE. Review the usage currently, replace the lighting and then share in the savings. Also provide the maintenance and disposal the cost. Post conversion, city pays what ERC the difference between actual energy and proposed savings. City pays ERC the savings. *Attached:* ERC-LED proposal Power Point Presentation. Digital presentation will be posted on line with approved 8/19/2022 minutes.

9. ESC Student Representatives – Tabled to September, 2022

10. Scotia Park Rain Garden Maintenance Chris Wilson asked members to provide some volunteers or create an organization to help maintain the Scotia Park Rain Garden. Mari C. Suggested that the Parks and Recreation Board be responsible to setting up an organization as it has traditionally been something they have done for the city. She also reminding the members that Amy Sullivan had reported that the organization putting in the rain gardens were supposed to train HW staff on maintenance of the gardens, as well as train city staff how to create other gardens where needed in the city. It is unclear if this training ever occurred.

11. Public Participation-None

12. Committee Member Remarks- None

13. Adjournment: 9:30PM



ERC-LED Introduction

Jim Lameratò – Chief Financial and Operation Officer

Mission:

ERC-LED's mission is to accelerate the adoption of energy-saving technologies. The ERC lighting conversion program removes the obstacles and risks that get in the way of making the switch to LED thereby allowing organizations to reduce their cost and carbon footprint.

ERC-LED Highlights

Why Huntington Woods should Partner With ERC-LED for LED Conversion?

This unique partnership program requires **no Huntington Woods investment**. ERC-LED pays all the costs of conversion and **Huntington Woods immediately get the first share of savings**. Based on our assessment, we estimate **Huntington Woods'** savings would start out at \$5,500 per year and grow to \$16,500 per year for a 30 year savings of over \$302,000. In addition, this conversion would benefit the environment by reducing **Huntington Woods annual CO₂ Emission 166,239 pounds**.

Huntington Woods would also have **no ongoing lighting maintenance costs**. ERC-LED not only pays for the initial complete conversion, but also pays to replace lights as long as Huntington Woods chooses to stay in the program, ***both product and labor*** – regardless of manufacturer's warranty.

ERC-LED Highlights

Why Huntington Woods should Partner With ERC-LED

- Immediate no-cost conversion to better looking, more energy efficient lighting
- Reduce your carbon footprint
- Improve safety, productivity, appearance, and morale
- No long-term commitment
- You do not book a long-term liability
- You do not invest capital, borrow funds, or sign a lease
- You enjoy an immediate and guaranteed reduction in lighting costs that triples over time, which means the amount of your savings increases every year
- All results are verified and adjusted by an annual measurement and verification reconciliation
- *Savings are based on actual use* and adjusted whenever that changes
- You avoid all risks associated with product failure, changes in energy pricing, changes in hours of usage, or technological obsolescence
- You can opt out of the program after 2 years, or buy out the lights at the lower of their depreciated value or current market value *at any time*
- ERC-LED pays the cost of maintenance – *product + labor*

ERC-LED Summary

A unique program offering win-win opportunities

This program is not a lease, performance contract, ESCO agreement, or purchase agreement – **the ERC Lighting Conversion Program does not require minimum payments.** By partnering with ERC-LED, Huntington Woods achieves immediate cost savings and improved lighting quality which increases safety and productivity. The environment wins too, as more efficient, longer lasting lighting reduces carbon emissions and waste.

Experience

ERC has 11 years of experience converting inefficient lighting systems to high efficiency LED lighting. We have partnered with 60 organizations, about half of which are municipalities. Our Municipality projects have included converting City, Village and County Halls, Administration Buildings, Police Stations, Jails, Court Buildings, Parks, Parking Lots, Streetlights, athletic facilities, Fire and Rescue Stations, Libraries, Museums, and DPW service areas and garages

Effortlessly achieve your goals

Through the ERC lighting conversion program, all of your facilities, and outdoor lighting (streetlights, parks, garages, etc.) can be upgraded to high efficiency LED lighting. After the conversion, ERC-LED is responsible for any future lighting maintenance costs, including replacement inventory, a labor stipend reimbursement and disposal cost.

Bottom line

Through the ERC-LED program, Huntington Woods can fully convert to LED lighting all their facilities in less than a month and achieve an immediate reduction in operating cost and carbon footprint, without making any investment of resources. Instead, those resources and the realized operational savings can be used for more mission-critical needs. You are guaranteed to always be better off having converted, regardless of energy prices, hours of use or product performance.

[illegible]

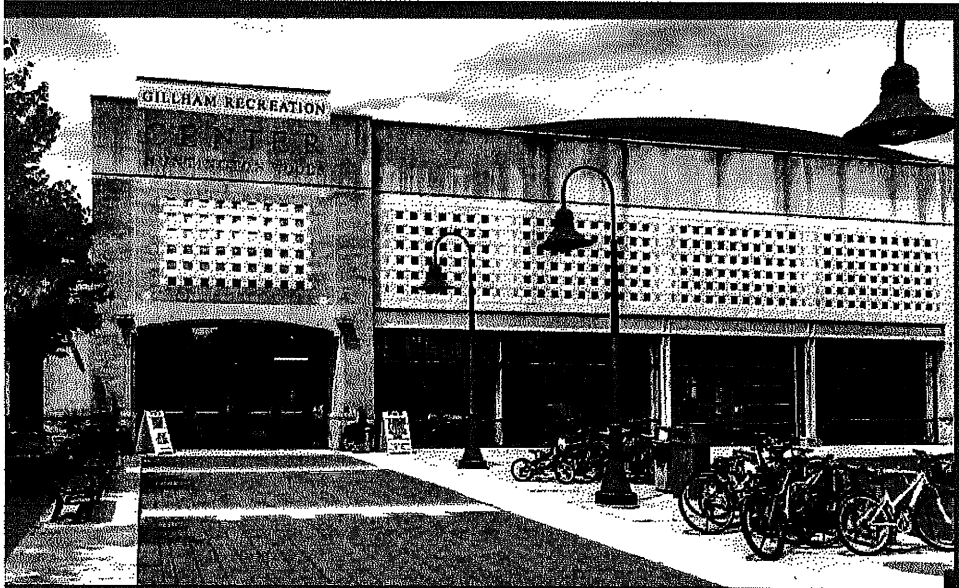
Huntington Woods, MI (Municipal Buildings & DTE SL): 5/11/22 Plan
Plan Summary (Projections, listed by Completion Status)

Monthly Excess Benefit Payment	Approved	Reviewing	Signed	Scheduling	Installed	Checking	Initialed
Next Full Year	\$1,676.02	\$1,676	\$0	\$0	\$0	\$0	\$0
Final year of Increasing Benefit Period	\$762.29	\$762	\$0	\$0	\$0	\$0	\$0
Post-Conversion Annual Lighting Costs	Approved	Reviewing	Signed	Scheduling	Installed	Checking	Initialed
Post-conversion Electricity Cost (Next)	\$59,372.95	\$59,373	\$0	\$0	\$0	\$0	\$0
Post-conversion Excess Benefit payment (Next)	\$20,112.20	\$20,112	\$0	\$0	\$0	\$0	\$0
Post-conversion Lighting Cost (Next)	\$79,485.14	\$79,485	\$0	\$0	\$0	\$0	\$0
Post-conversion Electricity Cost (Final)	\$59,372.95	\$59,373	\$0	\$0	\$0	\$0	\$0
Post-conversion Excess Benefit payment (Final)	\$9,147.48	\$9,147	\$0	\$0	\$0	\$0	\$0
Post-conversion Lighting Cost (Final)	\$68,520.42	\$68,520	\$0	\$0	\$0	\$0	\$0
Optional Buyout Cost (OBC) Information	All	ERC Products included in ERC LCP					All
Optional Buyout Cost (OBC)	\$201,121.99	ERC Product Count - (to be or already) Installed					6,753
		ERC Product Count - (to be or already) Inventory					93
		Total Count (See Bill Of Materials for detail)					6,846
Environmental Benefits	All						All
KW Reduction	55.53	Average Pounds of CO ₂ per KWH (MI)					1.347
Annual KWH Reduction	123,412	Pounds Annual CO ₂ Emission Reduction					166,239

Please refer to these detailed schedules to review the calculations and related summary information. By signing below, the Parties acknowledge an understanding of the data provided and confirm the reasonability of the resulting projections and summary data.

X
 For ERC: James A Lamerato _____ Date

X
 For Huntington Woods, MI: Chris Wilson _____ Date

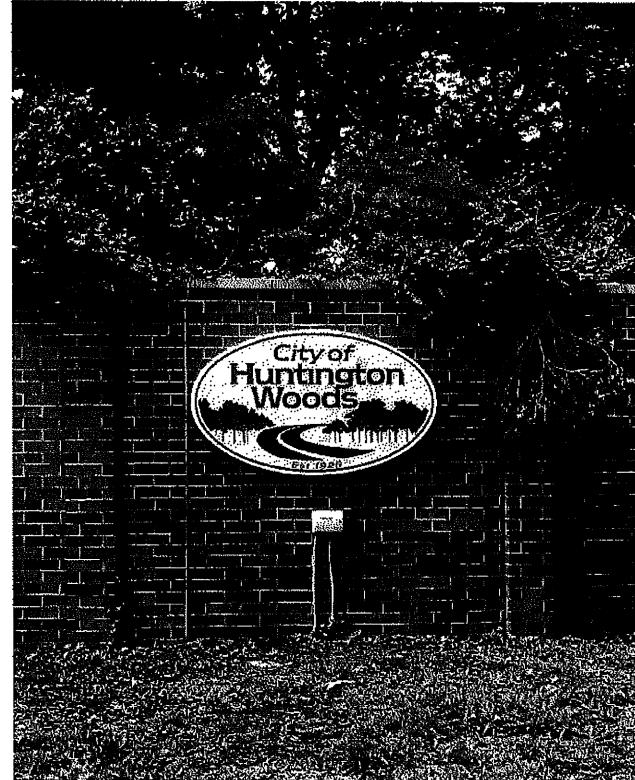


City of Huntington Woods Feasibility Study Presentation

August 18, 2022

SEND TOPICS TO DISCUSS

1. Accomplishments Thus Far
2. Energy Use
3. Benchmarking Facilities
4. Existing Conditions
5. List of ECMs
6. Proposed Improvements
7. Potential Grants and Funding
8. Potential Financing Scenarios
9. Next Steps
10. Questions / Comments



ACCOMPLISHMENTS THUS FAR

- 1) **October 3rd, 2021** – City of Huntington Woods (COHW) issues RFQ for Energy Savings Performance Contracting (ESPC) project.
- 2) **October 21st, 2021** – COHW selects Veregy for ESPC project.
- 3) **November 17 thru December 3rd, 2021** – January 8th Veregy Engineer evaluates mechanical and electrical facility drawings to assess potential opportunities for improvements.
- 4) **December 21st, 2021 thru January 6th, 2022** – Veregy conducts COHW facility walkthroughs.
- 5) **December 28th, 2022** – Veregy deploys and installs Intelligent Data Gathering Devices (IDGD's) into COHW facilities to learn and discover how systems are operating throughout the City buildings.
- 6) **January 8th, 2022** – Veregy meets with COHW DPW Director to discuss automated water meter reading opportunity.
- 7) **January 6th, 2022** – Veregy identifies need to perform 2 phases of the project critical items in phase one that need immediate attention and the longer energy savings and capital replacement items not as urgent included in phase two.
- 8) **January 19th, 2022** – Veregy develops bidder walkthrough plan for phase one items City Hall HVAC/Asbestos/Healthy Building Improvements, Pool Improvements, and backup generator installation.
- 9) **January 28th, 2022** – Veregy devises Diversity Equity and Inclusion (DEI) Bidding Plan.
- 10) **February 18th, 2022** – Veregy met with MML State of Michigan Coalition to understand their State of Michigan lobbying effort for the \$5.3 billion in American Rescue Plan Act (ARPA) funding that will be made available to various constituents to accomplish the ARPA goals. These potential grants could help the COHW.
- 11) **March 15th, 2022** – Veregy recovers Intelligent Data Gathering Devices and enters data into our software and Energy Baseline development tool.
- 12) **March 22** – Veregy requests meeting to discuss project status with new City Manager & team.
- 13) **July 5th thru August 15th, 2022** – Veregy meets with newly appointed Finance Director, Ethan Haan to gather additional Operational Expenses.
- 14) **August 18, 2022** – Veregy presents to Environmental Sustainability Committee.

City Sustainability Plan Goals

GOAL 1: IMPROVE MUNICIPAL BUILDING PERFORMANCE.

GOAL 2: IDENTIFY AND IMPLEMENT CLEAN ENERGY PROJECTS.

GOAL 3: INCREASE ENERGY EFFICIENCY AND RENEWABLE ENERGY FUNDING THROUGH INTERNAL AND EXTERNAL SOURCES.

GOAL 4: ESTABLISH A REVOLVING ENERGY FUND

GOAL 5: ESTABLISH AN ENERGY MANAGER POSITION.

GOAL 6: AMEND THE ENVIRONMENTAL ADVISORY COMMITTEE BYLAWS TO INCLUDE ENERGY CONSIDERATIONS AS PART OF ITS SCOPE.

GOAL 7: PROMOTE AND STRENGTHEN ENERGY MANAGEMENT POLICIES AND PROCEDURES.

GOAL 8: IMPROVE KNOWLEDGE OF ENERGY MANAGEMENT AND SUSTAINABLE DESIGN AMONG CITY STAFF AND APPOINTED AND ELECTED OFFICIALS.

GOAL 9: IMPROVE THE DATA-DRIVEN APPROACH TO MANAGING ENERGY USAGE.

GOAL 10: ESTABLISH A PROCESS TO ANALYZE DATA TO DETERMINE ENERGY USE TRENDS AND BILLING ERRORS.

GOAL 11: IMPROVE COMMUNICATIONS WITH FACILITY MANAGERS, UTILITY PROVIDERS, AND RELEVANT CONTRACTORS TO RESOLVE ISSUES QUICKLY.

GOAL 12: IMPROVE ENERGY AND SUSTAINABILITY-RELATED COMMUNICATION RESOURCES.

GOAL 13: PROMOTE AND SHARE ENERGY REDUCTION ACHIEVEMENTS WITH STAFF AND RESIDENTS.

Consumption and Costs

Utilities Summary

Customer: Huntington Woods
 Utility Provider: City of HW (Water), DTE (Electric), Consumers Energy (Gas)
 Fuel: Water, Electric, Gas
 Years: 2020, 2021
 Months: Nov - Oct

Summary

> Over \$136k / Year
 Total Utility Spend

> Average Rates

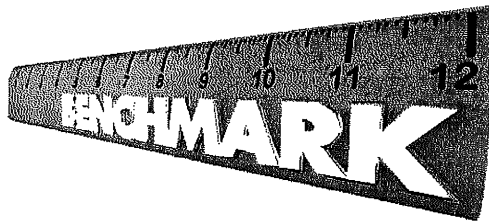
\$0.07 per kWh
 \$7.39 per Mcf
 \$15.45 per CCF

#	SITE NAME	SERVICE ADDRESS	YEAR	WATER VOLUME CCF	TOTAL CHARGE \$	RATE \$/ CCF	ELECTRIC VOLUME kwh	TOTAL CHARGE \$	RATE \$/ kwh	GAS Volume Mcf	TOTAL CHARGES \$	RATE \$/ Mcf	TOTAL CHARGES \$	NOTES
1	City Hall	26815 Scotia Rd	'20 - '21	238	\$3,637	\$15.28	40,857	\$3,309	\$0.08	417	\$3,071	\$7.37	\$10,017	Electric dates '21-'22
2	Public Safety	12755 W 11 Mile Rd	'20 - '21	70	\$1,083	\$15.48	67,240	\$3,661	\$0.05	461	\$3,883	\$8.42	\$8,628	
	Public Works 1	12779 W 11 Mile Rd	'20 - '21	20	\$310	\$15.51	27,654	\$4,434	\$0.16	563	\$4,496	\$7.99	\$9,241	
4	Public Works 2 / Yard	1801 W 11 Mile Rd	'20 - '21	28	\$504	\$18.00	0	\$304		-	\$180		\$987	
5	Library	26415 Scotia Rd	'20 - '21	60	\$919	\$15.31	99,520	\$4,954	\$0.05	514	\$4,273	\$8.32	\$10,146	
6	Library 2 / Rm 1	26415 Scotia Rd	'20 - '21				4,485	\$828	\$0.18	-			\$828	
7	Recreation Center 1	26325 Scotia Rd	'20 - '21	140	\$2,150	\$15.35	230,080	\$10,761	\$0.05	2,134	\$14,068	\$6.59	\$26,979	
8	Recreation Center 2 / Pool	26325 Scotia Rd	'20 - '21	3,110	\$47,897	\$15.40	67,909	\$9,085	\$0.13	1,300	\$9,867	\$7.59	\$66,849	
9	Tennis Courts	8725 W 11 Mile Rd	'20 - '21				3,268	\$589	\$0.18	-			\$589	
10	Scotia Park	26820 Scotia Rd	'20 - '21	30	\$536	\$17.87	80	\$209	\$2.61	-			\$745	
11	Gordon Hassig Senior Park	12726 Kingston	'20 - '21				3,954	\$753	\$0.19	-			\$753	
12	Alligator Park	8621 Nadine Ave	'20 - '21	42	\$712	\$16.94	45	\$185	\$4.11	-			\$897	
TOTAL				3,738	\$57,747	\$15.45	545,092	\$59,073	\$0.07	5,389	\$39,838	\$7.39	\$136,658	
SOCWA TOTAL				11 Mile-Newport, 11 Mile-Woodward, 10 Mile-Sherman	2021	34,752	\$386,305	\$11.12						

City of Huntington Woods' Buildings

Energy Star® Benchmarking compares energy use per metric between similar facilities ... such as for buildings in municipal buildings compared to U.S. National median reference values.

EUI BENCHMARKING

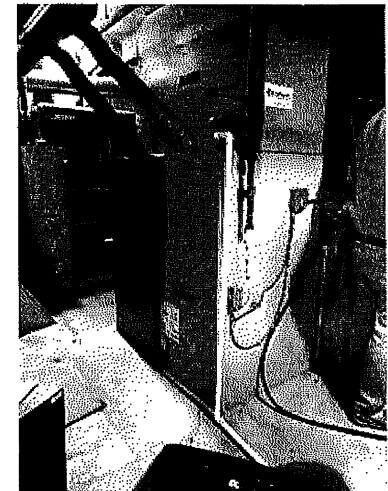


#	SITE NAME	BUILDING AREA sf	ENERGY CONVERSION				ENERGY STAR ¹ BENCHMARK	
			GAS VOLUME kBtu	ELECTRIC VOLUME kBtu	TOTAL ENERGY kBtu	BUILDING EUI Kbtu/ft ²	EUI Kbtu/ft ²	PEER GROUP Classification
1	City Hall	10,400	425,136	139,403	564,539	54.3	52.9	Office
2	Public Safety	6,600	470,322	229,423	699,745		63.5	Police/Fire Station
3	Public Works	7,000	574,158	94,355	668,513		47.9	Repair Services
4	Library	13,200	523,872	354,865	878,737		71.6	Library
5	Recreation Center	40,200	2,177,088	785,033	2,962,121		50.8	Recreation

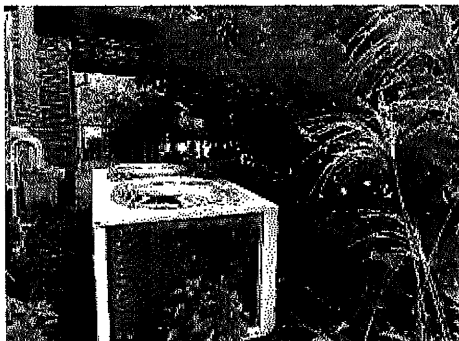
1. Energy Star Portfolio Manager - Technical Reference, see Enclosure 1.

EXISTING CONDITIONS City Hall

- HVAC Air Handling Systems is residential in nature but are expected to operate in a capacity to provide commercial-type operating functions. Residential units are not rated to operate with fans energized in constant operation. Constant ventilation to occupants is required by Code during operating hours. [Picture 1]
- Air Conditioning Condensing Unit is aged and past its service life. [Picture 2]
- There appears to be friable Asbestos present in the Basement Mechanical Room. There also appears to be Asbestos Dust present on many surfaces. [Picture 3]
- Corroded Return Ductwork of the Furnace serving the Main Floor has fractured opening ingesting Return Air from Mechanical Room where dust is present. [Picture 4]



Picture 1 – HVAC Unit



Picture 2 – AC Unit

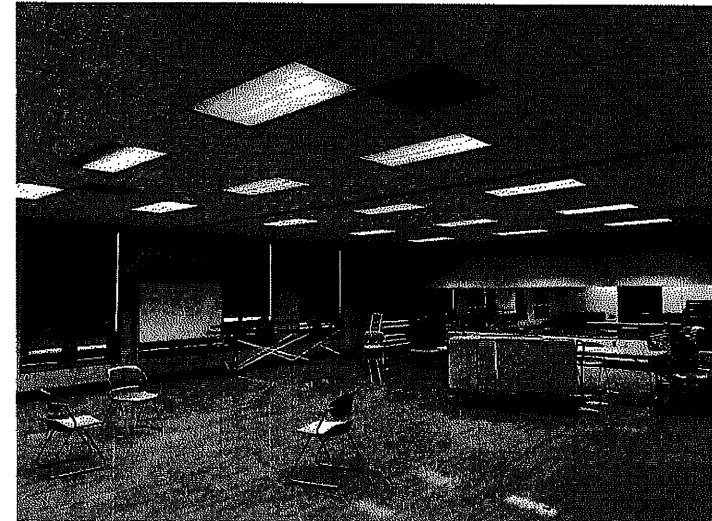
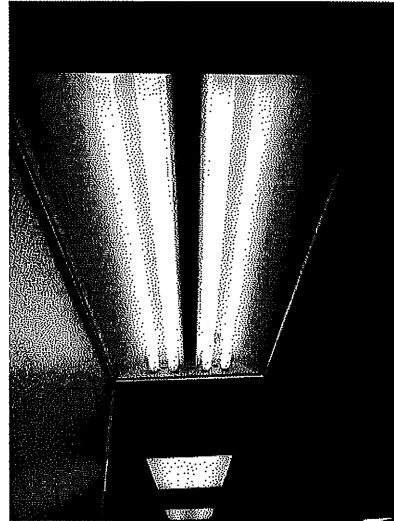
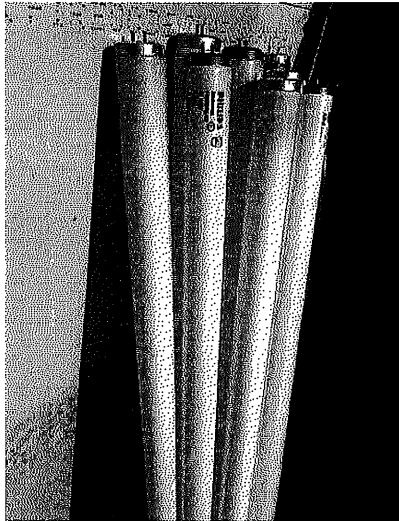


Picture 3 – Pipe w/Crumbling Insulation



Picture 4 – Rusted Ductwork w/Opening

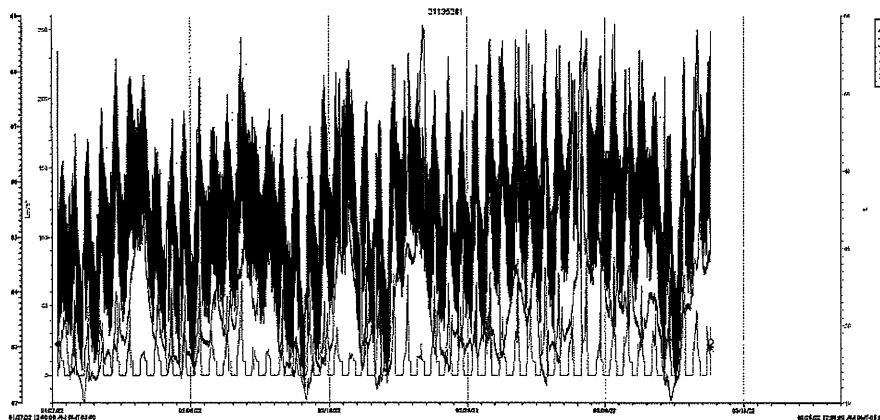
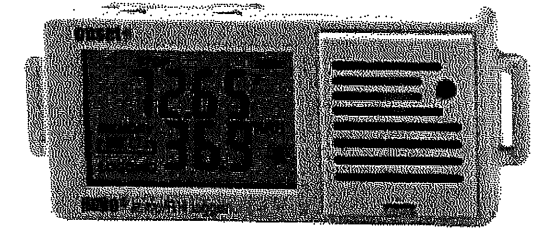
T8 & T12 FLUORESCENT LIGHTING



Previous generation Lighting Systems comprised primarily of T8 & T12 Fluorescent Bulbs and Electronic & Magnetic Ballasts have matured near or at their Service Life Expectancy. Evidence with increasing bulb and ballast maintenance.

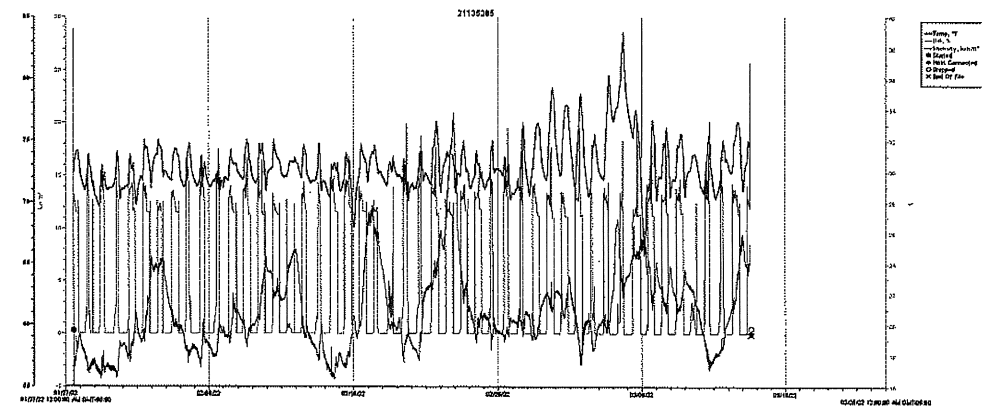
EXISTING OPERATIONS DATA GATHERING

Intelligence Data Gathering Devices (IDGD's) were deployed throughout the City Buildings to gather baseline operating conditions. This gathering of empirical data avails for accurate assessment of current conditions, hours of operations, varying temperatures and to gain a full understanding of other conditions within a building.



Recreation Center / Gymnasium

- Room Temp °F (65, 62, 69), (avg, min, max)
- Relative Humidity % (21, 10, 59), (avg, min, max)
- Lights-On 54% of the time



Library / Main Floor, Book Shelving Area

- Room Temp °F (73, 55, 84), (avg, min, max)
- Relative Humidity % (21, 16, 39), (avg, min, max)
- Lights-On 52% of the time

PROPOSED IMPROVEMENTS By Site

SCOPE SUMMARY - PRELIMINARY CITY OF HUNTINGTON WOODS

BUILDING (FACILITY OR SITE)	LED TECHNOLOGY UPGRADE	WATER CONSERVATION RETROFITS	BUILDING ENVELOPE TUNE-UP	SOLAR ARRAY INSTALLATION	BUILDING AUTOMATION INTEGRATION	HVAC REPLACEMENT	BOILER PLANT REPLACEMENT	HVAC SYSTEMS ZONING TUNE UP	INFRARED TUBE HEATER INSTALLATION	EMERGENCY GENERATOR INSTALLATION	SWIMMING POOL TECHNOLOGIES RETROFIT	WATER METER REPLACEMENT PROGRAM	WATER METER REPLACEMENT & AUTOMATIC METER READING (AMR) PROGRAM	ASBESTOS ABATEMENT	EV CHARGING STATION OPPORTUNITIES
CITY HALL	X	X	X	X	X	2								X	X
PUBLIC SAFETY	X	X	X		X	3	X	4, 5							X
PUBLIC WORKS	X	X	X	X	X				X						X
LIBRARY	X	X	X	X	X	3		4							X
RECREATION CENTER	X	X	X	X	X	3	X	4		X	X				X
TENNIS COURTS	X														
SCOTIA PARK	X														
GORDON HASSIG SENIOR PARK	X			X											
ALLIGATOR PARK	X														
CITY WIDE	1											X	X		

Notes:

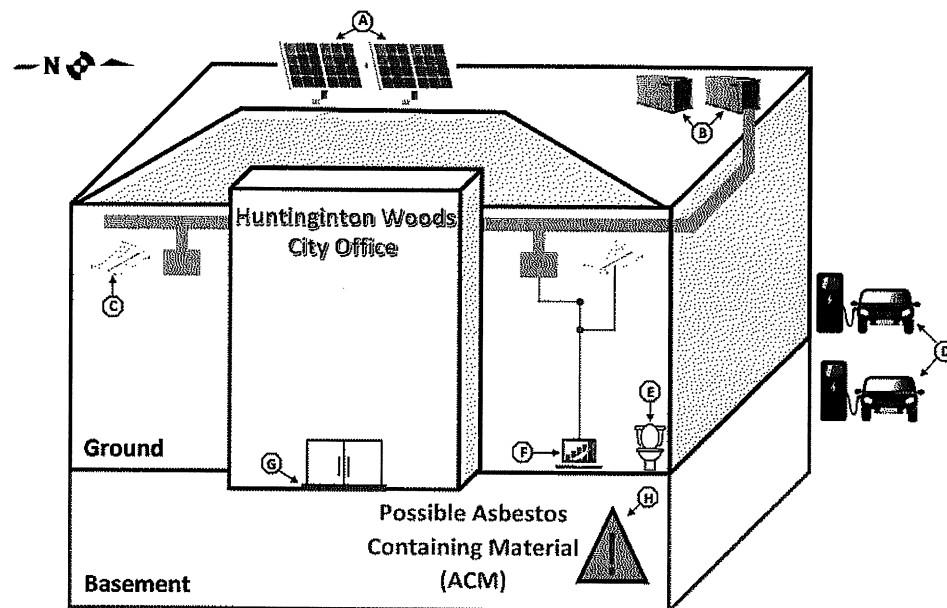
1. City Street Light LED Retrofit.
2. Complete HVAC Replacement.
3. Select HVAC and/or RTU Replacements.
4. Retrofit HVAC Zones to address distinct thermal zones, airside HVAC.
5. Retrofit HVAC Zones to address distinct thermal zones, hot water perimeter heating.

ENERGY CONSERVATION MEASURES

#	ECM NAME	DESCRIPTION OF EXISTING CONDITIONS	ECM DESCRIPTION
1	LED Technology Upgrade	Most if not all buildings have T8 fluorescent lamps w/electronic ballasts.	Replace all light fixtures with LED lights, LED retrofit kits, or LED lamps. This will reduce maintenance costs, provide better lighting quality, and superior energy efficiency.
2	Water Conservation Retrofits	Aged Domestic Water Fixtures with High Volume Water Consumption	Replace and/or Retrofit existing domestic water fixtures w/high performing, low water consuming fixtures.
3	Building Envelope Tune-Up	Observed many areas of exfiltration, large gaps at doorways, and failing caulk and door sweeps and window seals.	Improve building fenestration by installing premium quality door sweeps, preform caulking maintenance, spray foam large gaps and install batt (or equivalent) insulation as required.
4	Solar Array Installation	The City has not installed any Solar Arrays or existing Solar Arrays are non-functioning.	Install Solar Arrays on Roof or Grade. This measure will have a reduction of purchased electricity, reduce carbon footprint and provide a positive "green" stewardship to the community.
5	Building Automation Integration	Existing Building Controls Systems are on separate Interface Platforms	Combine all Building Controls Systems onto a common platform for ease of use.
6	HVAC Replacement	Existing HVAC Units are aged, energy inefficient are frequently serviced.	Replace select HVAC Units. This measure will replace equipment near or beyond its service life, provide reliable operations, and reduce service & energy consumption.
7	Boiler Plant Replacement	Existing Boilers are aged, serviced frequently & are energy inefficient.	Replace existing with modular, energy efficient boilers.
8	HVAC Systems Zoning Tune -Up	Uneven temperatures caused by over & under heating and over & under cooling at specific areas within the building.	Retrofit new HVAC Zones via new piping, control valves & controls and/or new ductwork, dampers and controls.
9	Infrared Tube Heater Installation	Existing Unit Heaters provide adequate heat for space, however lose heat when overhead doors are opened. Inefficient when doors are opened often which discourages proper ventilating when required.	Replace Unit Heaters with new energy efficient, Infrared Tube Heaters to heat slab floor heat sink and surround heavy objects. Even heat will maintain comfort even when doors are opened.
10	Emergency Generator Installation	No back-up power is available during a power outage.	Install an Emergency Generator to provide seamless power in the event of a power outage for the Entire Recreation Center (excluding pool).
11	Swimming Pool Technologies Retrofit	Pool Systems are operating adequately with opportunities for improvement.	Introduce VFD Technology & On-Demand Switching to pumping systems and replace aged pumps & assemblies. Modernize Pool Chemical Systems.
12	Water Meter Replacement & Automatic Meter Reading (AMR) Program	Approximately 2/3 of Water Meters throughout the City are in need of replacement and modernization.	Replace aging and inaccurate water meters with new modern meters with AMR technologies.
13	Asbestos Abatement	Crumbling and hazardous Asbestos is present at the City Hall Basement Mechanical Room posing potential harmful issues.	Properly abate hazardous Asbestos.
14	EV Charging Station Opportunities	The City has no installed EV Charging Stations available for their residents, visitors or staff.	Introduce new EV Charging Stations at select location capitalizing on Point-of-Use Solar generated electricity.

2025 VEREVA - 100

COMPREHENSIVE SOLUTIONS

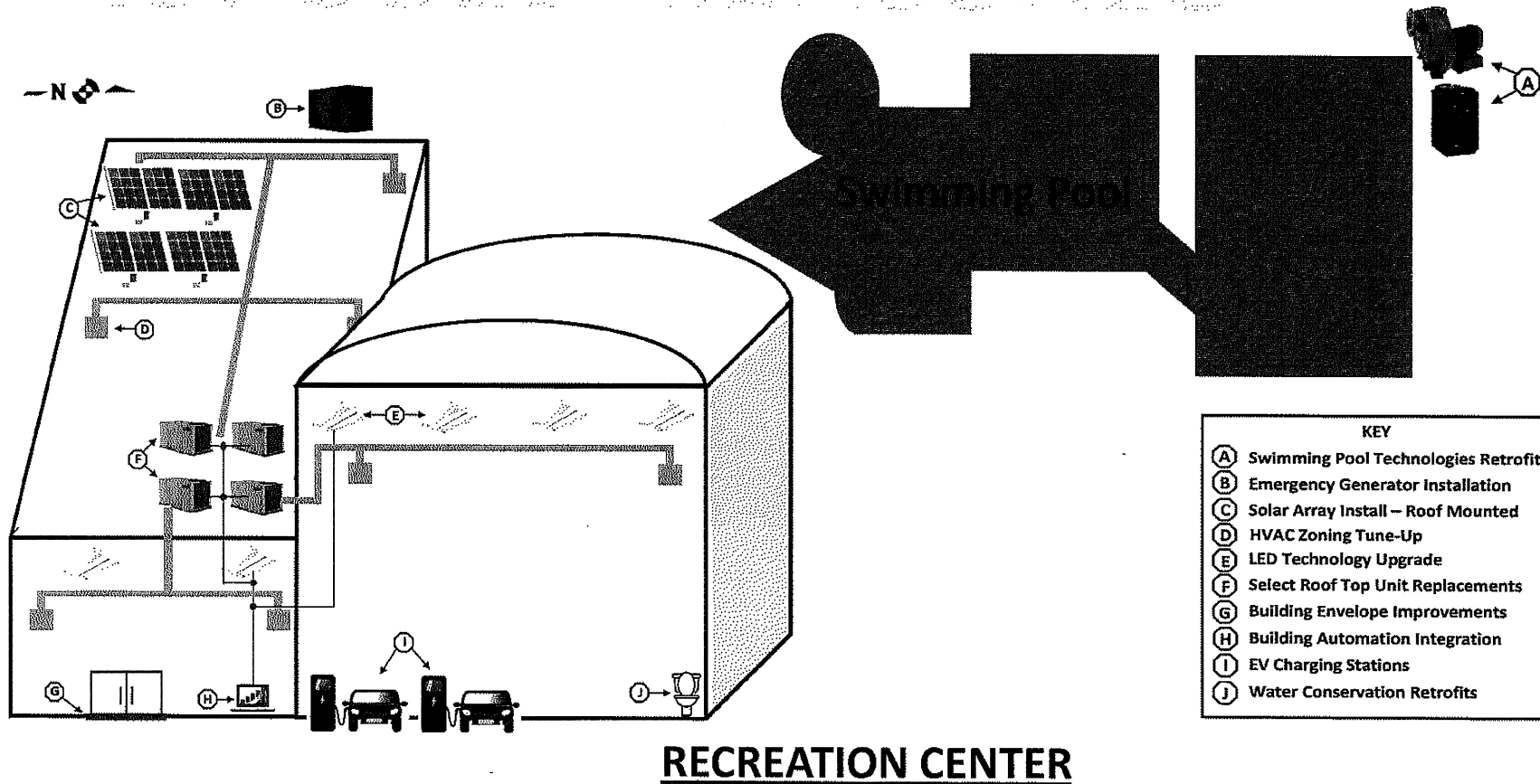


KEY	
(A)	Solar Array Install – Roof Mounted
(B)	Complete HVAC Replacement
(C)	LED Technology Upgrade
(D)	EV Charging Stations
(E)	Water Conservation Retrofits
(F)	Building Automation Integration
(G)	Building Envelope Improvements
(H)	Asbestos Abatement

CITY HALL

PROPOSED MEASURES

Master Plans - HVAC



PROPOSED MEASURES

Solar Array Installations

In compliance with the Detroit Edison's Distributed Generation Program, the City of Huntington Woods can capitalize on locating Solar Arrays as proposed. Exact locations and specific design elements will be engineered as per customer requirements and as site conditions dictate.

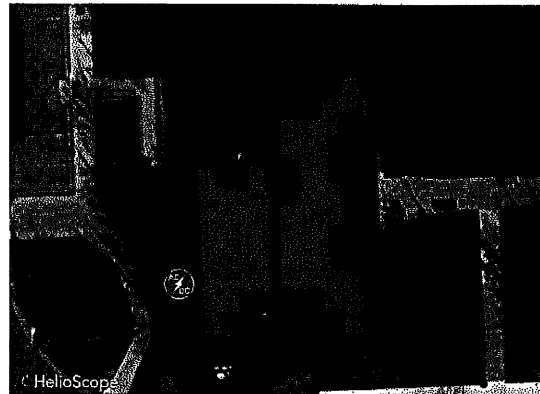


Image 1: City Hall, Grade Mounted, 36 kw Solar Array

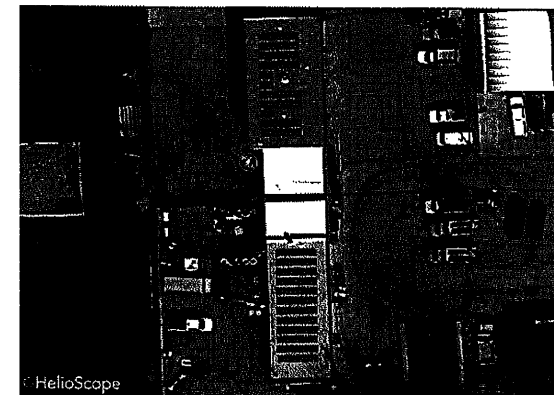


Image 2: DPW, Roof Mounted, 20 kw Solar Array

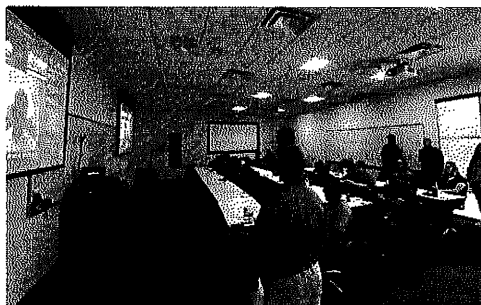


Image 3: Recreation Center, Roof Mounted, 100 kw Solar Array



Image 4: Library, Roof Mounted, 50 kw Solar Array

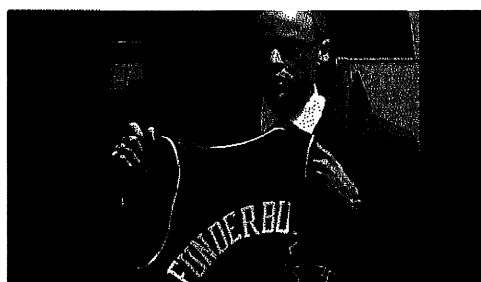
DE&I Diversity Equity & Inclusion Plan



West Region hosts DE&I speaker for all of Veregy

Clarence Anthony, former 24-year Mayor of a prominent Florida city and current CEO and Executive Director of the National league of Cities, spoke to Veregy employees.

7/5/2022 3:00 PM by Julie Dowdell Views 45 Comments 0



Former NBA Star Visits Ohio Site!

Lawrence Funderburke, former NBA player for the Sacramento Kings and the Chicago Bulls, spoke at the Columbus, Ohio Veregy location.

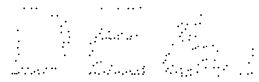
6/14/2022 2:20 PM by Julie Dowdell Views 44 Comments 0



Meet your Regional DE&I Council Members!

All three Veregy regions have established DE&I councils and are moving out on DE&I related activities and events! Take a peek at who is representing your region!

5/19/2022 12:00 PM by Julie Dowdell Views 148 Comments 0



Diversity Equity & Inclusion Plan

COHW Project DEI Construction & Subcontractor Engagement Plan:

- Access & Solicit Oakland & Wayne County Communities (& Southeast MI) for qualified MBE, WBE, SBE, DBE Contractors & Suppliers.
- Actively seek trade partners with DE&I Corporate Policies.
- Remain Transparent and Accountable with Communication & Action.



POTENTIAL Grants and Funding

- Building and Wastewater Improvements
 - Tax Exempt Lease Purchase (TELP) Public Act 123 2016
- Funding thru active Federal Grants (American Rescue Plan Act – ARPA)
- Funding thru a recent signing into law, the Inflation Reduction Act
- Funding thru future Federal Grants (Infrastructure, Investment and Jobs Act)

INTERNAL

Self Funding Model

Self-Funding Model

Cost of Operations (based on Year 2021):

The self-funding model indicates over \$0 in annual savings.

Cost Center	Current Expenditures	Proposed State with Veregy	Funding Stream
Capital Cost Avoidance ₁	\$29,009		
Utility Expenditures ₂	\$136,658		
Maintenance, Repairs, Materials & Supplies ₃	\$126,754		
Street Lighting	\$71,798		
City Water Meter Receivables ₄	\$3,568,048		
TOTALS	\$3,932,266		
Available Operational Funds			\$0

Notes:

1. Capital Cost Avoidance, annualized over 20 years.
Refer to Cost Avoidance Analysis, Attachment 1.
2. Refer to Utility Total & Summaries, Slide 5
3. Refer to Line Item Budget Summary, Enclosure 3.
4. Refer to History Register Data Summary, Enclosure 4.

PROJECT

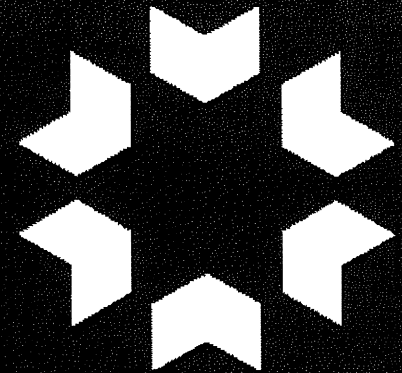
Benefits

- ☐ Proactive Asset Management
- ☐ Environmentally and Fiscally Responsible
- ☐ Better Maintenance Practices for City Infrastructure
- ☐ Future-Proof City Assets for Longevity and Resiliency
- ☐ Promotes Economic Development

Questions?

WHY VEREGY?

For your energy savings projects ...



LIFE CYCLE & COST AVOIDANCE ANALYSIS

CITY OF HUNTINGTON WOODS

BUILDING	YEAR INSTALLED	GROSS AREA (#F)	EQUIPMENT DESCRIPTION	FUEL	MANUFACTURER	MODEL #	SERIAL #	AREAS SERVICED	QTY	CAPACITY (L)	ASHRAE SERVICE LIFE (2)	REMAINING SERVICE LIFE	REPLACEMENT COST (3)	PRORATED REPLACEMENT COST (4)	2021 RSMEANS MECH PUBLISH D COST	2021 RSMEANS MECH PAGE #
Ity Hall	1955	10,400														
	2002		Furnace, Twinned Set	Gas	Lennox	G24-200		Main Floor	2	200 mbh	18	(2)	\$8,600	\$9,460	\$4,300	370
	2002		Furnace	Gas	Lennox	G40UH36B-090	5802A-70197	Basement	1	90 mbh	18	(2)	\$1,375	\$1,513	\$1,375	370
	2002		Cased Cooling Coil	DX	Lennox	C17-120-1	5602E 01534	Main Floor	1	10 ton	20	0	\$6,525	\$7,178	\$6,525	373
	2002		AC Condensing Unit	Electric	Lennox	ELS120SA4D5VY		Main Floor	1	10 ton	20	0	\$6,525	\$7,178	\$6,525	381
	2014		Water Heater	Gas	Lochinvar			Building	1	40 gal	10	2	\$2,200	\$2,420	\$2,200	71
	WEIGHTED AVERAGE >>&															

(1) Estimated capacities (listed in *italics*) are either based on ASHRAE Cooling Load Check Figures or General 'Rule-of-Thumb' Engineering Principles.
 (2) Service Life Data Source - "Estimates of Service Lives of Various System Components" - 2015 ASHRAE HVAC Applications Handbook. (Refer to Enclosure 2)
 (3) Equipment Unit Replacement Costs have been referenced through Means Mechanical Cost Data 2021.
 (4) Replacement cost adjusted for annual inflation (5%) at time of replacement.

