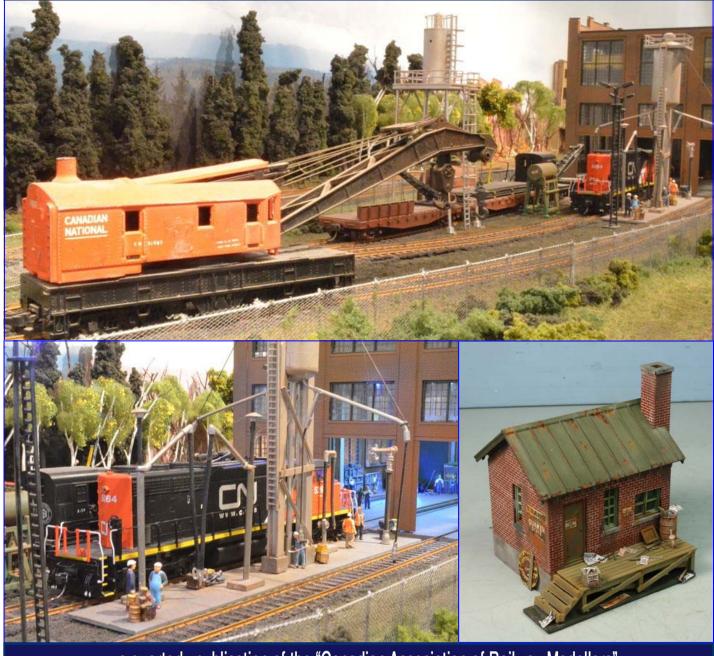




SPRING 2019 ISSUE #67

IN THIS ISSUE CHAPTER REPORTS — CHAIRMANS REPORT BRUCE COUNTY MUSEUM RAILWAY—PART 2 THE GRAFTON RAIL ROAD EMPIRE HOW TO IMPROVE A PLASTIC STRUCTURE



a quarterly publication of the "Canadian Association of Railway Modellers"



THE CANADIAN ASSOCIATION OF RAILWAY MODELLERS

Founded October 15, 2003 Founding Members: John Johnston, Peter Moffett, David King, Lex Parker

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John Johnston Peter Moffett David King

David King Walter Reid editor@caorm.org treasurer@caorm.org

membership@caorm.org registrar@caorm.org promosteve@caorm.org Gary Baillargeon chapters@caorm.org

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TOP COVER PHOTO & BOTTOM LEFT COVER PHOTO BY TED RAFUSE: Two photos of the compact, contemporary, engine servicing and MOW facility on Mike Sonosky's Grafton Rail Road Empire. A large crane occupies the foreground of the image. In the background is the large multi-story engine house and repair shop. Nearby is a sanding tower to replenish sand in diesels for adhesion, several flatcars with various pieces of maintenance machinery and a diesel being fuelled.

BOTTOM RIGHT COVER PHOTO BY GEORGE DUTKA: My Walthers brick fuel storage shed has the roof spray bombed with camo coat olive base, then burnt umber and burnt sienna acrylics followed by Bragdon rust. The walls are auto primer red followed by Roberts brick mortar. Using my tips one can get the same effect with a bit of effort. I have added some signage and details to add character to this structure.



FOREST CITY RAILS 2019 SUPERMEET UPDATES

The following was received from Bruce Harmer:

Meet & Greet program for Friday May 17th is now final:

8:00 p.m. pizza & registration in the conference room of the Best Western Stonebridge Inn

8:30 - 9:30 p.m. - Nerd's Guide to Germany (German Railroading) by Mike Walton

9:30 p.m. - 11:00 p.m. railroading movies.

The London Group has also opened a Website at www.forestcityrails2019.com

INTERESTING BLOG

You will have noticed over the last few issues the contributions that George Dutka has been making to the Canadian. George has an excellent HO model railroad titled the White River Division. The railroad was inspired by the Boston and Maine, Rutland, and Central Vermont Railway's of the 1950's. If you would like to follow an interesting blog about HO model railroading and prototype railroading of the 50's, I strongly suggest that you give George's blog a look at:

http://whiteriverdivision.blogspot.com/



2647

TRAIN SHOW TRIP

The group of modellers I hang with decided we would take in the Springfield Train Show this year. Wow! Worth the trip to Massachusetts.

We railfanned our way there and boy did we luck out. Stopping in Utica during a snow storm we caught the once a day Susquehanna turn. (Photo above). Our luck continued as we exited the Mass Turnpike to see what was on the headend of a slow moving freight we saw pass underneath us and caught this ex ATSF CF7 on the Pioneer Valley. One of the few left, this unit is over 60 years old starting life as an F7. Two once a day trains on the same trip. Boy did we luck out.

PUBLICATION SCHEDULE FOR THE CANADIAN

The Canadian is published four times per year. Submission by authors or Chapters should be submitted by the following dates.

Spring Issue: February 1 Summer Issue: May 1
Fall Issue: August 1 Winter Issue: November 1



CHAIRMAN'S REPORT

The spring edition of The Canadian brings with it the advantage that spring means less time snow shovelling and more time for modeling and attending shows and shows is what this article is all about. Not only do we have a great Supermeet being organised by the Southwestern Ontario modelers with layout tours, talks and prototype tours as well as social time So if you haven't already diarised the weekend of May 17 to May 19, 2019 and made your hotel reservations, if you need accommodation, then don't wait a moment longer. Stop spiking down track and get on the internet to find the details. There is more information about this event elsewhere in this issue.

Not only do we have Supermeet in 2019 but very preliminary plans are being made by the Toronto Chapter to organise a Supermeet in the greater Toronto area in 2020. They have formed a planning committee and will shortly be presenting a concept to the CARM Executive. It will probably be at the same time of year; mid – late May. As soon as more details are known we will make sure all CARM members are advised of as much detail as is confirmed. This will be a tenth anniversary for the Toronto Chapter from their hosting the CARM Convention in 2010 and maybe this could become a policy that other Chapters would like to follow to host once a decade events.

Some time ago I started writing a series of articles about my new portable On3 layout depicting the Anyox Mine

railroad. The layout construction got ahead of the articles and it did so in part because I made commitments to display it at several shows in 2018. I did make it to those shows, with a completed layout, fully sceniced so now I must write a closing article describing its completion. But before I do that I need to advise that I have now abandoned it as a portable layout and instead determined to erect it in a more permanent location so I can appreciate it more and also operate it, other than at shows. Therefore I dumped out a lot of other stuff and made room and now am setting it up in a slightly different arrangement of modules so it provides more interesting operating scenarios. Hopefully it will be on display as one of the layouts for the Toronto 2020 Supermeet.

The point of all that information about my non-portable layout is to suggest to all modellers who are building layouts or contemplating doing so, to sign up for an open house, layout tour or convention a year or two into the future. The goal of having to have it sufficiently completed to impress your visitors and yourself is a tremendous incentive to make progress on the layout. So get going on your layout and then find a Supermeet to volunteer it for. I look forward to visiting your success.

GERALD



CHAPTER REPORTS

NATIONAL CAPITAL CHAPTER

The National Capital Chapter held its annual Christmas lunch/meeting with 10 members present: Ian McLeod, Bruce Leckie, Garry Comber, Peter Jackson, Jeff Hill, Grant Bruner, Steve Watson, Richard Thornton, Rich Stewart and Alex Thum.. The usual banter ensued before we settled down.

At this meeting, the membership renewed the executive's mandate for 2019, voting to have Bruce Leckie continue as Chapter Chair and Ian Frost continue as Treasurer, reaffirmed support for the Capital Region Model Railway Tour in 2019 and decided on the major Chapter excursion for 2019. Attending the Forest City Supermeet in May.



NCC Right side, left to right: Grant Bruner, Steve Watson, Richard Thornton, Rich Stewart, Alex Thum



NCC Left side: Left to right, Ian McLeod, Bruce Leckie, Garry Comber, Peter Jackson, Jeff Hill

ONTARIO MIDWESTERN CHAPTER

We reflected back on a very productive year. We are pleased to introduce 4 new members to our chapter: Larry Ker of Owen Sound, Roy Whitman of Owen Sound, Steve Canton of Georgian Bluffs, and Dave Dybal of Chesley. Larry has been an active volunteer in the production of the Bruce County Museum Railway. We look forward to meeting Roy, Steve and Dave in 2019. (I actually have met Roy at Paul Maurer's when building the BCMR)

We mourned the loss of Lloyd Koch a long time member. Lloyd had a model train shop in Atwood.

We had a fairly active year in 2018. Meetings - Spring at Paul Korhonen's and - Fall at the Bruce County Museum. We were at the Grey Central Show, and the Kitchener Train Shows with switching layouts, and the Bruce County Museum Heritage Day with train layouts for the kids.

The Bruce County Museum Railway was installed in the gallery on July 11. The opening was one of the largest ever at the museum. Construction of the railway started in October 2016. It was a real scramble to be up and running for the opening date. Since then, the trains now actually run well. Dolf has built a camera into an RPO car so viewers of a TV monitor can enjoy a "ride on the rails". When a project this big opens, it looks good, but viewers have no idea what was needed to get it there. So, there is now a picture viewer to show the many ac-

tivities the volunteers completed to bring this project to life. The articles we are sharing with you in the Canadian, Part 2 this month, explain this volunteer effort in greater detail.

We look forward to a new year and all the promise it brings. Best wishes to Paul Korhonen as he prepares to move to a new home. The many shows and "get-togethers" to share our common interests. Enjoy the many facets of the planning, dreaming and building your own, or even a friend's "model railway".



Bob Funston, teaching a young operator how to "operate" at the Bruce County Museum Heritage Day celebration, on the Peter Stamford inspired switching layout. Larry Ker is looking on... (picture by Steve Hoshel)

TORONTO CHAPTER

John Hinbest, with help from his wife Cloy, arranged the organizational meeting for the CARM Toronto Chapter in June 2004. He was the first President of the chapter, from 2004 to 2007, and organized many of our activities those years. Then and later he and Cloy helped promote CARM at many Toronto area shows and flea markets.

John and Cloy had a joint party last October at the streetcar museum, John to celebrate his retirement and Cloy to celebrate her 60th birthday, with family and friends. The next week they headed off in their Big Rig and house trailer. The plan was to take Route 66 where possible to California, stopping at train museums and anywhere else they felt like.

Ending up in the hospital in Phoenix Arizona wasn't in the plan but unfortunately it was in John's destiny. Tuesday night January 15th he died of liver cancer.

The Toronto Chapter held their annual General Meeting on November 22nd 2018. In addition to reviewing the business of the Chapter recognition was given to an idea organized by Chapter Secretary James Rasor. The Toronto Chapter issues a regular email newsletter entitled "What are you working on" which showcases what individual members have been doing in the hobby. Here are some examples from this month's newsletter.

PHOTO RIGHT: IAN JAMESON: Ian has been updating his layout with flashing lights and sounds. "I seem to be in an electronic mode with making things that have flashing lights and sound. The fire truck is great, with three sets of flashing lights and the European wailing siren. My Commissioners waste station will have flashing lights on the building and on the loader and the garbage truck. The burning building has flashing lights simulating a fire burning in the building.

PHOTO BELOW: JAMES RASOR: I've been working on a CN maintenance of way train for Willie Waithe's CN Weston Subdivision layout for a while now and I have finally finished it including a four car ballast set, a four car track gang set and a miscellaneous vehicle set.

The trains are small but representative of a track gang photo I found years ago on the Tracksidetreasure website. The track gang consists of:

Ballast spreader on a flat car (Showcase Miniatures Kit). Tie cart with an older Kershaw tie crane and second tie cart on a flat car. (Railway Express Miniatures Kit). Crew speeder, generator, and washroom on a tie cart and a supply tie cart on a flat car. (Railway Express Miniatures Kit). New Knox Kershaw tie crane with tie cart on a flat car with scorpion ramp. (Showcase Miniatures Kit, Railway Express Miniatures Kit, and scratchbuilt scorpion)

The four car rail sets are all on painted CN flat cars with custom individual CN MoW decals and car numbers along with tie down chains and weathering. They are meant to be an older tired track gang set. The scorpion is representative of a scorpion ramp.











FOREST CITY RAILS 2019 SUPER MEET in London/St. Thomas

Friday, May 17th: Pizza party meet & greet and movie night in the hospitality room of the Stoneridge Inn. Start time -8:00 p.m. Cost included in the registration fee of \$25.00 per person.

Saturday, May 18th: 10:00 a.m. CARM annual meeting in the hospitality room. Lunch break after at the venue of your choice. Reconvene at 1:30 p.m. at the Elgin County Railway Museum for a tour of the facilities which will include the BX interlocking tower a short distance away. Cost will be \$7.00 + hst per person payable at the museum. Some St. Thomas layouts will be open from 4:00 - 6:00 p.m. Break for supper. The Thames Valley Railway Club, located in Thorndale, will host an operating session from 7:30 - 9:30 p.m.

Sunday, May 19th: 10:00 a.m. A tour of the Canada Southern Railway Station. Some London, Ontario layouts will be available for viewing from 1:00 - 4:00 p.m..

Subject to change without notice.

Hotel Information for those needing to make reservations: Best Western Stoneridge Inn at 6675 Burtwistle Lane, London, Ontario. Tel: 519-652-6022 http://stoneridgeinn.com

Rooms are \$134.00 per night and includes a breakfast buffet. Booking URL

https://bestwestern.com/en_US/book/hotel-rooms.66085.html?groupid=B56HN9T2

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FOREST CITY RAILS 2019 SUPER MEET REGISTRATION FORM

Name:		
Address:		
City:	Prov:	Postal Code
Email:		
For confirmation of rec		

Please enclose a cheque of \$25.00 per person and mail to: Bruce Harmer, 7190 Outer Drive, Port Franks, Ontario N0M 2L0

Registration desk will be open at the Friday "Meet & Greet" and on Saturday at 9:30 a.m. before the AGM in the hospitality room at the Best Western Stonebridge Inn.

BRUCE COUNTY MUSEUM RAILWAY

PART2

RESEARCH AND PLANNING ARTICLE AND PHOTOS BY RANDY SCHNARR



FROM THE EDITOR

This is the second article on the construction of the Display Layout at the Bruce County Museum built by a group of volunteers. Randy Schnarr will be covering a number of topics including:

- 1: From Concept to Reality: ...explaining how it came together.
- 2: Research & Planning: The efforts of the research team to find the data to give the project substance.
- 3: Major Structure: how the structure was built from initial sketches.
- 4: Diorama Construction: with photos of some of the completed dioramas.
- 5: Control Systems: We will be operating in three modes. Computer controlled, DCC, and DC.
- 6: Future development; we will be adding sound systems and video cameras to the system so disabled visitors and vertically challenged can enjoy all three levels of the exhibit with sound to match the images.

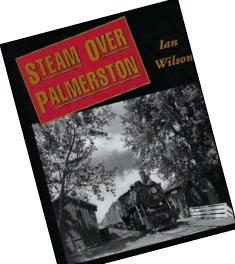
The order of the articles may change as Randy finds the time to write them.

The Bruce County Museum Railway (BCMR) exhibit is a volunteer driven community project commissioned by the Bruce County Museum to present the rail ways of Bruce County as they appeared when they were the vital link to the rest of Canada and the USA. Our targeted years to model were from the 1920's to late 50's.

From the initial concept of the BCMR to the opening ceremony, research has played a critical role in the development. We needed to know about the rail lines, buildings including dimensions, businesses, operations, and motive power.

When we started, we didn't know just what was available, how to find it, and in some cases how to use it. As with many elements of the project, there was a steep learning curve. Fortunately we had volunteers readily available to

search out key information. This article itemizes the many resources that helped us to replicate the prototype in HO scale.



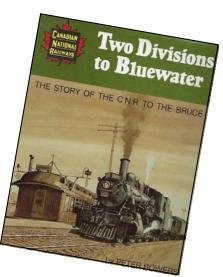
Early Research

As a student of model railways interest leaned toward typical, rather

than replication of a prototype railway. However, that changed when I took the time to read two books which featured the railways in our region. "Steam over Palmerston" by Ian Wilson, which takes you for a ride up the

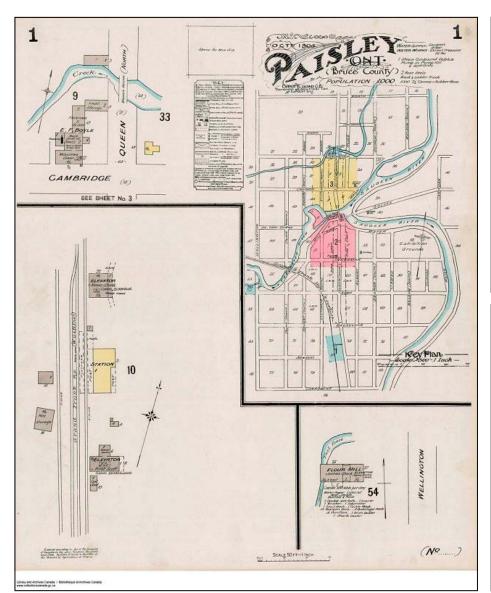
Southampton sub revealing amazing, almost romantic images of the businesses, structures, and activities along the route. The track plans offered were key elements of early concept thinking for the BCMR.

Two Divisions to Bluewater, by Peter Bowers offers several images with footnotes to



document times and places. These books provided the basis to model the original railway buildings, businesses. trackage, and rolling stock. The recent introduction of the book Rails to Goderich, a rail line just south of Bruce County, provided insight into the politics involved in the development of rail lines in Southwestern Ontario.

On the following pages I will share with you some of the sources we used and the types of information that we uncovered.

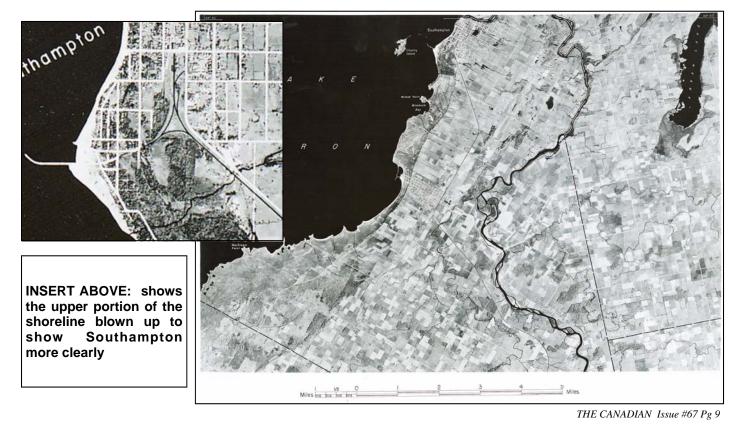


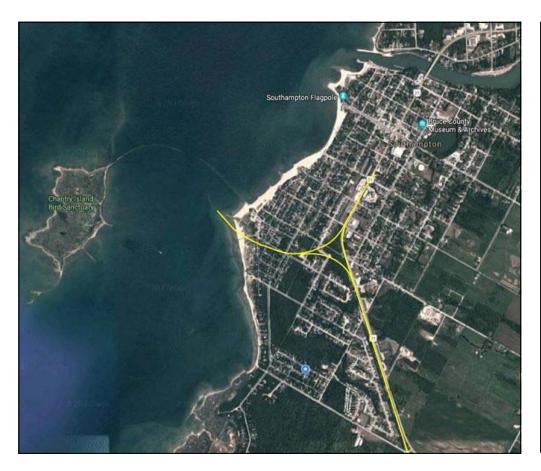
Fire Insurance Plans (LEFT)

It is amazing to learn that records are available which provide construction details with basic dimensions of structures in most communities ...for the insurance industry. Various records are available at Archives Canada, museums and many universities. It requires some searching to find records for specific locations. Bruce County town insurance plans are available with dates as far back 1890, 1904 and 1925.

National Aerial Photo Library (BELOW)

This black and white image was taken in 1954 and is located at the University of Toronto. It shows where the track was located and all buildings of that era. If you are looking for the 50's, this reference is like gold.





GOOGLE SATELLITE IMAGES: (LEFT)

These views are amazing when it comes to identifying the route of the railway, even though the tracks are no longer there. Rail Trails are very easy to identify. Tree lines and breaks in farmer's fields often indicate the route of the now removed railway.



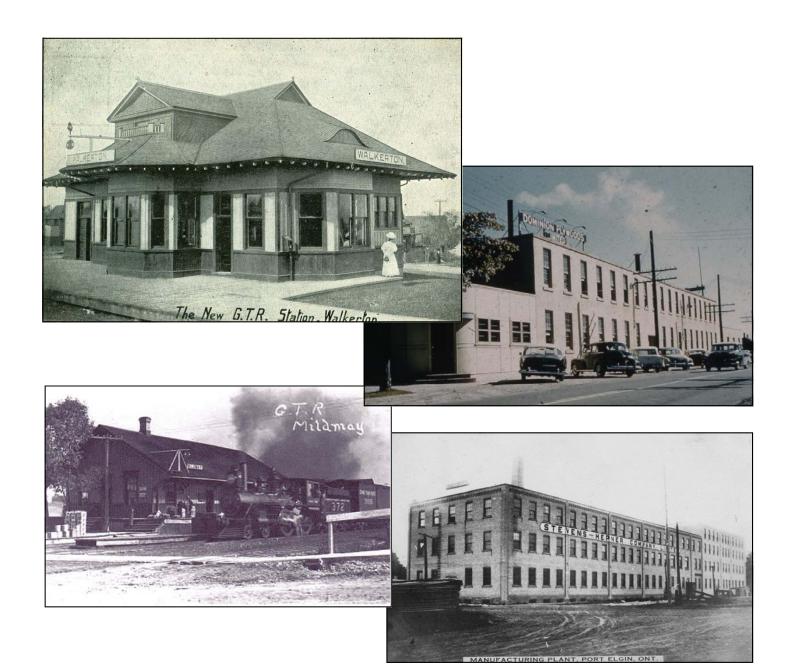
ON SITE PHOTOS: (LEFT AND BELOW)

most of the backdrops used on the BCMR are developed from photos taken on site, in season. The museum's graphic designer was able to use photo shop technology to remove modern elements, taking the images back to the 40's. Photos were then stitched together to make a single flowing back drop which accurately represents the location. Some buildings like Hepworth Furniture in Southampton and Stevens-Hepner in Port Elgin had to be created in elevation using black and white perspective photos as reference.





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BRUCE COUNTY MUSEUM (ABOVE) A visit to your local museum may uncover a treasure trove of photos and stories directly related to your region.

CANADIAN RAILWAY MUSEUM IN ST. CONSTANT: Our researchers did not reach out to CRM, however a recent visit there was very productive in expanding the understanding of railway operations.

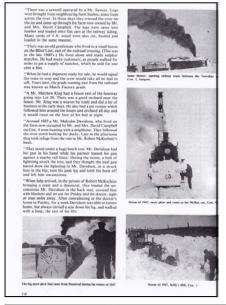
Stories from survivors... keep them on Video

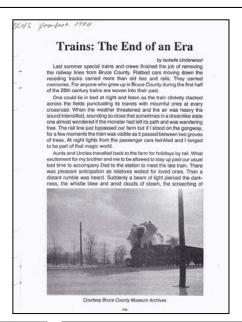
In our community we found two men who had "fired" on steam locos and a station agent. Survivors tend to have good stories and can validate conclusions from other research sources. We were able to video tape the station agent and a fireman. The video runs daily at the Bruce County Museum. Many visitors to the museum also offer information that can often add more depth to the exhibit.

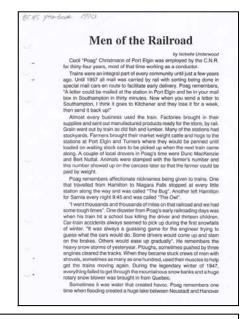
Research ...

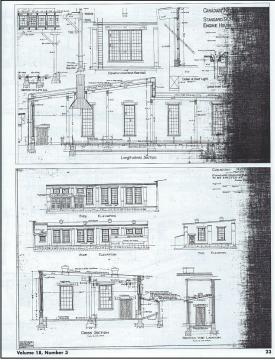
So much information was acquired that it was difficult to comprehend everything while we were building to meet a deadline. As we go forward we can now review the research in an effort to find more relative information to enhance our exhibit and related activities. The stories are amazing...

LOCAL HISTORICAL SOCIETY RECORDS (BELOW) provided regional stories of railway men, business operations and how they relied on the railway. They tell of nick names used for trains, disasters of all kinds, and generally what life was like with the railway ...very informative.









authors of railway materials may have some very valuable information. In our research, Peter Bowers, author of "Two Divisions to Bluewater" happened to have a complete list of GTR structures including build materials and dimensions, likely used for insurance purposes. Some dimensions on irregular shaped floor plans tended to reduce external dimensions to represent the square footage more accurately, as we noted in the Southampton station, which we could measure (because it still exists, as a private residence).

LOCAL RESOURCES CAN PROVIDE INSIGHT (BELOW) Local

RAILWAY HISTORICAL ASSOCIATIONS (ABOVE) such as CNR Historical Association's CN Lines publications were very useful as guides for railway scenery and some structures. Their focus on motive power, rolling stock and operations is very helpful as we move to operations, beyond the construction and scenery detail.

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	Coal platform	Timb. fdn., 3° plk., 216 sq. f	188	52nd class.		Preignt shed.,	rf., 1 storey, 40x96x15 Fr. bldg., tmb. fdn., shgle	1873	2nd class,
1	Baggageroom.	Fr. bldg., tmb. fdn., shgle	-			Closet	Fr. bldg., tmb. fdn., shgle	1873	88 (4)
3	Closet and oil house.	Jubb, idm., 3° pik., 1,280 80, ft., Tmb, idm., 3° pik., 216 seq. f Frame, 3° pik., 12825 Fr. bidg., tmb, idm., ehgle rf., 1 storey, 8x10x8. Fr. bidg., tmb, idm., shgle rf., 1 storey, 10x10x9. Frames, 20x20, lane 9'x30', 4 pens, 2 chutes.	18/3	ord class,		Oil house	Pr. bidg., tmb. Idn., shgie rf. 1 storey, 10x10x8 Pr. bidg., tmb. Idn., shgie rf., 1 storey, 5x7x6 Pr. bidg., tmb. Idn., shgie rf., 1 storey, 70x80x18 Pr. bidg., tmb. Idn., shgie rf., 1 storey, 14x18x10 Pr. bidg., tmb. Idn., shgie rf. 1 storey, 14x19x10		
	Stock pent	rf., 1 storey, 10x10x9	873	H		Engine shed	Fr. bldg., tmb. fdn., shgle	1873	
	344	4 pens, 2 chutes	1903	1st class.	1	Carman's house	rf., 1 storey, 70x85x18	1873	200
	water tank, gran, and	4 pens, 2 chutes. Fr. bldg, tmb, fdn, sheet ir. rf., 2 storey, 12x20	202	Can 93 404		Carman's nouse	rf., 1 storey, 14x19x10,	1873	
			000	gals,		Hand car house	Fr. bldg., trub, fdn., shgle	1872	1000
1.10	section nouse,	rf., I storey, 24x30v10	873	3rd class.	1	Dwelling house	rf., I storey, 16x47x8 Fr. bidg., tmb. fdn., shgle rf., I storey, 30x40x10 Fr. bidg., tmb. fdn., shgle	1000	40290
2	Section house, S. Caria.	Fr. bldg., tmb. fdn., shgle	004			Kitchen and slied	Fr. bldg., tmb. fdm. shele	1873	
1	Pump house,	Fre bidg tmb fdn shgle	846	18t class.					
118.70	Section house	rf., 1 storey, 16x24x12	896	2nd class.		Stock pens	Fr., 30x41, 1 pen, 2 chutes Tmb, fdn., board cover, 2 storey, 10x12	10 290	STATE AND INCOME.
		Fr. bldg., tmb. fdn., shgle rf., 1 storcy, 2sx3dx10. Fr. bldg., tmb. fdn., shgle rf., 1 storcy, 30x2dx10. Fr. bldg., tmb. fdn., shgle rf., 1 storcy, 18x2dx12. Fr. bldg., tmb. fdn., shgle rf., 1 storcy, 2sx3dx10. Fr. bldg., tmb. fdn., shgle rf., 1 storcy, 10x12x8.	873	3rd class.		State of the state of the state of	storey, 10x12	1873	Cap. 7,048
21	LICOME E FEETE	rr. bldg., tmb. fdn., shgle	973	10 m		Coal bin	Pr. bldg., tmb. fdn., 3' high,		gmls.
111	10年20日 10日		410	Section 1	1 3		6x6x12 long	1873	2nd class.

Mike Sonosky's HO Modelling The Grafton Rail Road Empire

Text & Images by Ted Rafuse

Mike Sonosky's foray into model railroading is rooted in personal history and extensive in diverging branches. At present he is constructing an HO layout in a 23 by 12 foot area in his home basement but in the past in previous locations he has erected eight HO scale layouts. His first layout was typically a starter built on a 4 by 8 foot sheet of plywood. To this was added staging yards at both ends that led a foray into constructing detailed structures. Several layouts followed and, due to less available space, these were shelf layouts. As his interest in switching operations intensified and with a larger space available he constructed a large switching layout with more detail and more realistic effects on the layout.

PHOTO BELOW: Coalspur Mines is a large modern mining operation in the interior of southwestern Alberta. It meets current ecological parameters and provides significant employment to many local community members. The plant ships out product in hoppers with both CN and CP having access to the mine and its loading tracks. Note the large communications tower on site that provides constant communications with the head office facilities elsewhere in the province and also provides income for the mining company as they rent out tower space to various telecommunications companies for their receivers and transmitters.

The communication tower was scratch-built using Canadian Towers as templates for the design. The tower is constructed using styrene tubing, brass rod, buttons and wood plugs for the antennas, The tower is illuminated using 3 mm LEDs and a red flashing LED at the top from Evans Design. The small control systems shack is also scratch-built, The enclosure fencing is scratch-built using the technique of soldering brass rod and covering it with tulle fabric and spraying painting the assembly with a silver paint.

Costspur A

One of these earlier larger layouts featured tables folding down from the walls of the rec room in which it was built. When the tables were folded up against the wall, the underneath side had a custom cork bed attached to it that allowed his children to post their art work. When the table was positioned down it allowed him to operate a model railroad! Subsequent layouts featured new construction techniques and an emerging sense of creating a realistic, detailed model railway. These early layouts featured historical and contemporary aspects of railroading and highlighted Canadian railways.

Mike began his interest in trains at an early age. About age 7, on a Christmas morning, he witnessed a Marx 027 set beneath the tree. Subsequently he spent a number of years collecting rolling stock and track expansion. As a youth he often wandered to the Toronto rail yards in the area of Bathurst St, Spadina Ave and Strachan Ave to watch the switchers work the yard and view the constant coming and going of passenger and freight trains. He and his gang of friends often entered the yards to get close to the

PHOTO BELOW: The large grey building in the background, which is a Walthers kit, is the printing plant of the giant Canadian news magazine, Mclean's. The railways supply this plant with daily boxcar loads of newsprint paper in gigantic rolls. Not only does this plant print the national news journal it also prints a variety of in house specialty publications and therefore operates two shifts daily. In the foreground is one end of the Maple Leaf Shipping transfer. The main line tracks follow the white fence around this corner of the layout. The building in the corner aids in diminishing the appearance of the sharp corner backdrop.



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PHOTO ABOVE: The Fraser-Surrey Dock coal handling facility occupies a significant portion of the bottom of the U-shaped layout. This transfer operation receives shipments of coal onto the property from the spur that leads off the track viewed in the foreground. Coal arrives by hopper cars and is stockpiled and transferred to barges and ships for forwarding by water. A glance at the elevator near the camera suggests that the device has just commenced operation as the coal spurts out in an arc from the end of the conveyor belt. On the far side of this dock estuary are fossil fuel transhipment facilities as indicated by the globular gas and cylindrical oil storage tanks. All items in this scene have been scratch-built by Mike. This includes the conveyors, the long covered coal dump building, the mobile conveyor belt units, stone walls and all signage. The scene has been augmented with appropriate equipment to create a realistic scene.

PHOTO BELOW: The dock company and rail company are aggressive regarding trespassing, so this view of the tug William C. Baker is the closest the camera railfan could set-up. Note the backdrop of oil storage tanks on the far side of the harbour and the track leading into the west coast facility.



trains only to be chased, but never apprehended, by the local rail police. Perhaps it was this 'gang' experience that got him off the streets and led him indoors to model trains.

The current layout is Mike's largest to date occupying a space 23 by 12 foot. Its construction began in 2015 with a five-year plan for completion. Its design intentionally includes parameters of ease of operation and ease of maintenance. The current track plan is in the shape of a U but future construction will witness continuous running in the form of an oval and will include several independent operating areas for six operators independent of the mainline. There will be a centre peninsula when completed with a swing out gate allowing for access. The layout at present depicts several scenes typical of the Canadian landscape and includes motive power representing all of the current Canadian railway companies. At the time of this article, the layout is not complete as it is designed, but is operational for multiple operators.

This layout's time frame depicts the early diesel era to contemporary and all units are DCC sound equipped. Early diesel examples include various road switchers such as F7 and GMD-1, and yard switchers, SW2, SW1200 and others, to more current diesels including SD40, SD40-2. GP35, GP38, and MP15 and passenger units such as FPA4 and F40PH models. Manufacturers are Rapido, Atlas, Kato, Intermountain, Athearn, Trueline. Rolling stock has been provided by the following manufacturers: Rapido, Atlas, Kato, Intermountain, Athearn, Trueline, and Accurail.

Locomotive propulsion is Digitrax DCC DB150s for control & booster support. Mike employs a JMRI (decoder pro sw) on an old XP laptop connected via a RR-Circuits interface module to a Digitrax DB150. ESU Loksound sound decoders are the default decoders for his locomotives. He uses a router dedicated for the layout room which connects the laptop with the JMRI-Decoder Pro (train list of added locos for operation) and uses old android cell phones and I-Pads using Engine Driver SW downloaded via Google Play and I-Tunes online stores. This arrangement has worked very well and the local train group from Cobourg use their own cellphones with engine driver to operate during his hosting operating sessions. He supplies old cell phones for those who have not embraced the smartphone era. In this manner he is all inclusive with the local train group.

Mike creates vignettes of Canadian rail scenery on his layout. In Southern Ontario are industrial structures located in the Toronto to Windsor corridor, the Alberta vignette features a mine from the northern part of the province, the Prairie region illustrates the typical inland terminal grain silos, farm scenes and rail depot facilities and the west coast is represented by the Fraser Surrey docks coal handling facility with scratch-built structures including the coal conveyors, coal train sheds, water scene tug and coal barges. A lumber mill could be in Northern Ontario or the British Columbia interior. Near the lumber mills is a forest fire with scores of men and equipment on the ground and a water bomber 'dropping water' on the



PHOTO ABOVE: In one corner of the bottom of the U shaped layout, Mike has uniquely camouflaged the 90 degree bend with this unique forest fire scene. The water bomber dropping water on the forest fire is a model of a Canadair CL-415, 1/72 scale; the model is from New Rays Toys Co. The helicopter is also transporting water, using a water pod below. The helicopter is a Bell UH-1D model, 1/87 scale, by Roco, kit #3345.

conflagration.

Structures from Walthers, Kana Models, Laser Models, Branchline Trains, Micro Trains, Juneco, JR scale models, and Lineside Structures are kit bashed before appearance on the layout. Of late Mike is focusing on scratch building models to suit specific locations and functions. Scratch built structures currently on the layout include the coal conveyor systems, a communications tower, a chain link fence built with brass & tulle material. Trees of various species, photographic vignettes for backdrop, buildings using computer design with matt board, are all added items to create a 3D affect.

A major feature of the layout reflects Mike's attraction to electronics and the effects that can be produced by that wizardry. Through the use of various LED lighting schemes, structures are lit, inside and outside, using static and very specific flashing lights on communications towers, at welding scenes, with street lights, industrial building lighting, forest fires, flashing emergency vehicle lights, and maritime protection scenes. A similar technique is used in the overhead lighting of the layout room to demonstrate both day and nighttime operation.

Microcomputer units handle sound delivery to various layout scenes using cell phone speakers implanted into the scenes with realistic results. These microcomputer units can receive edited sound files which Mike has edited using sound editors on PC. He uses these sound files for these scenes at the Coal mine, Diesel maintenance building, Forest Fire and Lumber Mill. As might be expected, all of the turnouts on the layout are managed by switch machines and controlled via switches mounted within panels on the fascia which fold down for maintenance.

Mike has many plans for the future beyond what he has created to date. Over the next two or three years to complete the layout. He expects to model the Brampton, Ontario, container facility with all of the container cranes and an actual operating Heljan DCC container terminal crane. There will be a West Coast Metro container port with a scratch-built container crane and ship. The Vancouver port will include a grain storage distribution operation with silos and loading operations with models including a scratch-built container ship for grain shipment. He is also planning a BC logging and mining shelf layout in the adjoining rec room.

As a member of the Cobourg modelers Mike has found this group a supportive and a fun group. There are no dues, no club layout to work on, just visit each other's layouts for operating sessions and to discuss everything model RR, real rail fan experiences and local community events including the Cobourg Model Train Show held the first Saturday in March for several decades. He is also involved in a venture acquiring collections and reselling railway items at various train shows and flea markets. This venture assists financially to support his personal acquisitions and time in the hobby. Additionally Mike is re-establishing himself into actual and model photography and capturing railway scenes locally and across the country with his Nikon equipment and high-end colour wide format printers at home.

With all of his future plans and activities the reader can look forward to future updates with regards to Mike's continuing modelling activities.

PHOTO BELOW: The milling plant is a Walther's kit that has been bashed and weathered. This operation functions with two daily work shifts in order to maintain a constant supply of lumber to the country's construction industry as well as for the export markets it has obtained. The company owners are currently concerned regarding the proximity of the forest fire to their mill complex and are doing as much as they can to assist the firefighters in their effort to contain and extinguish the conflagration. Visible are the piles of stacked lumber, the final product of the logging and milling operations. Mike 'animates' his scenes with people and with lights to provide a sense of activity within and without his structures.





PHOTO ABOVE: A bird's eye view of the milling plant. A high side gondola parked beneath the wood chip loader awaits its bin to be filled. CP has the rail rights to service this mill. Several cars are moved on a daily basis destined for wood chip board manufacturers elsewhere in the province.

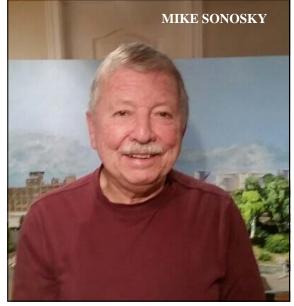


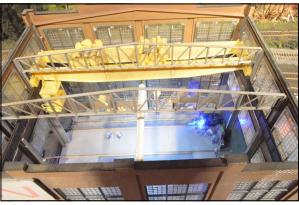
PHOTO ABOVE: Adjacent to the mainline on its own spur is the extensive Centennial Mills flour operation. This factory, a foreshortened 3-sided structure, receives bulk shipments of grains in covered hoppers, processes the grains into various grades of flour. and ships the refined packaged product in box cars to bulk bakeries and grocery warehouses. To provide the illusion of a manufacturing area Mike has added flat images of other factories to provide depth to the scene.

PHOTO RIGHT: Mike wanted the roof of the engine facility to be removable so that the interior shop could be visible. With the top removed we can observe the roof trusses, the overhead gantry crane for lifting heavy locomotive parts, and some of the floor appurtenances although these latter are somewhat obscured by the welding flash.



PHOTO ABOVE: The round the clock coal extraction at Coalspur Mines provides significant rail activity at the site as three tracks are available for loading coal from overhead delivery systems. Much railfan activity is available from off premises, as locomotive switchers manoeuvre both empty and loaded open hopper cars about the tracks. The outgoing loaded hoppers as they are forwarded to coal consumption facilities throughout the province provide significant income for the rail companies.





HOW TO IMPROVE A PLASTIC STRUCTURE

By George Dutka

EDITORS NOTE: It is difficult to convey the subtleties of weathering in black and white photographs. As a result I have put the majority of the photographs for this article on the back page. I have however put the captions in the appropriate place in the article. When you are reading and see the photo caption, please turn to the back page to view the actual photo, in colour. Photos are identified by number. An overall view of the finished structure is on the front page, again, so that it could be shown in colour.

I am sure you all have a favourite plastic structure that has been well built, but does not really appear as realistic as one wants it look and clearly not in tune with current techniques. Every day plastic structures can look great with a bit of effort. Almost all plastic structures have the plastic parts cast in the common colours used by kit manufactures. Let's see how we can improve a structure using paints, powders and some details. Following my tips, a realistic looking building can be had. So, lets get started following my step by step photos and notes.

To begin with, I normally fill all the voids at corner joints or around details using canopy glue which is a thick glue that can be used as a filler and is easily painted. Credit Valley carry this glue. This glue also secures the joints and details which is a bonus.

The brick fuel storage shed I am using is a simple Walthers kit that is still available today. There are two versions one may use. Many of these structures can be found at area model railroad flea markets for a dollar or two.

Spray-bomb base coats



I have been using three colours my base as coats on structures. All three are spray bomb which paints contains acetone which make permanent base coat. Two are available at Home Hardware and are from the Beauti-Tone, Camo Coat line which cost about

\$7.00 each. The two tones used are dark brown and olive with olive being my favourite base coat. I also use olive on my freight car trucks and wheels. The third spray bomb is a red auto body sandable primer. The primer coats brick walls extremely well with a nice flat finish and is my go-to colouring on most of my walls. One can also brush on dollar store acrylic red-brown mixes on brick

walls with good results but when the mortar is added care needs to be taken. More on the mortar shortly.

When spray bombing I do it outdoors summer or winter. I normally set the structure on an old pizza box and give the structure a very light coat. A thin



coat is all one needs and don't worry if you miss an area as the pastel and powder weathering will cover missed areas. I use red primer for the bricks, and olive or dark brown for roofs and wooden walls. Remember these are base coats and the colouring will be changed slightly with the use of PanPastels and Bragdon powders. You can



Acrylic paints photo 1

Reeves acrylic paint sets can be purchased at Michael's with 50% coupons at times for \$10. I use the two rust colours the most but have been known to mix colours for touch-ups on rolling stock and vehicles at times.



Acrylic paint photo 2

My two favourite colours for painting brick and stone are made by Anita's which is only available at the moment in US craft stores for under a dollar a bottle. PanPastel Titanium white and chrom ox green shade are good choices for colouring doors, trim and windows. The green tone is my go-to trim and window choice.

use your favourite weathering effects, but I find these two products have worked well for me.

Brick Walls

Once the base coating on the brick walls are dry, I add the mortar using Roberts Brick Mortar Formula which comes in two size jars. Credit Valley carry it in both sizes. I would suggest the small jar as it goes a long way. This product I found a bit tricky to master at first although it is really very simple to use. I am thinking it was just me not following instructions. Mix the formula really well. It

Brick Wall photo 1

On this brick wall I applied a good coating of Roberts brick mortar formula not really worrying about the amounts or if it got on doors and trim. This will be all wiped off shortly.

seems to be thick at the bottom of the container after stored for awhile. I use a screwdriver to stir it around. Once it is creamy again brush it over the whole wall. Go around all four walls as quick as possible. The product does dry pretty quickly. The trick is to not start removing the mortar from the brick face too early. When it appears to start drying on the brick faces there are two options one can use. I normally dab my finger on the brick face surface to see how well it is drying and what might come off that way. On small areas I just keep dabbing my finger over the surface to get what I want off. The common way

Brick Wall photo 2

The mortar formula is not quite dry yet but I decided to dabbed my finger over the surface to remove some of the mortar colouring off the brick face. For some this technique might be enough to get the desired effect. which speeds thing up is to use a paper towel or better yet a cloth to wipe it off the brick face. You want it dry enough that it is not being removed from the grout lines. The catch is the longer it is left on to dry, the harder it is to remove off the brick face. That is why I use acetone spray bombs as the base. It adheres a lot better than

Brick Wall photo 3

About two minutes after dabbing the brick face with my finger I used a paper towel and rubbed the brick surface clean of the mortar formula. Some of the edges are stubborn so I dampened the paper towel corner and wiped it over these areas. I also used the damp towel to remove mortar from the trim and doorway.

acrylics. Not to worry though if the mortar formula gets too dry. I recently tried dipping my cloth end into some water to just dampen it a bit then rub the rag over the brick surface to get the more stubborn mortar off and also removing grout from trim and doorways. This worked really well without disturbing the bricks mortar.

I have found between the red primer and Roberts brick mortar mix one gets a very convincing brick wall. I do like to take my wall weathering a step further, I apply some black Bragdon powders or PanPastels under the eves and near the base as weathering. I also use a bit of PanPastel white randomly around concrete edges and windows. I don't suggest applying much brown or red PanPastels or powders over the brick face as it really hides the grout lines unless you like modeling the looks of a really weathered structure. I found even on really old prototype buildings the grout line is still pretty clean and bright.

Once the brick and grout are done, I go back and paint any concrete or stone areas on the structure with an acrylic paint and a very fine brush. Dollar store gray is a good choice or mix a bit of black with white, whiter for stone. It can be further toned down with gray PanPastels using a micro brush. I like using Anita's acrylics found in the USA for a dollar or less. The two tones I normally use are rainy day gray or charcoal. On stone I usually use PanPastel white over the grays.

Metal Roof

I have been using Camo Coat olive as the base colour on metal roofs and the dark brown for shingles. My brick fuel shed seen here has a metal roof. Once the base coat olive has dried, I use two colours of tube acrylic gouache paints to emulate my rust spots. The colours used are burnt umber and burnt sienna. A set of 18 various acrylic colouring tube gouaches retails for \$20 but can be found on sale regularly for about \$10 when a coupon is used at Michael's art stores. This is a real bargain and my set has lots of paint left after 2 years of above average use. Now that the olive base coat is applied and dry, I apply acrylic burnt umber to locations rust would form.

Burnt umber is a dark tone colour. Acrylic tube paint dries very quickly so a dab of water is sometimes an option to keep it going. The second colour burnt sienna is applied

Roof Photo 1

This roof was already finished but without the rust spots. As one learns new techniques such as I did one can go back and improve the structure even if the roof has been painted and weathered prior to applying a new technique. The acrylic tube paint applied will stick well. I first applied burnt umber with a fine tipped brush to locations one would find rust.

inside the darker rust spots. Sienna is a bright red rust colour.

Roof Photo 2

Burnt sienna is now dabbed inside or near the burnt umber and a few other locations that I thought should have rust.

Once dry the rust spots get a dot of Bragdon bright rust in the middle of the acrylic rust and is dragged down using a micro brush as rust streaking. The photos show the steps which are actually quite easy to master. My first attempt really surprised me as how easy and effective it is. I don't use any flat finish sprayed on the walls or roof once completed as this reduces the effect of the weathering. The weathering stays on very well even when handled regularly.

Roof Photo 3

Now Bragdon powder bright rust is dabbed and dragged down from the middle of the burnt sienna locations to emulate rust streaking.

After the rust effects have been finished, I normally apply a really light brushing of PanPastel neutral gray shade which tones the rust down a bit. I don't always apply the PanPastel's, it really depends on how the weathering looks. Other options for toning down the rust is Bragdon soot or dark rust. This step is really up to the individual.

Roof Photo 4

This is an optional step that I applied to this roof. I gave the entire roof a very light coat of PanPastel neutral gray shade.

Roof Photo 5

This roof I completed using the olive camo coat as a base followed by the acrylics explained in the article. I did not give it an overcoat dusting of PanPastels gray but did dab on some gray highlights.

Windows and Doors

The windows and doors have the same coating as the wall have. These can be coloured using PanPastel and Bragdon powders. In my examples I have used PanPastel green as my door windows and trim. This was applied

using a small micro brush over the surfaces. The pastels stick very well to the base coat and the colouring looks kind of worn when viewed.

The Details

Detailing the walls and roofing is what really brings the structure into its own. I keep all my signs from kits as masters using my colour copies as the actual signs applied. I also have a group of newspaper copies that I trim and glue around doors on platforms and in boxes and barrels. I don't worry about the white edges of the signs. Once I have the signs applied to the structure, I just run my dirty PanPastel brush over the signs which darken the edges and weathers the signs a bit. Bragdon powders, rust is a good option. Tichy makes some nice details that can be added such as grain sacks, picks, hammers and brooms that are very reasonably priced. Juneco details are my favourites. I also like leaning a few boards against the wall made from leftover stripwood from completed wooden kits. I save all the bits and pieces to be used as junk. I at times add a pigeon to the roof or a few old board tossed up for repairs that add more interest.

The structure is now finished and looking 100% better using a few simple to master techniques and products that are not all that expensive to attain.



PHOTO ABOVE: My Walthers brick fuel storage shed has the roof spray bombed with camo coat olive base, then burnt umber and burnt sienna acrylics followed by Bragdon rust. The walls are auto primer red followed by Roberts brick mortar. Using my tips one can get the same effect with a bit of effort. I have added some signage and details to add character to this structure.

HOW TO IMPROVE A PLASTIC STRUCTURE BY GEORGE DUTKA

BRICK WALL PHOTO 1

BRICK WALL PHOTO 2

BRICK WALL PHOTO 3







ROOF PHOTO 1

ROOF PHOTO 2

ROOF PHOTO 3







ROOF PHOTO 4

OVERVIEW PHOTO



ROOF PHOTO 5



