Understanding Cybersecurity Threats that Municipalities Face
And what steps you should be taking to mitigate the risks.

Thursday, May 12th | 1:30 PM
Goals for this Session

- **Why this is important now**
  Describe current landscape and vulnerabilities that municipalities are facing.

- **What can be done to address it**
  Planning strategies, common best practices and key takeaways.

Questions welcomed!
Panel Discussion

Deputy Executive Director
NC League of Municipalities
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Chief Information Security Officer
VC3, Inc.
joe.howland@vc3.com

Director of Information Technology
NLC Mutual Insurance Company
rdraughn@nlcmutual.com
Facilitator
Typical Municipal Workspaces
### City Planning Department Files

**Application for Building Permit and Certificate of Occupancy**

**Project Details**

- **Project Name:** 1845 - 1846 1/2 S
- **Permit Number:** 2019SL62247
- **Project Date:** 02/05/2019
- **Total Amount:** $16,685.96

**Applicant:** Cangelosi Family Trust

**Certificate for Construction**

- **Certificate No.:** 2019SL62247
- **Status:** Approved

**Site Plan**

- **Proposed Use:** Residential
- **Number of Units:** 1

**Building Details**

- **Building Type:** Single Family Residence
- **Stories:** 1
- **Number of Bedrooms:** 3
- **Number of Bathrooms:** 1

**Utilities**

- **Electric:** City Power
- **Gas:** City Gas

**Financial Information**

- **Total Cost:** $16,685.96

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**Drawings and Plans**

- [Image of architectural plans]

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**Approval Details**

<table>
<thead>
<tr>
<th>Permit</th>
<th>Status</th>
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<tbody>
<tr>
<td>2019SL62247</td>
<td>Approved</td>
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**Note:** This document contains information regarding the applicant's proposal for a building permit, including drawings and plans. The permit is approved as of 02/05/2019, with a total cost of $16,685.96.
Ooops, your files have been encrypted!

What Happened to My Computer?
Your important files are encrypted. Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?
Sure. We guarantee that you can recover all your files safely and easily. But you have not yet enough time.
You can decrypt some of your files for free. Try now by clicking <Decrypt>.
If you want to decrypt all your files, you need to pay.
you only have 3 days to submit the payment. After that the price will be doubled.
We will have free events for users who are so poor that they couldn’t pay in 6 months.

How Do I Pay?
Payment is accepted in Bitcoin only. For more information, click <About bitcoin>.
Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.
And send the correct amount to the address specified in this window.
After your payment, click <Check Payment>. Best time to check: 9:00 am - 11:00 am GMT from Monday to Friday.

Send $600 worth of bitcoin to this address:
12t9YDpguwEz9NyMgw519p7AA8lsj6SMw

About bitcoin
How to buy bitcoins?
Contact Us

Check Payment Decrypt
Common Online Municipal Services

Pay Taxes & Other Fees Online

- Check
- Cash
- Money Order

via MuniCIPAY using

- Visa, MasterCard, Discover, American Express (convenience fee will apply)
- Electronic Check Payments (convenience fee will apply)

The terms are a minimum charge of $3.00 for credit card use, 2.65% above minimum. And $1.50 for e-checks.

MORE INFORMATION

PAY ONLINE

Save a Stamp! Pay your water bill online in a few easy steps:

1. Go to wsfutilities.org & click Pay Water Bill
2. Under the Online tab, click Pay Water/Sewer/Stormwater Bill Online Now
3. Enter your account number and the last 4 digits of the Customer Number on your bill and click Login
4. Click on your payment method (e-check or credit card) & follow the prompts

Other payment options:
- Auto Pay • City Link 311 • Drive-Through
Page Not Found
The requested content could not be found.
Immediate Impact

- How are citizens able to pay water bill or taxes?
- What is the public safety impact?
- How long will we be down? Reputational harm?
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Protect against Ransomware

- BACK UP SYSTEMS and DATA (Offsite or Cloud)
  - ENSURE what you need is backed up!
  - VERIFY that it truly is backed up!
  - TEST that you can actually recover from backup!
  - TEST again
- Ensure systems are patched and updated!
- Consider outside network monitoring firms
  - Vendors such as VC3, Inc. and others offers solutions to small to large municipalities
Protect against Ransomware - (Continued)

➢ Educate Staff of threats!
  ➢ Enforce strong passwords
  ➢ Employ MFA (Multi-factor Auth)
  ➢ Social Engineering and culture change
  ➢ Email phishing exercises
➢ Pay attention to Ransomware events
➢ Landscape is always changing
Protect against Ransomware - (Continued)

➢ Leverage Specialists like KnowBe4
➢ Trainings
➢ Free Tools/Simulators
➢ Whitepapers/Documentation
➢ Do your Due Diligence!
➢ Verbal confirmation before wiring funds; especially if from an email request.
➢ Note: May be requirement of some insurance policies.
➢ Policy to NOT wire funds via email request.
➢ Policy of having multiple people authorize:
  ➢ Wire transfers/Employee Direct Deposits
  ➢ Bank Routing/Account changes
  ➢ Other financial transactions
Other Considerations

- Third Party IT Security Assessments.
- Cyber Insurance coverage (if possible).
- Public vs Private Cloud Solution Providers
- Office 365 Cloud Solutions and System Security tools.
- Seek guidance from Counsel
  - Proper contract provisions with IT Providers.
  - Data Breach Response terms, Where Data is Located.
  - Especially should a breach occur.
- Report to Authorities - FBI, IC3, HSA/CISA.
ARPA funds may be available

“American Rescue Plan Act funds can support short- and long-term investment in cybersecurity practices, updating legacy equipment that may no longer be receiving patches, moving to the cloud for data storage, or even training up staff members to recognize when they are being targeted by a phishing or social engineering campaign.”
Other Resources

- Engage with MS-ISAC (Multi-State Information Sharing and Analysis Center)
- Connect with CISA State Representative
- Netdiligence eRisk Hub
- Vendor produced Cybersecurity Checklists
  [Cybersecurity Checklist for Municipalities: Where to Begin? - VC3 | IT Services](#)
- NLC-RISC & NLC Mutual Cyber Roadmap
Final Thoughts and Q&A

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