
WHAT YOUR BUILDING'S EXTERIOR IS TELLING YOU: IDENTIFICATION OF TOP EXTERIOR FAÇADE ISSUES

Presented to:

Minnesota Healthcare Engineers Association (MHCEA)

2023 Spring Conference

Grand Casino Hinckley | May 4th, 2023

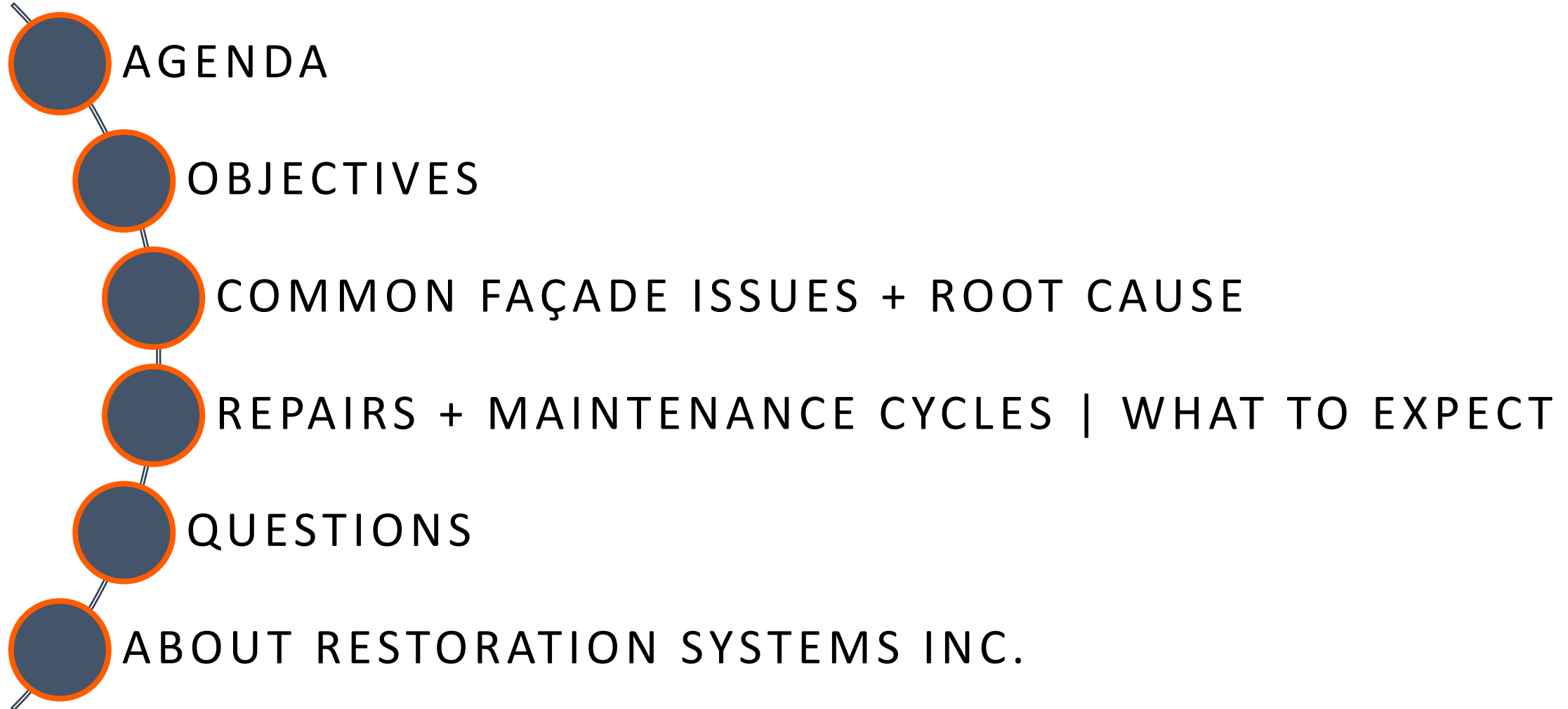
SPEAKER INTRODUCTION



CHELSEY KLASNICH

BUSINESS DEVELOPMENT

AGENDA

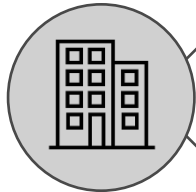


OBJECTIVES

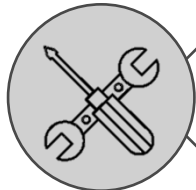
PARTICIPANTS WILL BE ABLE TO:



Identify common exterior façade issues and distinguish the level of severity within their own properties.



Recognize why common exterior façade issues exist.



Predict the type of repairs necessary per common exterior façade problem.



Recall why consistent maintenance of a property's exterior façade is vital.

COMMON FAÇADE ISSUES + ROOT CAUSE



An exterior façade acts as the first level of defense to a property's structure

Inspecting your façade is imperative to identify any issues that need to be addressed

WHY

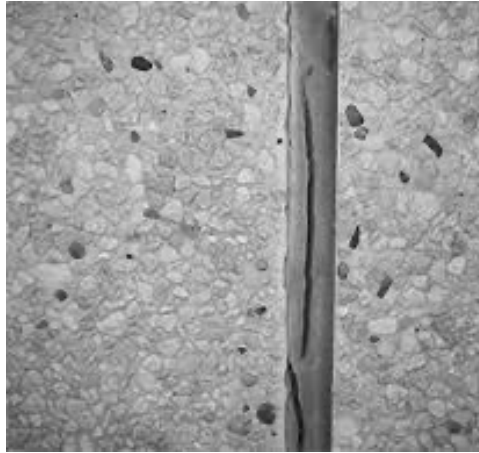
WEATHER

NATURAL
SHIFTING

AGE

LOCATION

JOINT SEALANT DETERIORATION



ROOT CAUSE

WEATHER

NATURAL BUILDING MOVEMENT

UV EXPOSURE

CRACKS



ROOT CAUSE

TEMPERATURE CHANGES

NATURAL MOVEMENT

ENVIRONMENTAL STRESSORS

CHEMICAL REACTIONS

SPALLING



ROOT CAUSE

MOISTURE INFILTRATION

TEMPERATURE CHANGES

REINFORCEMENT
CORROSION

EFFLORESCENCE



ROOT CAUSE

WEATHER ELEMENTS

SALT

BIOLOGICAL GROWTH



ROOT CAUSE

MOISTURE INTRUSION

FREEZE-THAW CYCLES

WATER MITIGATION
ISSUES

MORTAR DETERIORATION



ROOT CAUSE

WEATHER ELEMENTS

EROSION

MOISTURE

FAULTY CONSTRUCTION

BOWED AND BULGING WALLS



ROOT CAUSE

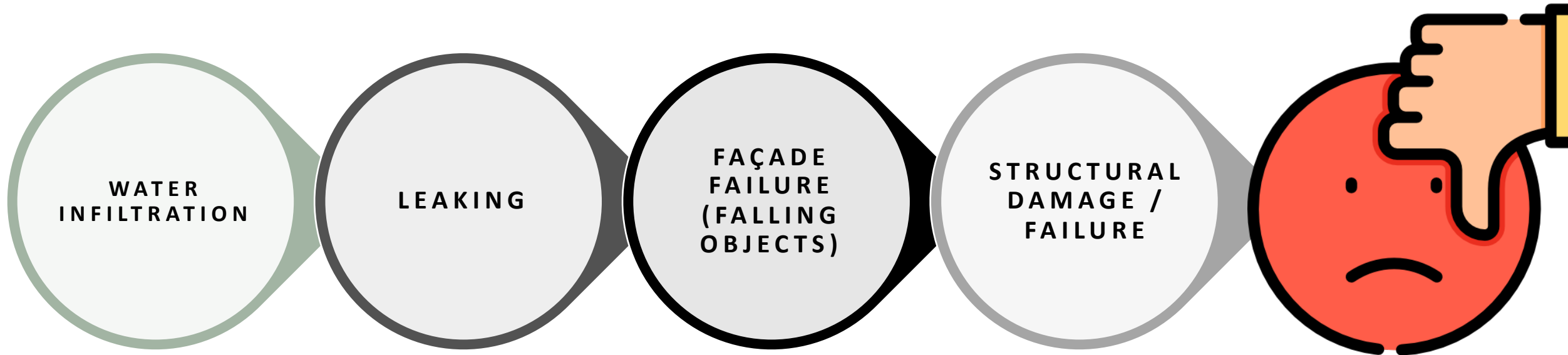
EXCESS HUMIDITY

EXCESS RUST ON ANCHORS

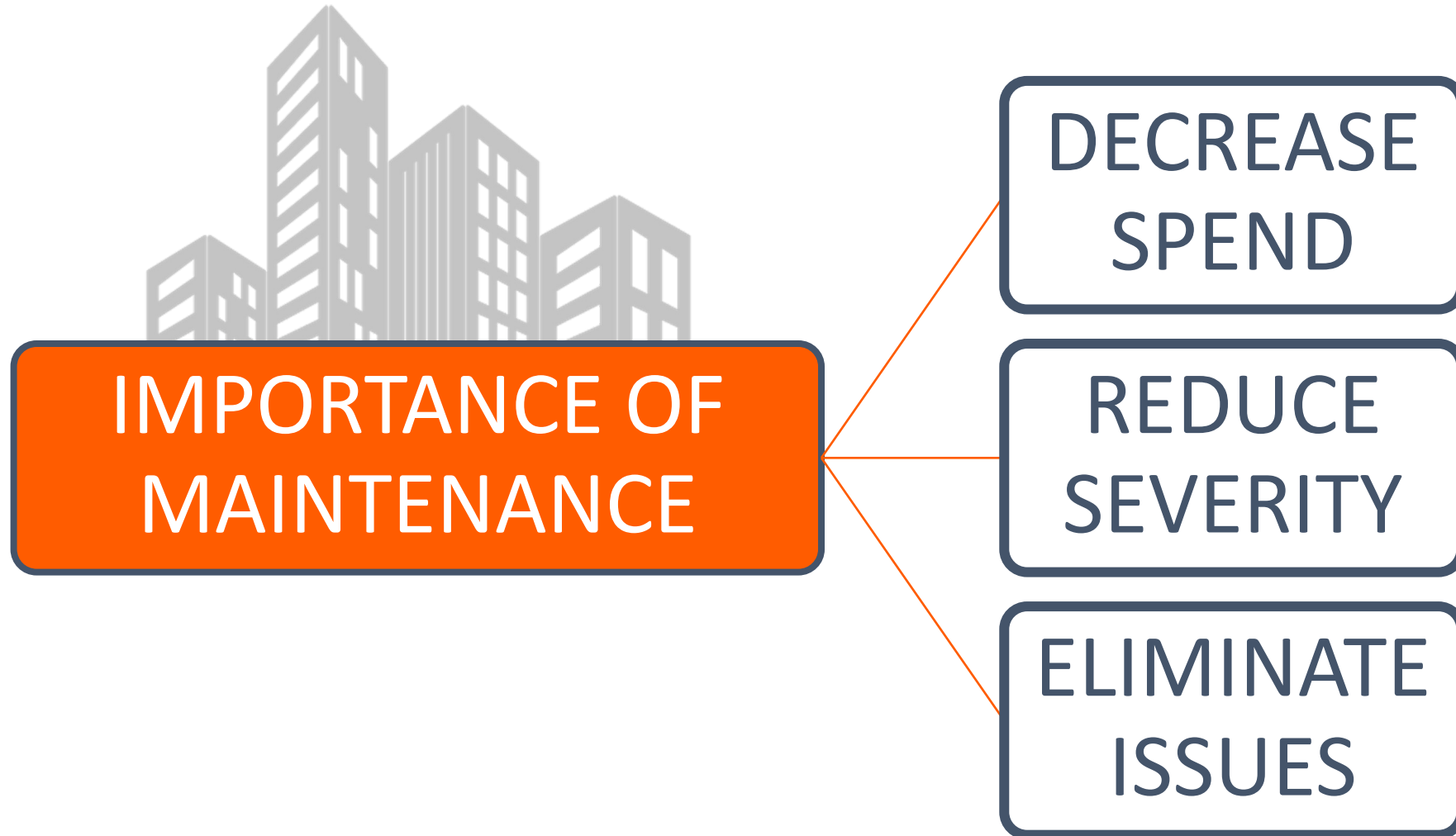
LACK OF MAINTENANCE

CONSTRUCTION ISSUES

WHAT HAPPENS WHEN YOU DO NOTHING... ---



WHY MAINTENANCE IS VITAL



REPAIRS + MAINTENANCE CYCLES

WHAT TO EXPECT



JOINT SEALANT DETERIORATION

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
SEALANTS	JOINTS	5-15 YEARS FULL REPLACEMENT



MINOR REPAIRS

- Spot replace deteriorated sealant joints



MAJOR REPAIRS

- Remove old sealant
- Install new backer rod
- Apply primer
- New sealant application

BRICK CRACKING + SPALLING

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
BRICK	WALLS	75-125+ YEARS FOR SELECTIVE REPLACEMENT



MINOR REPAIRS

- Spot brick replacement
- Select areas and unit replacement



MAJOR REPAIRS

- Full areas of removal and replacement
- Corners, parapets, severe water infiltration areas

EFFLORESCENCE

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
BRICK	WALLS	75-125+ YEARS FOR SELECTIVE REPLACEMENT



MINOR REPAIRS

- Spot acid washing



MAJOR REPAIRS

- Media blasting areas of severe build up

BIOLOGICAL GROWTH

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
WATER REPELLANTS	WALLS	5-10 YEARS REAPPLICATION CYCLE



MINOR REPAIRS

- Pressurized water technique to remove areas of growth on buildings



MAJOR REPAIRS

- Media blasting off the areas of severe build up

MORTAR DETERIORATION

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
MORTAR	BRICK JOINTS	25-50+ YEARS REPOINTING CYCLE (MANY VARIABLES)



MINOR REPAIRS

- Spot tuckpointing



MAJOR REPAIRS

- Full tuckpointing

BOWED WALLS + BULGING WALLS

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
FAÇADE ANCHORS	WALL ASSEMBLY	15+ YEARS (MANY VARIABLES)



MINOR REPAIRS

- Replacing isolated areas of deterioration



MAJOR REPAIRS

- Full removal + rebuilding wall
- Corners, window heads, and parapets

LEAKING

MATERIAL	APPLICATION	MAINTENANCE CYCLE (YEARS)
COPING/FLASHINGS	PARAPET CAPS	10-25 YEARS PHYSICAL INSPECTIONS
WATER REPELLANTS	WALLS	5-10 YEARS REAPPLICATION CYCLE



MINOR REPAIRS

- Spot flashing
- Window heads, sealant joints, and masonry façade.



MAJOR REPAIRS

- Full flashing
- Full restoration

OTHER CONSIDERATIONS

WATERPROOF COATING



EXTERIOR CONCRETE REPAIRS



BEFORE + AFTER

BEFORE



AFTER



BEFORE + AFTER

BEFORE



AFTER



Q + A



WHO ARE WE?



MIDWEST'S LEADING RESTORATION COMPANY

+300
Clients

+25
Years of
Experience

+80
Employees

+40
Services

+\$220M
Contracts



THANK
YOU!