

CCC 145 – SANITARY
DRAIN PIPE STACK
REPLACEMENT PLAN

PRESENTED BY:
CHRIS O'BRIEN, P.ENG.
KELLER ENGINEERING
OTTAWA / TORONTO
CALGARY / EDMONTON

SANITARY RE-PIPING PROGRESS

2

- Sanitary piping replacement on P1 level has been completed
- Proposed phasing schedule for sanitary stack piping replacement has been completed
- Design and specifications for the sanitary stack piping replacement are underway and being finalized by year end
- Ultrasonic thickness testing of domestic water riser piping has been completed and we are currently waiting for the results

WHAT'S NEXT

3

- Project ready to tender in January 2024.
- Construction could start as early as May 2024 (Dependent on Contractor availability)
- Fixtures (Sinks, toilets, bathtubs, etc.) in the affected locations will not be useable for the duration of the stack replacement. Estimated 2 months per stack.
- Phase 1 – no owner removals required. All wall openings will be performed from the corridors.
- Recommend at least 1 month notice to owners of service shutdown, and a minimum 3 months notice when owner removals are required.

ACCESS LOCATIONS

4

- Planning priority
 - Minimize cost to the Corporation
 - Minimize overall impact to occupants
- Prioritize access from common corridors where possible to minimize construction cost and occupant impact
- Where corridor access is not possible, access must be made available from within the suite served by the stack
- In suite pipe access will require removal of fixtures and finishes by the owners
- Wall openings for stack access will be made from the same side on each floor

CONSTRUCTION REMOVALS PROCESS

5

- Prior to construction owners of affected suites will be notified with specific scheduling and any removals they are responsible for.
- Removals (by owner)
 - In suite removals to include toilets, sinks, bathtubs, tiles, and anything else on the effected wall or within the work area.
 - Must be completed 2 weeks prior to start of construction. Suite inspections to verify removals are complete.
- Removals (by Corporation)
 - Drywall - type 2 asbestos abatement required
 - Removal of old stacks and branch piping
 - Chipping old mortar from around stacks and p-traps.

CONSTRUCTION REMOVALS

6

- Typical Washroom piping configuration
- Fixtures and drywall removed and ready for pipe replacement



CONSTRUCTION REMOVALS

7

- These pictures show the condition of the main stack and the bathroom p-trap located behind a bathtub.



CONSTRUCTION INSTALLATION PROCESS

8

- Installations (by Corporation)
 - Stacks and branch piping
 - Fire stopping material
 - Drywall finished to a primed surface
- Corporation work expected to take 2 months to complete.
- Installations (by owner)
 - Reinstate all fixtures and finishes in effected room.

PHASING

9

- Prioritize early access from common corridors
 - Maximizes notification to homeowners so they can coordinate contractors to have finishes removed
 - First stacks serve to identify challenges and any site-specific conditions that may affect scheduling.
- One stack per unit per phase
 - Ensures adequate time for owners to re-instate washroom/kitchen fixtures before work begins on another stack affecting the suite

PHASE 1 2024

10

- 01 suites washroom 1
- 02 suites washroom 1
- 06 suites washroom 1
- 07 suites washroom 1
- 10 suites washroom 1
- Laundry room floors 2-14

PHASE 1 2024

11

- 01, 02, 07, 10 suites washroom 1
 - Corridor access.
- 06 suites washroom 1
 - Corridor access floors 2-14, ground floor laundry ceiling and wall access.
- Laundry room floors 2-14
 - Laundry room access 2-14, ground floor corridor access.

PHASE 2 2025

12

- 01 suites washroom 2
- 02 suites washroom 2
- 06 suites kitchens
- 07 suites washroom 2
- 10 suites washroom 2
- 11 suites washroom 1

PHASE 2 2025

13

- 01, 02, 07, 10 suites washroom 2
 - Corridor access.
- 06 suites kitchens
 - Corridor access floors 2-14, ground floor storage room access.
- 11 suites washroom 1
 - 11 suites living room access.

PHASE 3 2026

14

- 03/04 suites washroom 2 floors 2-14
- 05 suites washroom 1
- 06 suites washroom 2
- 08 suites washroom 2
- 09 suites washroom 2
- 11 suites washroom 2 and kitchen

PHASE 3 2026

15

- 03/04 suites washroom 2 floors 2-14
 - 04 suite washroom 2 access from 2-14, ground floor closet access in 04 suite.
- 05 suites washroom 1
 - 05 suites washroom 1 access.
- 06 suites washroom 2
 - 06 suites washroom 2 access floors 2-14, ground floor storage room access.
- 08, 09 suites washroom 2
 - 08, 09 suites washroom 2 access.
- 11 suites washroom 2 and kitchen
 - 11 suite kitchen access.

PHASE 4 2027

16

- 01 Suites kitchens
- 02 Suites kitchens
- 03 suites washroom 1
- 04 suites washroom 1
- 05 Suites washroom 2
- 08 suites washroom 1
- 09 suites washroom 1

PHASE 4 2027

17

- 01 Suites kitchens
 - 01 suites den access.
- 02 Suites kitchens
 - 02 suites kitchen access
- 03, 04, 08, 09 suites washroom 1
 - 03, 04, 08, 09 suites washroom 1 access
- 05 Suites washroom 2
 - 05 suites washroom 2 access

PHASE 5 2028

18

- 03 Suites kitchens
- 04 Suites kitchens
- 05 Suites kitchens
- 07 Suites kitchens
- 08 Suites kitchens
- 09 Suites kitchens
- 10 Suites kitchens

PHASE 5 2028

19

- 03, 04, 05, 08, 09, 10 Suites kitchens
 - 03 , 04, 05, 08, 09, 10 suites kitchen access.
- 07 Suites kitchens
 - 07 suites kitchen access on all floors except 6, closet access on level 6.

QUESTIONS?

20

THANK YOU