

# YERWOOD CENTER

## DRAINAGE REPAIR

WORK TOOK PLACE  
FROM 4/21/16 TO 4/28/16

## DAY 1: EXPLORATORY EXCAVATION



### DISCOVERIES:

1. Waterproofing on foundation wall started 5' below grade, not reaching the footing.
2. Footing drain with perforations atop and on side of the pipe.
3. Footing drain is broken and clogged with silt with open joints.
4. There was no filter fabric wrapped around the footing drain. Instead it was wrapped with plastic.

## DAY 2: EXPLORATORY EXCAVATION FOLLOWING THE LOCATION OF EXISTING FOOTING DRAIN



### DISCOVERIES:

Existing footing was improperly installed:

1. open joints
2. broken and clogged
3. not pitched to drain due to the ledge (backpitched in corner where internal flooding was taking place)

## DAY 3: POWER WASHING THE FOUNDATION WALL AND FOOTING



### WORK DONE:

1. Foundation wall and footing was power washed in preparation of applying new waterproofing.
2. Drain/pump excess water to work in the dry.

## DAY 4: FURTHER EXCAVATION & START OF REPAIR



### WORK DONE:

1. Further excavation was needed to reach the 6" outlet connection.
2. Ledge was in the way. Laborers chipped away at stone with hydraulic hand held drill around the connection and at the foundation footing.
3. Replaced perforated footing drain with new 4" diameter pipe and pitched it correctly, now that the ledge was removed.
4. Wrapped footing drain with filter fabric and covered with crashed stone.

## DAY 5: FURTHER REPAIR



### WORK DONE:

1. Applied hydraulic cement where foundation wall meets footing to cut-off water infiltration here.
2. Applied water proofing layer to the foundation wall and the footing.
3. New footing drain was covered with crushed stone; covered with 1 more layer of filter fabric. Then sand was placed atop the crushed stone to prevent pipe from backfill.
4. Back filled with existing earth. Took out large stones and debris.
5. Compacted soil with hand held compactor in lifts.

## DAY 6: BACK FILLING ENTIRE SITE & GRADING SOIL



### WORK DONE:

1. Back filled entire site with excavated earth.
2. Compacted soil with compactor.
3. Trucked – off excess material.
4. Re-graded soil away from the building, creating a swale to divert rain water.
5. Re-seeded grass and hay was spread on top.
6. Asked Boys & Girls Club building manager to water the site for seed germination.

# RECOMMENDATIONS

- Building Manager and City Facilities to clean-out stairway area drain after a rain event.
- Building Manager and City Facilities to clean-out all other catch basins as part of the routine maintenance.



**INSPECTION FOLLOWING REMEDIATION DURING PERIODS OF PRECIPITATION ON 5/1 & 5/2 DRY INSIDE CONDITIONS**



**AS – BUILT PLAN**  
 following  
 remediation on  
 April, 2016

