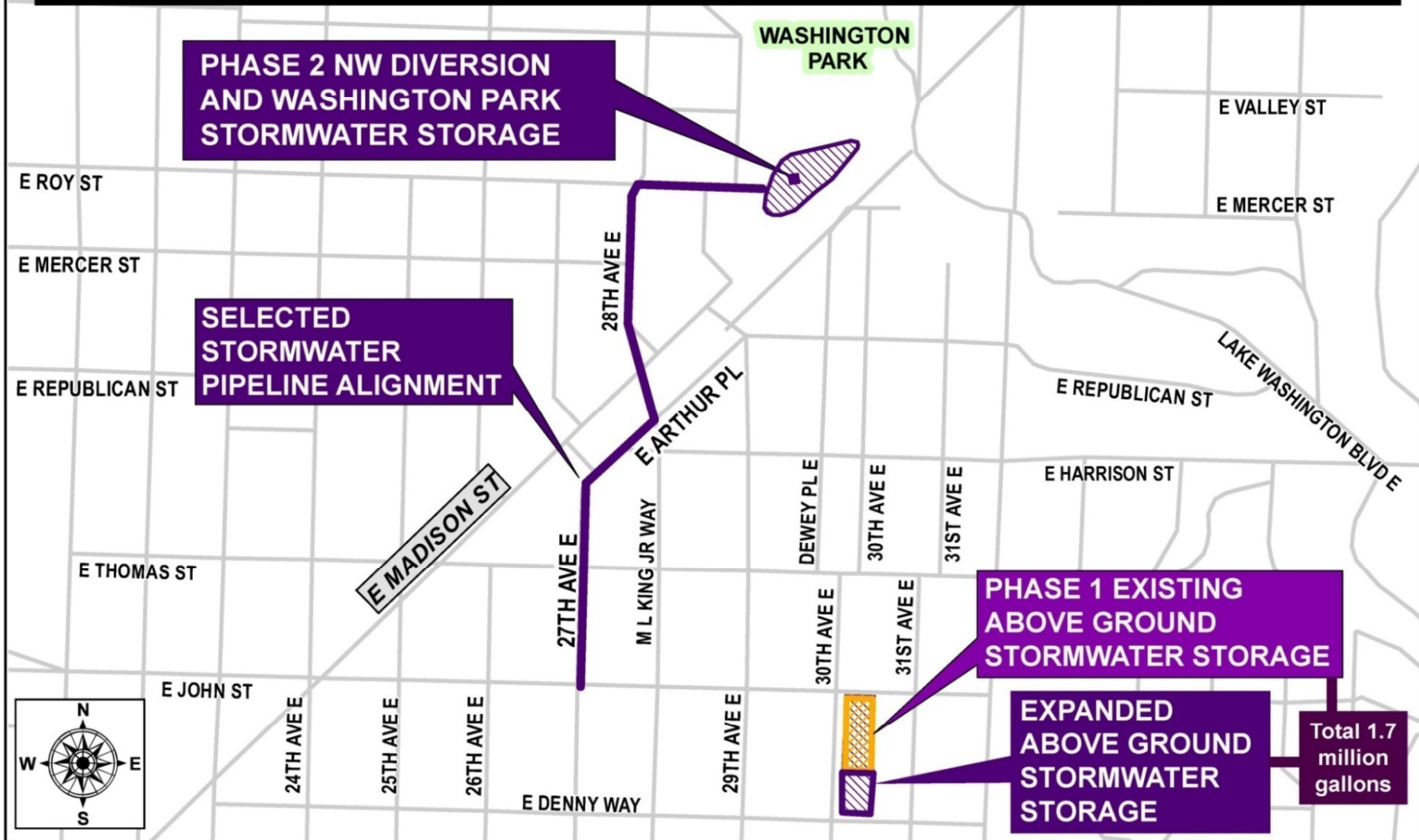


# Madison Valley Stormwater Project Phase 2 60% Design

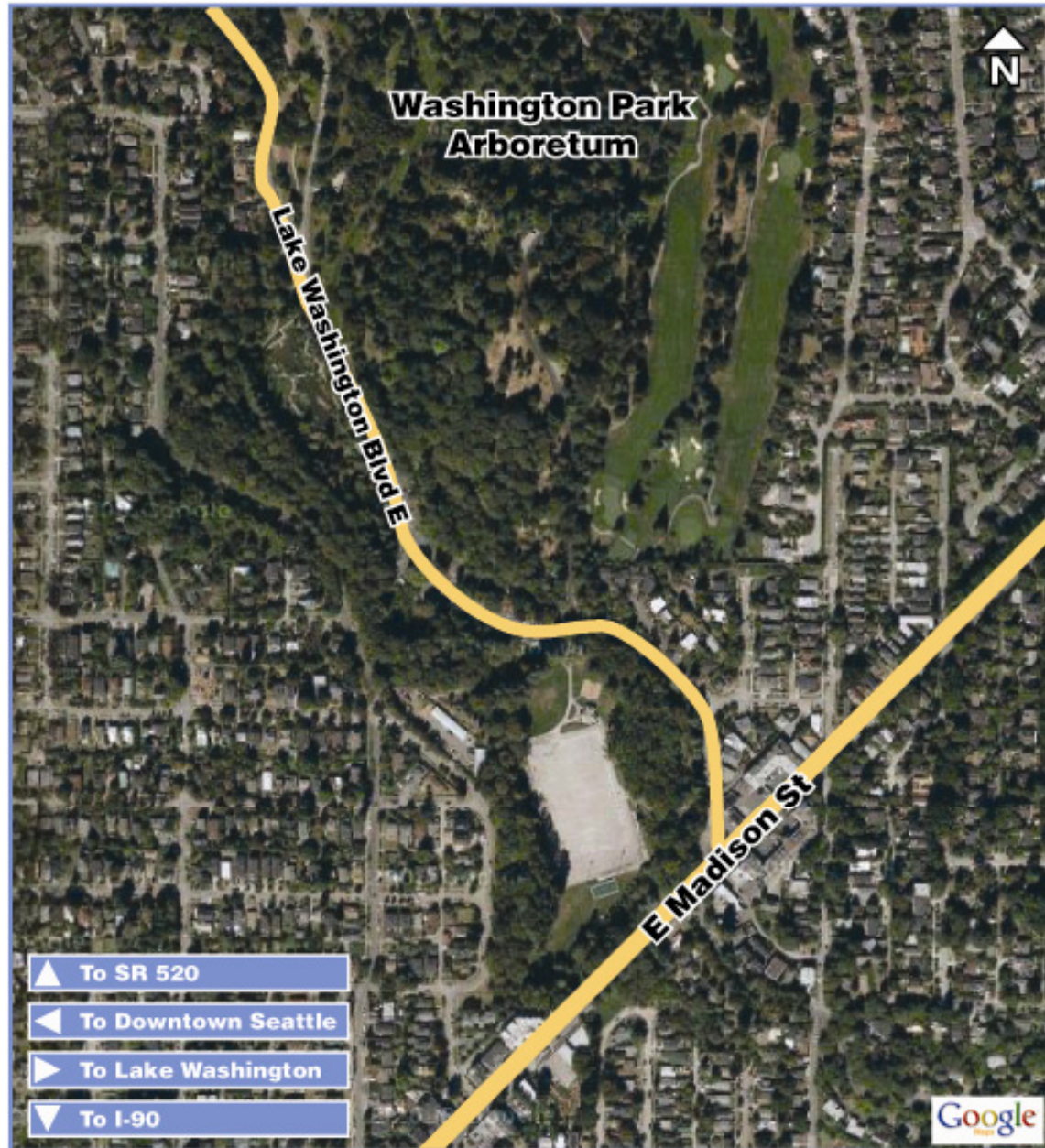
Seattle Design Commission Meeting  
September 3, 2009

## NW Diversion and Washington Park Storage Project



- ✓ 90% Design submitted for permitting – October 2009
- ✓ Start of construction – Spring/Summer 2010
- ✓ System operational – Fall/Winter 2011

# Washington Park Orientation Map





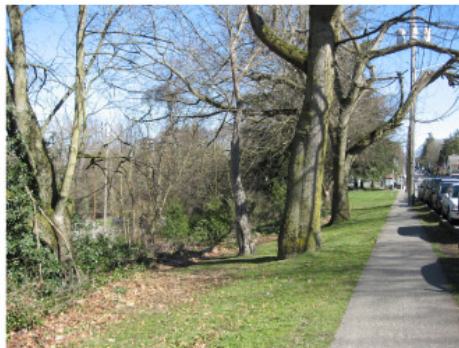
# Existing Conditions in Washington Park



Looking toward southwest corner of Washington Park



Mixed-use building on  
E. Madison Street



E. Madison Street  
streetscape



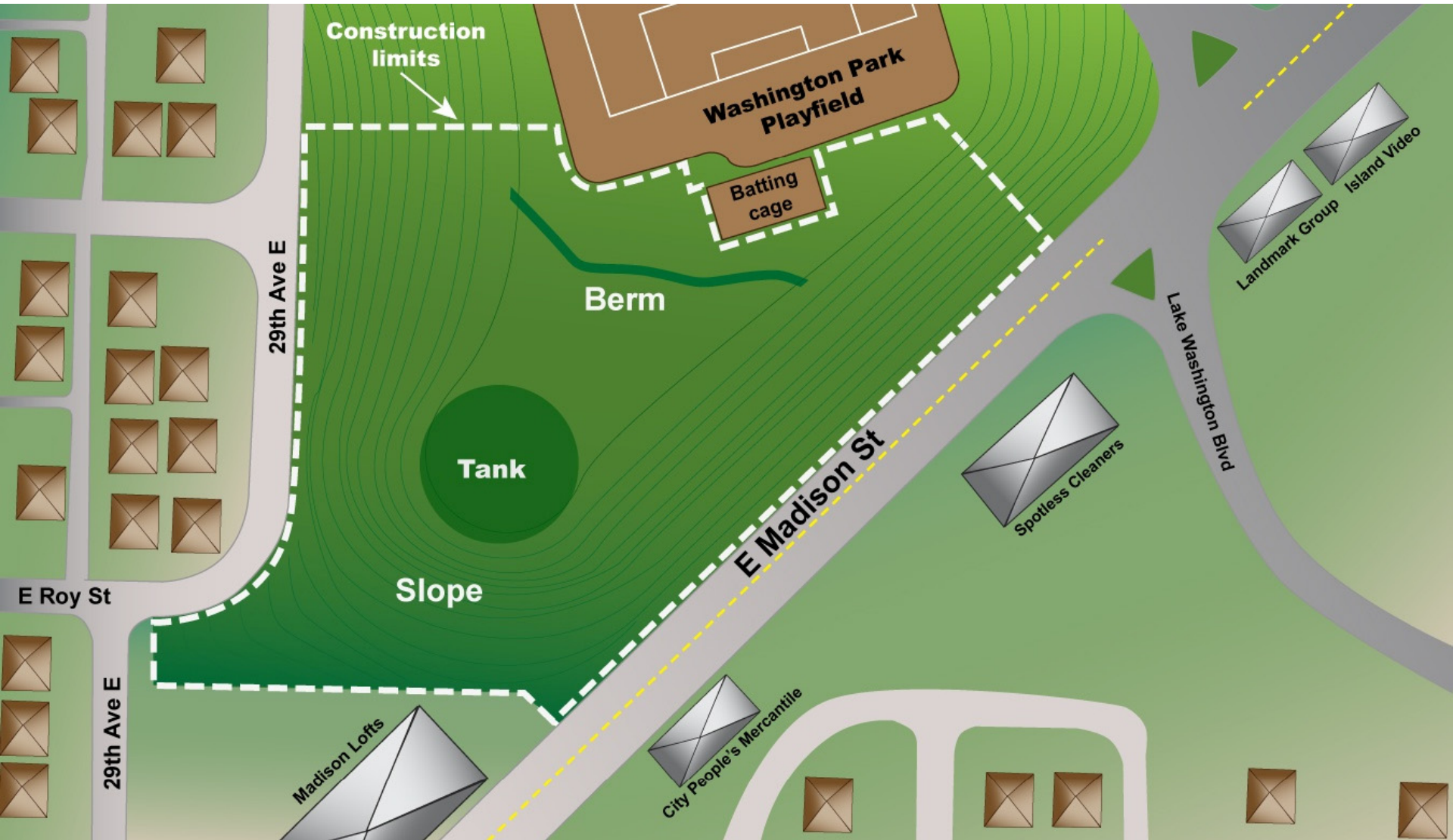
Batting cage and  
south slope from  
lower lawn



View down into site  
from E. Madison Street



# Washington Park Construction Boundary





# Landscape Plan





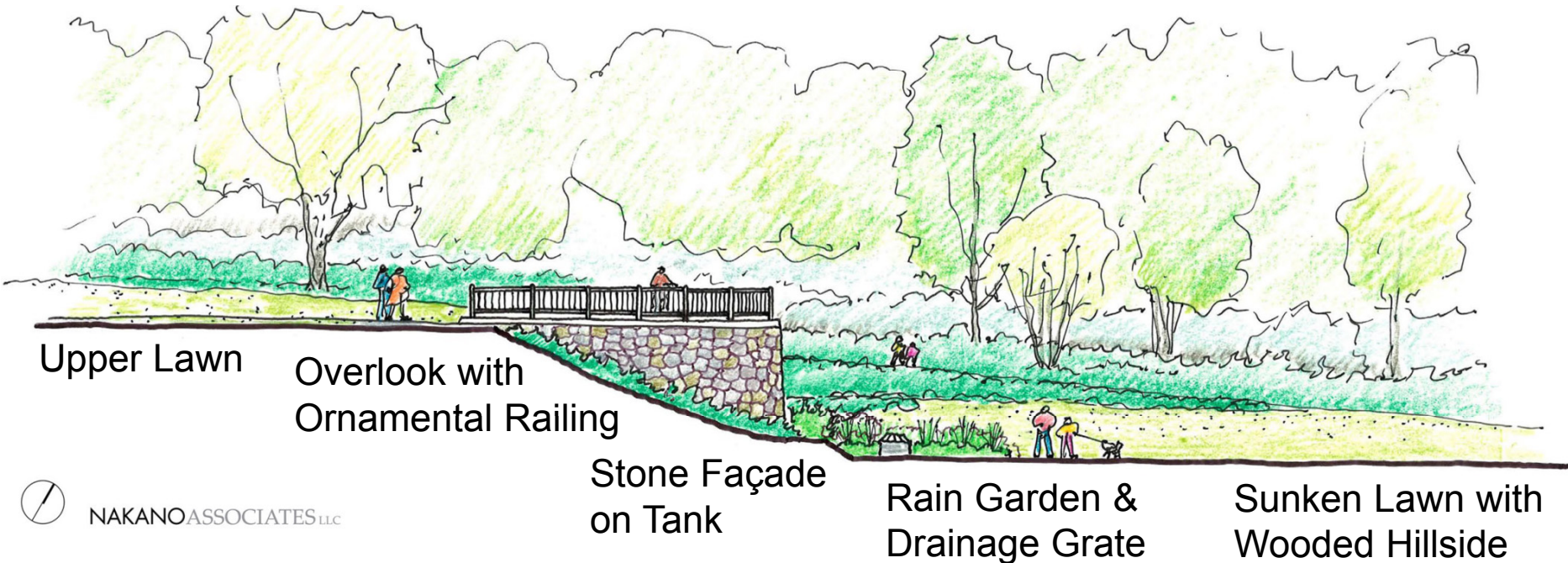
# Landscape Details



Metal Guardrail



Concrete Pavers



Upper Lawn

Overlook with  
Ornamental Railing

Stone Façade  
on Tank

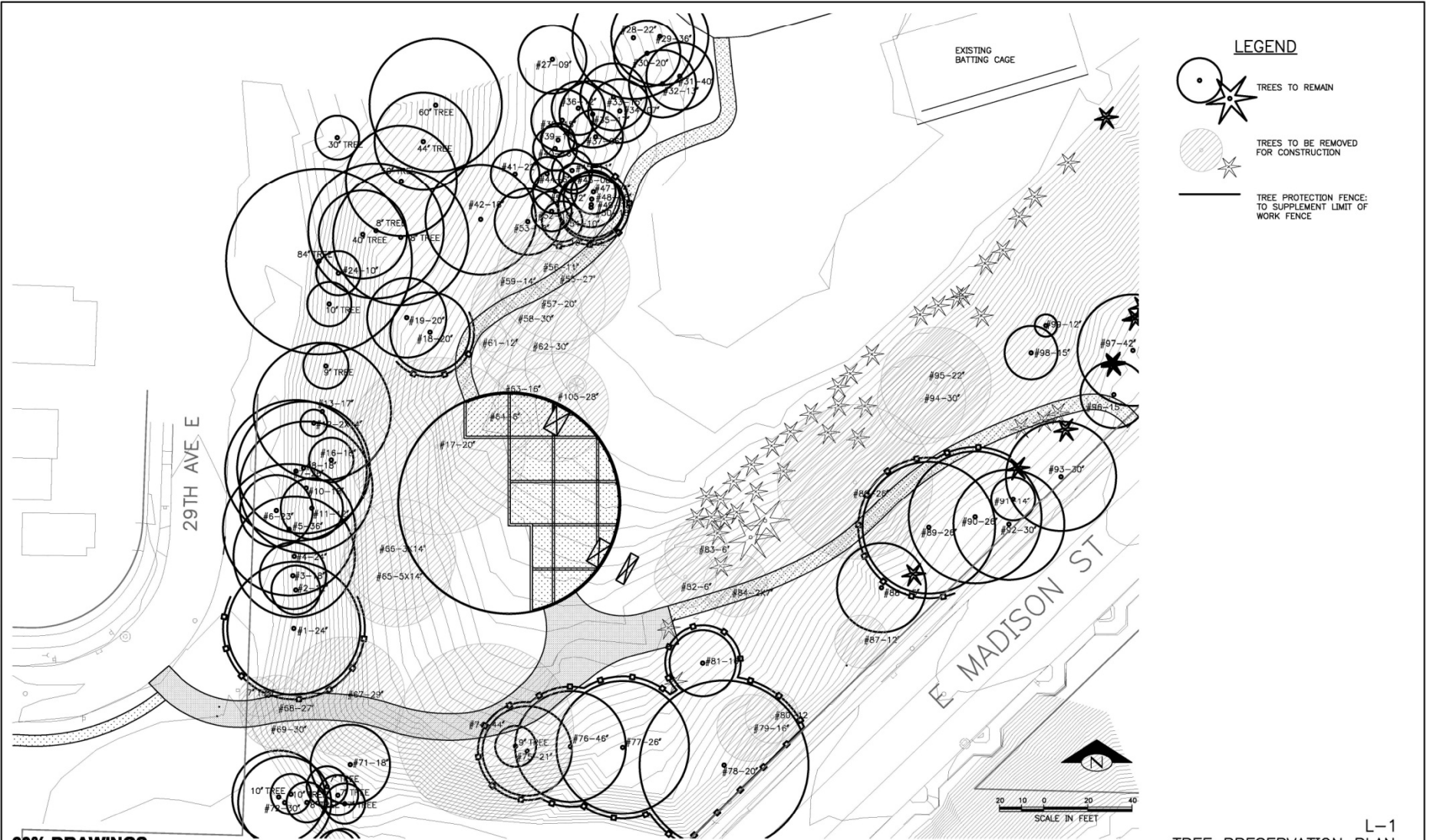
Rain Garden &  
Drainage Grate

Sunken Lawn with  
Wooded Hillside





# Tree Preservation Plan



60% DRAWINGS

L-1  
TREE PRESERVATION PLAN



**NAKANO ASSOCIATES LLC**  
Landscape Architecture  
3609 S. Mt. Baker Blvd. Tel 206 292 9392  
Seattle WA 98144 Fax 206 292 9640  
www.nakanocomm.com

**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

APPROVED FOR ADVERTISING  
**FRED PODESTA**  
DEPARTMENT OF EXECUTIVE ADMINISTRATION  
SEATTLE, WASHINGTON 20  
BY: DIRECTOR, CONTRACTING SERVICES

| NAME OR INITIALS AND DATE                                                                                                                                     |             | INITIALS AND DATE |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|-------------|
| DESIGNED: GS                                                                                                                                                  | CHECKED:    | REVIEWED:         | CONST.:     |
| DRAWN: PMW                                                                                                                                                    | CHECKED: GS | RECEIVED:         | FINAL WORK: |
| ALL WORK DONE IN ACCORDANCE WITH THE CITY OF SEATTLE STANDARD PLANS AND SPECIFICATIONS AND OTHER DOCUMENTS CALLED FOR IN SECTION 0-0.2 OF THE PROJECT MANUAL. |             | REVISOR'S BOOK    |             |

**Seattle Public Utilities**  
City of Seattle  
**Roy Holman, Acting Director**  
ORDINANCE NO. 122863  
FUND: WATER  
SCALE: 1" = 20'  
INSPECTOR'S BOOK

**MADISON VALLEY  
NW DIVERSION AND  
WASHINGTON PARK  
STORMWATER PROJECT**

|                |           |
|----------------|-----------|
| PC             | C307014   |
| JOB NO.        |           |
| R/W            |           |
| CD             |           |
| VAULT PLAN NO. | ****-**** |
| SHEET          | OF 170    |

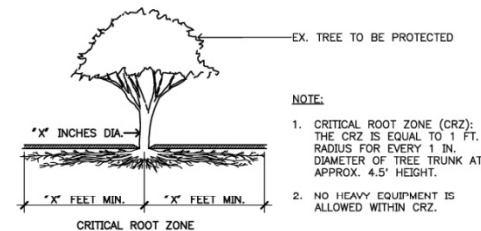
# Tree Preservation Details

## TREE INVENTORY

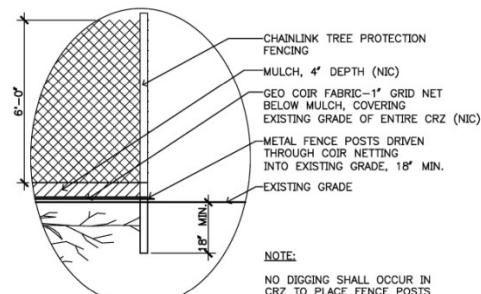
| TREE ID NO. | SPECIES                 | SIZE-DBH   | HEALTH/CONDITION                                                                                 | EXCEPTIONAL RATING PER COS | STATUS | REPLACE WITH              |
|-------------|-------------------------|------------|--------------------------------------------------------------------------------------------------|----------------------------|--------|---------------------------|
| 1           | Acer macrophyllum       | 28"        | Die leader trunk decay, included bark, 70% LCR                                                   |                            |        |                           |
| 2           | Acer macrophyllum       | 14"        | Lost terminal leader, 15% LCR                                                                    |                            |        |                           |
| 3           | Acer macrophyllum       | 19"        | Trunk decay, 65% LCR                                                                             |                            |        |                           |
| 4           | Acer macrophyllum       | 25"        | Trunk decay, lost terminal leader, competition                                                   |                            |        |                           |
| 5           | Acer macrophyllum       | 35"        | Good condition, 85% LCR                                                                          | Yes                        |        |                           |
| 6           | Acer macrophyllum       | 19.5"      | Good condition, 70% LCR                                                                          |                            |        |                           |
| 7           | Acer macrophyllum       | 25"        | Poor branch structure, competition, 65% LCR                                                      |                            |        |                           |
| 8           | Acer macrophyllum       | 22"        | Good condition, 75% LCR                                                                          |                            |        |                           |
| 9           | Prunus emarginata       | 7"         | Good condition, 75% LCR                                                                          |                            |        |                           |
| 10          | Acer macrophyllum       | 21"        | Included bark, trunk decay, 40% LCR                                                              |                            |        |                           |
| 11          | Acer macrophyllum       | 15"        | crown decay                                                                                      |                            |        |                           |
| 12          | Acer macrophyllum       | 12" & 15"  | Die leader, lost terminal leader                                                                 |                            |        |                           |
| 13          | Acer macrophyllum       | 15"        | Trunk decay, 50% LCR                                                                             |                            |        |                           |
| 14          | Acer macrophyllum       | 10"        | Extensive trunk decay, 10% LCR                                                                   |                            |        |                           |
| 15          | Acer macrophyllum       | 10"        | Trunk decay, 50% LCR                                                                             |                            |        |                           |
| 16          | Acer macrophyllum       | 12" & 10"  | Die leader, 50% LCR                                                                              |                            |        |                           |
| 17          | Acer macrophyllum       | 28" & 30"  | multiple trunks, extensive trunk and branch decay, included bark, 50% LCR, high hazard potential | Yes                        | Remove | 2" Cal. Betula papyrifera |
| 18          | Acer macrophyllum       | 28"        | trunk decay minimal, 50% LCR                                                                     |                            |        |                           |
| 19          | Acer macrophyllum       | 22"        | double leader with included bark, 50% LCR, high hazard potential                                 |                            |        |                           |
| 20          | Acer macrophyllum       | 19"        | Good buttress roots, some crown decay, 45% LCR                                                   |                            |        |                           |
| 21          | Acer macrophyllum       | 28"        | Extensive trunk decay, included bark, 20% LCR                                                    |                            |        |                           |
| 22          | Acer macrophyllum       | 16"        | Die leader, included bark, 25% LCR, extensive decay                                              |                            |        |                           |
| 23          | Acer macrophyllum       | 8" & 9"    | good condition, competition, 40% LCR                                                             |                            |        |                           |
| 24          | Acer macrophyllum       | 15"        | Deadwood in crown, 60% LCR                                                                       |                            |        |                           |
| 25          | Acer macrophyllum       | 18"        | Deadwood in crown, 60% LCR                                                                       |                            |        |                           |
| 26          | Prunus emarginata       | 8"         | photosynthetic, 80% LCR                                                                          |                            |        |                           |
| 27          | Quercus robur           | 12"        | 40% LCR, interior tree in stand                                                                  |                            |        |                           |
| 28          | Quercus robur           | 23.5"      | 85% LCR                                                                                          |                            |        |                           |
| 29          | Populus 'Italica'       | 38"        | WATER multi-leaders at 35', 80% LCR                                                              | Yes                        |        |                           |
| 30          | Acer campestre          | 22"        | Lean, die leader                                                                                 |                            |        |                           |
| 31          | Populus 'Italica'       | 58"        | Included bark, dense canopy                                                                      | Yes                        |        |                           |
| 32          | Ahnus rubra             | 14"        | Trunk decay, broken terminal leader                                                              |                            |        |                           |
| 33          | Populus trichocarpa     | 12"        | 50% LCR due to competition                                                                       |                            |        |                           |
| 34          | Ahnus rubra             | 8"         | Extensive decay                                                                                  |                            |        |                           |
| 35          | Populus trichocarpa     | 18"        | 50% LCR, competition                                                                             |                            |        |                           |
| 36          | Populus trichocarpa     | 12"        | Extensive lean, 30% LCR                                                                          |                            |        |                           |
| 37          | Ahnus rubra             | 8"         | good condition, 70% LCR                                                                          |                            |        |                           |
| 38          | Populus trichocarpa     | 15"        | good condition, 70% LCR                                                                          |                            |        |                           |
| 39          | Populus trichocarpa     | 14"        | 15% LCR, extensive competition                                                                   |                            |        |                           |
| 40          | Populus trichocarpa     | 16"        | Lean, 50% LCR                                                                                    |                            |        |                           |
| 41          | Acer macrophyllum       | 16"        | Extensive trunk decay, 30% LCR, broken terminal leader                                           |                            |        |                           |
| 42          | Acer macrophyllum       | 18"        | Included bark, trunk decay, die leader                                                           |                            |        |                           |
| 43          | Acer macrophyllum       | 12"        | Deadwood in canopy, 50% LCR                                                                      |                            |        |                           |
| 44          | Arbutus menziesii       | 8"         | Good health, competition                                                                         |                            |        |                           |
| 45          | Populus trichocarpa     | 10"        | Poor structural development, trunk leads 30% LCR                                                 |                            |        |                           |
| 46          | Populus trichocarpa     | 8"         | Moderate condition, 45% LCR, competition                                                         |                            |        |                           |
| 47          | Populus trichocarpa     | 16"        | Moderate condition, 40% LCR, competition                                                         |                            |        |                           |
| 48          | Ahnus rubra cluster (3) | 4", 5", 6" | Extensive decay                                                                                  |                            |        |                           |
| 49          | Populus trichocarpa     | 18"        | Deadwood in canopy, 70% LCR                                                                      |                            |        |                           |

## TREE INVENTORY

| TREE ID NO. | SPECIES                          | SIZE-DBH                     | HEALTH/CONDITION                                             | EXCEPTIONAL RATING PER COS | STATUS | REPLACE WITH              |
|-------------|----------------------------------|------------------------------|--------------------------------------------------------------|----------------------------|--------|---------------------------|
| 50          | Populus trichocarpa              | 20"                          | Good condition, 70% LCR                                      |                            |        |                           |
| 51          | Populus trichocarpa              | 12"                          | Good condition, 70% LCR                                      |                            |        |                           |
| 52          | Populus trichocarpa              | 10"                          | Poorly developed canopy, 20% LCR                             |                            |        |                           |
| 53          | Populus trichocarpa              | 16"                          | good condition, 70% LCR                                      |                            |        |                           |
| 54          | Populus trichocarpa              | 10"                          | Poorly developed canopy, 20% LCR                             |                            |        |                           |
| 55          | Populus trichocarpa              | 28"                          | Broken terminal leader, high hazard potential                |                            | Remove |                           |
| 56          | Populus trichocarpa              | 12"                          | Poorly developed canopy due to competition, 15% LCR          |                            | Remove |                           |
| 57          | Populus trichocarpa              | 18"                          | lean due to competition, hazard potential - adjacent to lane |                            | Remove |                           |
| 58          | Populus trichocarpa              | 28"                          | trunk decay, deadwood in crown                               |                            | Remove |                           |
| 59          | Populus trichocarpa              | 15"                          | Poorly developed canopy due to competition, 15% LCR          |                            | Remove |                           |
| 60          | Ahnus rubra                      | 8-10"                        | Trunk decay and cracking, bark splitting                     |                            |        |                           |
| 61          | Acer macrophyllum                | 12" cluster                  | Extensive trunk decay                                        |                            | Remove |                           |
| 62          | Populus trichocarpa              | 24"                          | Crown decay, 75% LCR                                         |                            | Remove |                           |
| 63          | Crataegus sp.                    | 16"                          | Trunk decay, poor form                                       |                            | Remove |                           |
| 64          | Malus sp.                        | 6"                           | Trunk decay, poor form                                       |                            | Remove |                           |
| 65          | Acer macrophyllum                | 30", 28", 15", 10", 17", 22" | Included bark, trunk decay, 75% LCR                          | Yes                        | Remove | 2" Cal. Betula papyrifera |
| 66          | Acer macrophyllum                | 18", 15"                     | Die leader, extensive trunk decay                            |                            | Remove |                           |
| 67          | Acer macrophyllum                | 44"                          | Die leader, extensive trunk decay, 75% LCR                   | Yes                        | Remove | 2" Cal. Betula papyrifera |
| 68          | Acer macrophyllum                | 30"                          | Extensive trunk decay 30% LCR                                | Yes                        | Remove | 2" Cal. Betula papyrifera |
| 69          | Acer macrophyllum                | 34"                          | Lost terminal leader, trunk decay, 15% LCR                   | Yes                        | Remove | 2" Cal. Betula papyrifera |
| 70          | Acer macrophyllum                | 6"                           | Broken terminal leader, 80% LCR                              |                            |        |                           |
| 71          | Acer macrophyllum                | 18"                          | Broken terminal leader, trunk decay, 20% LCR, decay          |                            | Remove | 2" Cal. Betula papyrifera |
| 72          | Acer macrophyllum                | 6", 5", 8"                   | Lost terminal leader, trunk decay, 15% LCR                   |                            |        |                           |
| 73          | Acer macrophyllum                | cluster                      | Extensive trunk decay, poor form                             |                            |        |                           |
| 74          | Acer macrophyllum                | 22" & 20"                    | Die leader, 70% LCR                                          |                            | Remove |                           |
| 75          | Quercus rubra                    | 25"                          | Deadwood in crown, 60% LCR                                   |                            |        |                           |
| 76          | Populus nigra                    | 46"                          | Die leader, 80% LCR                                          | Yes                        |        |                           |
| 77          | Quercus rubra                    | 30"                          | Good wood closure, 80% LCR                                   |                            |        |                           |
| 78          | Quercus robur                    | 28"                          | Good condition, die leader, included bark                    |                            |        |                           |
| 79          | Pinus sp.                        | 12"                          | Extensive decay                                              |                            | Remove |                           |
| 80          | Malus sp.                        | 15"                          | dead                                                         |                            | Remove |                           |
| 81          | Ahnus rubra                      | 17"                          | 90% LCR                                                      |                            |        |                           |
| 82          | Sambucus racemosa                | 10"                          | extensive decay and poor pruning, regenerative growth        |                            | Remove |                           |
| 83          | Crataegus sp.                    | 12"                          | Poor form, 80% LCR, trunk decay                              |                            | Remove |                           |
| 84          | Crataegus sp.                    | 24"                          | Die leader, poor form, 75% LCR, trunk decay                  |                            | Remove |                           |
| 85          | Cluster of calocedrus and cedars | 3"                           | Excellent condition with symmetrical form                    |                            | Remove |                           |
| 86          | Acer macrophyllum                | 24", 12"                     | Decay in canopy, included bark                               |                            | Remove |                           |
| 87          | Malus sp.                        | 12"                          | Poor form, 75% LCR                                           |                            | Remove |                           |
| 88          | Malus sp.                        | 14"                          | Poor form, 75% LCR                                           |                            | Remove |                           |
| 89          | Acer macrophyllum                | 26"                          | Good wood closure, competition, 80% LCR                      |                            |        |                           |
| 90          | Acer macrophyllum                | 26"                          | Deadwood in crown, 65% LCR                                   |                            |        |                           |
| 91          | Malus sp.                        | 14"                          | Poor structural condition, 10% LCR                           |                            |        |                           |
| 92          | Quercus rubra                    | 30"                          | Broken terminal leader and lateral branches, included bark   | Yes                        |        |                           |
| 93          | Quercus rubra                    | 30"                          | Decay in crown, 80% LCR                                      | Yes                        |        |                           |
| 94          | Acer sp.                         | 30"                          | Extensive decay, 10% LCR                                     |                            | Remove | 2" Cal. Betula papyrifera |
| 95          | Quercus rubra                    | 22"                          | Lost terminal leader, trunk decay                            |                            | Remove |                           |
| 96          | Malus sp.                        | 15"                          | Poor structural condition, low LCR, extensive decay          |                            |        |                           |
| 97          | Quercus rubra                    | 42"                          | Good condition, 80% LCR                                      | Yes                        |        |                           |
| 98          | Malus sp.                        | 15"                          | Extensive trunk decay 15% LCR                                |                            | Remove |                           |
| 99          | Malus sp.                        | 12"                          | Extensive trunk decay, 10% LCR                               |                            | Remove |                           |



TREE PROTECTION DETAIL 1  
NTS



TREE PROTECTION FENCE DETAIL 2  
NTS

## TREE PRESERVATION NOTES

1.

## TREE INVENTORY

| TREE ID NO. | SPECIES                | SIZE-DBH | HEALTH/CONDITION                          | EXCEPTIONAL RATING PER COS | STATUS | REPLACE WITH              |
|-------------|------------------------|----------|-------------------------------------------|----------------------------|--------|---------------------------|
| 100         | Cedrus deodora         | 28"      | Good condition, 90% LCR                   |                            |        |                           |
| 101         | Cedrus deodora         | 28"      | Good condition, 90% LCR                   |                            |        |                           |
| 102         | Malus sp.              | 14"      | Crown decay, 80% LCR                      |                            |        |                           |
| 103         | Malus sp.              | 6"       | Good condition, 95% LCR                   |                            |        |                           |
| 104         | Grouping of calocedrus | 6-8"     | Excellent condition with symmetrical form |                            | Remove | 2" Cal. Betula papyrifera |
| 105         | Populus trichocarpa    | 28"      | Broken terminal leader, 30% LCR, lean     |                            | Remove |                           |

| ABBREVIATIONS |                                                                                                  |
|---------------|--------------------------------------------------------------------------------------------------|
| L-CR          | Live crown ratio is the vertical extent of live crown compared to the overall height of the tree |
| Dbl           | Double leader                                                                                    |
| Dbh           | Trunk diameter readings taken at 4.5' above grade                                                |

## TREE PRESERVATION TABLE

## 60% DRAWINGS



NAKANO ASSOCIATES LLC  
Landscape Architects  
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Seattle WA 98148  
tel 206 295 9090  
fax 206 295 9640  
www.nakanolandscape.com

WARNING  
0 1/2" = 1'  
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

APPROVED FOR ADVERTISING  
FRED PODESTA  
DIRECTOR OF EXECUTIVE ADMINISTRATION  
SEATTLE, WASHINGTON 20

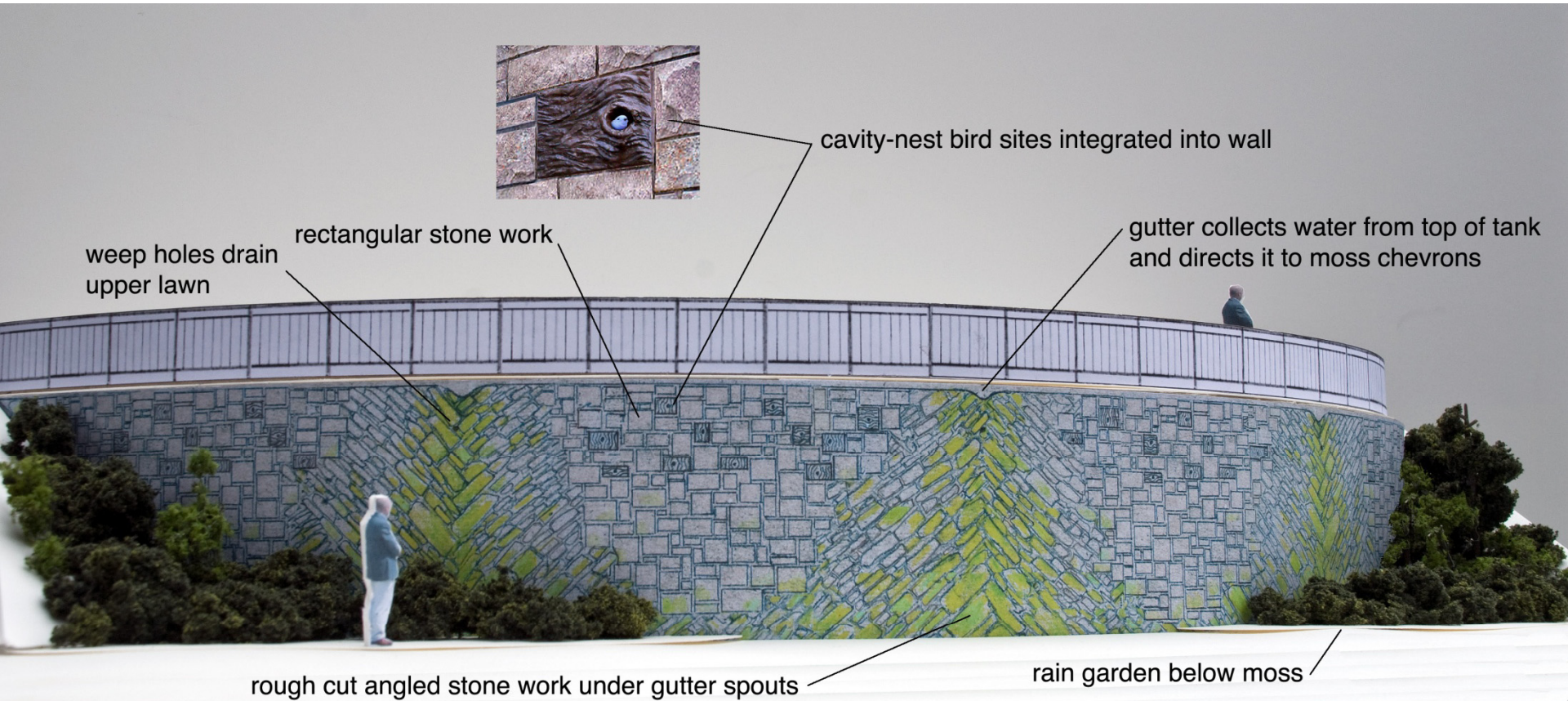
NAME OR INITIALS AND DATE  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
RECEIVED BY: \_\_\_\_\_  
REVISED AS BUILT  
CHECKED BY: \_\_\_\_\_

Seattle Public Utilities  
City of Seattle  
Ray Holman, Acting Director  
PROJECT NO. 122863  
FUND: WATER  
SCALE: -----  
INSPECTOR'S BOOK

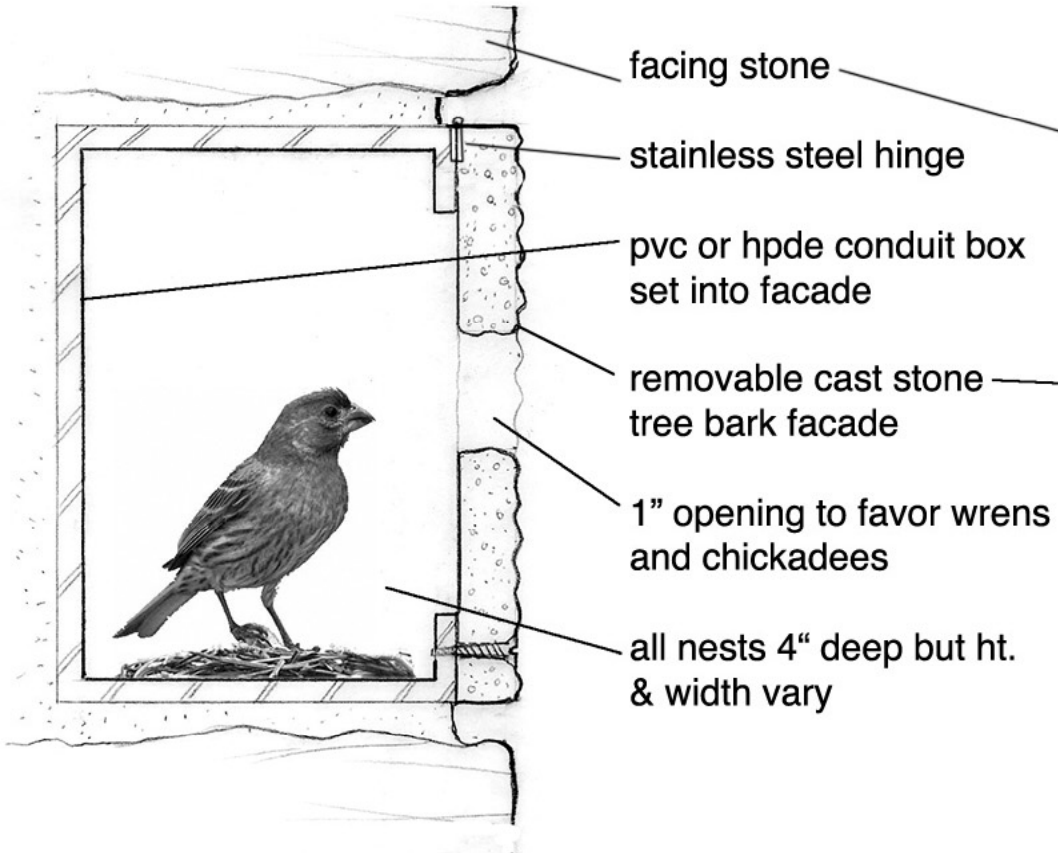
MADISON VALLEY  
NW DIVERSION AND  
WASHINGTON PARK  
STORMWATER PROJECT

PC C307014  
R/W CO  
VAULT PLAN NO.  
\*\*\*-\*\*\*  
SHEET - OF 170

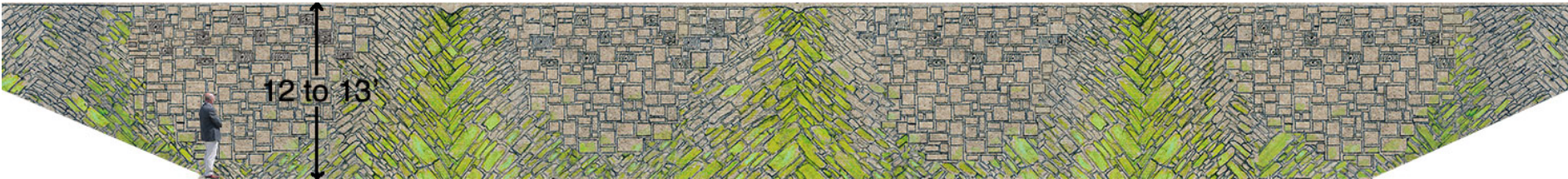




## Bird Nest







**Hydrology:** Storm runoff from the top of the tank, the upper lawn and possibly the access road is captured and directed to a gutter at the top of the wall. Captured runoff flows down the wall creating 3 moss zones of the tank into the rain garden below.



**Moss Wall Zones:** The mossy wall zones located on the northeast side of the tank, an easy place for moss to grow. In addition to moss, ferns can also grow on the wall.