

# CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



October 23, 2014

Ron Hensley, P.E.  
The Group  
300 Branding Iron Rd. SE  
Rio Rancho, NM 87124

Richard J. Berry, Mayor

**RE: Sevano Place Subdivision – Lots 13-20 Block 29, N. Albq. Acres  
(File: C18D075)  
Drainage Report, Engineer's Stamp Date 7-25-2014  
Supplemental Calculations, Engineer's Date 7-25-14, 7-29-14, 10-6-14  
Grading and Drainage Plan, Engineer's Date 10-6-14**

Dear Mr. Hensley:

Based upon the information provided in your submittals received 7-25-14, 7-30-14, and 10-8-14, the above referenced Drainage Report with Supplemental Calculations and Grading and Drainage Plan is approved for Grading Permit with the following condition:

- The Final Plat must have a note stating that the HOA will maintain the Storm Drain, inlet, and the sidewalk culverts.

Prior to Building Permit approval, Engineer Certification per the DPM checklist will be required.

Since the disturbed area on this site exceeds 1.0 acre, an Erosion and Sediment Control (ESC) Plan, prepared by a NM PE and approved by the City's Stormwater Engineer, will be required for this site. Also, This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge for disturbing one acre or more and a Topsoil Disturbance Permit for disturbing  $\frac{3}{4}$  of an acre or more. If you have any questions, you can contact me at 924-3695.

Sincerely,

Rita Harmon, P.E.  
Senior Engineer, Planning Dept.  
Development Review Services

Orig: Drainage file  
c.pdf via Email: Recipient, Monica Ortiz



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Sevano Place Subdivision Building Permit #: \_\_\_\_\_ City Drainage #: C-18D075

DRB#: 1005191 EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: Lots 13-20, Block 29, North Albuquerque Acres Tract A, Unit B

City Address: Alameda / Louisiana

Engineering Firm: THE Group Contact: Ron Hensley

Address: 300 Branding Iron Rd. SE, Rio Rancho, NM 87124

Phone#: 505-410-1622 Fax#: \_\_\_\_\_ E-mail: ron@thegroup.cc

Owner: Nazish LLC Contact: Adil Risvi

Address: 8504 Waterford Pl. NE, Albuquerque, NM 87122

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Architect: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Surveyor: Cartesian Surveys Inc. Contact: Will Plotner

Address: P.O. Box 44414, Rio Rancho, NM 87174

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

### TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☒ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY) \_\_\_\_\_

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) \_\_\_\_\_

WAS A PRE-DESIGN CONFERENCE ATTENDED: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Copy Provided

DATE SUBMITTED: October 7, 2014 By: Ron E. Hensley

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



**The HENSLEY ENGINEERING GROUP**

October 8, 2014

Hydrology Development  
City of Albuquerque  
PO Box 1293  
Albuquerque, NM 87103

Re: Sevano Place Subdivision – Grading Plan

We are the attached supplement and Grading Plan of Sevano Place Subdivision in support of a Grading Permit.

The comments of August 5, 2014 have been addressed with the following:

- The Grading Plan has been modified to reduce the number of sidewalk culverts to four. This lowered the maximum water elevation.
- The Grading Plan has been modified to eliminate drainage encroachment onto adjacent lots.
- Additional detail has been provided on culvert installation.
- Calculations for the culverts have been included to include superelevation of the roadway.
- The Final Plat will note maintenance responsibilities.

Please contact me at 410-1622 or via email if you have any questions or comments.

Sincerely,

Ron E. Hensley P.E.  
[ron@thegroup.cc](mailto:ron@thegroup.cc)

# Culvert Report

Hydroware Express Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc.

Wednesday, Sep 3 2014

## SIDEWALK CULVERT 1

Invert Elev Dn (ft) = 88.67  
 Pipe Length (ft) = 8.00  
 Slope (%) = 2.00  
 Invert Elev Up (ft) = 88.83  
 Rise (in) = 8.0  
 Shape = Box  
 Span (in) = 24.0  
 No. Barrels = 1  
 n-Value = 0.012  
 Inlet Edge = 0  
 Coeff. K,M,c,Y,k = 0.498, 0.667, 0.0327, 0.75, 0.2

### Embankment

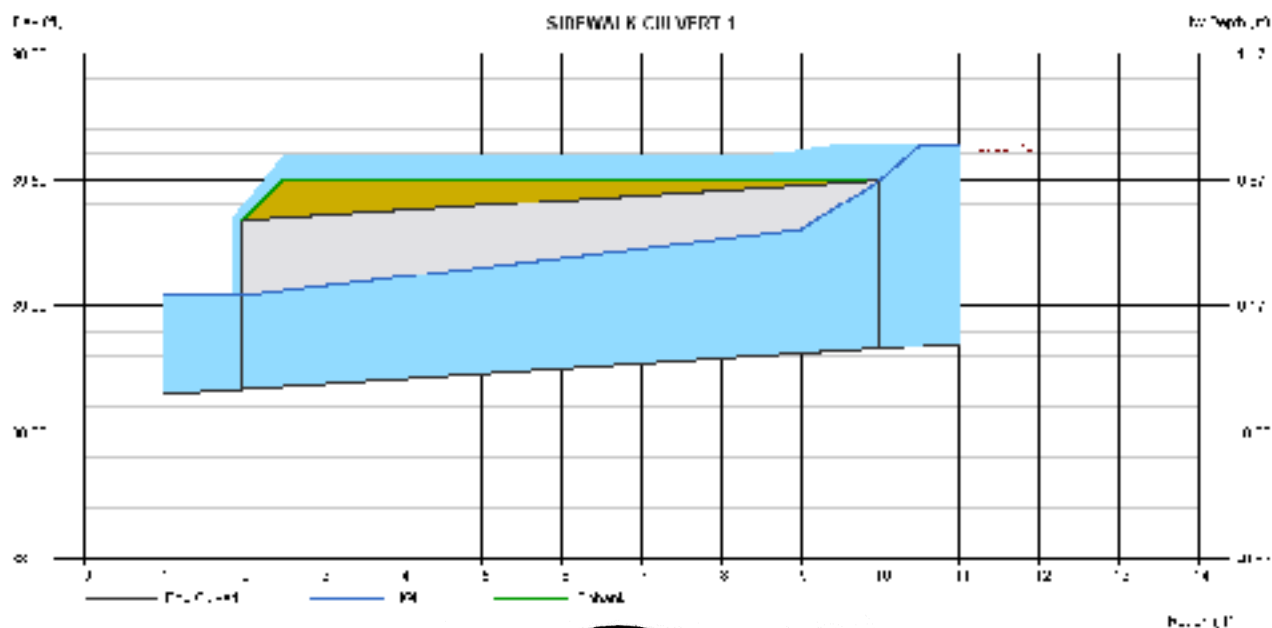
Top Elevation (ft) = 89.50  
 Top Width (ft) = 7.00  
 Crest Width (ft) = 3.00

### Calculations

Qmin (cfs) = 0.00  
 Qmax (cfs) = 5.00  
 Tailwater Elev (ft) = 0

### Highlighted

Qtotal (cfs) = 4.50  
 Qpipe (cfs) = 4.10  
 Qovertop (cfs) = 0.40  
 Veloc Dn (ft/s) = 5.53  
 Veloc Up (ft/s) = 4.04  
 HGL Dn (ft) = 89.04  
 HGL Up (ft) = 89.34  
 Hw Elev (ft) = 89.63  
 Hw/D (ft) = 1.21  
 Flow Regime = Inlet Control



RON E. HENSLEY  
 NEW MEXICO  
 21850  
 PROFESSIONAL ENGINEER  
 10/16/14

# Culvert Report

Hydrow Express Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc.

Wednesday, Sep 3 2014

## SIDEWALK CULVERT 2

Invert Elev Dn (ft) = 88.77  
 Pipe Length (ft) = 8.00  
 Slope (%) = 2.00  
 Invert Elev Up (ft) = 88.93  
 Rise (in) = 8.0  
 Shape = Box  
 Span (in) = 24.0  
 No. Barrels = 1  
 n-Value = 0.012  
 Inlet Edge = 0  
 Coeff. K,M,c,Y,k = 0.498, 0.667, 0.0327, 0.75, 0.2

### Embankment

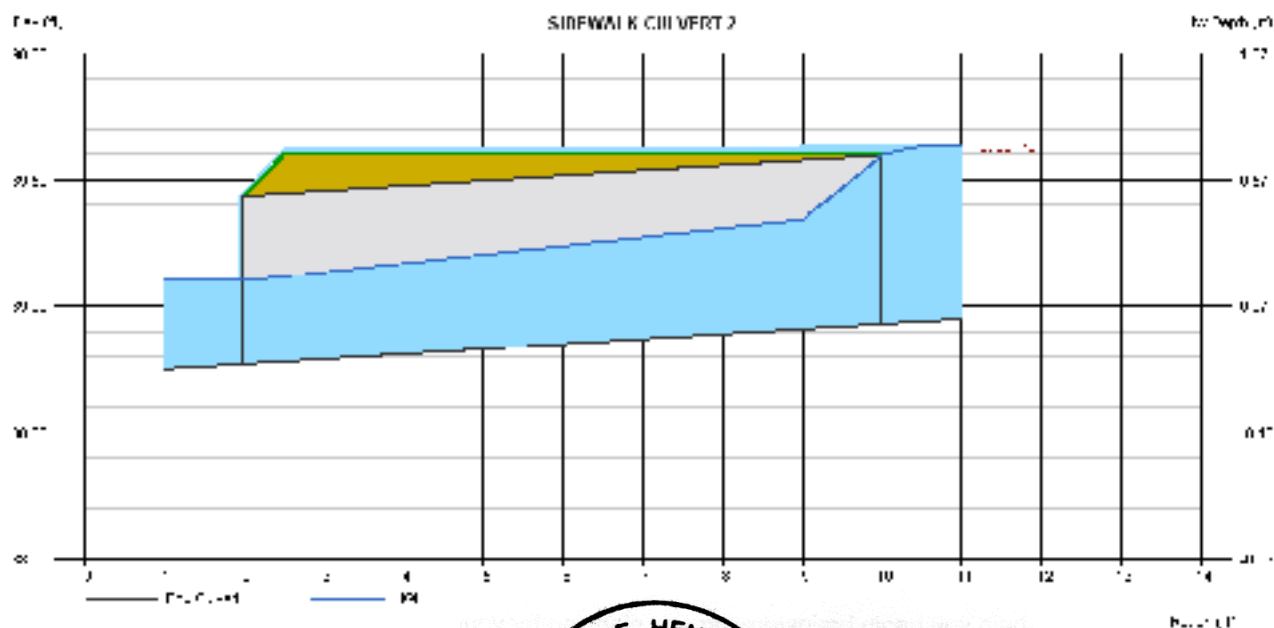
Top Elevation (ft) = 89.60  
 Top Width (ft) = 7.00  
 Crest Width (ft) = 3.00

### Calculations

Qmin (cfs) = 0.00  
 Qmax (cfs) = 5.00  
 Tailwater Elev (ft) = 0

### Highlighted

Qtotal (cfs) = 3.40  
 Qpipe (cfs) = 3.36  
 Qovertop (cfs) = 0.04  
 Veloc Dn (ft/s) = 5.09  
 Veloc Up (ft/s) = 3.78  
 HGL Dn (ft) = 89.10  
 HGL Up (ft) = 89.37  
 Hw Elev (ft) = 89.63  
 Hw/D (ft) = 1.06  
 Flow Regime = Inlet Control



10/6/14

# Culvert Report

Hydraulow Express Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc.

Wednesday, Sep 3 2014

## SIDEWALK CULVERT 3

Invert Elev Dn (ft) = 88.87  
 Pipe Length (ft) = 8.00  
 Slope (%) = 2.00  
 Invert Elev Up (ft) = 89.03  
 Rise (in) = 8.0  
 Shape = Box  
 Span (in) = 24.0  
 No. Barrels = 1  
 n-Value = 0.012  
 Inlet Edge = 0  
 Coeff. K,M,c,Y,k = 0.498, 0.667, 0.0327, 0.75, 0.2

### Embankment

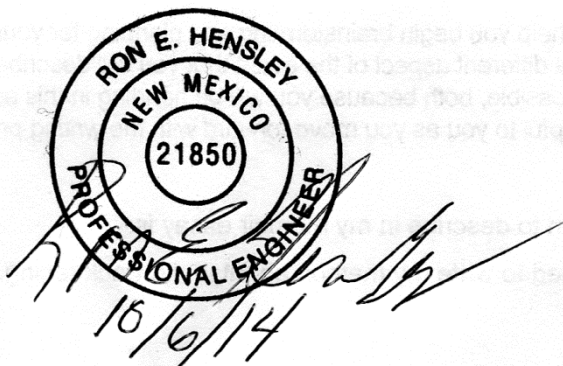
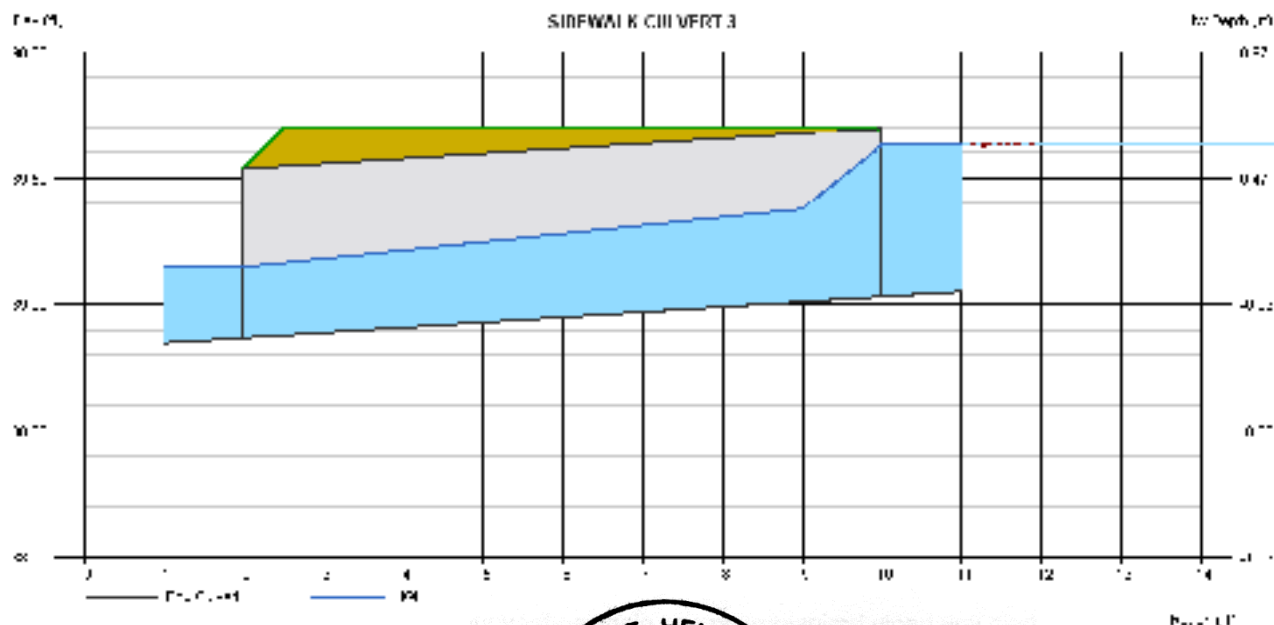
Top Elevation (ft) = 89.70  
 Top Width (ft) = 7.00  
 Crest Width (ft) = 3.00

### Calculations

Qmin (cfs) = 0.00  
 Qmax (cfs) = 5.00  
 Tailwater Elev (ft) = 0

### Highlighted

Qtotal (cfs) = 2.65  
 Qpipe (cfs) = 2.65  
 Qovertop (cfs) = 0.00  
 Veloc Dn (ft/s) = 4.73  
 Veloc Up (ft/s) = 3.49  
 HGL Dn (ft) = 89.15  
 HGL Up (ft) = 89.41  
 Hw Elev (ft) = 89.63  
 Hw/D (ft) = 0.90  
 Flow Regime = Inlet Control



# Culvert Report

Hydrow Express Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc.

Wednesday, Sep 3 2014

## SIDEWALK CULVERT 4

Invert Elev Dn (ft) = 88.97  
 Pipe Length (ft) = 8.00  
 Slope (%) = 2.00  
 Invert Elev Up (ft) = 89.13  
 Rise (in) = 8.0  
 Shape = Box  
 Span (in) = 24.0  
 No. Barrels = 1  
 n-Value = 0.012  
 Inlet Edge = 0  
 Coeff. K,M,c,Y,k = 0.498, 0.667, 0.0327, 0.75, 0.2

### Embankment

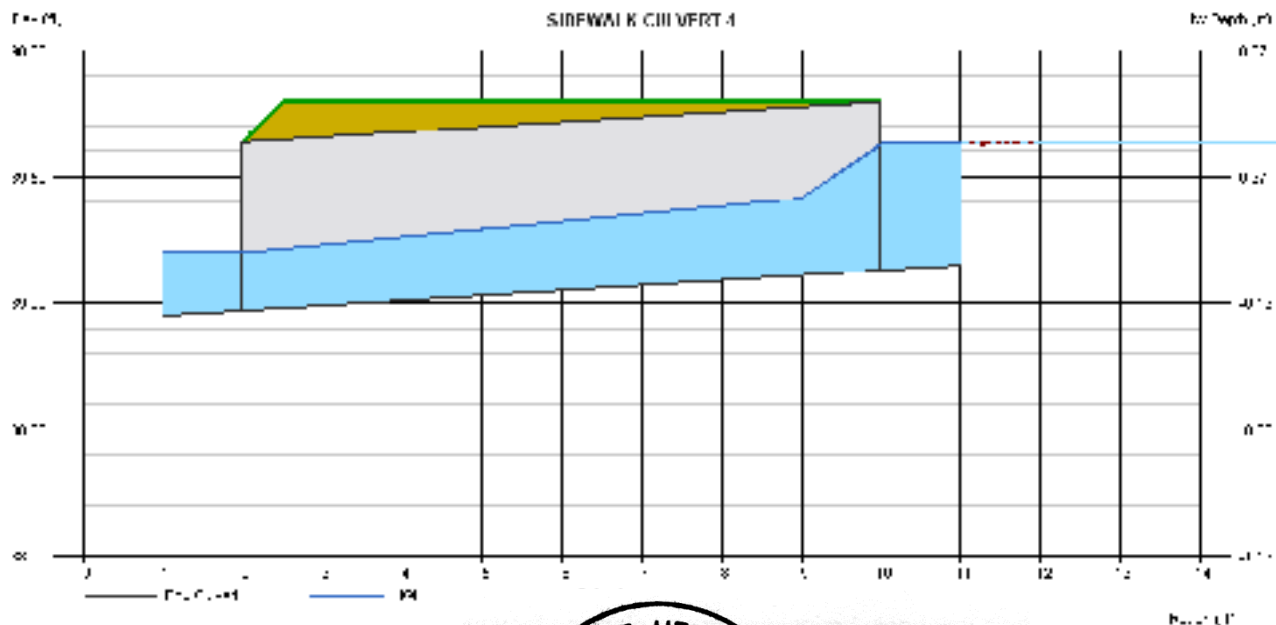
Top Elevation (ft) = 89.80  
 Top Width (ft) = 7.00  
 Crest Width (ft) = 3.00

### Calculations

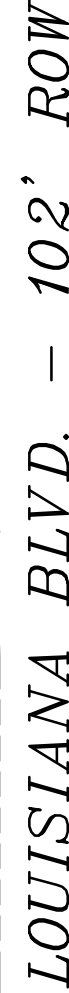
Qmin (cfs) = 0.00  
 Qmax (cfs) = 5.00  
 Tailwater Elev (ft) = 0

### Highlighted

Qtotal (cfs) = 2.00  
 Qpipe (cfs) = 2.00  
 Qovertop (cfs) = 0.00  
 Veloc Dn (ft/s) = 4.35  
 Veloc Up (ft/s) = 3.18  
 HGL Dn (ft) = 89.20  
 HGL Up (ft) = 89.44  
 Hw Elev (ft) = 89.63  
 Hw/D (ft) = 0.75  
 Flow Regime = Inlet Control







### LEGEND

FLOW ARROW  
 SLOPE ARROW  
 PROPOSED ELEVATION  
 EXISTING ELEVATION  
 GRADE BREAK  
 EXISTING CONTOUR  
 EXISTING CONTOUR  
 PROPOSED EASEMENT  
 PROPOSED GRADE  
 EXISTING WALL  
 PROPOSED WALL

CITY PROJECT No.	ZONE MAP NO. <b>C-18-7</b>	SHEET <b>1</b> OF <b>2</b>
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$$\text{VOLUME} = 2400 * 0.44 / 12 = 88 \text{ CU.FT.}$$


DRB No. 1005191

CITY PROJECT No.

ZONE MAP NO.

ET 1 OF 2



