



SEAL & SIGNATURE



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- ACOUSTICAL ENGINEER  
**ROSEN GOLDBERG DER AND LEWITZ, INC.**  
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DESIGN / BUILD

- MECHANICAL DESIGN/BUILD  
**MARINA MECHANICAL**  
799 Thornton Street  
San Leandro, CA 94577  
510.614.3500
- PLUMBING DESIGN/BUILD  
**W.L. HICKEY SONS, INC.**  
P.O. Box 61209  
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Burlingame, CA 94088  
408.736.4938
- ELECTRICAL DESIGN/BUILD  
**H.A. BOWEN ELECTRIC, INC.**  
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San Leandro, CA 94577  
510.483.0500

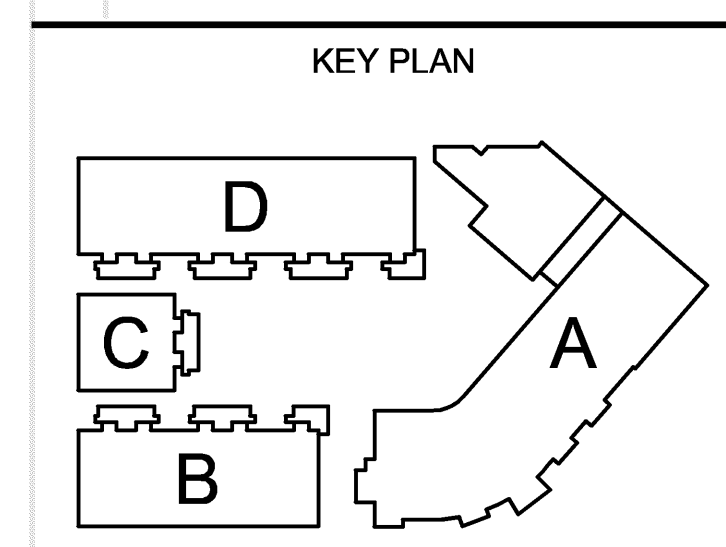
AGENCY APPROVAL

**rca**  
Creating & Preserving Affordable Housing  
Resources for Community Development

**ASHLAND FAMILY HOUSING**  
KENT AVE. AND E. 14TH STREET  
ASHLAND, CA

REVISIONS

ISSUANCE	DAY	MONTH	YEAR
PERMIT RESUBMITTAL	29	JULY	2013
BACKCHECK #1	06	SEPT.	2013
BACKCHECK #2	04	OCT.	2013



DRAWING TITLE  
**DETAILS:  
GRADING**

DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

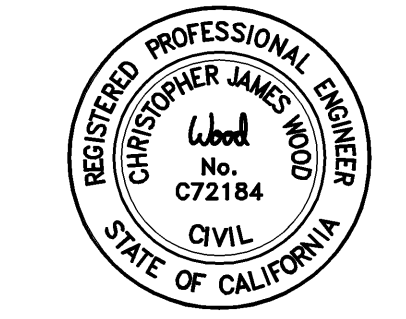
CHECKED: CW  
SCALE: AS SHOWN

SHEET NUMBER: **C-2.1**

PLOT DATE: 10/04/2013

PAVEMENT DESIGN CHART		CONCRETE VERTICAL CURB		PERVIOUS VEHICULAR PAVERS		PERVIOUS PLAY-AREA SURFACE		ACCESS RAMP TYPE 1	
AREA USE	TRAFFIC INDEX (T.I.)	ASPHALT CONCRETE (INCHES)	CLASS II AB (INCHES)	[Diagram: Concrete vertical curb cross-section showing 6" concrete curb, 2" aggregate base, and 1 1/2" batter]		[Diagram: Pervious vehicular pavers cross-section showing 3-1/8" permeable pavers, hydrologically sized joints, and uniform base elevation]		[Diagram: Access ramp type 1 cross-section showing 6" concrete curb, 4" minimum sidewalk, and 8.33% maximum slope]	
TRAVEL LANE (HEAVY)	6.0	3.5	13.0	[Diagram: Pervious courtyard pavers cross-section showing 2-3/8" permeable pavers, hydrologically sized joints, and uniform base elevation]		[Diagram: Remedial grading: cement-soil cross-section showing rough grade surface, finish floor section, and native material surcharge fill]		[Diagram: Access ramp type 2 cross-section showing 12" long groove width, 1/4" groove depth, and 3/4" at top of ramp]	
PARKING STALLS (LIGHT)	5.0	3.0	10.0	[Diagram: Concrete curb & gutter cross-section showing 6" concrete curb, 4" concrete sidewalk, and 6" aggregate base]		[Diagram: Ramp grooves cross-section showing 1/4" max. access pt. or flush (typ.) and 6" curb]		[Diagram: Transition curb cross-section showing 6" concrete curb, 4" minimum sidewalk, and 8.33% maximum slope]	
ASSUMING EXISTING SOILS R-VALUE=5				[Diagram: Concrete curb & gutter profile view showing parking stall width, curb opening, and top 6" curb]		[Diagram: Pad surcharge program cross-section showing 2-1/2" max. to finish grade surface, rough grade surface, design landscape, and native material surcharge fill]		[Diagram: Transition curb cross-section showing 6" concrete curb, 4" minimum sidewalk, and 8.33% maximum slope]	
NOTES: 1. ALL PAVEMENT SUBGRADES SHALL BE SCARIFIED TO A DEPTH OF 8" BELOW FINISHED SUBGRADE. MOISTURE CONDITIONED TO AT OR ABOVE OPTIMUM. BE RECOMPACTED TO AT LEAST 95% (OMIT SCARIFICATION WHEN PLACED OVER CEMENT-TREATED SOIL). 2. AGGREGATE BASE(A.B.) SHALL BE CLASS II AND COMPACTED TO 95% RELATIVE COMPACTION.				NOT TO SCALE		NOT TO SCALE		NOT TO SCALE	
20 21		24		27		30		33	
1 ASPHALT PAVEMENT DETAIL		4 CONCRETE VERTICAL CURB		7 PERVIOUS VEHICULAR PAVERS		10 PERVIOUS PLAY-AREA SURFACE		13 ACCESS RAMP TYPE 1	
[Diagram: Asphalt pavement detail cross-section showing expansion joint material, gutter lip, and aggregate base]		[Diagram: Concrete curb & gutter cross-section showing 6" concrete curb, 4" concrete sidewalk, and 6" aggregate base]		[Diagram: Pervious courtyard pavers cross-section showing 2-3/8" permeable pavers, hydrologically sized joints, and uniform base elevation]		[Diagram: Remedial grading: cement-soil cross-section showing rough grade surface, finish floor section, and native material surcharge fill]		[Diagram: Access ramp type 2 cross-section showing 12" long groove width, 1/4" groove depth, and 3/4" at top of ramp]	
NOTES: 1. PORTLAND CEMENT CONCRETE (P.C.C.) 2. #4 RE-BAR, 12" O.C. EACH WAY, WRAP ONE END WITH FELT OR GREASED 3. #4 REBAR, 12" O.C. EACH WAY, MID-SLAB 4. CLASS II A.B. COMPACTED TO 95% 5. 3/8" PREMOLDED EXPANSION MATERIAL AT 8" O.C. MAXIMUM AND SCORE MARKS 4" BETWEEN EXPANSION JOINTS		NOT TO SCALE		NOT TO SCALE		NOT TO SCALE		NOT TO SCALE	
2 CONCRETE VEHICULAR PAVEMENT		5 CONCRETE CURB & GUTTER		8 PERVIOUS COURTYARD PAVERS		11 REMEDIAL GRADING: CEMENT-SOIL		14 ACCESS RAMP TYPE 2	
[Diagram: Concrete vehicular pavement cross-section showing expansion joint material, gutter lip, and aggregate base]		[Diagram: Concrete curb & gutter cross-section showing 6" concrete curb, 4" concrete sidewalk, and 6" aggregate base]		[Diagram: Pervious courtyard pavers cross-section showing 2-3/8" permeable pavers, hydrologically sized joints, and uniform base elevation]		[Diagram: Remedial grading: cement-soil cross-section showing rough grade surface, finish floor section, and native material surcharge fill]		[Diagram: Access ramp type 2 cross-section showing 12" long groove width, 1/4" groove depth, and 3/4" at top of ramp]	
NOTES: 1. PORTLAND CEMENT CONCRETE (P.C.C.) 2. #4 RE-BAR, 12" O.C. EACH WAY, WRAP ONE END WITH FELT OR GREASED 3. #4 REBAR, 12" O.C. EACH WAY, MID-SLAB 4. CLASS II A.B. COMPACTED TO 95% 5. 3/8" PREMOLDED EXPANSION MATERIAL AT 8" O.C. MAXIMUM AND SCORE MARKS 4" BETWEEN EXPANSION JOINTS		NOT TO SCALE		NOT TO SCALE		NOT TO SCALE		NOT TO SCALE	
3 CONCRETE PEDESTRIAN SIDEWALK		6 CURB OPENINGS		9 PERVIOUS SIDEWALK PAVERS		12 PAD SURCHARGE PROGRAM		16 TRANSITION CURB	
[Diagram: Concrete pedestrian sidewalk cross-section showing expansion joint material, gutter lip, and aggregate base]		[Diagram: Curb openings cross-section showing 6" concrete curb, 4" concrete sidewalk, and 6" aggregate base]		[Diagram: Pervious sidewalk pavers cross-section showing 2-3/8" permeable pavers, hydrologically sized joints, and uniform base elevation]		[Diagram: Pad surcharge program cross-section showing 2-1/2" max. to finish grade surface, rough grade surface, design landscape, and native material surcharge fill]		[Diagram: Transition curb cross-section showing 6" concrete curb, 4" minimum sidewalk, and 8.33% maximum slope]	
NOT TO SCALE		NOT TO SCALE		NOT TO SCALE		NOT TO SCALE		NOT TO SCALE	

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DESIGN / BUILD

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AGENCY APPROVAL

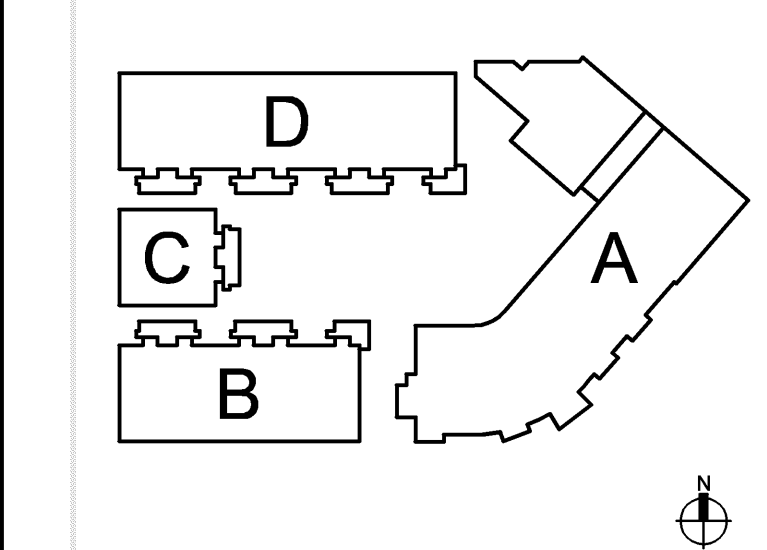


**ASHLAND FAMILY HOUSING**  
KENT AVE. AND E. 14TH STREET  
ASHLAND, CA

REVISIONS

ISSUANCE	DAY	MONTH	YEAR
PERMIT RESUBMITTAL	29	JULY	2013
BACKCHECK #1	06	SEPT.	2013
BACKCHECK #2	04	OCT.	2013

KEY PLAN



DRAWING TITLE

**DETAILS:  
GRADING &  
UTILITY**

DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

CHECKED: CW  
SCALE: AS SHOWN

SHEET NUMBER: **C-2.2**

PLT DATE: 10/04/2013

<p><b>NOTE:</b> SURFACE AREA OF BIOTREATMENT FACILITY SHALL BE EQUAL TO AT LEAST 4% OF THE IMPERVIOUS SURFACE AREA DRAINING INTO THE FOOTPRINT</p> <p>ENERGY DISSIPATOR AT CONCENTRATED FLOWS, AS APPLICABLE</p> <p>18" BIO-TREATMENT SOIL PER APPENDIX B OF THE ALAMEDA COUNTY CS GUIDEBOOK</p> <p>12" CLASS 2 PERMEABLE MATERIALS PER CALTRANS SPECIFICATIONS</p> <p>4" PERFORATED SUBDRAIN AT 0.5% MIN SLOPE WITH PERFORATIONS FACE DOWN. PROVIDE CLEANOUT WITH SWEEP BEND AND CONNECT TO STORM DRAIN SYSTEM.</p>	<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>	<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>	<p><b>NOTE:</b> DETAIL SHOWS POUR OF CROSS BEAMS AND CURBS. CONTRACTOR CAN OPT TO POUR SEPARATELY IN WHICH CASE THE REBAR SPECIFIED SHALL BE DOWELED AND EPOXIED.</p>	
<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>	<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>	<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>		
<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>	<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>	<p><b>NOTE:</b> RETAINING WALLS TO BE DESIGN-BUILD</p>		

SEAL & SIGNATURE



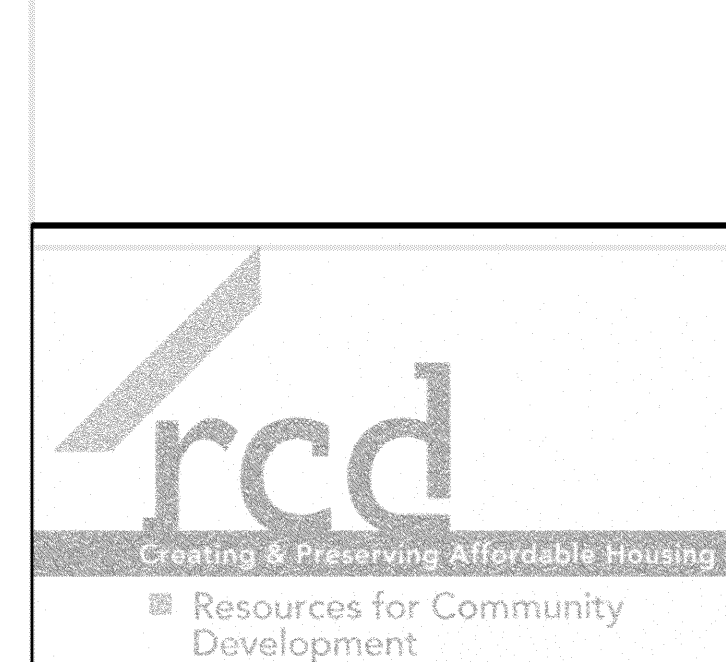
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AGENCY APPROVAL

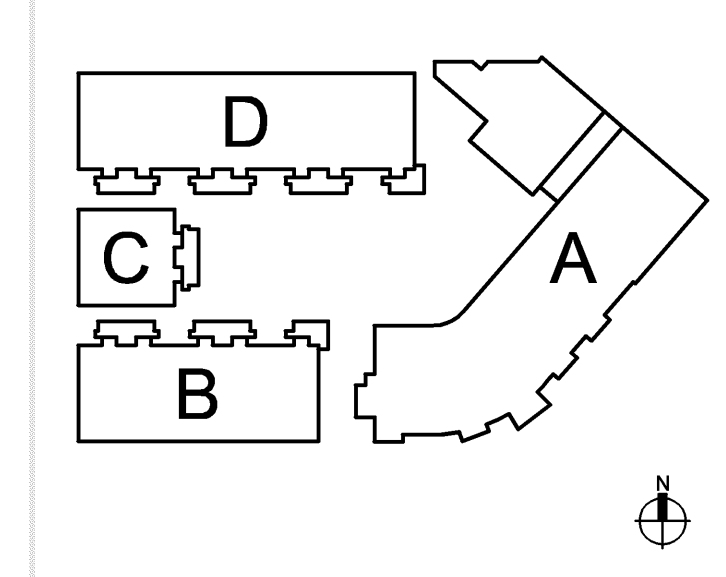


**ASHLAND FAMILY HOUSING**  
KENT AVE. AND E. 14TH STREET  
ASHLAND, CA

REVISIONS

ISSUANCE	DAY	MONTH	YEAR
PERMIT RESUBMITTAL	29	JULY	2013
BACKCHECK #1	06	SEPT.	2013
BACKCHECK #2	04	OCT.	2013

KEY PLAN



DRAWING TITLE

**DETAILS:  
UTILITY &  
STRIPING**

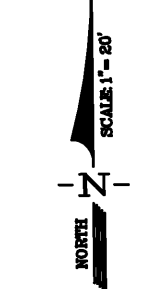
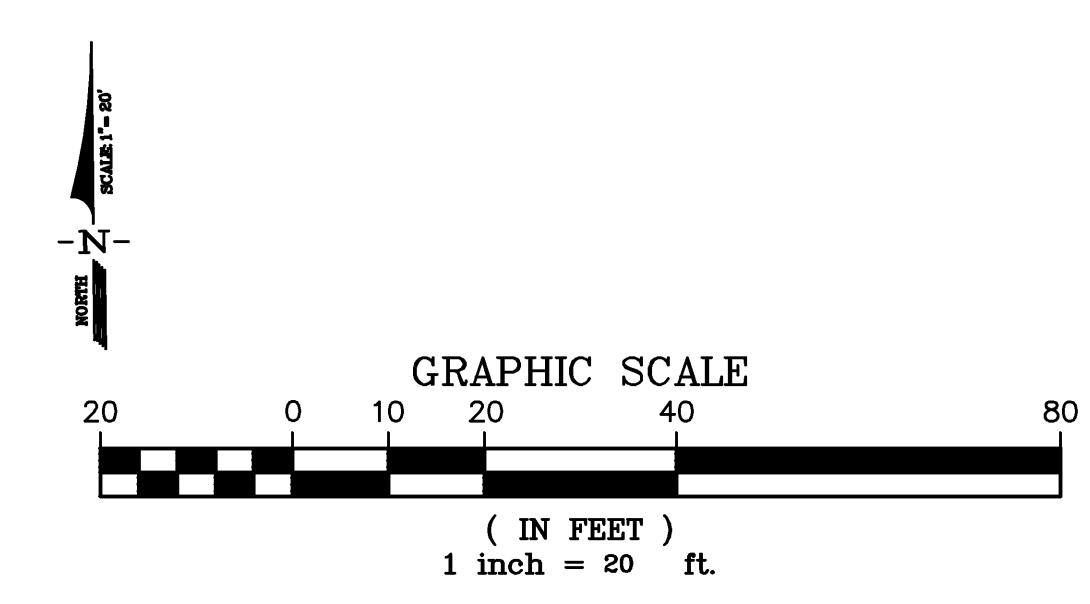
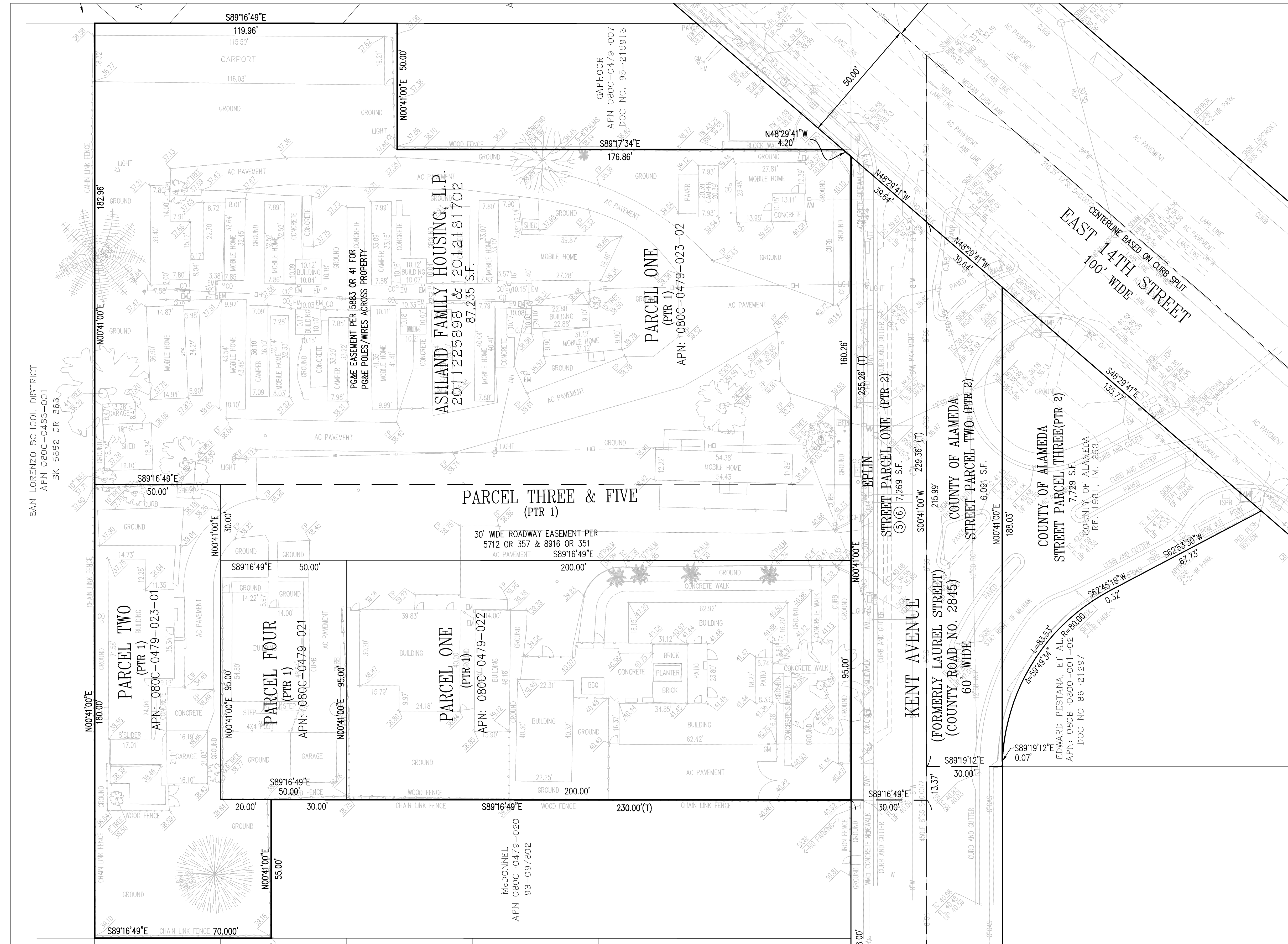
DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

CHECKED: CW  
SCALE: AS SHOWN

SHEET NUMBER: **C-2.3**

PLOT DATE: 10/04/2013

<p>GENERAL UTILITY NOTES NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>
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<p>GENERAL UTILITY NOTES NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOTES:</p> <ol style="list-style-type: none"> <li>1. THE DETECTABLE SURFACE DOMES SHALL BE ORIENTED SUCH THAT THE ROWS ARE PARALLEL WITH THE DIRECTION OF THE RAMP. WHEN MULTIPLE TILES REGARDLESS OF SIZE ARE USED, THEN THE DETECTABLE SURFACE DOMES SHALL BE ALIGNED BETWEEN THE TILES AND THROUGHOUT THE ENTIRE DETECTABLE SURFACE INSTALLATION.</li> <li>2. THE SLOPE OF THE CURB PORTION OF THE RAMP SHALL MATCH THE SLOPE OF THE RAMP ITSELF.</li> <li>3. WHEN THE CURB IS WIDER THAN 8 INCHES, THE CURB WITHIN THE CURB RAMP SHALL BE 8 INCHES MAXIMUM. THE WIDE CURB OUTSIDE SHALL TRANSITION THROUGH THE GROOVED BORDER AS SHOWN ON THE DRAWING.</li> <li>4. WHEN THE MAXIMUM SLOPE OF THE RAMP IS LESS THAN OR EQUAL TO 6.67% (1:15), A DETECTABLE SURFACE SHALL BE INSTALLED ON THE ENTIRE RAMP PORTION.</li> <li>5. WHEN A DETECTABLE SURFACE DOME IS CUT, THE REMAINING DOME SHALL BE BEVELLED TO A MAXIMUM SLOPE OF 1:2. COLOR MATCH CUT OR GROUND SURFACES WITH COATING IN ACCORDANCE WITH DETECTABLE WARNING MANUFACTURER.</li> <li>6. THE DETECTABLE SURFACE SHALL HAVE INTEGRAL RESONANT AIR CAVITY FOR SOUND ON CANE DIFFERENTIAL WITH RESPECT TO ADJACENT WALKING SURFACES. DETECTABLE SURFACE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. THE COLOR OF THE DETECTABLE SURFACES SHALL CONFORM TO FEDERAL STANDARD 595B TABLE IV, COLOR #33538. NEW RAMP CONSTRUCTION SHALL BE PROVIDED WITH DPW APPROVED UNITS THAT ARE CAST-IN-PLACE PER MANUFACTURER'S INSTRUCTIONS. RETROFITTED RAMPS SHALL BE PROVIDED WITH DPW APPROVED UNITS THAT ADHERED AND MECHANICALLY FASTENED PER MANUFACTURER'S INSTRUCTIONS.</li> <li>7. THE EDGE OF THE DETECTABLE SURFACE SHALL HAVE A BEVELLED EDGE SLOPED AT 1:2 MAXIMUM. WHEN THE DETECTABLE SURFACE EDGE IS CUT AND THE RESULTING EDGE IS NOT FLUSH WITH THE SURFACE OF THE CURB RAMP, THE EDGE SHALL BE BEVELLED OR CONFORMED WITH AN APPROVED DETECTABLE SURFACE MANUFACTURER'S REQUIREMENTS.</li> </ol>
<p>GENERAL UTILITY NOTES NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>	<p>NOT TO SCALE</p>



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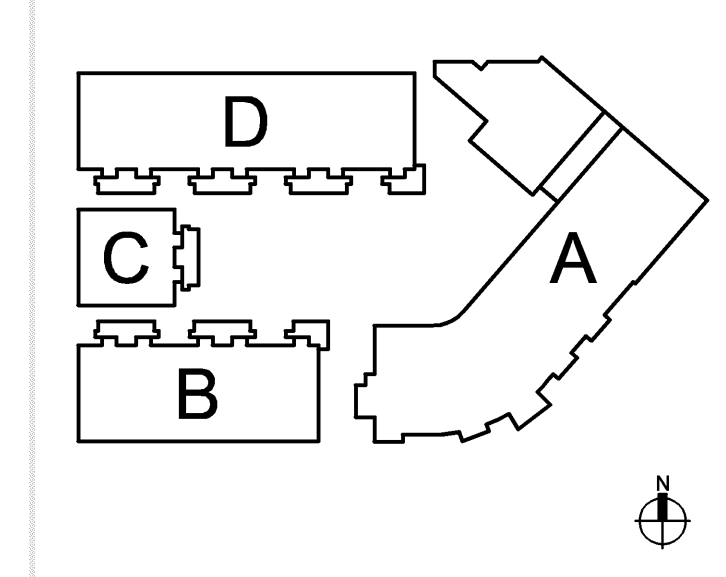


**ASHLAND FAMILY HOUSING**  
 KENT AVE. AND E. 14TH STREET  
 ASHLAND, CA

REVISIONS

ISSUANCE	DAY MONTH YEAR
PERMIT RESUBMITTAL	29 JULY 2013
BACKCHECK #1	06 SEPT. 2013
BACKCHECK #2	04 OCT. 2013

KEY PLAN



DRAWING TITLE

**SITE SURVEY**

DRAWN: STAFF  
 DATE: JUNE 2013  
 KMA PROJECT NO.: 1020  
 LUK PROJECT NO.: 10019A10

CHECKED: CW  
 SCALE: 1"=20'  
 SHEET NUMBER: **C-3.1**



massih  
ARCHITECTS  
A CALIFORNIA CORPORATION

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BERKELEY, CALIFORNIA 94710  
510.844.1920  
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SEAL & SIGNATURE



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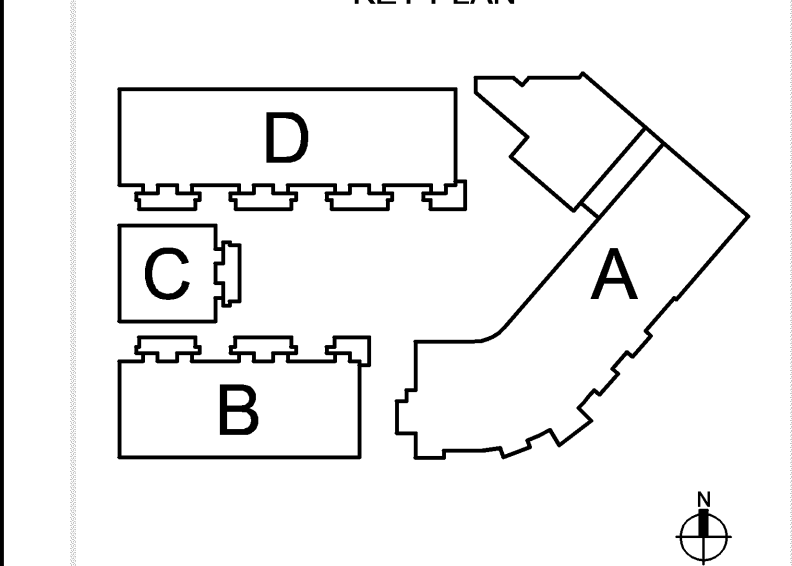


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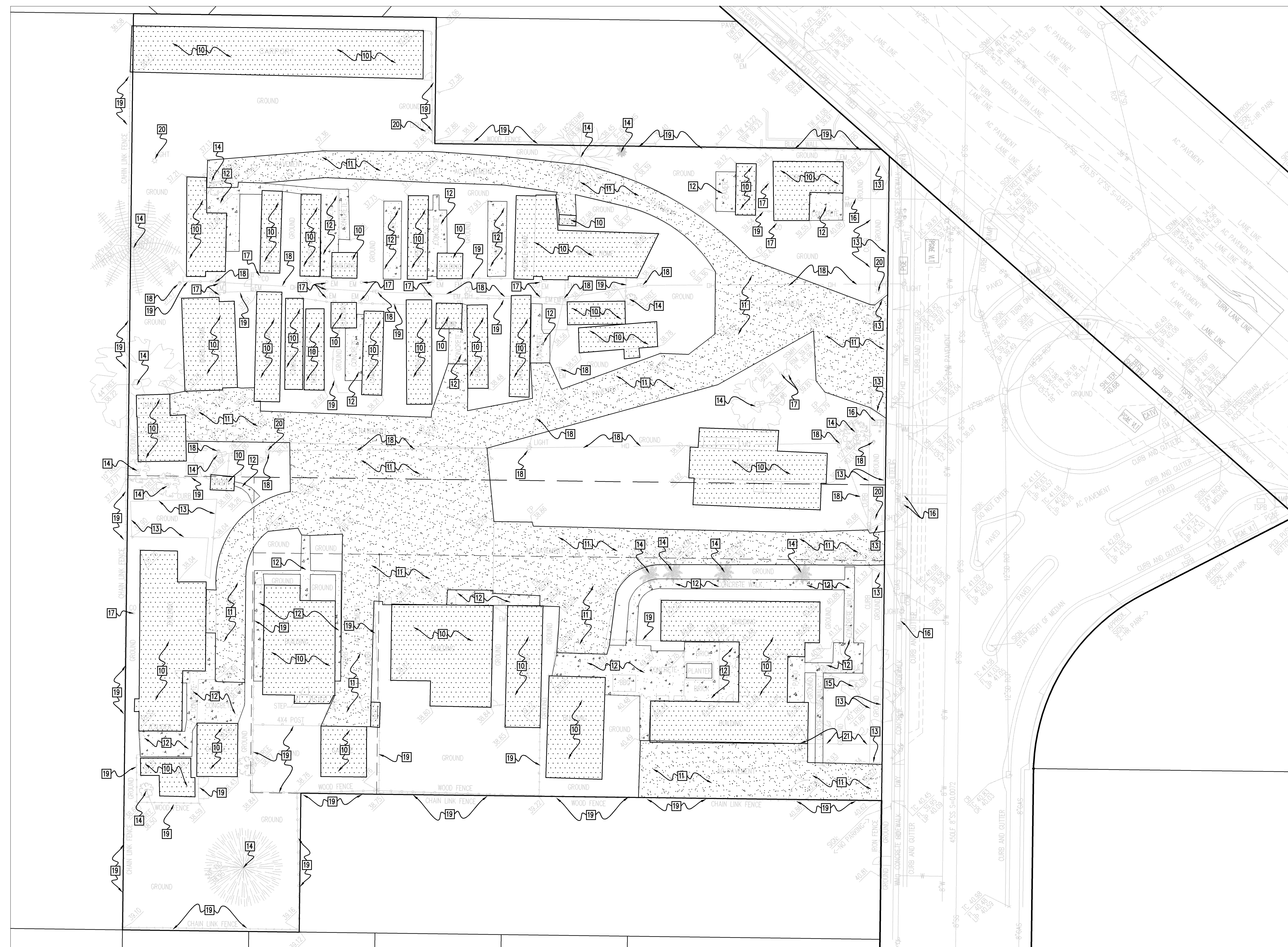
**DEMOLITION PLAN**

DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

CHECKED: CW  
SCALE: 1"=20'  
10019A10

SHEET NUMBER: **C-3.2**

PLOT DATE: 10/04/2013

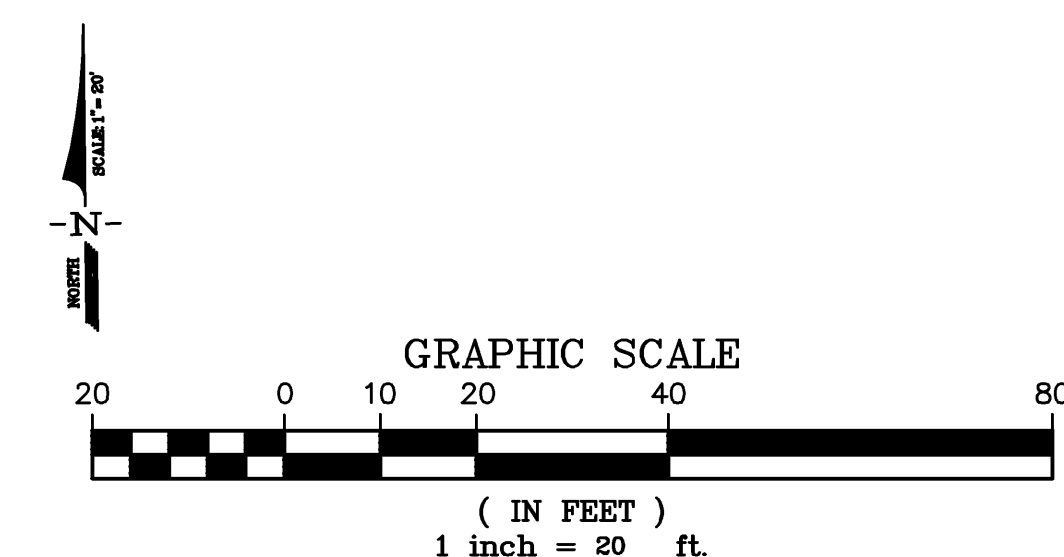


**DEMOLITION NOTES**

- 10 REMOVE BUILDING/STRUCTURE, INCLUDING FOOTINGS AND ALL ASSOCIATED UTILITY SERVICES UP TO THE RIGHT-OF-WAY/PROPERTY-LINE. CONTRACTOR SHALL CONTACT UTILITY AGENCIES HAVING JURISDICTION, TO COORDINATE SHUT-DOWN AND TERMINATION OF SERVICES. UTILITY REMOVAL INCLUDES, BUT IS NOT LIMITED TO, ALL METERS, PANELS, SLEAVES, VAULTS, POLES, LINES, AND OTHER INCIDENTAL FEATURES.
- 11 REMOVE EXISTING ASPHALT CONCRETE PAVEMENT.
- 12 REMOVE EXISTING CONCRETE SIDEWALK PAVEMENT.
- 13 REMOVE EXISTING CURB.
- 14 REMOVE EXISTING TREE.
- 15 EXISTING TREE TO REMAIN. CONTRACTOR SHALL PROTECT THROUGHOUT ENTIRE CONSTRUCTION PERIOD.
- 16 REMOVE EXISTING WATER SERVICE LATERAL AND METER IN COORDINATION WITH WATER DISTRICT.
- 17 REMOVE EXISTING SEWER SERVICE LATERAL, CLEANOUTS, AND MANHOLES IN COORDINATION WITH SANITARY DISTRICT.
- 18 REMOVE EXISTING ELECTRIC SERVICE OVERHEAD LINES AND UTILITY POLES IN COORDINATION WITH PG&E (AND OTHER DRY UTILITY COMPANIES).
- 19 REMOVE EXISTING FENCE. REPLACE PROPERTY LINE FENCING PER IMPROVEMENT PLANS.
- 20 REMOVE EXISTING LIGHT AND ASSOCIATED ELECTRICAL SERVICE.
- 21 REMOVE EXISTING GAS METER AND ASSOCIATED SERVICE LINES IN COORDINATION WITH PG&E.

**GENERAL DEMOLITION NOTES**

- 1. CLEAR AND GRUB SITE OF ALL EXISTING VEGETATION, AS DESCRIBED IN THE EARTHWORK SPECIFICATIONS.
- 2. HOLES CREATED BY REMOVAL OF TREES, BUILDING FOOTING, MANHOLE STRUCTURES, AND OTHER FEATURES, SHALL BE BACKFILLED ACCORDING TO THE EARTHWORK SPECIFICATIONS.
- 3. CONTRACTOR SHALL ENSURE PROPER DISPOSAL OF ALL DEMOLISHED MATERIALS. ANY FOUND HAZARDOUS MATERIAL SHALL BE REMOVED IN ACCORDANCE WITH STANDARD ABATEMENT PROCEDURES.
- 4. CONTAMINATED SITE SOILS SHALL BE MITIGATED IN ACCORDANCE WITH ENVIRONMENTAL ABATEMENT RECOMMENDATIONS, AS DEFINED BY THE ENVIRONMENTAL ENGINEER WHOM PERFORMED THE SOIL INSPECTION/INVESTIGATION REPORT, OR OTHER DESIGNATED QUALIFIED CONSULTANT.





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SEAL & SIGNATURE



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ROSEN GOLDBERG DER AND LEWITZ, INC.  
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DESIGN / BUILD

- MECHANICAL DESIGN / BUILD  
MARINA MECHANICAL  
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510.614.3500
- PLUMBING DESIGN / BUILD  
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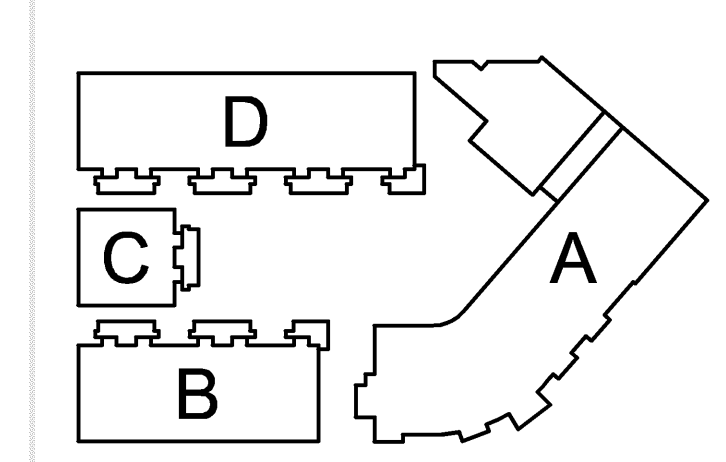
# ASHLAND FAMILY HOUSING

KENT AVE. AND E. 14TH STREET  
ASHLAND, CA

REVISIONS

ISSUANCE	DAY MONTH YEAR
PERMIT RESUBMITTAL	29 JULY 2013
BACKCHECK #1	06 SEPT. 2013
BACKCHECK #2	04 OCT. 2013

KEY PLAN



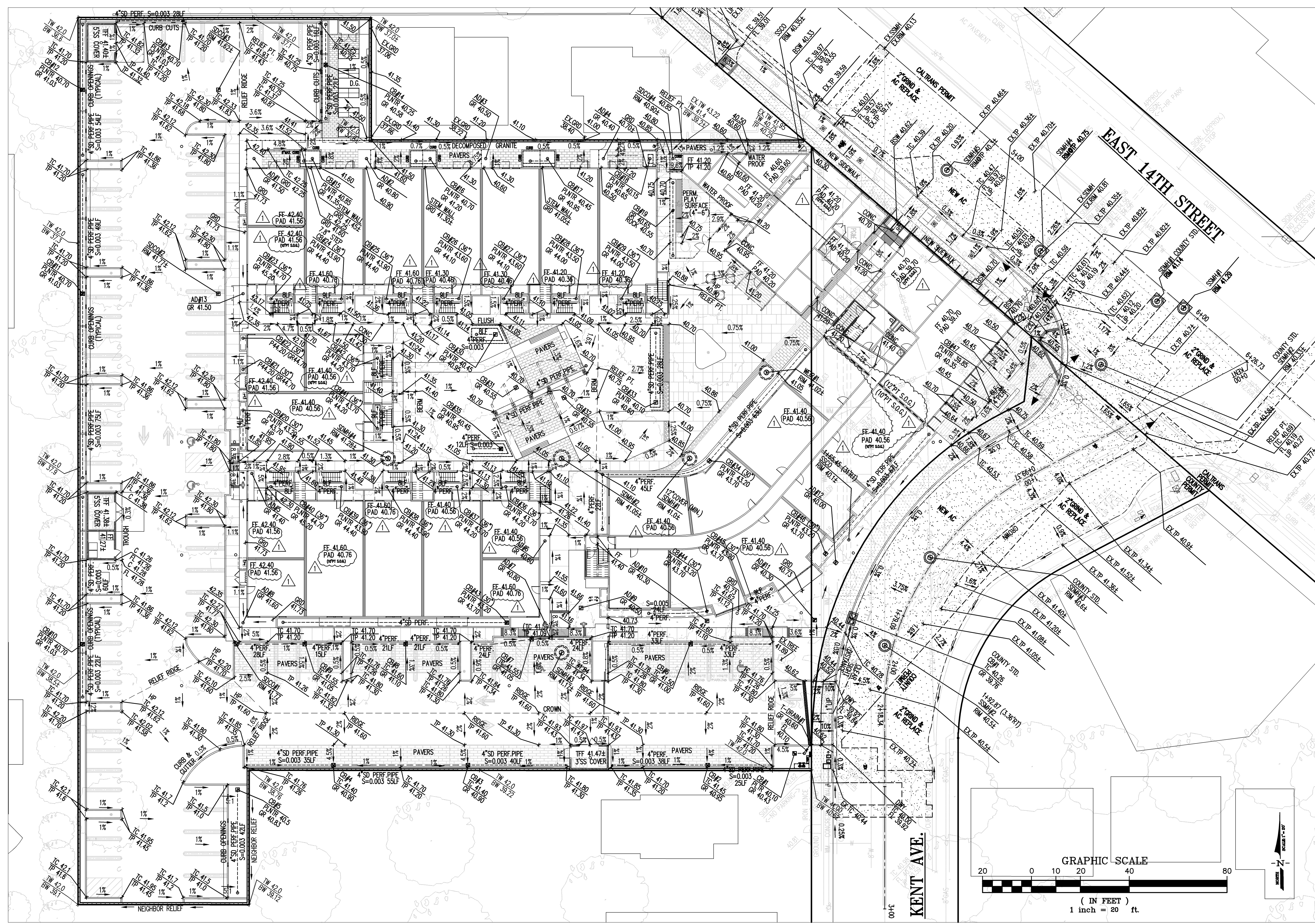
DRAWING TITLE

## GRADING PLAN: ELEVATIONS

DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

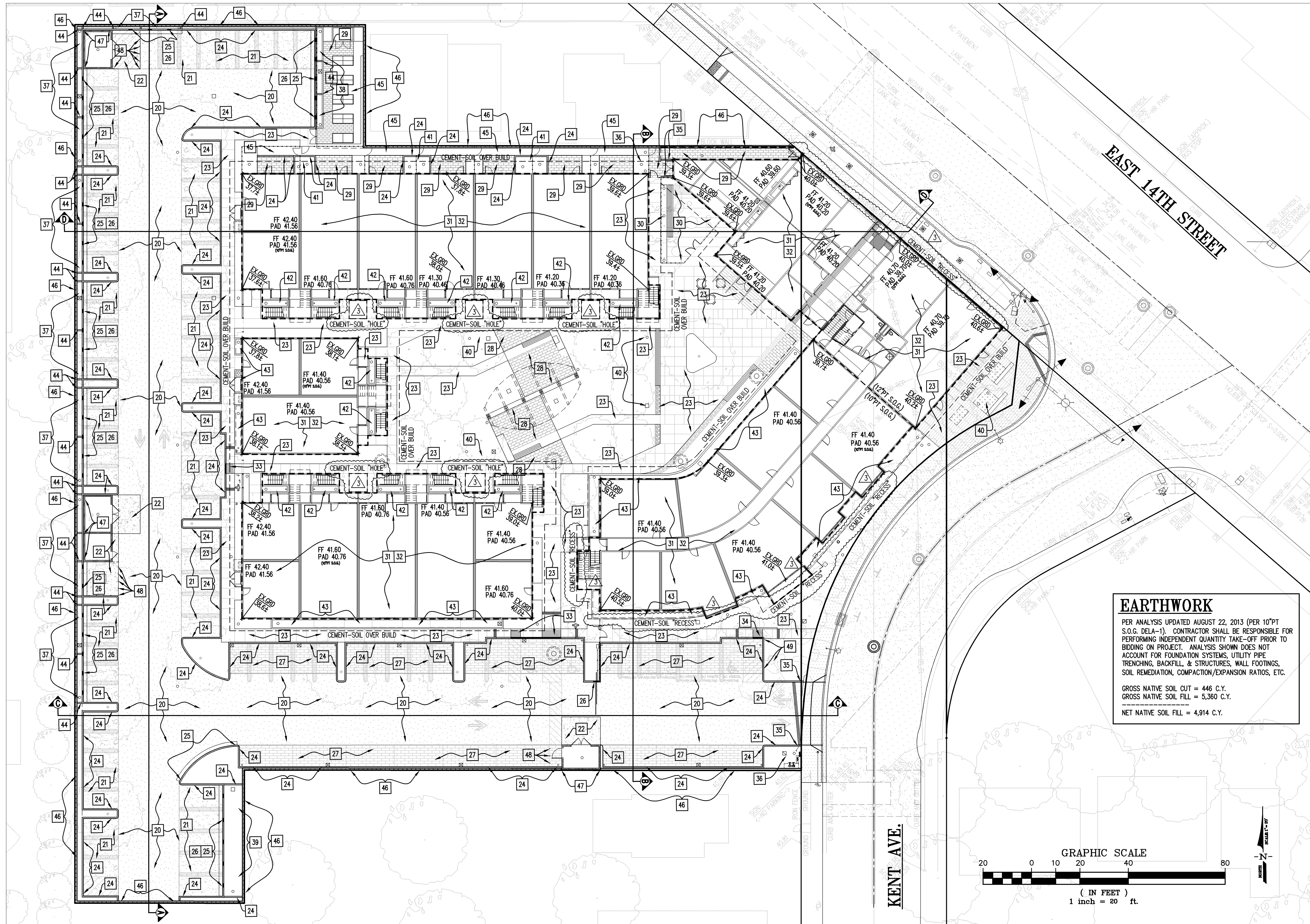
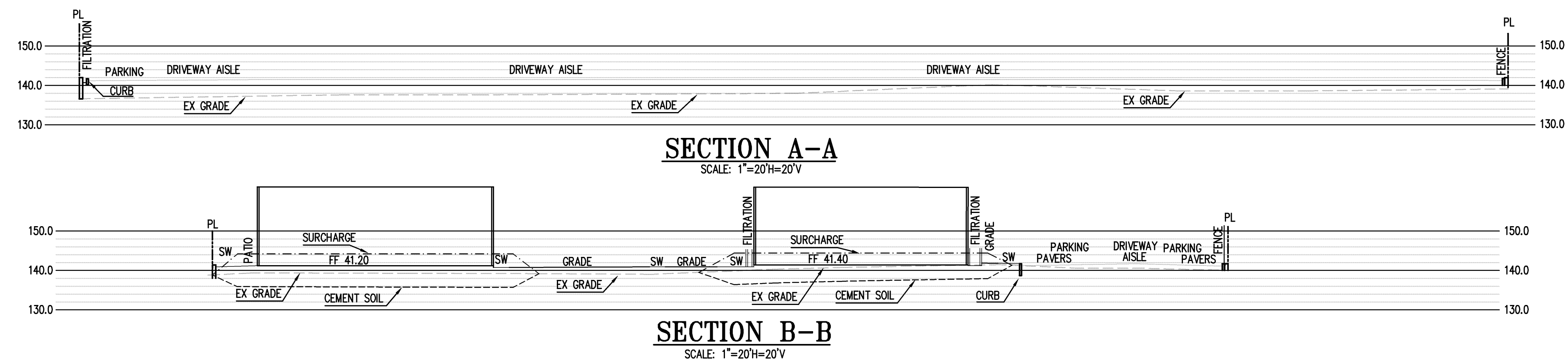
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SCALE: 1"=20'  
SHEET NUMBER: **C-4.1**

PLOT DATE: 10/04/2013



### RCD REQUIREMENTS

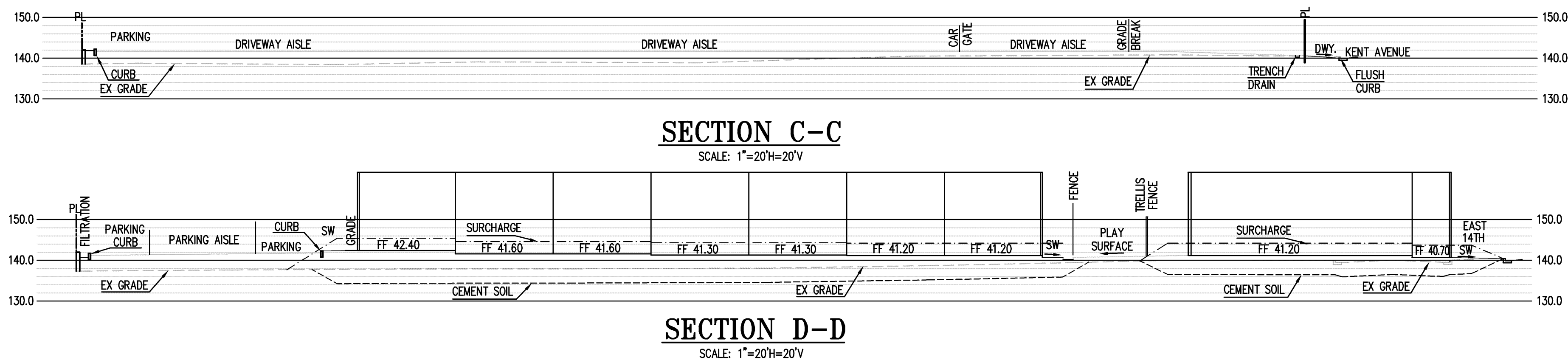
- SITE CONCRETE: 20% MINIMUM FLY ASH OR SLAG IN CONCRETE MIX. STRUCTURAL CONCRETE SHALL REQUIRE APPROVAL OF STRUCTURAL ENGINEER PRIOR TO APPROVAL.
- AGGREGATE BASE: SPECIFY RECYCLED AGGREGATE BASE FOR CLASS II AB UNDER SIDEWALKS, ROADS, BUILDING SLABS, ETC. REUSE CRUSHED EXISTING AGGREGATE BASE, WHERE POSSIBLE.



**EARTHWORK**  
 PER ANALYSIS UPDATED AUGUST 22, 2013 (PER 10"PT S.O.G. DELA-1). CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING INDEPENDENT QUANTITY TAKE-OFF PRIOR TO BIDDING ON PROJECT. ANALYSIS SHOWN DOES NOT ACCOUNT FOR FOUNDATION SYSTEMS, UTILITY PIPE TRENCHING, BACKFILL, & STRUCTURES, WALL FOOTINGS, SOIL REMEDIATION, COMPACTION/EXPANSION RATIOS, ETC.  
 GROSS NATIVE SOIL CUT = 446 C.Y.  
 GROSS NATIVE SOIL FILL = 5,360 C.Y.  
 NET NATIVE SOIL FILL = 4,914 C.Y.

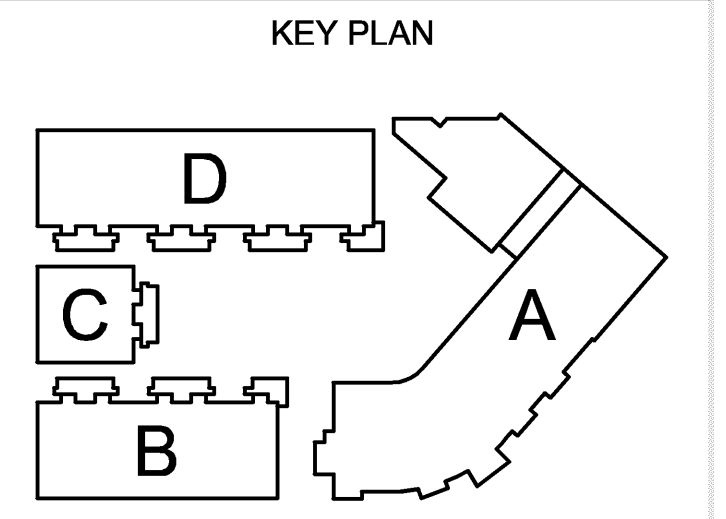
**GRADING NOTES**

- 20 INSTALL HEAVY AC PAVEMENT SECTION AT DRIVE AISLE PER DETAIL NO. 1 ON SHEET C-2.1.
- 21 INSTALL LIGHT AC PAVEMENT SECTION AT PARKING STALLS PER DETAIL NO. 1 ON SHEET C-2.1.
- 22 INSTALL CONCRETE VEHICULAR PAVEMENT PER DETAIL NO. 2 ON SHEET C-2.1.
- 23 INSTALL CONCRETE PEDESTRIAN SIDEWALK PER DETAIL NO. 3 ON SHEET C-2.1.
- 24 INSTALL CONCRETE VERTICAL CURB PER DETAIL NO. 4 ON SHEET C-2.1.
- 25 INSTALL CONCRETE CURB & GUTTER PER DETAIL NO. 5 ON SHEET C-2.1. (SEE ADDITIONAL DETAILS WHERE GUTTER IS LOCATED ADJACENT TO BIO-RETENTION PLANTER)
- 26 INSTALL CURB OPENINGS (TYPICAL) AT LOCATIONS SHOWN PER DETAIL NO. 6 ON SHEET C-2.1.
- 27 INSTALL PERVIOUS VEHICULAR PAVERS PER DETAIL NO. 7 ON SHEET C-2.1.
- 28 INSTALL PERVIOUS COURTYARD PAVERS PER DETAIL NO. 8 ON SHEET C-2.1.
- 29 INSTALL PERVIOUS SIDEWALK PAVERS PER DETAIL NO. 9 ON SHEET C-2.1.
- 30 INSTALL PERVIOUS PLAY-AREA PAVERS PER DETAIL NO. 10 ON SHEET C-2.1. AND PER LANDSCAPING DETAILS.
- 31 INSTALL REMEDIAL GRADING CEMENT-SOIL AND BUILDING PAD PER DETAIL NO. 11 ON SHEET C-2.1. SEE "GRADING PLAN: ELEVATIONS" FOR PAD AND FINISH FLOOR ELEVATIONS.
- 32 INSTALL PAD SURCHARGE PER DETAIL NO. 12 ON SHEET C-2.1. SURCHARGE SHALL BE INSTALLED AND REMAIN IN PLACE FOR 3-MONTHS, PRIOR TO SUBSEQUENT REMOVAL AND FINAL PAD CONSTRUCTION. CONTRACTOR SHALL VERIFY FOUNDATION SECTION PRIOR TO INSTALLING PAD SURCHARGE.
- 33 INSTALL ACCESS RAMP TYPE 1 PER DETAIL NO. 13, 15, & 16 ON SHEET C-2.1.
- 34 INSTALL ACCESS RAMP TYPE 2 PER DETAIL NO. 14, 15, & 16 ON SHEET C-2.1.
- 35 INSTALL TRANSITION CURB PER DETAIL NO. 16 ON SHEET C-2.1.
- 36 INSTALL BIO-RETENTION PLANTER (TYPICAL) PER DETAIL NO. 17 ON SHEET C-2.2.
- 37 INSTALL BIO-RETENTION PLANTER TYPE 1 PER DETAIL NO. 17, 18, & 25 ON SHEET C-2.2.
- 38 INSTALL BIO-RETENTION PLANTER TYPE 2 PER DETAIL NO. 17, 19, & 25 ON SHEET C-2.2.
- 39 INSTALL BIO-RETENTION PLANTER TYPE 3 PER DETAIL NO. 17, 20, & 25 ON SHEET C-2.2.
- 40 INSTALL BIO-RETENTION PLANTER TYPE 4 PER DETAIL NO. 17, 21, & 25 ON SHEET C-2.2.
- 41 INSTALL BIO-RETENTION PLANTER TYPE 5 PER DETAIL NO. 17, 22, & 25 ON SHEET C-2.2.
- 42 INSTALL FLOW-THROUGH PLANTER 36" AT BUILDING PER DETAIL NO. 17, 23, & 25 ON SHEET C-2.2.
- 43 INSTALL FLOW-THROUGH PLANTER 30" AT BUILDING PER DETAIL NO. 17, 24, & 25 ON SHEET C-2.2.
- 44 INSTALL RETAINING CURB STRUTS AT LOCATIONS SHOWN (TYPICAL) PER DETAIL NO. 26 ON SHEET C-2.2.
- 45 INSTALL DECOMPOSED GRANITE SIDEWALK PER LANDSCAPING DETAILS.
- 46 INSTALL SITE PERIMETER WALL PER DETAILS BY OTHERS.
- 47 INSTALL TRASH ENCLOSURE AND ASSOCIATED DEEP FOOTING ADJACENT TO BIO-RETENTION PLANTER SECTION OR WALL, PER DETAILS BY OTHERS.
- 48 INSTALL PROTECTIVE BOLLARDS PER ARCHITECTURAL DETAILS.
- 49 INSTALL TREE ROOT BARRIER AT EXISTING TREE AND NEW VEHICULAR PERVIOUS PAVERS.



REVISIONS

ISSUANCE	DAY	MONTH	YEAR
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BACKCHECK #2	04	OCT.	2013
BID ADDEDNUM	31	OCT.	2013







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ISSUANCE DAY MONTH 2013  
PERMIT RESUBMITTAL 29 JULY 2013  
BACKCHECK #1 06 SEPT. 2013  
BACKCHECK #2 04 OCT. 2013

REVISIONS

ISSUANCE DAY MONTH 2013  
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BACKCHECK #1 06 SEPT. 2013  
BACKCHECK #2 04 OCT. 2013

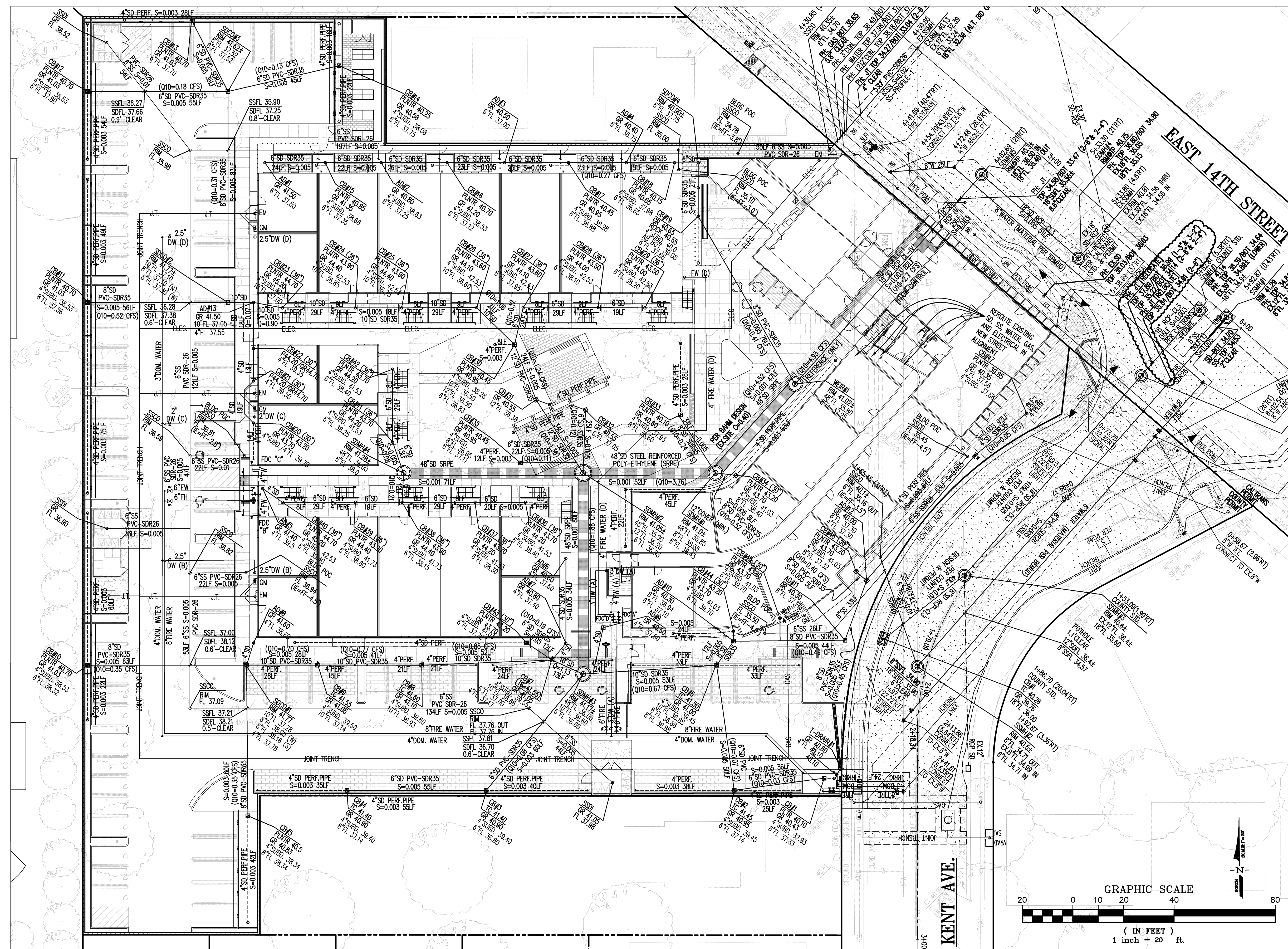
KEY PLAN

DRAWING TITLE  
UTILITY PLAN:  
LAYOUT

DRAWN: STAFF CHECKED: CW  
DATE: JUNE 2013 SCALE: 1"=20'  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

SHEET NUMBER: C-5.1

PLOT DATE: 10/04/2013



### EBMUD FLOW TEST

BASE ELEVATION: 44  
STATIC: 65 PSI  
RESIDUAL (750 GPM FLOW): 64 PSI  
RESIDUAL (1500 GPM FLOW): 61 PSI  
PIPE SIZE: EXISTING 8-INCH MAIN

### NOTE:

SEE SHEET C5.2 FOR UTILITY CONSTRUCTION NOTES

### ON-SITE STORM DRAIN SCHEDULE

STRUCTURE NUMBER	MODEL	INLET INSIDE DIAMETER
CB# 20, 21, 22, 47 AD# 5, 6, 7, 8, 9	NDS PART NO. 13 GREEN ROUND GRATE ON RISER, OR EQUAL.	4" ROUND GRATE ON 4" PVC RISER
CB# 13, 14, 15, 16, 17, 18, 27, 28, 29, 36, 37, 38, 39, 40, 41 AD# 1, 2, 3, 4	NDS PART NO. 50 GREEN ROUND GRATE ON RISER, OR EQUAL.	6" ROUND GRATE ON 6" PVC RISER
CB# 19 AD# 10, 11, 12	NDS PART NO. 1050 GREEN ROUND GRATE ON RISER, OR EQUAL.	10" ROUND GRATE ON 8" PVC RISER
CB# 23, 24, 25, 26 AD# 13	NDS PART NO. 50 GREEN ROUND GRATE ON RISER, ON TEE SADDLE FITTING NDS PART DF-6T/C, OR EQUAL.	6" ROUND GRATE ON 6" PVC RISER 10" TEE SADDLE
CB# 1, 5, 10, 11, 12, 14, 32, 33, 34, 35, 43, 46	US CONCRETE PRECAST CB-1212 WITH STANDARD GALVANIZED STEEL GRATE, OR EQUAL.	12" x 12"
CB# 2, 3, 4, 6, 7, 8, 9	US CONCRETE PRECAST CB-1212 WITH TRAFFIC RATED GALVANIZED STEEL GRATE, OR EQUAL.	12" x 12"
CB# 30, 31	US CONCRETE PRECAST CB-1818 WITH STANDARD GALVANIZED STEEL GRATE, OR EQUAL.	18" x 18"
SDCO# 4	CHRISTY CURB VALVE BOX (CLEANOUT) MODEL F01, WITH SOLID LID COVER MODEL F8D (MARKED "STORM"), ON RISER, OR EQUAL.	8" ROUND COVER ON 6" PVC RISER
SDCO# 3	CHRISTY CURB VALVE BOX (CLEANOUT) MODEL G3, WITH SOLID LID COVER (MARKED "STORM"), ON RISER, OR EQUAL.	8" ROUND COVER ON 8" PVC RISER
SDCO# 1, 2	CHRISTY CURB VALVE BOX (CLEANOUT) MODEL G8, WITH SOLID LID COVER (MARKED "STORM"), ON RISER, OR EQUAL.	10" ROUND COVER ON 10" PVC RISER
SDMH# 1, 4 WEIR# 1*	OLDCASTLE MODEL 60" DIAMETER "PBU" STORM MANHOLE WITH LOW PROFILE "GST" COVER WITH STANDARD STEEL LID, OR EQUIVALENT.	60" DIAM.
SDMH# 3	OLDCASTLE MODEL 60" DIAMETER "PBU" STORM MANHOLE WITH LOW PROFILE "GST" COVER WITH H-20 STEEL LID, OR EQUIVALENT.	60" DIAM.
SDMH# 2	OLDCASTLE MODEL 72" DIAMETER "PBU" STORM MANHOLE WITH LOW PROFILE "GST" COVER WITH STANDARD STEEL LID, OR 60" TEE-FITTING, OR EQUIVALENT.	72" DIAM. JUNCTION MANHOLE
T-DRAIN# 1	ZURN PERMATRENCH MODEL Z-886 WITH HEAVY DUTY DUCTILE IRON HEEL-PROOF TRENCH GRATE MODEL Z-886-HPD, OR EQUAL.	6" WIDE STRUCT. COMPOSITE TRENCH DRAIN

\* SEE DETAILS FOR WEIR STRUCTURE INFORMATION

SEAL & SIGNATURE



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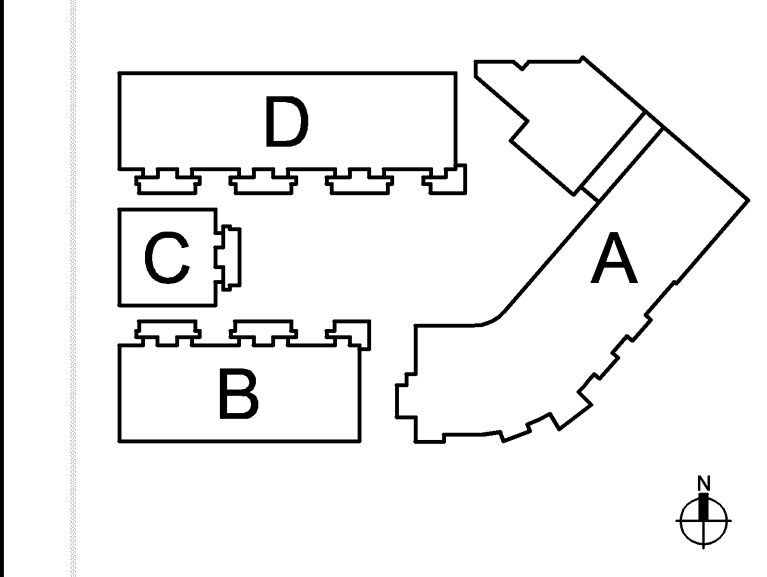
Creating & Preserving Affordable Housing  
Resources for Community Development

**ASHLAND FAMILY HOUSING**  
KENT AVE. AND E. 14TH STREET  
ASHLAND, CA

REVISIONS

ISSUANCE	DAY	MONTH	YEAR
PERMIT RESUBMITTAL	29	JULY	2013
BACKCHECK #1	06	SEPT.	2013
BACKCHECK #2	04	OCT.	2013

KEY PLAN



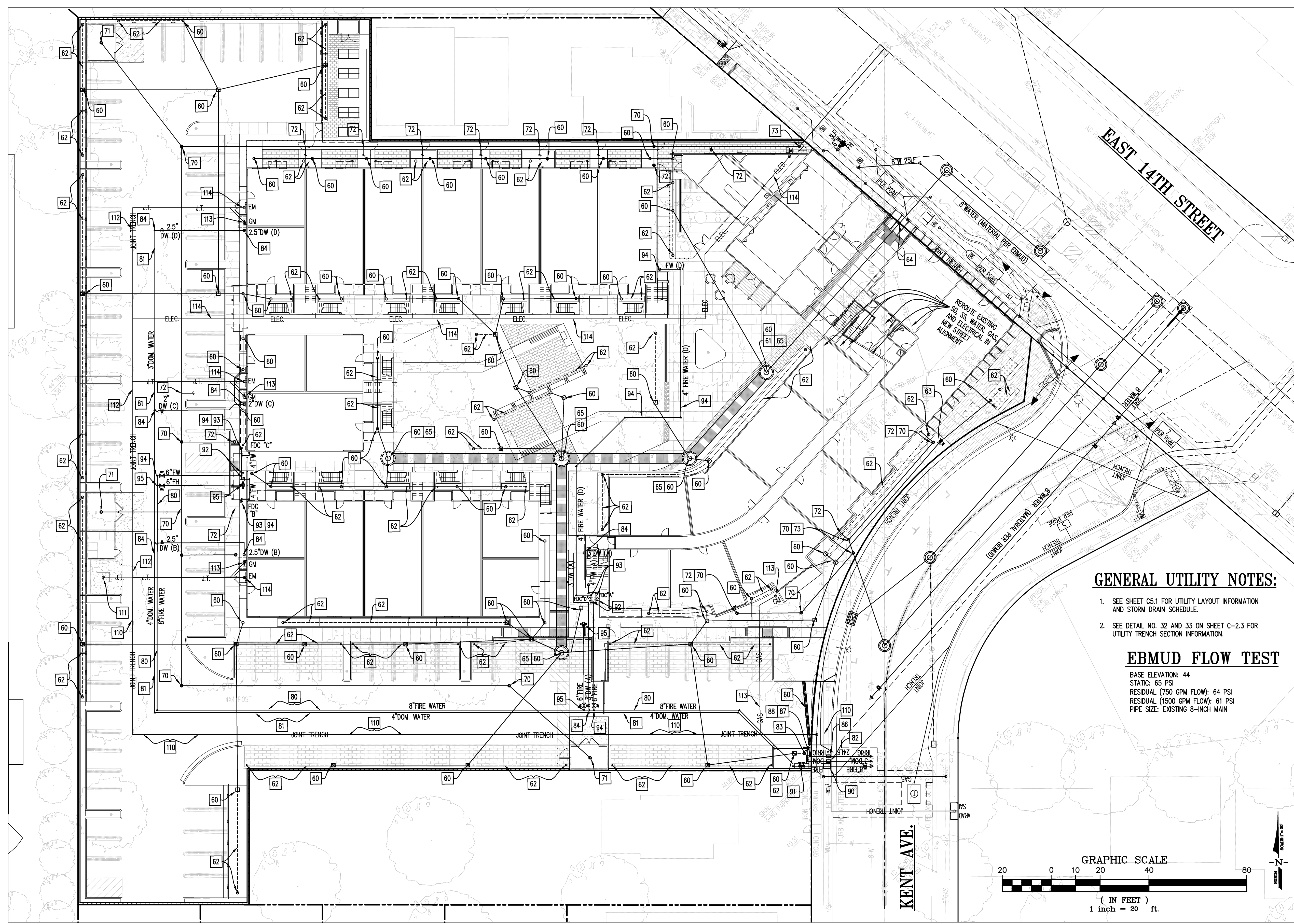
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**UTILITY PLAN:  
CONSTRUCTION  
NOTES**

DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

CHECKED: CW  
SCALE: 1"=20'  
SHEET NUMBER: **C-5.2**

PLOT DATE: 10/04/2013



**UTILITY NOTES (STORM)**

- 60 INSTALL STORM DRAIN STRUCTURE PER STORM DRAIN SCHEDULE ON SHEET C-5.1, AND ALL ASSOCIATED UNDERGROUND STORM PIPING, PER SHEET C-5.1.
- 61 INSTALL WEIR FLOW CONTROL STRUCTURE PER DETAIL NO. 35, 36, & 37 ON SHEET C-2.3.
- 62 INSTALL BIO-RETENTION PLANTER SURFACE CLEANOUT, SWEEP, AND UNDERGROUND SUBDRAIN PIPE.
- 63 INSTALL STORM DRAIN CHECK VALVE.
- 64 CONNECT TO OFFSITE STORM LATERAL STUB OUT. SEE OFFSITE IMPROVEMENT PLANS.
- 65 VERIFY THAT SPECIFIED PRECAST STRUCTURE WILL ALLOW FOR MINIMAL COVER AS SHOWN. PROVIDE CAST-IN-PLACE STRUCTURE IN THE EVENT THAT A PRE-CAST STRUCTURE WILL NOT ALLOW FOR NECESSARY GRADING ELEVATIONS.

**UTILITY NOTES (SEWER)**

- 70 INSTALL SANITARY SEWER CLEANOUT AND ASSOCIATED UNDERGROUND SEWER PIPING, PER SHEET C-5.1.
- 71 INSTALL SANITARY SEWER DRAIN INLET AT TRASH ENCLOSURE AND ASSOCIATED UNDERGROUND SEWER PIPING, PER SHEET C-5.1.
- 72 CONNECT TO BUILDING POINT OF CONNECT. SEE PLUMBING PLANS.
- 73 CONNECT TO OFFSITE SANITARY SEWER LATERAL STUB OUT. SEE OFFSITE IMPROVEMENT PLANS.

**UTILITY NOTES (WATER)**

- 80 CONTRACTOR SHALL INSTALL PRIVATE (BEHIND METER) FIRE WATER MAIN. BACKFLOW PREVENTOR PER EBMUD STANDARD/APPROVED LEAD-FREE DOMESTIC BACKFLOW DEVICES.
- 81 CONTRACTOR SHALL INSTALL PRIVATE (BEHIND METER) DOMESTIC WATER MAIN.
- 82 CONTRACTOR SHALL CONNECT TO DOMESTIC WATER METER (AS INSTALLED BY EBMUD).
- 83 CONTRACTOR SHALL INSTALL DOMESTIC WATER REDUCED PRESSURE BACKFLOW PREVENTOR PER EBMUD STANDARD/APPROVED LEAD-FREE DOMESTIC BACKFLOW DEVICES.
- 84 CONTRACTOR SHALL INSTALL DOMESTIC WATER PIPE (BEHIND METER) AND CONNECT TO BUILDING POINT OF CONNECTION. SEE PLUMBING PLANS.
- 85 NOT USED.
- 86 CONTRACTOR SHALL CONNECT TO IRRIGATION WATER METER (AS INSTALLED BY EBMUD).
- 87 CONTRACTOR SHALL INSTALL IRRIGATION WATER REDUCED PRESSURE BACKFLOW PREVENTOR PER EBMUD STANDARD/APPROVED IRRIGATION BACKFLOW DEVICES.
- 88 CONTRACTOR SHALL INSTALL IRRIGATION WATER PIPE (BEHIND METER) AND CONNECT TO IRRIGATION SYSTEM POINT OF CONNECTION. SEE IRRIGATION PLANS.
- 89 NOT USED.
- 90 CONTRACTOR SHALL CONNECT TO FIRE WATER DETECTOR CHECK VALVE (AS INSTALLED BY EBMUD).
- 91 CONTRACTOR SHALL INSTALL FIRE WATER BACKFLOW PREVENTOR PER EBMUD STANDARD/APPROVED FIRE BACKFLOW DEVICES.
- 92 CONTRACTOR SHALL INSTALL POST INDICATOR VALVE.
- 93 CONTRACTOR SHALL INSTALL FIRE DEPARTMENT CONNECTION.
- 94 CONTRACTOR SHALL INSTALL FIRE WATER PIPE (BEHIND CHECK VALVE) AND CONNECT TO BUILDING POINT OF CONNECTION. SEE PLUMBING PLANS.
- 95 CONTRACTOR SHALL INSTALL FIRE HYDRANT & ASSOCIATED LATERAL.

**UTILITY NOTES (MISC.)**

- 110 INSTALL JOINT TRENCH PRIMARY SERVICE PER JOINT TRENCH PLANS, PER PG&E STANDARDS.
- 111 INSTALL TRANSFORMER PER JOINT TRENCH PLANS.
- 112 INSTALL JOINT TRENCH SECONDARY SERVICE PER JOINT TRENCH PLANS, PER PG&E STANDARDS.
- 113 INSTALL GAS LATERAL & GAS METER PER JOINT TRENCH PLANS.
- 114 INSTALL ELECTRICAL LATERAL & ELECTRICAL METER PER JOINT TRENCH PLANS.

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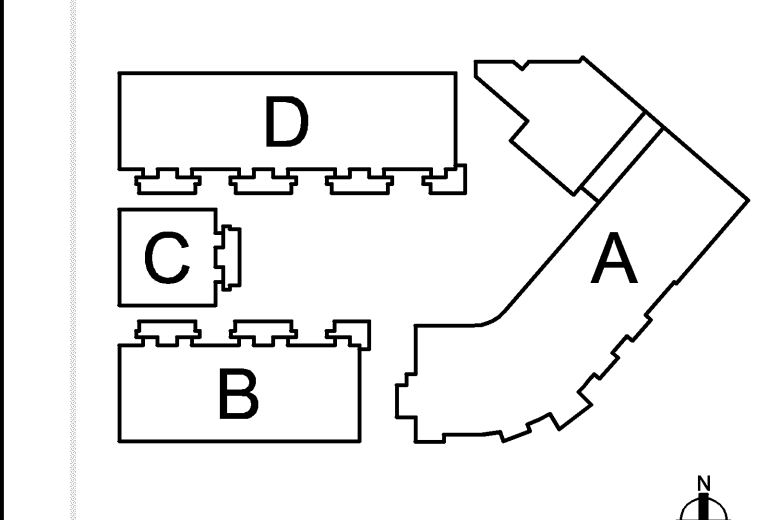


**ASHLAND FAMILY HOUSING**  
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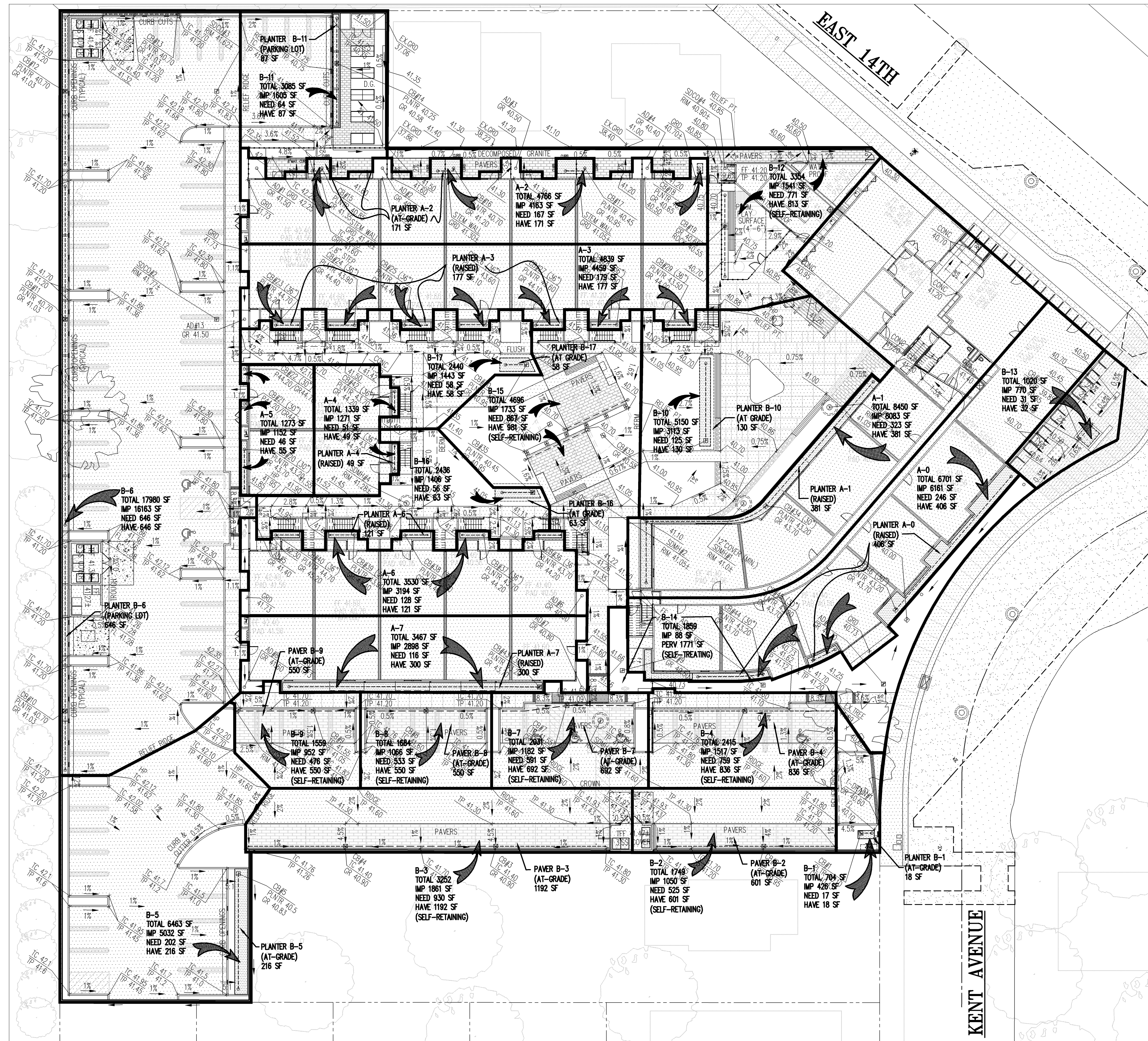
DRAWING TITLE

**STORMWATER TREATMENT PLAN**

DRAWN: STAFF  
 DATE: JUNE 2013  
 KMA PROJECT NO.: 1020  
 LUK PROJECT NO.: 10019A10

CHECKED: CW  
 SCALE: 1"=20'  
 SHEET NO.: 10019A10

**C-6**



**GENERAL NOTES**

- ON-SITE INLETS SHALL BE MARKED WITH THE WORDS "NO DUMPING FLOWS TO BAY".
- ALL INTERIOR FLOOR DRAINS SHALL BE PLUMBED TO SANITARY SEWER.
- FIRE SPRINKLER TEST WATER SHALL DISCHARGE TO LANDSCAPING (PREFERRED) OR SANITARY SEWER.
- MISCELLANEOUS DRAIN OR WASH WATER (IE DOLLER DRAIN LINES, ROOF TOP EQUIPMENT, WASH WATER) SHALL DRAIN TO SANITARY SEWER.

**HYDRO-MOD NOTES:**

- MEAN ANNUAL PRECIPITATION = 22.0 INCHES (PER APCWCD FIGURE 9)  
 TIME OF CONCENTRATION = 5 MINUTES  
 Q10-YEAR INTENSITY (I<sub>10</sub>-5MIN) = 3.04 IN/HR
- TOTAL SITE AREA = 96,269 SQUARE FEET OR 2.21 ACRES
- EXISTING CONDITIONS:  
 PERVIOUS AREA = 45,075 SQUARE FEET  
 IMPERVIOUS AREA = 51,194 SQUARE FEET  
 RUNOFF COEFFICIENT = 0.62
- PROPOSED CONDITIONS:  
 PERVIOUS AREA = 16,706 SQUARE FEET  
 IMPERVIOUS AREA = 79,563 SQUARE FEET  
 RUNOFF COEFFICIENT = 0.80
- HYDROMODIFICATION DESIGN BASED ON BAY AREA HYDROGRAPH MODEL (BAHM) PROGRAM. STORM WATER RETENTION SYSTEM BASED ON ABOVE VALUES. SITE DESIGN CONSTRAINTS, AND RESULTS IN THE RETENTION BASIN PIPE SHOWN ON THE UTILITY PLANS.

**C.3 CALCULATION TABLE**

SIZING FACTOR (Sf) [PLANTER]=0.04 OF IMPERVIOUS AREA PER ALAMEDA COUNTY WIDE CLEAN WATER PROGRAM PUBLICATION: "C.3 STORMWATER TREATMENT GUIDANCE" OCTOBER 19, 2010 VERSION 2.1

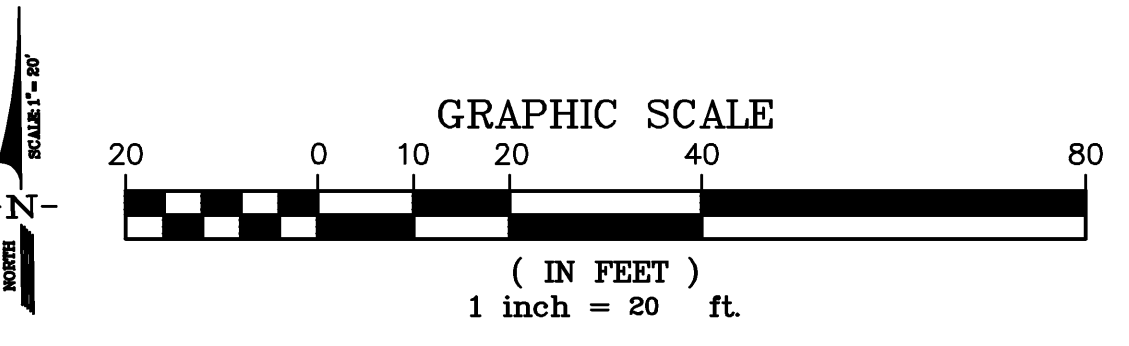
DRAINAGE AREA#	TOTAL AREA S.F.	IMPERVIOUS AREA S.F.	Sf	MIN. IMP S.F.	DESIGN IMP S.F.	TREATMENT METHOD
A-0	6701	6161	0.04	246	406	PLANTER #A-0
A-1	8450	8083	0.04	323	381	PLANTER #A-1
A-2	4766	4163	0.04	167	171	PLANTER #A-2
A-3	4839	4459	0.04	179	177*	PLANTER #A-3
A-4	1339	1271	0.04	51	49*	PLANTER #A-4
A-5	1273	1152	0.04	46	53	PLANTER #A-5
A-6	3530	3194	0.04	128	121*	PLANTER #A-6
A-7	3467	2898	0.04	116	300	PLANTER #A-7
A-8	4666	2983	0.04	120	153	PLANTER #A-8
A-9	1366	811	0.04	33	35	PLANTER #A-9
A-10	2933	1974	0.04	79	80	PLANTER #A-10
B-1	704	426	0.04	17	18	PLANTER #B-1
B-2	1671	1466	0.04	59	61	PLANTER #B-2
B-5	6463	5032	0.04	202	216	PLANTER #B-5
B-6	17980	16163	0.04	646	646	PLANTER #B-6
B-10	5150	3113	0.04	125	130	PLANTER #B-10
B-11	3085	1605	0.04	64	87	PLANTER #B-11
B-13	1020	770	0.04	31	32	PLANTER #B-13
B-16	2436	1406	0.04	56	63	PLANTER #B-16
B-17	2440	1443	0.04	58	58	PLANTER #B-17

\* LIMITED BY ARCHITECTURAL DESIGN CONSIDERATIONS

**SELF-RETAINING/TREATING AREAS**

DRAINAGE AREA	TOTAL DRAINAGE AREA S.F.	IMPERVIOUS AREA S.F.	SELF-RET. (SELF-TREAT.) AREA S.F.	RATIO IMPERVIOUS TO PERVIOUS TO PERVIOUS AREA	RATIO LESS THAN 2:1? (<Sf*)	ROCK STORAGE DEPTH [1" CAPTURE]
B-2	1749	1050	601	1.75:1	YES	7.3"
B-3	3252	1861	1192	1.56:1	YES	6.8"
B-4	2415	1517	836	1.81:1	YES	7.3"
B-7	2031	1182	692	1.71:1	YES	7.3"
B-8	1684	1066	550	1.94:1	YES	7.7"
B-9	1559	952	550	1.73:1	YES	7.1"
B-12	3354	1541	813	1.90:1	YES	10.3"
(B-14)*	1859	88	(1771)*	(0.047:1)*	(YES)*	(N/A)*
B-15	4696	1733	981	1.77:1	YES	12.0"

\* SELF-TREATING DRAINAGE MANAGEMENT AREA

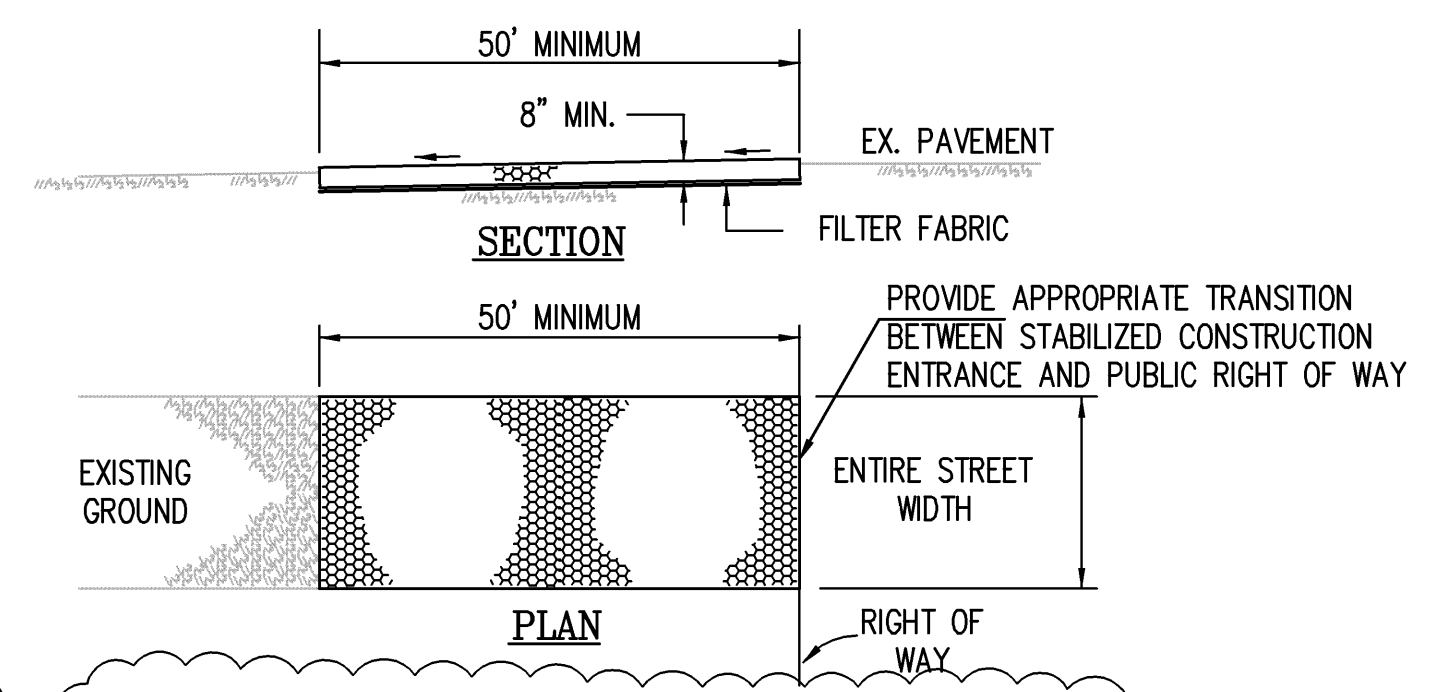




**EROSION CONTROL NOTES:**

- CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF "EROSION CONTROL" AND SHALL INSTALL AND MAINTAIN ANY DEVICES AND MEASURES NECESSARY TO THE SATISFACTION OF THE COUNTY ENGINEER DURING THE ENTIRE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL PLACE COARSE DRAIN ROCK AS A GRAVEL ROADWAY (8" MIN. THICK FOR THE FULL WIDTH AND 50' LONG) AT EACH ENTRANCE TO THE SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THAT SAME DAY AND AS REQUIRED BY THE COUNTY INSPECTOR.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE COUNTY ENGINEER.
- DURING THE ENTIRE CONSTRUCTION PERIOD, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.
- THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING GRADING. PLANS ARE TO BE RE-SUBMITTED FOR COUNTY APPROVAL PRIOR TO SEPTEMBER 1 OF EACH SUBSEQUENT YEAR UNTIL THE SITE IMPROVEMENTS ARE ACCEPTED BY THE COUNTY.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY OR DAILY DURING THE ENTIRE CONSTRUCTION PERIOD.
- ANY SEDIMENT BASINS SHALL BE CLEARED OUT WHENEVER SEDIMENT REACHES THE SEDIMENT CLEANOUT LEVEL INDICATED ON THE PLANS.
- BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE COUNTY ENGINEER.
- ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERBACK FLOW.
- THIS PLAN MAY NOT COVER ALL SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO ANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD, SUBJECT TO THE APPROVAL OF THE COUNTY.
- HYDROSEED ALL CUT AND FILL SLOPES WHICH ARE STEEPER THAN 5% WITH THE FOLLOWING (VOLUMES SHOWN ARE PER ACRE OF SLOPE):  

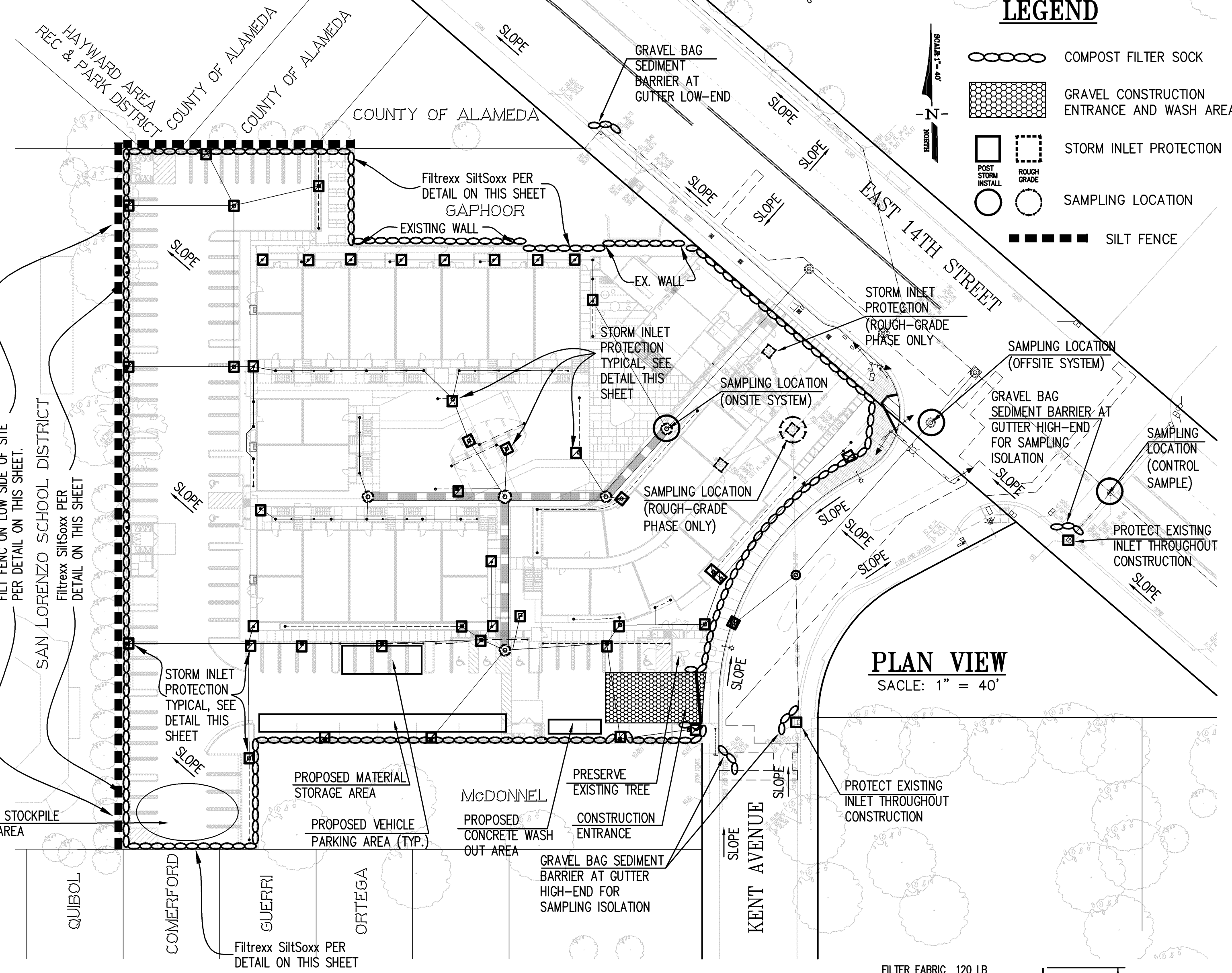
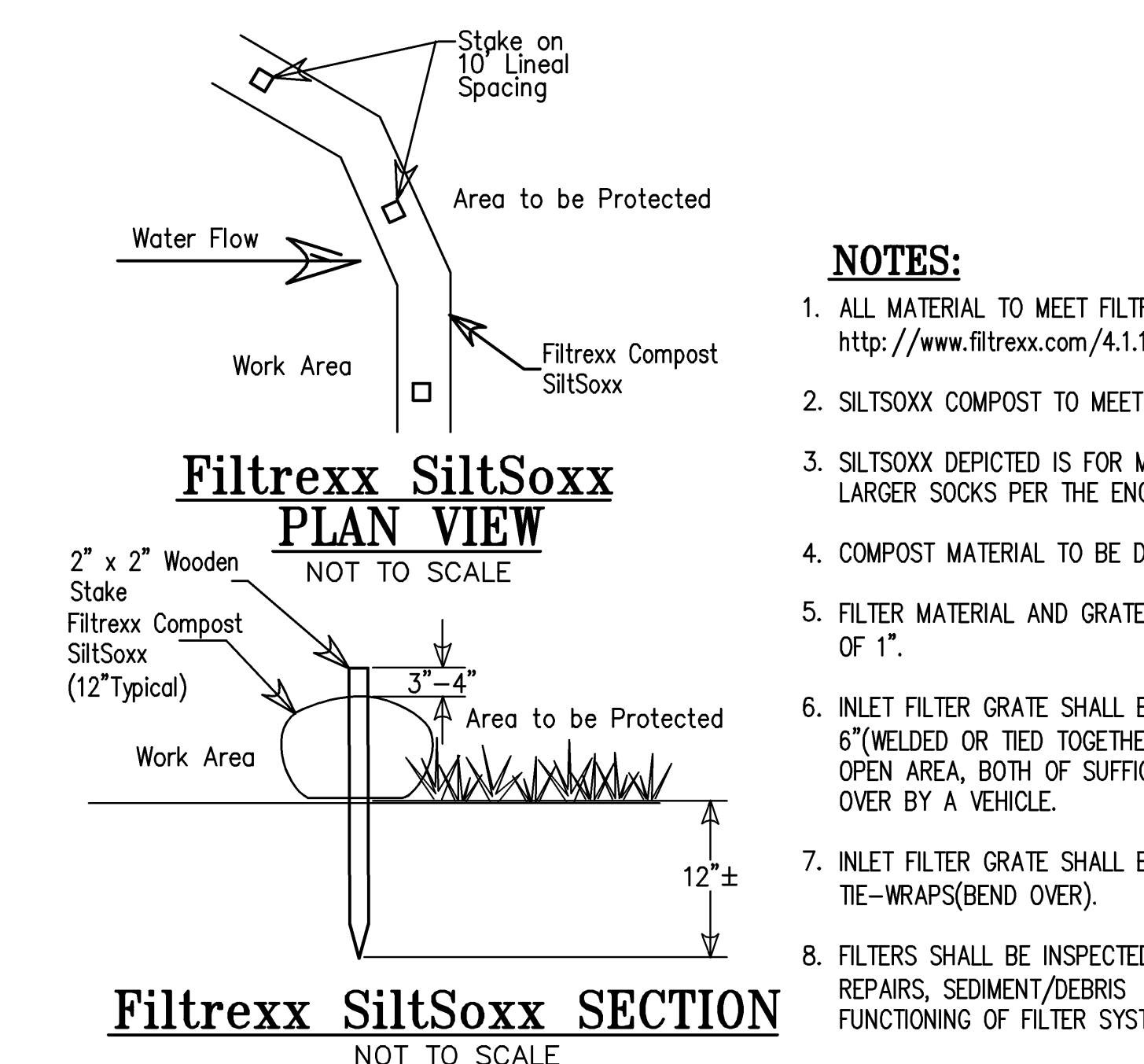
FERTILIZER:	500 LBS. 16-6-8
SEED:	60 LBS. BLANDO BROME GRASS
	60 LBS. ANNUAL RYE GRASS
	30 LBS. ROSE CLOVER
CHEMICAL TACKIFIER	2000 LBS. WOOD CELLULOSE
	30 LBS. ORGANIC BINDER
- TO CONTROL EROSION WITHIN THE STREET RIGHT-OF-WAY, FIBER ROLLS, SANDBAGS, EARTH BERMS OR OTHER SUITABLE MATERIALS SHALL BE PLACED WITHIN ALL UNPAVED STREETS DURING THE ENTIRE CONSTRUCTION PERIOD. THESE ROLLS OF FIBER SHALL BE PLACED AS SHOWN ON PLAN OR AS REQUIRED BY THE CITY ENGINEER (SEE FIBER ROLL DETAIL, THIS SHEET). THE ROLLS SHALL BE SECURELY ANCHORED IN PLACED BY STAKES OR REBARS DRIVEN THROUGH THE ROLLS WITH THE FIRST STAKE IN EACH ROLL ANGLED TOWARD THE PREVIOUSLY LAID ROLL TO FORCE THEM TOGETHER. THE ROLLS SHALL BE MAINTAINED IN GOOD CONDITION FOR THE ENTIRE CONSTRUCTION PERIOD UNTIL THE STREET IS PAVED. ROLLS OF FIBER OR OTHER SUITABLE MATERIALS SHALL BE USED TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING ANY PARTIALLY COMPLETED STORM DRAIN SYSTEM.
- TO MINIMIZE STORM WATER RUNOFF FROM THE SITE, FIBER ROLLS SHALL BE CONSTRUCTED ON EACH PAD AS IT IS GRADED. THE FIBER ROLLS SHALL BE 1-FOOT MINIMUM IN HEIGHT AND PLACED SO THE STORM WATER FALLING ONTO THE PAD AREA AND THE SURROUNDING UPHILL BANKS WILL BE TRAPPED ON THE PAD. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND REPAIRING THE ROLLS ON EACH PAD DURING THE ENTIRE CONSTRUCTION PERIOD AND MAINTAINING THEM IN GOOD CONDITION UNTIL THE BUILDING CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL ENSURE COMPLIANCE WITH THE REQUIREMENTS REGARDING PAD MOISTURE CONTENT, COMPACTION, AND ALL OTHER CONDITIONS SET FORTH BY THE GEOTECHNICAL ENGINEER.
- WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE ENBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- CONTRACTOR IS RESPONSIBLE FOR ALL AGENCY EROSION CONTROL PLANS AND PAPERWORK AND IS RESPONSIBLE FOR ALL CLOSURES OF THESE FILINGS.
- ALL GRADED OR DISTURBED AREAS THAT WILL BE IDLE DURING THE RAINY SEASON SHALL BE MULCHED AT THE MINIMUM RATE OF TWO TONS PER ACRE.
- CONTRACTOR TO REFER TO STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR EROSION CONTROL MEASURES DURING CONSTRUCTION.



**CONSTRUCTION SPECIFICATIONS**

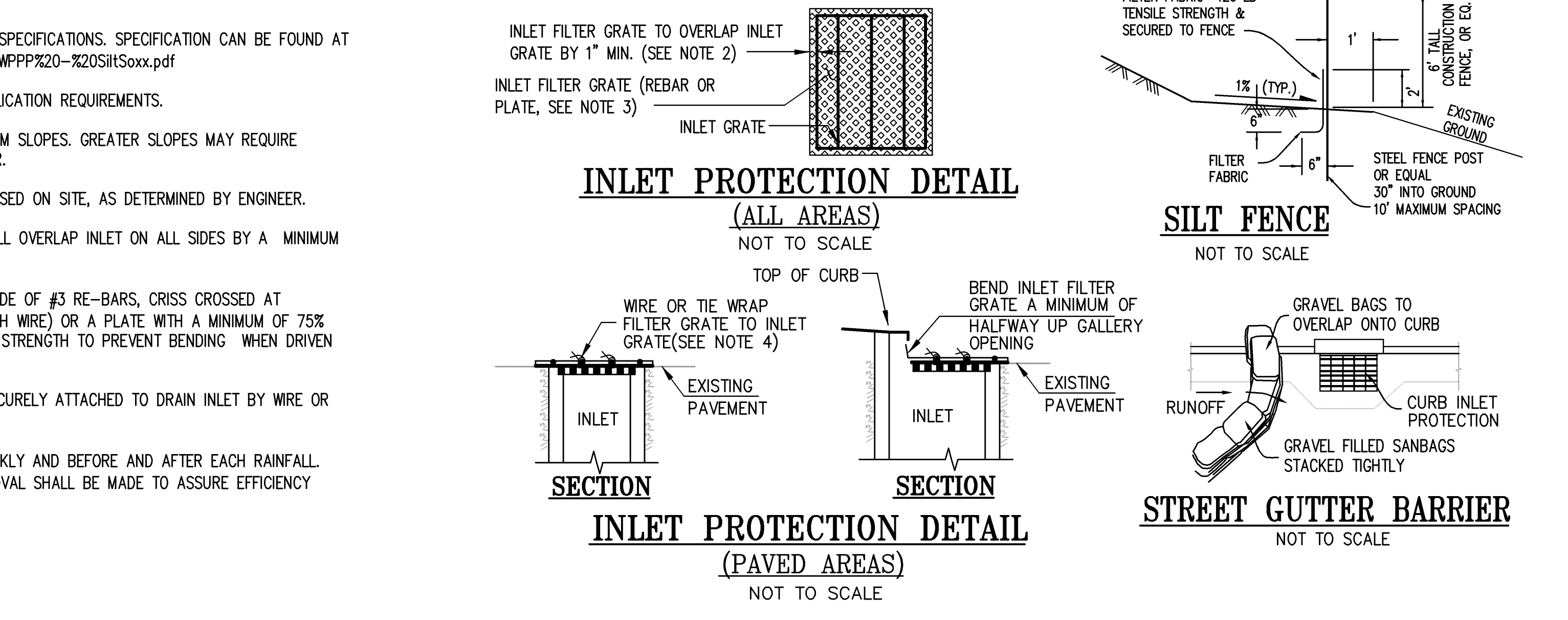
- CONSTRUCTION AND MAINTENANCE OF THE COMPOST FILTER SOCK CAN BE FOUND AT [WWW.TOPSPRAY.COM/EROSIONCONTROL/FILTERSOXX153/TABID/155/DEFAULT.ASPX](http://WWW.TOPSPRAY.COM/EROSIONCONTROL/FILTERSOXX153/TABID/155/DEFAULT.ASPX)
- THE MATERIAL FOR CONSTRUCTION SHALL BE 3 TO 4 INCH ROCK.
- LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
- THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
- WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL BOARDS OR OTHER APPROVED METHODS.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.

**CONSTRUCTION ENTRANCE DETAIL**  
NOT TO SCALE

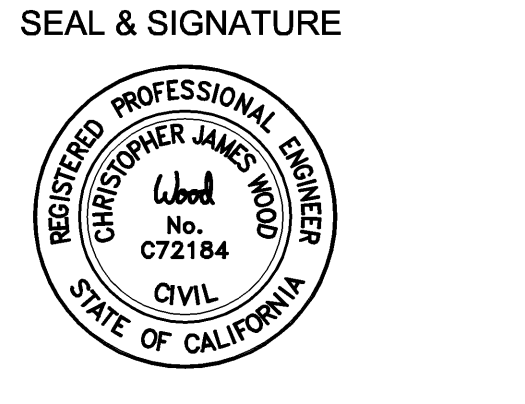


**LEGEND**

- COMPOST FILTER SOCK
- GRAVEL CONSTRUCTION ENTRANCE AND WASH AREA
- STORM INLET PROTECTION
- SAMPLING LOCATION
- SILT FENCE



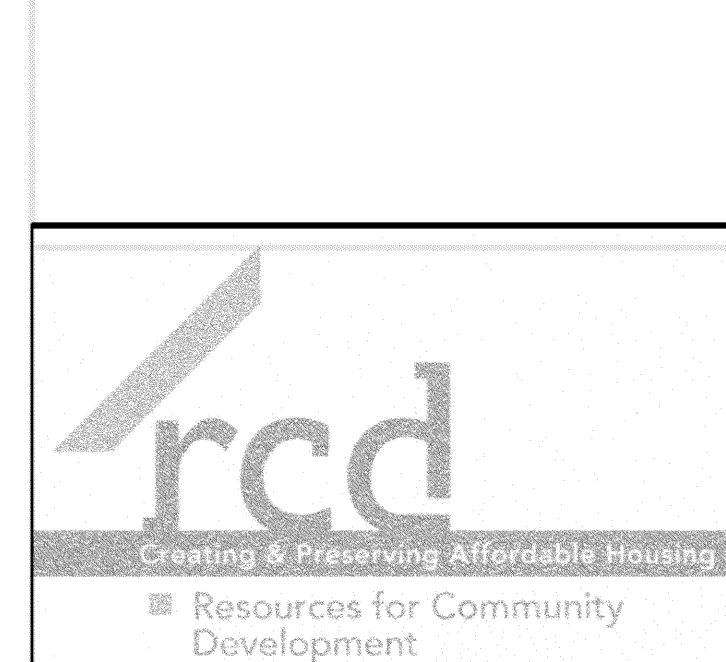
- NOTES:**
- ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS. SPECIFICATION CAN BE FOUND AT <http://www.filtrexx.com/4.1.1%20SWPPP%20-%20SiltSoxx.pdf>
  - SILTSOXX COMPOST TO MEET APPLICATION REQUIREMENTS.
  - SILTSOXX DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
  - COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
  - FILTER MATERIAL AND GRATE SHALL OVERLAP INLET ON ALL SIDES BY A MINIMUM OF 1".
  - INLET FILTER GRATE SHALL BE MADE OF #3 RE-BARS, CRISS CROSSED AT 6"(WELDED OR TIED TOGETHER WITH WIRE) OR A PLATE WITH A MINIMUM OF 75% OPEN AREA, BOTH OF SUFFICIENT STRENGTH TO PREVENT BENDING WHEN DRIVEN OVER BY A VEHICLE.
  - INLET FILTER GRATE SHALL BE SECURELY ATTACHED TO DRAIN INLET BY WIRE OR TIE-WRAPS(BEND OVER).
  - FILTERS SHALL BE INSPECTED WEEKLY AND BEFORE AND AFTER EACH RAINFALL. REPAIRS, SEDIMENT/DEBRIS REMOVAL SHALL BE MADE TO ASSURE EFFICIENCY FUNCTIONING OF FILTER SYSTEM.



- CONSULTANTS**
- STRUCTURAL ENGINEER  
VerTech Engineering, Inc.  
383 Rio Linda Ave. #200 - Chico, CA 95926  
530.899.9716
  - CIVIL ENGINEER  
LUK ASSOCIATES  
738 ALFRED NOBEL DRIVE  
HERCULES, CA 94547  
910.724.3388
  - LANDSCAPE  
CLIFF LOWE ASSOCIATES  
1175 FOLSOM STREET  
SAN FRANCISCO, CA 94103  
415.431.0294
  - WATERPROOFING  
WISS, JANEY, ELSTNER ASSOCIATES, INC.  
2000 Powell Street, Suite 1650  
Emeryville, CA 94608  
910.428.2907
  - ACOUSTICAL ENGINEER  
ROSEN GOLDBERG DER AND LEWITZ, INC.  
1100 Larkspur Landing Circle, Suite 375  
Larkspur, CA 94959  
415.464.0150

- DESIGN / BUILD**
- MECHANICAL DESIGN/BUILD  
MARINA MECHANICAL  
799 Thornton Street  
San Leandro, CA 94577  
510.614.3500
  - PLUMBING DESIGN/BUILD  
W.L. HICKEY SONS, INC.  
P.O. Box 61209  
191 Commercial Street  
Burlingame, CA 94088  
408.736.4938
  - ELECTRICAL DESIGN/BUILD  
H.A. BOWEN ELECTRIC, INC.  
2055 Williams Street  
San Leandro, CA 94577  
510.483.0500

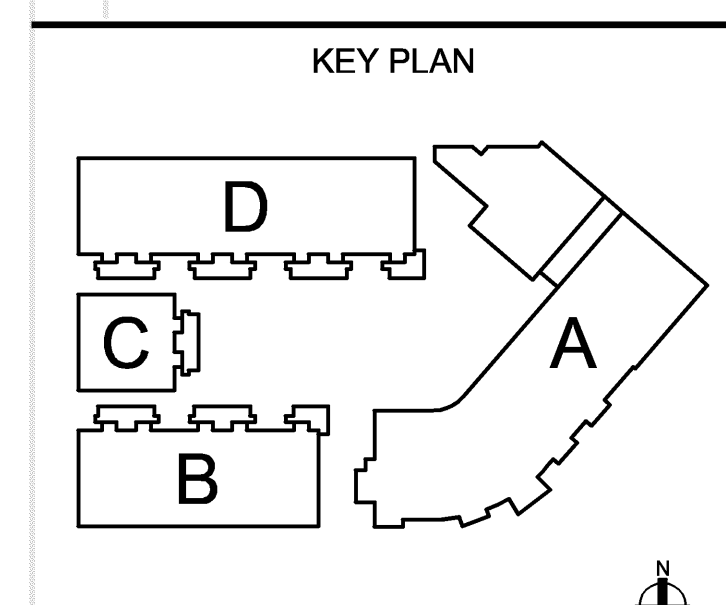
**AGENCY APPROVAL**



**ASHLAND FAMILY HOUSING**  
KENT AVE. AND E. 14TH STREET  
ASHLAND, CA

**REVISIONS**

ISSUANCE	DAY	MONTH	YEAR
PERMIT RESUBMITTAL	29	JULY	2013
BACKCHECK #1	06	SEPT.	2013
BACKCHECK #2	04	OCT.	2013



**DRAWING TITLE**  
**EROSION CONTROL PLAN**

DRAWN: STAFF  
DATE: JUNE 2013  
KMA PROJECT NO.: 1020  
LUK PROJECT NO.: 10019A10

CHECKED: CW  
SCALE: 1"=40"