

**Earthwork Report
Proposed Home Depot
19101 Magnolia Street
Huntington Beach, Ca**

**Prepared For
Home Depot USA, Inc.
3800 West Chapman Avenue
Orange, Ca 92868**

**Prepared By
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4630 W. Jacquelyn Ave Suite #119
Fresno Ca 93722**

Jan 2006

City of Huntington Beach

JAN 17 2006

Introduction

This report presents results of the earthwork analysis for the proposed Home Depot store to be located at 19101 Magnolia Street, on the southwest corner of Magnolia Street and Garfield Avenue, in Huntington Beach, California. This report will analyze the dirt quantities associated with constructing the proposed Home Depot. This report is limited to dirt quantities and does not evaluate any other materials associated with the construction.

References

1. ALTA Survey by Fuscoe Engineering Dated July 2004
2. Geotechnical Report The Twining Labs Dated November 23, 2004
3. Lars Andersen & Associates Conceptual Grading Plan Dated January 11, 2006

Procedure

The earthwork quantities were based on existing topographical information provided by Fuscoe Engineering in their ALTA Survey dated July 2004 see **Appendix A**. Dirt grade elevations were determined using recommendations from the Geotechnical Report from The Twining Labs dated November 23, 2004. As indicated in the report a 4" concrete slab is assumed for the existing Kmart building and the asphalt section is assumed to be 2" AC over 3.5" AB. Using the combined information from the ALTA survey and the Geotechnical Report a DTM (digital terrain model) was created through a modeling program AutoCAD Land Desktop, creating a three dimensional profile of the existing topography. The proposed surface based on Lars Andersen Conceptual Grading Plan dated January 11, 2006 (**Appendix B**) was also modeled using the same program creating a second three dimensional profile. The proposed surface profile was adjusted to account for design recommendations for the construction of the Home Depot as required by the Geotechnical Report. Pad graded was determined for this analysis to be 2.5 feet below proposed finish floor, heavy duty and standard duty pavement sections were accounted for as required by the Geotechnical Report. The non expansive fill below the slab is analyzed as a separate number as part of this report. A dirt volume calculation and cut fill analyses

was then computed by the AutoCAD Land Desktop program in a comparison of the existing ground surface to the proposed ground surface, the results are provided herewith in this report. Footings, storm Drains and other subsurface structures were not considered in this analysis and not part of this report.

Results

The earthwork results provided herewith are actual numbers generated by computer analysis. The results do not account for any shrinkage or subsidence should not be used for bid purposes. The results may also vary depending means and methods used by the contractor in the grading operation. However since this site is a previously improved and graded site it is expected that the re-grading operation will result in minimal net dirt yardage due to the re-grading and re-compaction efforts on existing onsite soils required by the Conceptual Grading Plan and Geotechnical Report.

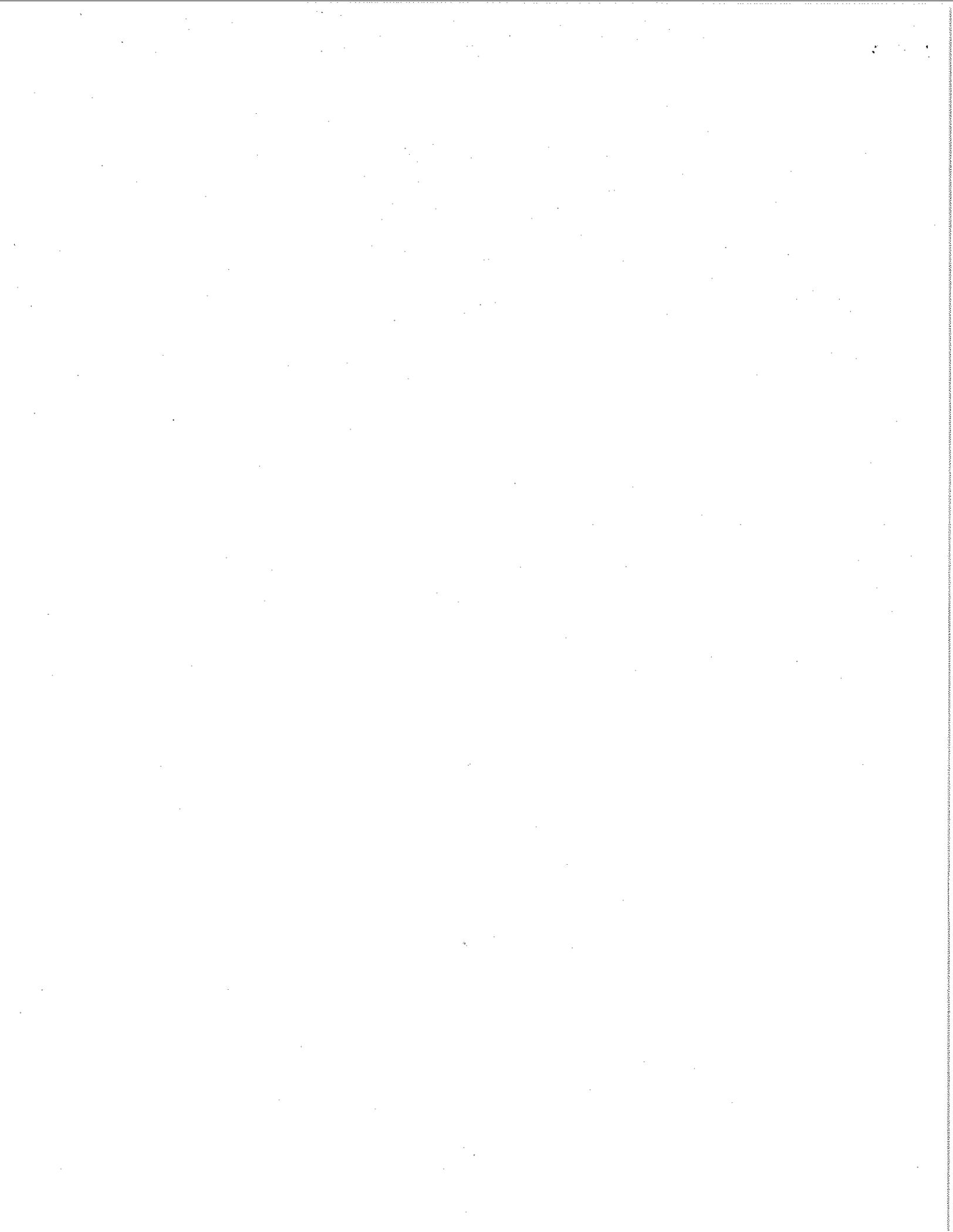
The earthwork quantities not including the non expansive import required by the Geotechnical Report were determined to be 6636 yards of cut and 5855 yards of fill see **Appendix C** for volume report. A Cut / Fill Map is included as part of this report in **Appendix D**, this computer generated map represents areas of the site that are expected to be in cut or fill. A color representation of these cuts and fills are provide in the isometric map provided in **Appendix E**. In addition to the dirt yardage required to construct the site the Geotechnical Report requires non expansive fill which was determined to be 12,246 yards of fill for the construction of the building pad. The yardage includes the 5 foot overbuild area required by the Geotechnical Report of a total area of 165,323 square feet with a 2 foot fill requirement. This results in a net requirement of 12,246 yards of fill to be brought to the site and 781 yard of cut to be hauled off of the site to create the necessary dirt grade for construction of the proposed Home Depot as depicted by the Conceptual Grading Plan by Lars Andersen & Associates Inc. and fulfillment of the soils requirements of the Geotechnical Report requirements from Twining Labs. ^{over excavation}

Conclusion

The 12,246 yards of import soils is expected to be brought into the site in loose truck loads of 20 yard capacity. Results may vary in the compaction and placement of this loose dirt depending on soil conditions, varying grading techniques along with reasonable accommodations for shrinkage and subsidence. Even with the possibility of varying results it is expected that the necessary truck trips would be less than 850 to place the necessary fill for the project. The 781 yards of fill would result in approximately 60 additional trips for the necessary off-haul of spoils.

"cut"

APPENDIX A
ALTA SURVEY



APPENDIX B

CONCEPTUAL GRADING PLAN

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APPENDIX C

VOLUME REPORT

volume report.txt

Site Volume Table: Home Depot
Cut Fill

Net	Cut	Fill	
	yards	yards	yards
Method			
=====			
=====			

Site: SM013

Stratum: dirt volume eg-sg fg - subgrade
780 (C) Grid 6636 5855

APPENDIX D
CUT / FILL MAP

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GARFIELD AVENUE

SHEET NO. 1

JOB NO: SMO13

DR. BY: DZ

CH. BY: DZ

DATE: 01-12-06

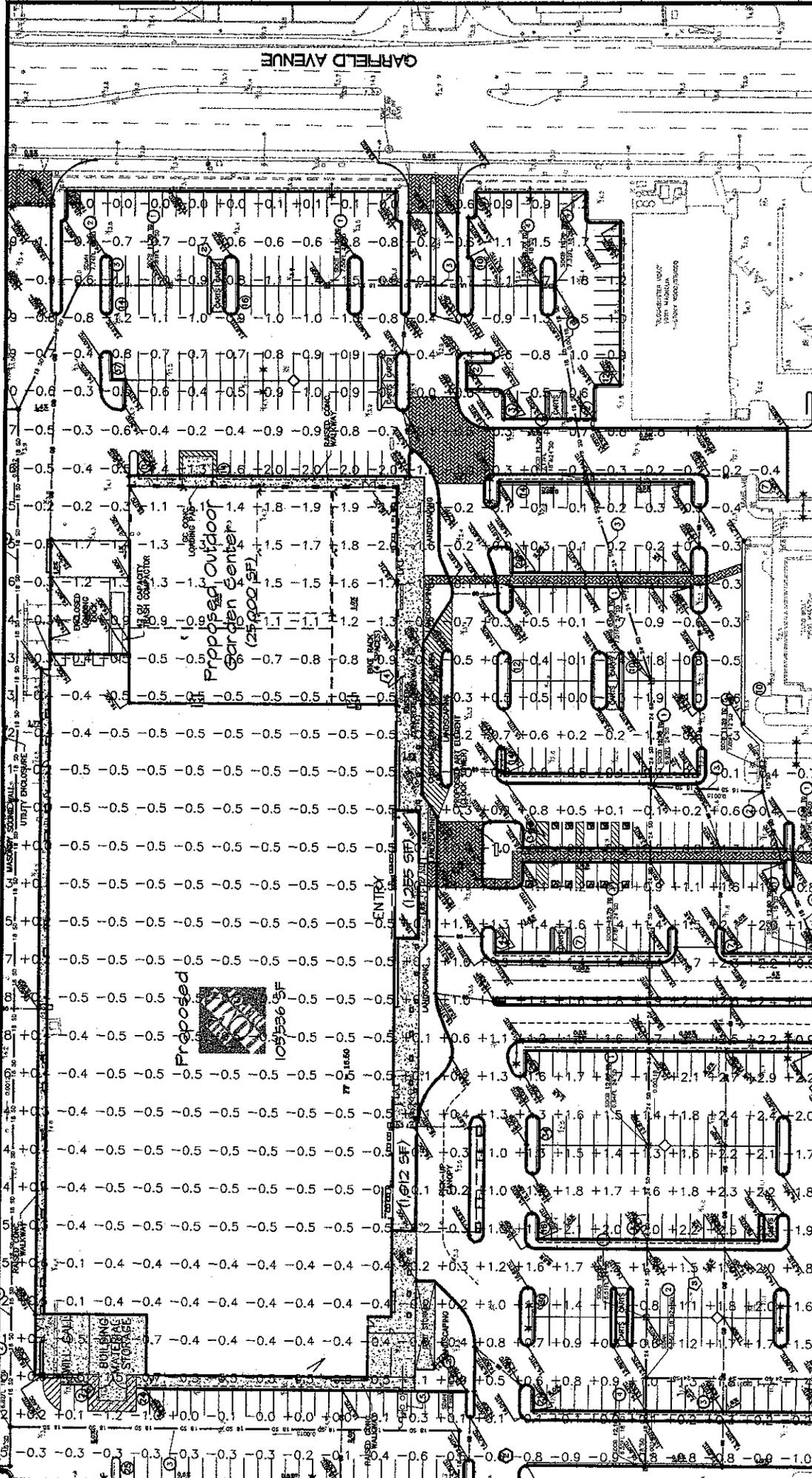
OF 1 SHEET

SCALE: NA

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APPENDIX D - CUT / FILL MAP

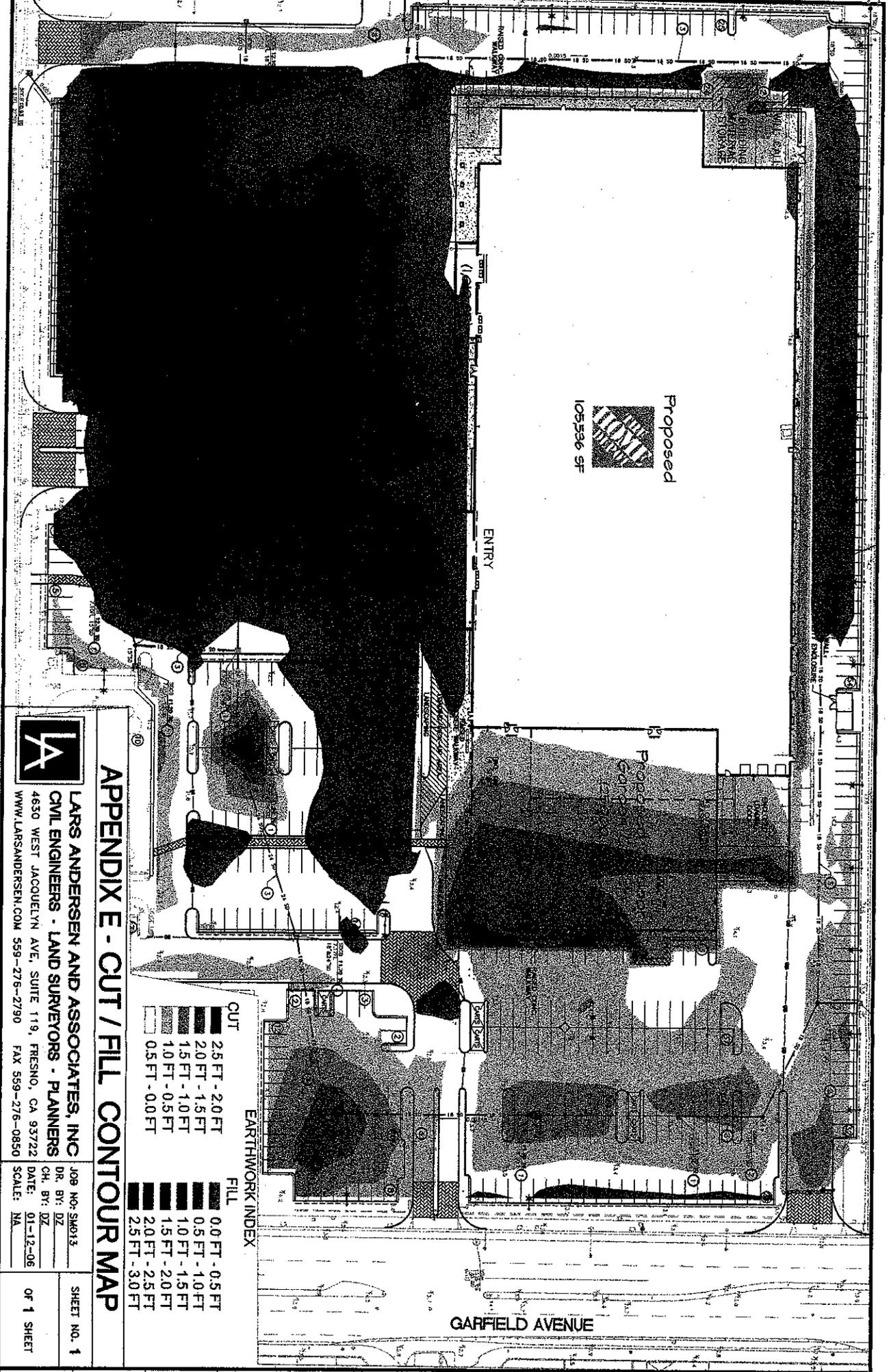


MAGNOLIA STREET

APPENDIX E

COLOR CONTOUR CUT / FILL MAP





Proposed
105536 SF

ENTRY

GARFIELD AVENUE

EARTHWORK INDEX

CUT	2.5 FT - 2.0 FT	0.0 FT - 0.5 FT
	2.0 FT - 1.5 FT	0.5 FT - 1.0 FT
	1.5 FT - 1.0 FT	1.0 FT - 1.5 FT
	1.0 FT - 0.5 FT	1.5 FT - 2.0 FT
	0.5 FT - 0.0 FT	2.0 FT - 2.5 FT
		2.5 FT - 3.0 FT

APPENDIX E - CUT / FILL CONTOUR MAP



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