MCDONNELL CENTRE BUSINESS PARK
EIR #96-1

Environmental Impact Report
Addendum

Prepared for:

City of Huntington Beach
2000 Main Street
Huntington Beach, California 92648

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Prepared by:
EDAW, Inc.

February 6, 2002

MCDONNELL CENTRE BUSINESS PARK
HUNTINGTON BEACH, CALIFORNIA

ENVIRONMENTAL IMPACT REPORT
ADDENDUM

SCH # 96061043

PREPARED FOR:

CITY OF HUNTINGTON BEACH
2000 MAIN STREET
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FEBRUARY 6, 2002

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1.0 INTRODUCTION

The City of Huntington Beach, as Lead Agency, has authorized the preparation of this Addendum to the McDonnell Centre Business Park Specific Plan Final Environmental Impact Report, EIR 96-1, (herein after referred to as Addendum to EIR 96-1). In general, an addendum to an Environmental Impact Report (EIR) is a document that evaluates proposed changes to a project that would result in only minor modification of a previously prepared environmental document. As a result of project changes proposed by the applicant following certification of the EIR 96-1 in August 1997 and changes in the project's circumstances, additional environmental analysis is required to ensure compliance with the California Environmental Quality Act (CEQA). This Addendum to EIR 96-1 describes these project changes and changes in the project's circumstances for the amended McDonnell Centre Business Park project, analyzes their potential for new or increased significant environmental impacts, and compares the environmental impacts of the current revision with the impacts described in the EIR 96-1. The subject project changes and changed circumstances include 1) adjustment of the size of planning areas; 2) slight reduction in overall development density; 3) preparation and processing of a parcel map delineating the planning area changes, and 4) changes in grading associated with planning area adjustments. This Addendum to EIR 96-1 is prepared pursuant to the California Environmental Quality Act (CEQA) and is subject to the limitations contained in Section 15164 of the CEQA Guidelines.

This Addendum to EIR 96-1 is organized as follows. Section 1 is an Introduction containing project background and history, CEQA basis for the Addendum, and summary of impacts comparing the original Specific Plan to the proposed amended Specific Plan and parcel map project. Section 2 provides a detailed explanation of the various parts of the Specific Plan that are being amended. In general, the total area within the amended McDonnell Centre Business Park Specific Plan remains at 307 gross acres; however, changes are made in the assumption of amount of development in each of the six planning areas. Overall, the potential square footage of building area at buildout in the amended Specific Plan is reduced slightly by approximately 14,270 square feet compared to the original Specific Plan. Section 3 of the Addendum to EIR 96-1 includes a discussion of each environmental issue discussed in EIR 96-1, describes previous impact conclusions and how those conclusions are changed by the proposed addendum, and reviews the adequacy of adopted mitigation measures.

It should be noted that subsequent to the original Specific Plan adoption and EIR certification, the ownership of McDonnell Douglas changed to the Boeing Company. The references to the McDonnell Centre Business Park have been maintained throughout this document to avoid confusion and to prevent the need for further edits to adopted City documents.

1.1 PROJECT BACKGROUND

The McDonnell Centre Business Park is located within the northwest portion of the City of Huntington Beach, Orange County, California and encompasses approximately 307 gross acres. The site is bounded on the north by Rancho Road and the U.S. Navy Railroad right-of-way, and Astronautics Lane on the east by Springdale Street, on the south by Bolsa Avenue, and on the west by Bolsa Chica Street. Low-density residential uses are located north of the railroad tracks and Rancho Road. Low density residential and commercial uses are located east of Springdale Street, and office and manufacturing uses are located south of Bolsa Avenue. To the west, is the Orange County Flood Control Channel (CO-3) which is owned by the Orange County Flood Control District. The property across from Bolsa Chica Street is owned by the U.S. Navy and is used as part of the Seal Beach Naval Weapons Station. The location of the project in relation to the local and regional setting is displayed in Exhibit 1. Exhibit 2 depicts the project site and immediate adjacent uses as they existed in 1997. The McDonnell Centre Business Park Specific Plan consists of 6 planning areas (1, 1A, 2, 3, 4, and 5) and originally provided for the eventual development of 8,376,265 square feet of industrial, office, and commercial uses on the site. The Specific Plan serves as zoning regulation for the McDonnell Centre Business Park area.

1.2 PROJECT HISTORY

The history of project development at the site includes the following milestones.

- Beginning in 1963, McDonnell Douglas initiated construction of industrial R&D, manufacturing, and office structures at the site, eventually developing the approximately 2,800,000 square foot McDonnell Douglas Aerospace Facility.

- In 1981, the first plan for development of the site was prepared, consisting of 1.2 million square feet of industrial and office space. The plans made use of the Restricted Manufacturing (M1-A) zone, which allows for "appropriate" mixed uses with the issuance of a conditional use permit. At that time, the applicant also applied for a zone change, which would allow for a Multi-Story (MS) designation.

- A Final EIR for this first development plan was approved and certified in March 1981. Due to an inability to contract with an interested developer, construction of the proposed Industrial/Office Complex was never initiated.

- A subsequent application was submitted by the McDonnell Douglas Realty Company on January 8, 1991, requesting an amendment to the land use map of the General Plan by redesignating 62 acres of the project site from General Industrial to residential and commercial uses. At that time a zone change was processed in conjunction with a General Plan Amendment.

- An Initial Study for this amendment was prepared on February 4, 1991. It was determined through the Initial Study process that an EIR should be prepared for this project. An EIR (91-2) was prepared, and though the Final EIR was certified, the project application was denied.

- The City of Huntington Beach updated its General Plan, which was adopted on May 13, 1996. The Land Plan Map adopted with the General Plan designated the project site as Industrial.

- An Environmental Impact Report was prepared for the General Plan Update and certified on May 13, 1996.

- In 1996, the original McDonnell Centre Business Park Specific Plan was prepared. The intent was to establish a public private partnership to enable the development of a high quality business park.

- In June 1996, the City of Huntington Beach determined that an EIR was necessary to analyze the potentially significant environmental effects associated with buildout of the proposed Specific Plan.

- Subsequent to the circulation of the Initial Study and Notice of Preparation (NOP) for this project, revisions to the Project Components Table were implemented. The NOP was revised to show a reduction in the Future Uses square footage figures.

- The optional residential component originally proposed in Planning Area 5 was also subsequently deleted in the EIR table at City Council direction.

- Subsequent to the initiation of the Environmental Impact Report for the total 307-acre Specific Plan, the City of Huntington Beach approved two separate industrial projects within two parcels of the McDonnell Centre Business Park area: Conditional Use Permit No. 96-104 (Airtech International 121,500 SF); and Conditional Use Permit No. 96-73 (Dynamic Cooking Systems 167,950 SF) on the basis of Negative Declarations.

- The City of Huntington Beach certified Final EIR 96-1 and approved the McDonnell Centre Business Park Specific Plan, August 1997.

- In March 2001, McDonnell Douglas Realty Corporation initiated the proposed amendment of the Specific Plan to adjust planning area boundaries and development levels, and process a parcel map consistent with the proposed changes. The amended Specific Plan proposes 8,361,995 square feet of industrial, office and commercial uses on 284.2 net acres. Preliminary analysis by the City indicates that the proposed changes to the Specific Plan are minor and that a CEQA Addendum to EIR 96-1 should be prepared.

1.3 CEQA BASIS FOR THIS ADDENDUM

State CEQA Guidelines §15164(a) requires that the lead agency or responsible agency prepare an addendum to a previously Certified EIR "if some changes or additions are necessary but none of the conditions described in §15162 calling for preparation of a subsequent EIR have occurred." An addendum need not be circulated for public review but can be included in or attached to the FEIR, as indicated in State CEQA Guidelines §15164(c).

Under Public Resources Code §21166 and CEQA Guidelines 15162(a), once an EIR has been certified, the lead agency shall not require a subsequent or supplemental EIR unless:

1. Substantial changes are proposed in the project that will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is being undertaken that will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance for the project, which was not known and could not have been known at the time the EIR was certified, shows that project will have one or more significant effects not discussed in the EIR, that significant effects previously examined will be substantially more severe than shown in the EIR, or that the project applicant declines to adopt mitigation measures or alternatives not analyzed in the EIR or not found to be feasible in the EIR which would substantially reduce one or more significant effects of the project. (CEQA Guidelines, Section 15162(a)).

CEQA Guidelines 15162 (see above) makes clear that the key issue in determining whether or not a subsequent or supplemental EIR is required is not the scope or magnitude of the proposed changes to the project, because major changes to a project are not sufficient alone to trigger the requirement for a further EIR. These changes must result in new significant impacts or a substantial increase in the severity of impacts previously identified as significant impacts. Similarly, the focus of the inquiry is not in the nature, scope, or extent of changed circumstances but whether the changed circumstances will lead to new or more severe significant project impacts not previously considered.

The McDonnell Centre Business Park Specific Plan, as presented in EIR 96-1, included 8,376,265 square feet of development potential consisting of about 70 percent industrial use, 26 percent office use, and 47 percent commercial use. Six planning areas were created that provided for development on 289 net acres (307 gross acres). The proposed amendment to the Specific Plan adjusts the development levels in each phase with the overall result of reducing total square footage of development by 14,270 square feet to 8,361,995 square feet. The amended plan increases the amount of industrial use overall and decreases the amount of both office use and commercial use. The net acres of development decrease to 284.2 acres (307 gross acres). These and other project changes are described in greater detail in Section 2 of the addendum.

Compared to the original Specific Plan, the proposed amendment will result in less development overall with a corresponding reduction in environmental impacts. Section 3.0 of this document, provides the detailed analysis to demonstrate that the changes being proposed would not result in any new significant environmental effects or substantial increases in the severity of previously identified significant effects. Consequently, major revisions to EIR 96-1 are not required and none of the other conditions listed in §15162(a) that would require the preparation of a subsequent EIR have occurred. Therefore, the appropriate level of analysis for the proposed project revision is an addendum to the Final EIR (EIR 96-1), as required by §15164(a). This conclusion is based on the analysis provided in this document and is supported by numerous updated technical studies, including traffic and parking, noise and other information included in the administrative record. Substantial evidence in the record supports the conclusion that the revised project does not create any new or increased significant impacts as compared to the original Specific Plan. Thus, no supplemental environmental review is required.

The City of Huntington Beach shall consider the Addendum to EIR 96-1 along with Certified Final EIR 96-1 prior to making a decision on the proposed amendment of the Specific Plan, as required by §15164(c). The Certified Final EIR 96-1 consists of 1) McDonnell Centre Business Park EIR 96-1 Final EIR text volume dated August 1997; 2) the Response to Comments Volume, dated August 1997, and 3) the Final EIR Technical Appendices Volume, dated August 1997.

1.4 INTENDED USES OF THIS ADDENDUM

The intent of this Addendum to EIR 96-1 is to provide to decision-makers additional information regarding the project's potential environmental impacts due to project changes subsequent to the certification of the project Final EIR 96-1. The Addendum to EIR 96-1 will also be used by the City of Huntington Beach to satisfy CEQA requirements for consideration of potential environmental impacts prior to making a decision on the proposed amendment to the McDonnell Centre Business Park Specific Plan and Tentative Parcel Map No.2001-122.

1.5 SUMMARY IMPACT COMPARISON

The following table provides a comparison of the environmental impacts of the current Specific Plan revision (see 2nd column of Table A) with the impacts analyzed in the Certified EIR (original Specific Plan) (see 1st column of Table A).

TABLE A
COMPARISON OF IMPACTS BETWEEN THE CERTIFIED EIR (ORIGINAL SPECIFIC PLAN), THE CURRENT REVISION, AND TENTATIVE PARCEL MAP 2001--122

ISSUES ANALYZED	CERTIFIED EIR (ORIGINAL SPECIFIC PLAN)	CURRENT SPECIFIC PLAN REVISION	TENTATIVE PARCEL MAP 2001-122
LAND USE	Implementation of the project would establish new on-site and off-site land use relationships. No significant land use impacts to on-site or adjacent uses were identified. The Specific Plan would result in consistency impacts to the Air Quality Element due to the increase in local and regional emissions.	Minor change in the mix of land uses and reduction in development potential would not create new or increased impacts. No significant land use impacts on-site or for adjacent uses will occur. Reduction in development density still results in exceedance of air emissions thresholds and conflict with Air Quality Element. The impact is the same as the 1997 Certified EIR.	Tentative Parcel Map No. 2001-122 will not result in new or increased land use impacts since no change to permitted uses or allowed densities will occur. Future industrial uses within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. No new or increased compatibility impacts will occur from the realignment of Astronautics Lane because the existing railroad tracts would still act as a buffer between the existing single family and anticipated industrial uses.
AESTHETICS / URBAN DESIGN	The project would permanently alter the existing visual environment of the site by developing vacant areas with additional industrial, office, and commercial uses. Adjacent off-site land uses would experience a significant aesthetic change associated with buildout of the proposed Specific Plan.	The minor reduction in development potential and arrangement of uses in the revised Specific Plan will alter the existing on-site and surrounding visual environment in a manner similar to the original plan. No new or increased impacts will occur. A minor revision of the Design Guidelines has occurred to clarify vegetation buffers. Specific Plan Design Guidelines and landscape concepts result in no new or increased impacts. Mitigation measures for the 1997 Certified EIR are applicable.	Tentative Parcel Map No. 2001-122 will not result in new or increased aesthetic / urban design impacts since future industrial development within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. Although proposed grading will result in finished pads 2-4 feet above existing grade, anticipated impacts are less than significant since the potential increase in building height is negligible, no retaining walls will be required along street frontages, no scenic vistas will be obstructed, and all uses surrounding the project area will be adequately buffered by planned or existing roadways. The realignment of Astronautics Lane will not result in new aesthetic impacts as it will be constructed in accordance with the Specific Plan Standards and the new alignment is more internal to the Specific Plan.
LIGHT AND GLARE	The project would affect on-site and nearby residents' nighttime perception of light and glare, and would incrementally increase the amount of light and glare in the area.	The minor reduction in development potential would not create new or increased impacts with respect to light and glare. Mitigation Measures 1,2, and 3 should be implemented with the revised Specific Plan to ensure light and glare impacts are minimized to the extent feasible.	Although the finished pads will range between 2 to 4 feet above existing grade, the anticipated uses to be developed under Tentative Parcel Map 2001-122 are consistent with the uses allowed under the Specific Plan and no new or increased impacts will occur. Mitigation Measures for light and glare contained in the 1997 Certified EIR and as replicated in this document should be applied as the parcel map is implemented. Night lighting impacts associated with the realignment of Astronautics Lane are anticipated to be less as the new alignment is further from existing residential uses.
TRANSPORTATION / CIRCULATION	Demand for parking can be adequately provided by surface parking or new parking structure. Maximum additional traffic generated by Specific Plan is 56,445 total daily trip ends. Overall, Specific Plan generates 96,205 daily trip ends. Potential access impacts and required mitigation (such as traffic signals) would be evaluated by City on case-by-case basis. In 2001, subsequent study shows that there is a surplus of 35 parking spaces at the Aerospace Facility and that traffic counts at selected intersections confirm that original assumptions about interim traffic conditions were correct. The original traffic study is considered valid.	Construction of the remaining phases of the project would generate short-term traffic impacts. New information shows that remaining phases, not including Boeing site redevelopment, could amount to 28,317 truck-loads of fill material. The impacts are mitigated by existing Mitigation Measure 1 that requires a Construction Traffic Control Plan. Parking analysis shows that a surplus of parking will continue to be provided at buildout. Changes in development potential result in an overall reduction of 3,199 trip ends per day, or 93,096 daily trip ends overall. The trip ends associated with the revised Specific Plan are less than the Interim Trip Budget, thus a detailed TIA is not required. The Interim Trip Budget methodology has been clarified with language shown in revised Mitigation Measure 8. Measures 6 and 7 have been satisfied and are no longer applicable.	A scenario for construction traffic (fill material hauling to raise proposed parcels 2 to 4 feet over existing grade) has been provided to clarify the impacts not quantified in the 1997 Certified EIR. The first project under Tentative Parcel Map 2001-122 would require importation of 196,583 cubic yards of earth, or 110 truck-loads per day over a 6 month period consisting of 120 working days. This short-term impact would be mitigated to less than significant through development of a detailed construction traffic control plan (Mitigation Measure 1). No new traffic impacts are anticipated from the realignment of Astronautics Lane, because the new alignment will be constructed to City Standards and provides better access to the proposed parcels. Parking analysis shows that a surplus of parking will continue to be provided at buildout. For the parcel map, parking will be provided in accordance with standard City requirements. Trip generation due to buildout of Planning Areas within the Parcel Map boundaries is consistent with the Specific Plan and no new or increased impacts will occur.

TABLE A
COMPARISON OF IMPACTS BETWEEN THE CERTIFIED EIR (ORIGINAL SPECIFIC PLAN), AND THE CURRENT REVISION (CONT'D)

ISSUES ANALYZED	CERTIFIED EIR (ORIGINAL SPECIFIC PLAN)	CURRENT SPECIFIC PLAN REVISION	TENTATIVE PARCEL MAP NO. 2001-122
AIR QUALITY	The project would exceed SCAQMD's daily threshold emission during construction activities, leading to significant, unavoidable impacts. The project would exceed SCAQMD's daily threshold emission levels for CO, NOx, and HC, leading to a long-term significant and unavoidable air quality impact. Short-term and long-term cumulative impacts on air quality are significant and unavoidable.	Though the amount of site development has reduced, the revised Specific Plan's grading and construction activities would still create significant construction air emissions. Mitigation Measures 1 through 6 were adopted to alleviate these impacts and should continue to be implemented with future construction phases. The minor reduction of 14,270 square feet of building development potential and daily reduction of 3,199 vehicle trip ends would reduce the project-specific and cumulative air quality impacts. The reduction would not be substantial overall and the Specific Plan would continue to have significant air quality impacts relative to CO, NOx, and HC. Mitigation Measures 7 and 8 from the 1997 Certified EIR are appropriate.	Earthwork associated with the parcel map would necessitate periodic fill hauling during buildout. A scenario for Phase II would result in 110 truck-loads of fill imported to the site on a daily basis, which would contribute to significant short-term air quality impacts. The required mitigation from the 1997 Certified EIR is consistent with the magnitude of the impact and no new measures are deemed necessary. The implementation of the parcel map will contribute to long-term and cumulatively significant air quality impacts as addressed for the revised Specific Plan. No new or increased impacts will occur.
NOISE	After mitigation construction noise levels were found to be less than significant. The original Specific Plan would increase the year 2015 traffic noise levels by up to 1.7 dBA. The increase in project noise levels along the segment of Rancho Road between Bolsa Chica Street and Westminster Boulevard is considered a significant impact.	Short-term construction noise impacts with the revised Specific Plan would be similar to the original plan. Hauling associated with fill importation would contribute to vehicular noise along haul routes, although established truck routes would be used and construction traffic would be a relatively minor (less than significant) portion of total roadway traffic volume. Measures 1 and 2 would mitigate to less than significant the construction noise impacts. Estimated noise contours for various traffic conditions were updated. Noise level differences at buildout differ no more than 0.1 dB CNEL from the original Specific Plan analysis, thus no new or increased impacts will occur either on-site or off-site. Mitigation Measure 3 would still apply.	As discussed for the revised Specific Plan, fill material hauling associated with the grading of the parcel map will cause incremental noise impacts along designated haul routes. These and other construction impacts are considered less than significant with implementation of Mitigation Measures 1 and 2, which allow the Planning Department and City Engineer to require a noise mitigation plan and to establish other appropriate noise mitigation. The construction traffic control plan also allows the City to manage the hauling operation to avoid impacts. Traffic noise impacts associated with the realignment of Astronautics Lane are anticipated to be less as the new alignment is further from existing residential uses.
EARTH CONDITIONS	After mitigation and standard city policies the project would not result in significant impacts to local geology, seismicity, liquefaction, expansive soils, and hazardous materials. An evaluation of the extent and depth of grading and excavation was not known and therefore, not provided.	Geologic conditions have not changed at the site since the original Specific Plan, thus impacts and Mitigation Measures from the 1997 Certified EIR are applicable to the revised Specific Plan. Buildout of portions of the revised Specific Plan will result in a deficit of fill material. This impact is discussed further under the Parcel Map column.	Implementation of the parcel map will require 429,954 cubic yards of cut and 854,716 cubic yards of fill, resulting in a fill deficit of 424,762 cubic yards. The impacts associated with fill placement can be reduced to less than significant through implementation of existing Mitigation Measure 1 (requiring geotechnical/soils studies prior to grading), Measure 4 (requiring grading plans showing fills to be competent), and Measure 8 (requiring runoff and erosion control plans). This is not a new impact since the 1997 Certified EIR addressed grading and relevant mitigation; however, the impact is further quantified as to its magnitude.

TABLE A
COMPARISON OF IMPACTS BETWEEN THE CERTIFIED EIR (ORIGINAL SPECIFIC PLAN), AND THE CURRENT REVISION (CONT'D)

ISSUES ANALYZED	CERTIFIED EIR (ORIGINAL SPECIFIC PLAN)	CURRENT SPECIFIC PLAN REVISION	TENTATIVE PARCEL MAP NO. 2001-122
DRAINAGE AND HYDROLOGY	Under a 100-year storm event, the proposed Specific Plan will result in a total flow increase of 58.5 cfs. The Specific Plan would have an impact on water quality due to the addition of pollutants typical of urban runoff. With proposed mitigation, people and property would not be exposed to flood hazards and potentially significant water quality impacts from addition of pollutants typical of urban runoff would be reduced to less than significant.	The revisions to the Specific Plan result in minor changes to the development acreage on the site, including slightly less building coverage and slightly more acreage in on-site roadways. The 100-year storm runoff and impacts on water quality would be essentially the same under the revised Specific Plan as assessed under the original plan. No new or increased impacts would occur. Mitigation Measures 1 through 5 are applicable to the impacts of the revised Specific Plan.	Future development within the Specific Plan boundaries will occur after review and approval of an updated water quality management plan, hydrology and hydraulic studies. Additional storm drain capacity, as necessary to accommodate any increased flow associated with the subdivision, will be designed and constructed. No additional drainage or water quality impacts have been identified.
NATURAL RESOURCES/ ENERGY	Consumption of 17,000 million gallons of gasoline daily. Consumption of approximately 57,720 gallons of water hourly.	The minor reduction of 14,270 square feet of building development potential and daily reduction of 3,199 vehicle trip ends would incrementally reduce the project-specific consumption of gasoline. Consumption of water would also be incrementally reduced relative to the original Specific Plan. The impacts are less than significant.	Future development within the boundaries of the proposed Tentative Parcel Map 2001-122 would be designed consistent with the standards and permitted uses of the Specific Plan. No additional natural resource impacts have been identified.
PUBLIC SERVICES AND UTILITIES	The Specific Plan would increase the number of buildings and the number of employees at the site and create demands on various public services and utilities, including need for additional fire protection services, need for one new police officer, demand of 962 gallons per minute of water, and new sewer infrastructure (on-site). No significant impacts were found for other services/utilities covered in the original EIR.	The minor reduction of 14,270 square feet of building development potential within the Specific Plan would reduce demand for Public Services and Utilities compared to the original Specific Plan. No new or increased impacts will occur.	Future development within the boundaries of the proposed Tentative Parcel Map 2001-122 would be designed consistent with the standards and permitted uses of the Specific Plan. No additional public services or utilities impacts have been identified. Additionally, future development within the Specific Plan boundaries will occur after review and approval of an updated sewer study, and establishment of a mechanism for financing the maintenance, operation and replacement of any sewer lift stations and force mains required by the project. Additional sanitary sewer systems, as necessary to accommodate any increased flow associated with the subdivision, will be designed and constructed. No additional impacts have been identified.
AGRICULTURE	The Specific Plan results in the loss of less than 80 acres of farmland.	The revised Specific Plan does not change the amount of agricultural land affected by the Specific Plan. All agricultural parcels existing in 1997 have now been developed. No new or increased impacts will occur.	The development within Tentative Parcel Map 2001-122 is not located on prime agricultural lands. No impacts will occur.
SOCIO-ECONOMIC	Stimulate business opportunities within the City. No significant impacts were identified.	The minor reduction in development potential of the revised Specific Plan does not negate the positive business and employment impacts of the original Specific Plan. No new or increased impacts will occur.	Future development of anticipated uses associated with Tentative Parcel Map 2001-122 will have positive socio-economic impacts consistent with those identified for the original Specific Plan.

TABLE A
COMPARISON OF IMPACTS BETWEEN THE CERTIFIED EIR (ORIGINAL SPECIFIC PLAN), AND THE CURRENT REVISION (CONT'D)

ISSUES ANALYZED	CERTIFIED EIR (ORIGINAL SPECIFIC PLAN)	CURRENT SPECIFIC PLAN REVISION	TENTATIVE PARCEL MAP NO. 2001-122
DRAINAGE AND HYDROLOGY	Under a 100-year storm event, the proposed Specific Plan will result in a total flow increase of 58.5 cfs. The Specific Plan would have an impact on water quality due to the addition of pollutants typical of urban runoff. With proposed mitigation, people and property would not be exposed to flood hazards and potentially significant water quality impacts from addition of pollutants typical of urban runoff would be reduced to less than significant.	The revisions to the Specific Plan result in minor changes to the development acreage on the site, including slightly less building coverage and slightly more acreage in on-site roadways. The 100-year storm runoff and impacts on water quality would be essentially the same under the revised Specific Plan as assessed under the original plan. No new or increased impacts would occur. Mitigation Measures 1 through 5 are applicable to the impacts of the revised Specific Plan.	Future development within the Specific Plan boundaries will occur after review and approval of an updated water quality management plan, hydrology and hydraulic studies. Additional storm drain capacity, as necessary to accommodate any increased flow associated with the subdivision, will be designed and constructed. No additional drainage or water quality impacts have been identified.
NATURAL RESOURCES/ ENERGY	Consumption of 17,000 million gallons of gasoline daily. Consumption of approximately 57,720 gallons of water hourly.	The minor reduction of 14,270 square feet of building development potential and daily reduction of 3,199 vehicle trip ends would incrementally reduce the project-specific consumption of gasoline. Consumption of water would also be incrementally reduced relative to the original Specific Plan. The impacts are less than significant.	Future development within the boundaries of the proposed Tentative Parcel Map 2001-122 would be designed consistent with the standards and permitted uses of the Specific Plan. No additional natural resource impacts have been identified.
PUBLIC SERVICES AND UTILITIES	The Specific Plan would increase the number of buildings and the number of employees at the site and create demands on various public services and utilities, including need for additional fire protection services, need for one new police officer, demand of 962 gallons per minute of water, and new sewer infrastructure (on-site). No significant impacts were found for other services/utilities covered in the original EIR.	The minor reduction of 14,270 square feet of building development potential within the Specific Plan would reduce demand for Public Services and Utilities compared to the original Specific Plan. No new or increased impacts will occur.	Future development within the boundaries of the proposed Tentative Parcel Map 2001-122 would be designed consistent with the standards and permitted uses of the Specific Plan. No additional public services or utilities impacts have been identified. Additionally, future development within the Specific Plan boundaries will occur after review and approval of an updated sewer study, and establishment of a mechanism for financing the maintenance, operation and replacement of any sewer lift stations and force mains required by the project. Additional sanitary sewer systems, as necessary to accommodate any increased flow associated with the subdivision, will be designed and constructed. No additional impacts have been identified.
AGRICULTURE	The Specific Plan results in the loss of less than 80 acres of farmland.	The revised Specific Plan does not change the amount of agricultural land affected by the Specific Plan. All agricultural parcels existing in 1997 have now been developed. No new or increased impacts will occur.	The development within Tentative Parcel Map 2001-122 is not located on prime agricultural lands. No impacts will occur.
SOCIO-ECONOMIC	Stimulate business opportunities within the City. No significant impacts were identified.	The minor reduction in development potential of the revised Specific Plan does not negate the positive business and employment impacts of the original Specific Plan. No new or increased impacts will occur.	Future development of anticipated uses associated with Tentative Parcel Map 2001-122 will have positive socio-economic impacts consistent with those identified for the original Specific Plan.

2.0 PROJECT DESCRIPTION

2.1 DESCRIPTION OF THE ORIGINAL PROJECT IN THE CERTIFIED FINAL EIR 96-1

The McDonnell Centre Business Park Specific Plan is located in the northwestern portion of the City of Huntington Beach. Exhibit 1 shows the project's location and Exhibit 2 provides an aerial of the Specific Plan area as it existed in 1997. The Specific Plan established the planning concept, design theme, development regulations and administrative procedures necessary to achieve an orderly and compatible development of the property; and to implement the goals, policies, and objectives of the Huntington Beach General Plan. The development procedures, regulations, standards and specifications established in the Specific Plan by law supersede the relevant provisions of the City's Zoning Code (Huntington Beach Zoning and Subdivision Ordinance).

At the time the Specific Plan was approved, approximately 173 acres of the 307-acre project site were developed or had been granted entitlement for development of industrial storehouse/distribution and McDonnell Douglas aerospace uses. The McDonnell Centre Business Park Specific Plan consists of 6 planning areas (1, 1A, 2, 3, 4, and 5) and originally provided for the eventual development of 8,376,265 square feet of industrial, office, and commercial uses on the site. The various planning areas are discussed below.

Existing Specific Plan Planning Areas

The configuration of the six Planning Areas are shown on Exhibit 3 and described as follows:

Areas 1 and 1A. These planning areas include the existing Boeing Aerospace Facility (formerly McDonnell Douglas), comprised of approximately 2,789,053 square feet of building area and approximately 8,000 parking spaces on 120 net acres of land. The existing Specific Plan contemplates the continued expansion of aerospace facilities in these areas pursuant to existing entitlements. An additional 329,784 square feet of industrial use and 148,164 square feet of office use are estimated under Planning Area 1 in the existing Specific Plan. Thus, Planning Area 1 can accommodate an additional 477,948 square feet of new development, for a total development of 3,267,001 square feet; and 522,720 square feet of office use is assumed to be constructed in Planning Area 1A.

Area 2. Planning Area 2 is comprised of 58 net acres of land bounded by Springdale Street, Bolsa Avenue, Able Lane, and Astronautics Lane. The plan contemplates development of 1,515,880 square feet of industrial, commercial, and office uses. Existing users or those that had approved entitlements at the time the 1997 Specific Plan was adopted include Sharp Electronics, Cambro Manufacturing, and Dynamic Cooking Systems.

Area 3. Planning Area 3, consisting of 36 net acres, is ultimately anticipated to be developed under the existing plan with 940,896 square feet of office, light industrial, warehouse and distribution uses.

Area 4. Planning Area 4 is comprised of 35 net acres of vacant land along the northern perimeter of the project site, and under the existing plan was intended to be developed as an expansion of the current aerospace facility located in Planning Area 1 with approximately 914,760 square feet of industrial and office uses.

Area 5. Planning Area 5 consists of 40 acres, located northeast of the intersection of Bolsa Avenue and Bolsa Chica Street, with a significant amount of frontage on both arterials. The existing Specific Plan contemplates development of 1,215,000 square feet of commercial, industrial, and office uses.

Other components of the Existing Specific Plan

The Specific Plan includes a Circulation Plan that illustrates the general alignments, classifications, location and design of cross-sections for public and private streets within the Specific Plan area. The circulation component of the existing Specific Plan was developed on the assumption that the aerospace facility would be retained and expanded from its central location. The approved dimensions and layout of streets within the existing Specific Plan are shown in Exhibit 4.

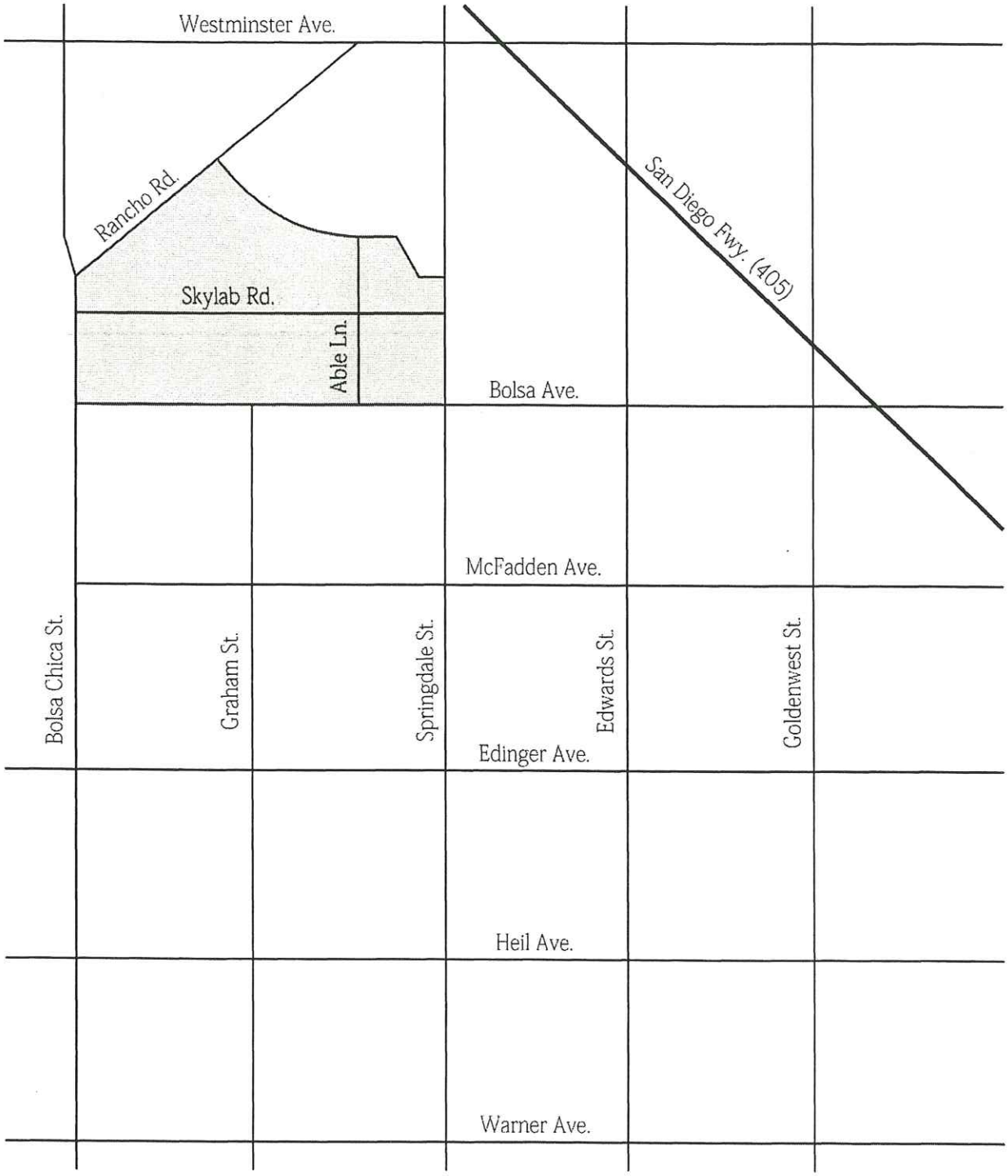
Among the other plans incorporated within the Specific Plan are a Public Facilities Plan, Landscape Concept, and Phasing Plan. The Public Facilities Plan provides for utility infrastructure to adequately support the proposed development. The various components discussed within the Public Facilities Plan include water system, sewer system, storm drainage, water quality, and utilities (electricity, natural gas, phone, solid waste, and cable). Offsite facilities were generally found adequate to serve the Specific Plan area; consequently, utility improvements were focused and phased to serve developments as constructed at the site.

The Landscape Concept serves as an integral component of the overall project design by establishing the design character and visual qualities of the interior and perimeter of the site. The overall landscape theme establishes consistent planting of streetscapes (both local and private), entryways, parkways, transitional edges, and fencing and security walls.

A Phasing Plan was approved with the McDonnell Centre Business Park Specific Plan (Exhibit 5). Planning Areas (1, 1A, 2, 3, 4, & 5) were further divided into Subareas (A through M) to reflect the anticipated development pattern and infrastructure improvement phasing. The original Phasing Plan recognized that in 1997 the project area was about 40 percent built-out including the McDonnell Douglas facility with an additional 10 percent under construction and/or entitled. As indicated on the original Phasing Plan, development of the eastern portion of the project site (Planning Areas 2 and 3) and (Subareas A, C, and D) were anticipated to occur in the first phases of the Specific Plan implementation. Development of the western portion of the project site along Bolsa Chica Street (Subareas B, E, F, J, and K), were anticipated to occur in later phases, as market conditions warranted; however, there was the potential for a hotel project (Extended Stay) at Bolsa Chica Street and Skylab Road West to occur sooner.

Original Grading and Earthwork Quantities

The original EIR assumed that buildout of the Specific Plan would require grading and excavation for development of future industrial, office, and support retail. The discussion of grading and excavation, though not specific in terms of cubic yards, did address various hazards associated with seismic, geologic, and soil conditions on the site. One site hazard, expansive soils, was identified and could be mitigated by removal, regrading, and recompaction. Expansive soils were believed to exist on about 65 percent of the site. The alluvial deposits and scattered fill soils that occur onsite are potentially compressible in their present states under foundation loadings.



No Scale

EDAW, Inc.

Exhibit 1

Source: EDAW, Inc.

Vicinity Map

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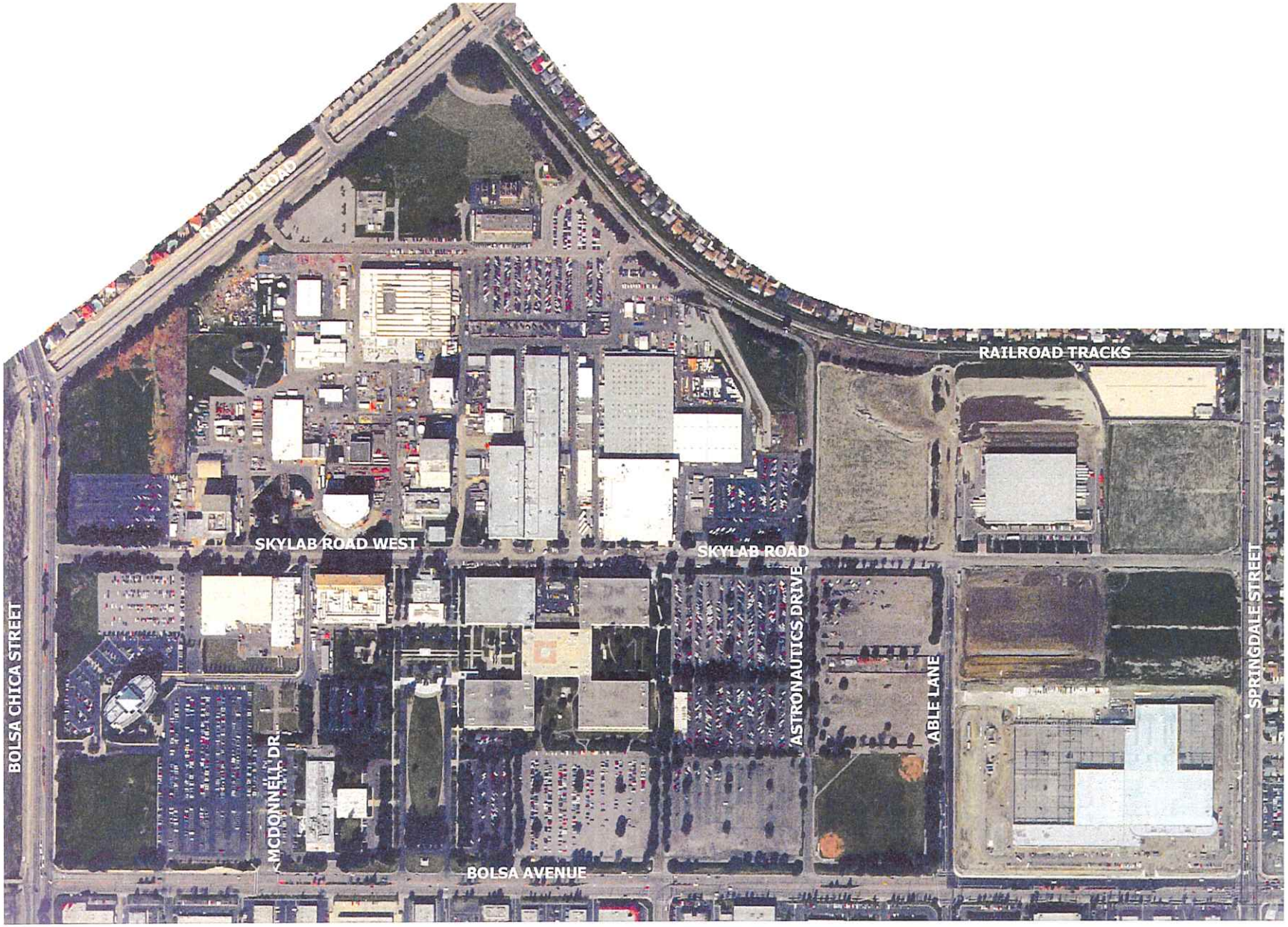


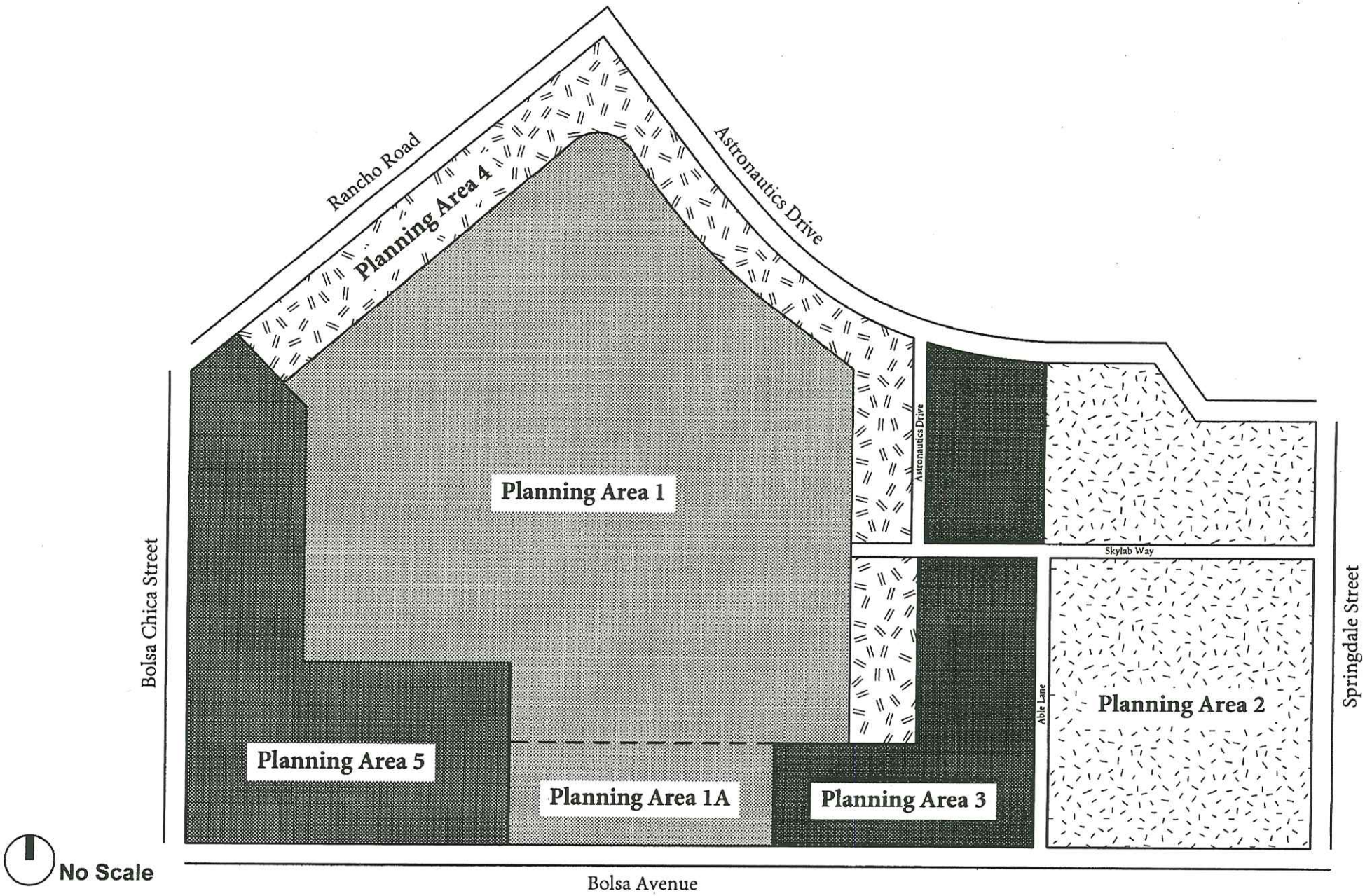
No Scale

EDAW, Inc.

Source: MDRC

Exhibit 2

1997 Aerial Photo



EDAW, Inc.

Exhibit 3

Source: EDAW, Inc.

Original Planning Areas

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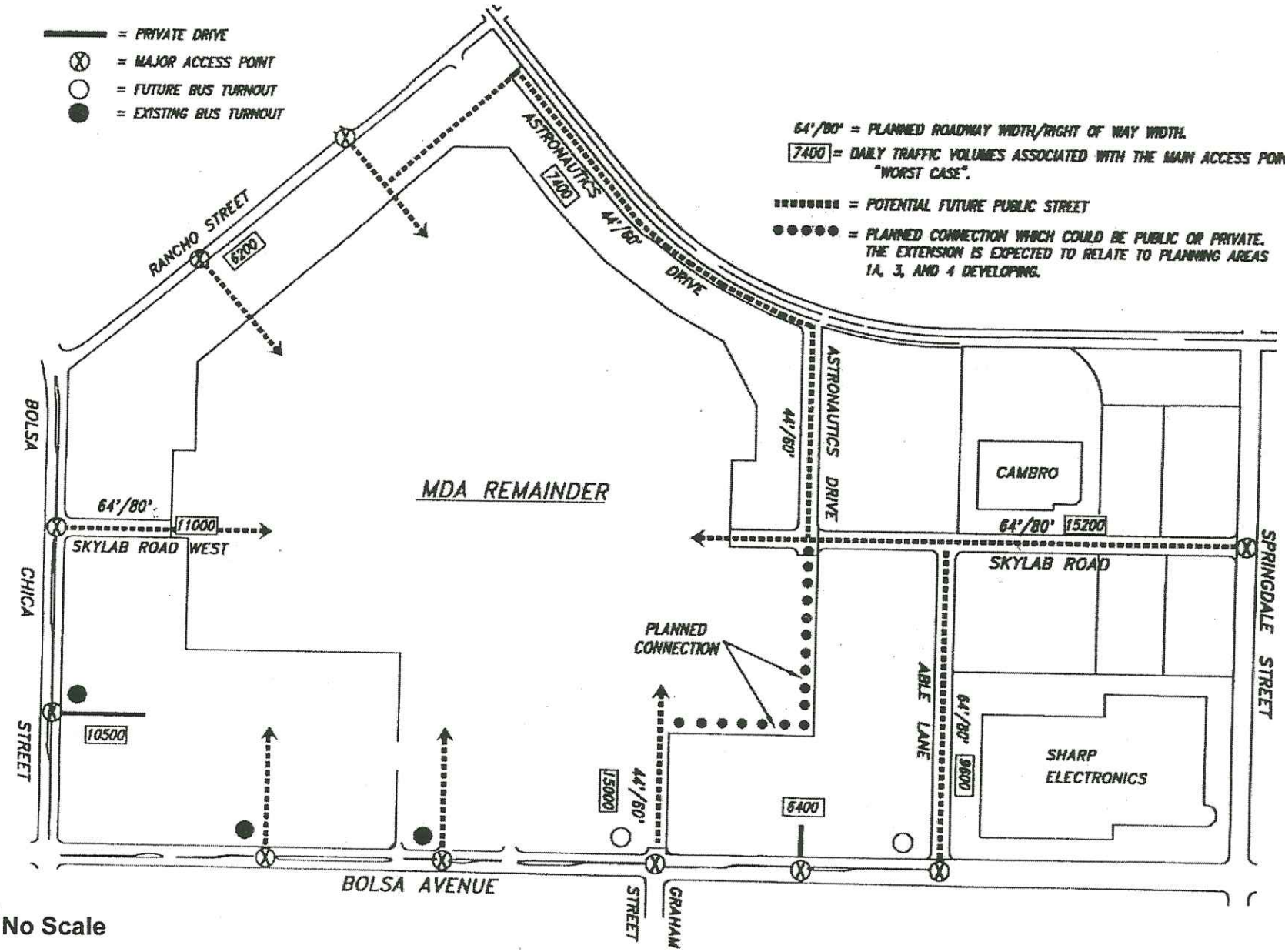

EDAW, Inc.

Exhibit 4

Source: WPA Traffic

Original Circulation Plan

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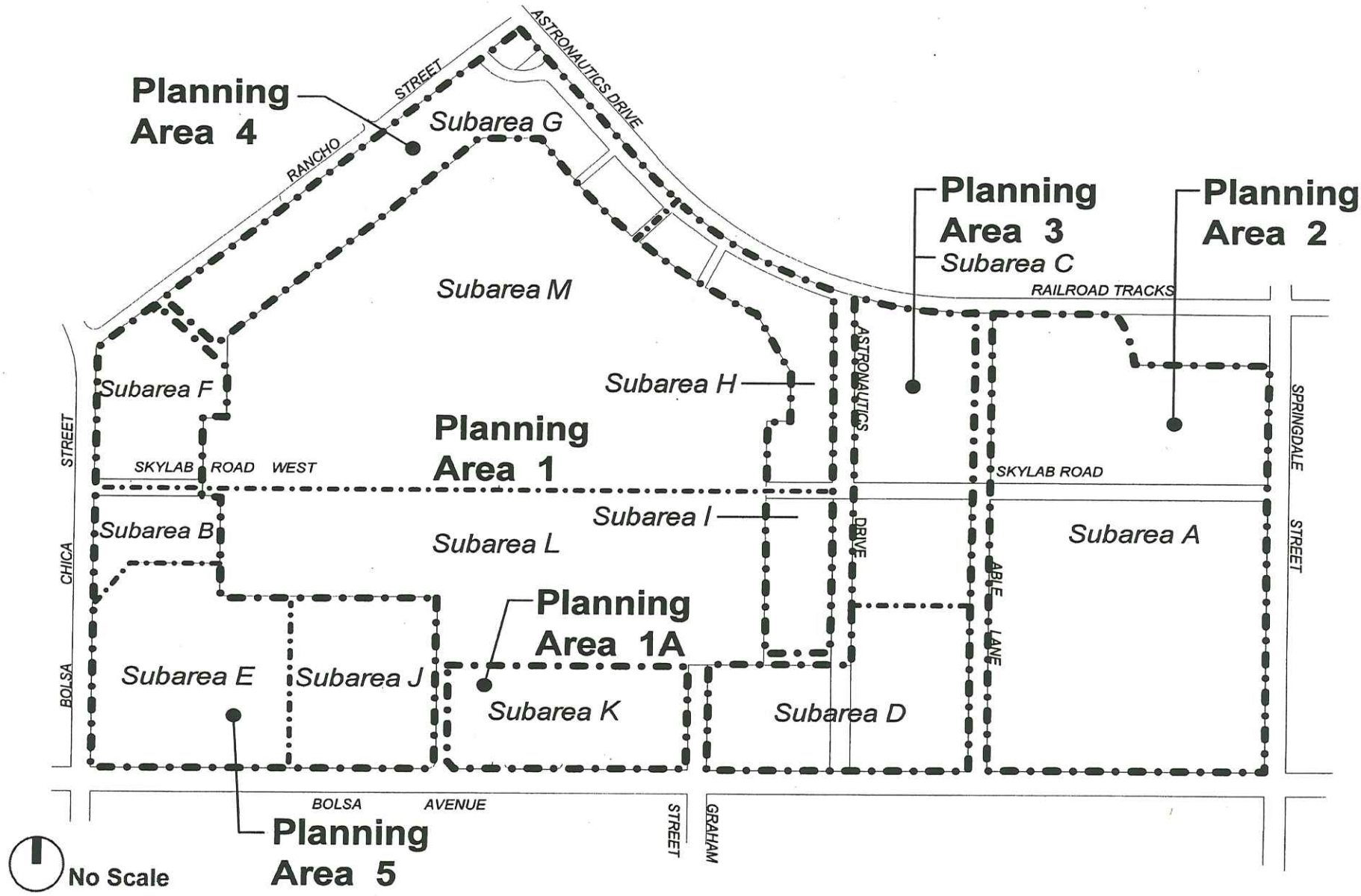

EDAW, Inc.

Exhibit 5

Source: MDRC

Original Phasing Plan

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2.2 PROPOSED PROJECT MODIFICATIONS

2.2.1 DESCRIPTION OF THE PROPOSED SPECIFIC PLAN AMENDMENT NO. 1

Boeing Realty (formerly McDonnell Douglas Realty Corporation), the Applicant, now proposes an amendment of the McDonnell Centre Business Park Specific Plan that includes adjusting the planning area boundaries and development levels and processing a parcel map consistent with the proposed changes. This is the first amendment of the plan since approval in 1997. The amended Specific Plan proposes a slight reduction in development density to 8,361,995 square feet of industrial, office and commercial uses on 284.2 net acres. That is, the Specific Plan reduces ultimate buildout by 14,270 square feet and reduces net developable acreage by 4.8 acres. The decrease in net developable acres is due primarily to the increase in area required by changes in the onsite circulation plan that increase the acreage of streets and provide better access. In addition, the boundaries of the planning areas and project phasing have been adjusted to accommodate greater flexibility for incremental development.

Table B has been prepared to update the existing and planned development levels under the amended Specific Plan. The current level of buildout is also characterized on the recent aerial photo (Exhibit 6). Table C compares the amended development levels to the original adopted Specific Plan statistics.

Proposed Planning Area Modifications

Proposed changes to the six Planning Areas are shown on Exhibit 7 and are discussed below.

Area 1 and Area 1A. The proposed revisions to Planning Area 1 include a 46-acre reduction in size and a decrease in the development potential within this Planning Area. The current facilities within this revised Planning Area are comprised of 1,734,180 square feet of building area on 54 net acres of land. This area can accommodate an additional 30,000 square feet of new development, for a total development of 1,764,180 square feet.

Under the Specific Plan amendment, no changes to the total acreage or configuration of Planning Area 1A are proposed, however, there is a slight increase (± 44,000 square feet) in the development potential for Planning Area 1A. Planning Area 1A includes the entrance to the Aerospace Facility and currently provides the primary parking facilities along Bolsa Avenue. The area consists of 20 net acres and can accommodate a total development of 566,280 square feet versus the original Specific Plan estimate of 522,720 square feet.

Area 2. Under the Specific Plan amendment, no changes to the total acreage or configuration of Planning Area 2 are proposed. Planning Area 2 includes the area along Springdale Street and Bolsa Avenue, westerly to Able Lane; and comprises 58 net acres of land that is mostly built out with 1,072,095 square feet currently existing. Sharp Electronics has constructed a 540,000 square feet facility on a 23-acre site, Cambro Manufacturing completed a 160,000 square feet building on a 12-acre site and Dynamic Cooking has completed 570,117 square feet.

The remaining acreage in the Planning Area has been developed with research and development facilities, light industrial, warehouse and distribution uses as well as some office and commercial uses. Ultimate build out of this area could add 570,117 square feet of development. This area can accommodate a total development of approximately 1,642,212 square feet.

Area 3. Under the Specific Plan amendment, no changes to the total acreage or configuration of Planning Area 3 are proposed. Planning Area 3, west of Area 2, includes the Bolsa Avenue frontage west of Able Lane to an extension of Graham Street. Currently this Planning Area contains the following facilities, totaling 638,772 square feet: DIX Metals, Airtec, Konica, and C & D Aerospace. At ultimate buildout, this area can accommodate a total development of 1,019,304 square feet.

Area 4. The proposed revisions to Planning Area 4 include an increase in size by 44.5-acres and corresponding increase in development potential within this Planning Area. The revised area consists of 79.5 net acres of which 29.5 net acres are currently vacant land. The remaining portion is the existing Aerospace Facility. Planning Area 4 can accommodate additional development of 2,250,963 square feet for light industrial, warehousing, and office park. This additional development figure assumes that 1,040,710 square feet of existing aerospace facility buildings would be demolished. Should only a part of this square footage be demolished due to evolving facility operations then the total figure of future development (2,250,963 square feet) would be reduced accordingly. Because the development of this Planning Area includes the demolition of existing aerospace buildings, additional discussion is provided in the Environmental Analysis – Earth Section of this document.

Area 5. The proposed revisions to Planning Area 5 include a 3.3-acre reduction in size and a slight decrease in the future development potential within this Planning Area. This area is located along the western boundary of the project area, with a significant amount of frontage on the arterial highways. The revised area consists of 36.7 total net acres and is partially developed with office, research and development facilities and surface parking lots. This area can accommodate a total development of 1,119,056 square feet.

As described above and shown in Table C, Planning Areas 1 and 5 are proposed to decrease in size while Planning Area 4 is proposed to increase in size. The change occurs through a shifting of the planning area boundaries. It is important to note that the total Specific Plan developable acreage is proposed to decrease, due to added internal roadways included in the proposed parcel map.

No change from the original Specific Plan has been proposed to the maximum F.A.R. within each Planning Area.

Other components of the Revised Specific Plan

The revised Specific Plan includes a revised Circulation Plan (see Exhibit 8) that illustrates revised general alignments, classifications, location and design of cross-sections for public and private streets within the Specific Plan area. The revisions include the following: first, there is only one major access point on Rancho Road compared to the existing circulation plan, which

had two major access points on Rancho Road. Also, there are four major access points on Bolsa Avenue compared to the existing circulation plan, which had five major access points. At ultimate project development it is anticipated that street improvements would also include new public internal roadways: Delta Lane, Skybolt Lane, the continuation of Skylab Road (Skylab West) and a connection to Rancho Road from Astronautics Lane. Delta Lane would extend from the intersection of Bolsa Avenue and Graham Street then continue doglegging across Skylab Road until its intersection with Astronautics Lane. Astronautics Lane has also been realigned from its original Specific Plan configuration to provide better access to the proposed parcels created by Tentative Parcel Map No. 2001-122. The Delta Lane right-of-way at its intersection with Bolsa Avenue has been increased from its original 60' right-of-way to 75'. It then tapers to a 60' right-of-way after an approximate distance of 200' from the intersection. Skybolt Lane is planned to run north-south from Bolsa Avenue, parallel to Bolsa Chica Street, until its merge with Astronautics Lane to the north. Skylab West will be the continuation of Skylab Road until its intersection with Bolsa Chica Street.

Under the Specific Plan amendment, no changes are proposed to the water quality and utilities (electricity, natural gas, telephone, solid waste disposal, and cable television). However, the proposed water, sewer, and storm drain alignments have been revised to conform to the interior street realignments. Further more, portions of sewer and water lines that were originally identified as "future" have been constructed to serve completed developments within Planning Area 2. These lines are now shown as existing. Additionally, the sewer line located in Skylab Road east of Able Lane has been increased to a twelve (12) inch line from an originally proposed eight (8) inch line. The portion of the water line on Rancho Road between the railroad and proposed entry street at Rancho Road, has been revised to 16" (12" per original EIR, Technical Appendix). A new City water well site is also part of the revised Water System Plan. The City of Huntington Beach will construct this water well and pumping facility at the southeast corner of Rancho Road and Navy Railroad. This water well will be connected to the future water system in Rancho Road and will provide additional water supply to the City system. The new water well was not a part of the original Technical Appendix.

The overall landscape concept has not been revised. Minor modifications to the landscape guidelines have been proposed to 1) de-emphasize tree preservation due to the extreme declining health of the existing eucalyptus trees from lerp psyllid infestation and age stress and 2) the revision/clarification of landscape buffer zone areas between aerospace and non-aerospace land uses to be consistent with typical landscape buffer zones between all other project land uses.

The revised Phasing Plan is shown as Exhibit 9. The first phase of the infrastructure improvements upgraded the utilities for new projects in Planning Areas 2 and 3. Some of these infrastructure improvements still need to be completed to fully conform to City Water Division requirements and the requirements of the Specific Plan adopted in 1997. Please refer to Section 3.1.10 Water for a detailed discussion of these water improvements. The revised phasing also shows Planning Area 4 to be the next area (following Planning Areas 2 and 3) for sale and redevelopment by the property owner. Development within Planning Area 4 will trigger the need for the extension of utility lines from the first phase improvements in Areas 2, and 3, as well as Area 5.

In later phases infrastructure improvements will be extended west along the southern boundary of the project area. This extension of services will facilitate a variety of new development options in Planning Areas 1A and 5. Later phases of development will follow the market trends and build out accordingly.

2.2.2 TENTATIVE PARCEL MAP NO. 2001-122

The proposed parcel map is shown in reduced form as Exhibit 10. A full size copy of this plan is provided as Appendix E. The proposed parcel map is comprised of 91.5 acres and includes the following three (3) components; 1) the parcelization of land; 2) the realignment of Astronautics Lane, and 3) the import of fill required to raise the proposed parcels approximately 2 feet to 4 feet from the existing grade. These components are discussed in more detail below.

Additionally, in preparing for grading of the Parcel Map Area (i.e., demolition of buildings within Planning Area 4), a small amount of diesel fuel was uncovered in the vicinity of an underground structure (North of Boeing Aerospace Building #46) referred to as the "STEVS" site. The site has been monitored consistent with the Orange County Health Care Agency regulations and will be given clearance by City and State Agencies prior to grading within the Parcel Map Area.

PARCELIZATION

Currently, a portion of the Parcel Map Area is occupied by a portion of the Boeing (formerly McDonnell Douglas) Aerospace Facility. The Parcel Map area is proposed to be divided as follows: 1) Parcels 1–13, 17–20 Industrial Building Sites; 2) Parcel 14 – Edison Substation (existing); 3) Parcel 16 – Central Plant (existing); and 4) Parcels A, B, and C – Private Street. Additionally, the parcel map includes 10.2 acres of public streets. It should be noted that no specific industrial developments are currently proposed by the Parcel Map. Therefore site plan review/approval will be required prior to construction.

Under the original Specific Plan Planning Area boundaries, the parcel map affects portions of Planning Areas 1, 3 and 4. Under the revised Specific Plan, 46 acres are proposed to be removed from Planning Area 1 and put into Planning Area 4. Under the Specific Plan Amendment, the parcel map affects a portion of Planning Areas 3 and 4 .

ROADWAY REALIGNMENT

In addition to the parcelization of land described above, the proposed parcel map also includes the realignment of Astronautics Lane (formerly called Astronautics Drive) by moving it south of the existing Central Plant and existing Edison Substation. The realigned roadway provides better access to the proposed parcels and is also more internal to the overall Specific Plan. Please refer to Exhibits 4 and 8, which graphically depict the realignment of this roadway.

Proposed Grading and Earthwork Quantities

Implementation of the Parcel Map necessitates grading and excavating of future building sites for the development of industrial, office and support retail facilities. Based on contours shown on Tentative Parcel Map No.2001-122, development Phases II, IIIa and IIIb, and IVa will require approximately 429,954 cubic yards of cut and 854,716 cubic yards of fill. There would be need to import a total of 424,762 cubic yards of fill over the three phases listed above. However, only Phase II is currently proposed for construction immediately following approval of the Parcel Map, which would require import of 196,583 cubic yards of earth. As stated above, the import will be used to raise the proposed parcels approximately 2 feet to 4 feet from the existing grade. The exact depths of fill required for future developments would be determined by hydrologic and flood plain studies as well as depth requirements for future utilities in the development areas. Please see Table D, Earthwork Quantities Estimation. It should be noted that grading quantities for the existing Boeing facilities (i.e., Boeing North and Boeing South) and a portion of Phase V are not included because specific development scenarios (i.e., parcel maps) have not been completed at this time. Although no specific grading numbers have been provided for these areas, it is anticipated that these future phases will be built to pad elevations similar to those on the proposed parcel map.

2.2.3 ADMINISTRATIVE APPROVALS

The following section describes the administrative actions, which are currently proposed for the subject property. Approval of these actions is granted by the Lead Agency (City of Huntington Beach).

1. Approval of the Addendum to Environmental Impact Report No. 96-1. The applicant is requesting adoption of an addendum environmental document for purposes of complying with the California Environmental Quality Act (CEQA), the State CEQA guidelines, and City policies. The addendum will be approved by the Zoning Administrator.

2. Amendment of the McDonnell Centre Business Park Specific Plan No.11. The applicant is requesting an approval of the Amendment of the McDonnell Centre Business Park Specific Plan No.11 by the Zoning Administrator.

3. Approval of Tentative Parcel Map No.2001-122. The applicant is requesting an approval of the Tentative Parcel Map No.2001-122 by the Zoning Administrator. The applicant is also requesting an approval of the Final Parcel Map by the City Engineer.

TABLE B
REVISED STATISTICAL ANALYSIS

		Industrial Uses				Office Uses		Commercial Uses			
	Plan Area	Aerospace	Manufacturing	Warehousing	Light Industrial	Research Development	Office Park	Retail	Restaurant	Hotel	Total [1]
Existing Development	1	1,734,180									1,734,180
	1A										0
	2		181,924	766,866			123,305				1,072,095
	3		89,628	415,553			133,591				638,772
	4	1,040,710 [2]									0
	5						235,831			43,396	279,227
Subtotal		1,734,180	271,552	1,182,419	0	0	492,727	0	0	43,396	3,724,274
Entitled Projects	1										0
	1A										0
	2										0
	3										0
	4										0
	5						345,551	9,600	14,000		369,151
Subtotal		0	0	0	0	0	345,551	9,600	14,000	0	369,151
Future Development	1	30,000									30,000
	1A					283,140	283,140				566,280
	2			142,529	285,059		142,529				570,117
	3			95,133	190,266		95,133				380,532
	4			562,740	1,125,483		562,740				2,250,963
	5				79,209	86,302	107,976	120,587		76,604	470,678
Subtotal		30,000	0	800,402	1,680,017	369,442	1,191,518	120,587	0	76,604	4,268,570
Total Anticipated Development	1	1,764,180									1,764,180
	1A					283,140	283,140				566,280
	2		181,924	909,395	285,059		265,834				1,642,212
	3		89,628	510,686	190,266		228,724				1,019,304
	4			562,740	1,125,483		562,740				2,250,963
	5				79,209	86,302	689,358	130,187	14,000	120,000	1,119,056
Subtotal		1,764,180	271,552	1,982,821	1,680,017	369,442	2,029,796	130,187	14,000	120,000	8,361,995

Notes:

1. Activity square footage may vary and may transfer between Planning Areas provided use intensity is consistent with the E.I.R. "Trip Generation Budget" and allowed within the Planning Areas.

2. A total of 1,040,710 square feet of Aerospace facility buildings is anticipated to be demolished and thus is not included in the Total Development figures. Should only a part of this square footage be demolished due to evolving facility operations then the total figure of Future Development would be reduced accordingly.

Source: MDRC

TABLE C
LAND USE SUMMARY COMPARISON

Planning Area	Industrial Use		Office Use		Commercial Use		Total	
	(sq. ft.)	(ac)	(sq. ft.)	(ac)	(sq. ft.)	(ac)	(sq. ft.)	(ac)
1	1,764,180	54	0	0	___	___	1,764,180	54
1A			566,280	20	___	___	566,280	20
2	1,525,894	50	116,318	8	0	0	1,642,212	58
3	926,446	28	92,858	8	___	___	1,019,304	36
4	1,688,223	62.2	562,740	17.3	____	___	2,250,963	79.5
5	79,209	3	775,660	19	264,187	14.7	1,119,056	36.7
Total	5,983,952	198.2	2,113,856	71.3	264,187	14.7	8,361,995	284.2 *

Note: * Indicates net acres. There are 307 gross acres. 22.8 acres in right-of-way.

Source: MDRC

TABLE D
EARTHWORK QUANTITIES ESTIMATION

	Phase II *		Phase IIIA *		Phase IIIB *		Phase IVA *	
	cut (c.y.)	fill (c.y.)	cut (c.y.)	fill (c.y.)	cut (c.y.)	fill (c.y.)	cut (c.y.)	fill (c.y.)
Raw, Mass Grading Quantities	25,536	163,895	6,033	30,297	4,177	78,594	9,926	83,075
Shrinkage (15%) Over Cut		3,830		905		627		1,489
(1) Over-excavation-Building Areas	101,750	101,750	21,441	21,441	31,871	31,871	46,447	46,447
Over-excavation-Building Areas Shrinkage (15%)		15,263		3,216		4,781		6,967
(2) Over-excavation (Pavement Areas)	47,241	47,241	9,955	9,955	14,797	14,797	21,565	21,565
Over-Excavation-Pavement Areas Shrinkage (15%)		7,086		1,493		2,220		3,235
(3) Remedial Grading (1000 CY/Acre)	45,049	45,049	9,493	9,493	14,110	14,110	20,564	20,564
Remedial Grading Shrinkage (15%)		6,757		1,424		2,117		3,085
(4) Building Footing and Basement and Other Losses		18,020		3,797		5,644		8,226
Subsidence (0.1' Over Graded Areas)		7,268		1,531		2,276		3,318
Subtotal	**219,577**	**416,160**	**46,921**	**83,552**	**64,955**	**157,036**	**98,502**	**197,969**
Import		**196,583**		**36,361**		**92,081**		**99,467**
			Total RAW CUT **			45,672		
			Total RAW FILL **			355,861		
		Total Phase II through Phase IV Cut				**429,954 (c.y.)**		
		Total Phase II through Phase IV Fill				**854,716 (c.y.)**		
		Total Phase II through Phase IV Import				**424,762 (c.y.)**		

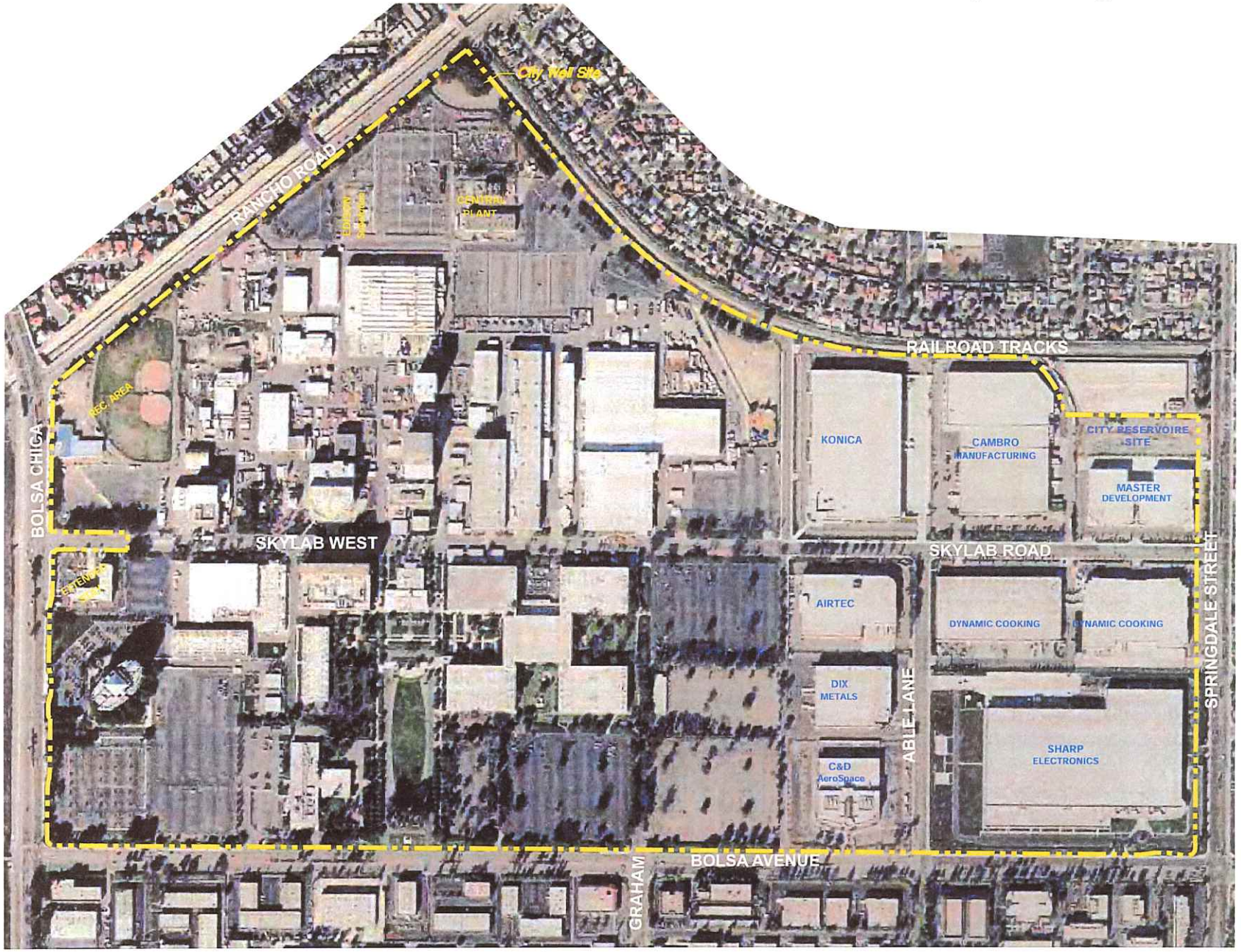
Note: * Refer to Exhibit 9 for Phasing Boundaries. Phase I is complete and therefore not shown. The existing Boeing facilities (i.e., Boeing North and Boeing South) and a portion of Phase V are not included because specific development scenarios (i.e., parcel maps) have not been completed at this time.

** Does not include the loss from the shrinkage, subsidence, etc.

Assumptions

(1) It is assumed that 35% of the area will be used for building with 4' of overex (extra grading) as required by soils report.
(2) It is assumed that 65% of the area will be covered by paving with 1' of overex (extra grading) as required by soils report.
(3) 1000 C.Y. per acre is assumed for estimation of the remedial grading for unsuitable material.
(4) 400 C.Y. per acre is assumed for estimation for losses due to building footings, basements, tree removals, and other miscellaneous losses.
(5) 2' undercut is assumed for all proposed streets.

Source: Adams Streeter



No Scale

EDAW, Inc.

Exhibit 6

Source: EDAW, Inc.

12/2000 Aerial Photo

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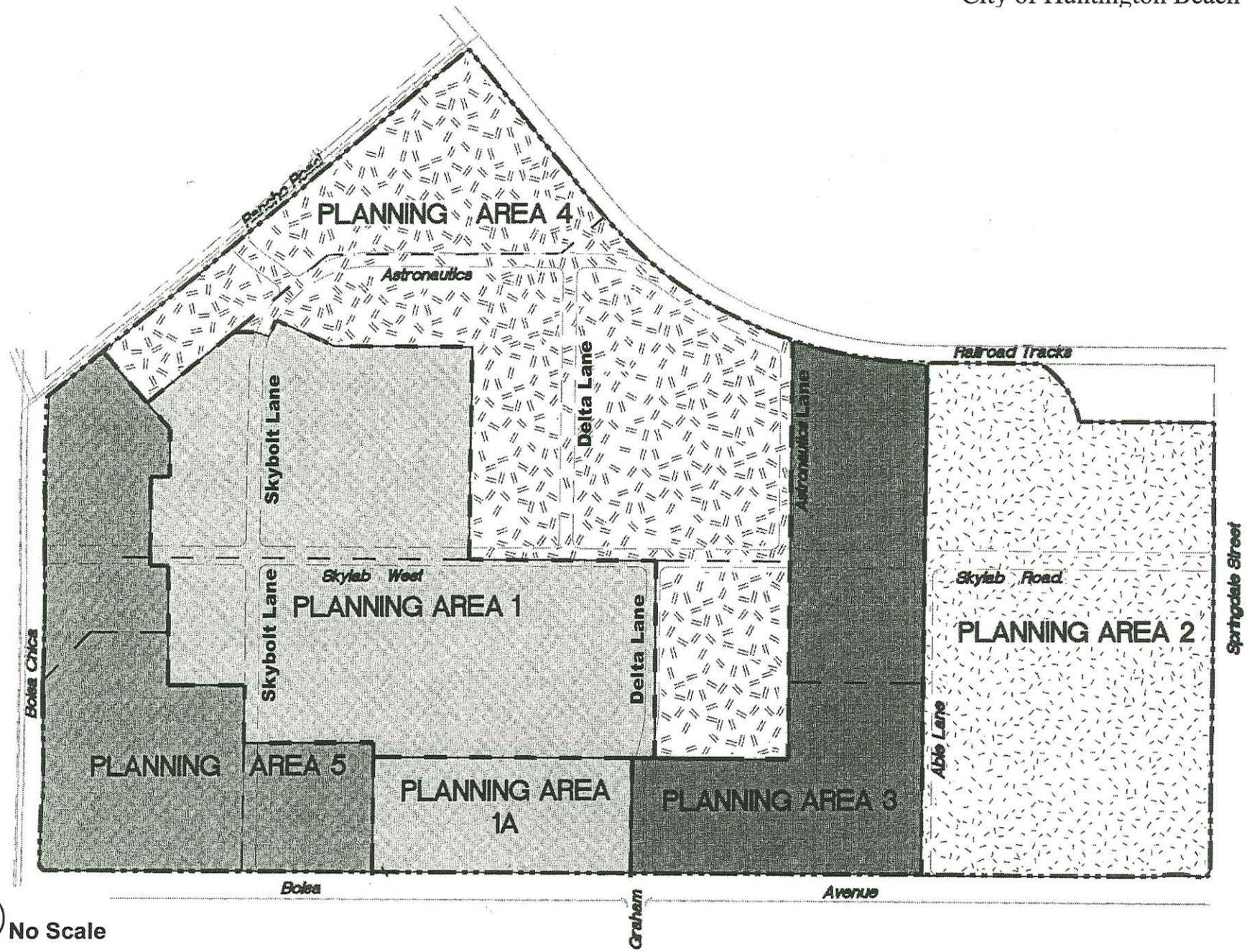

EDAW, Inc.

Source: MDRC

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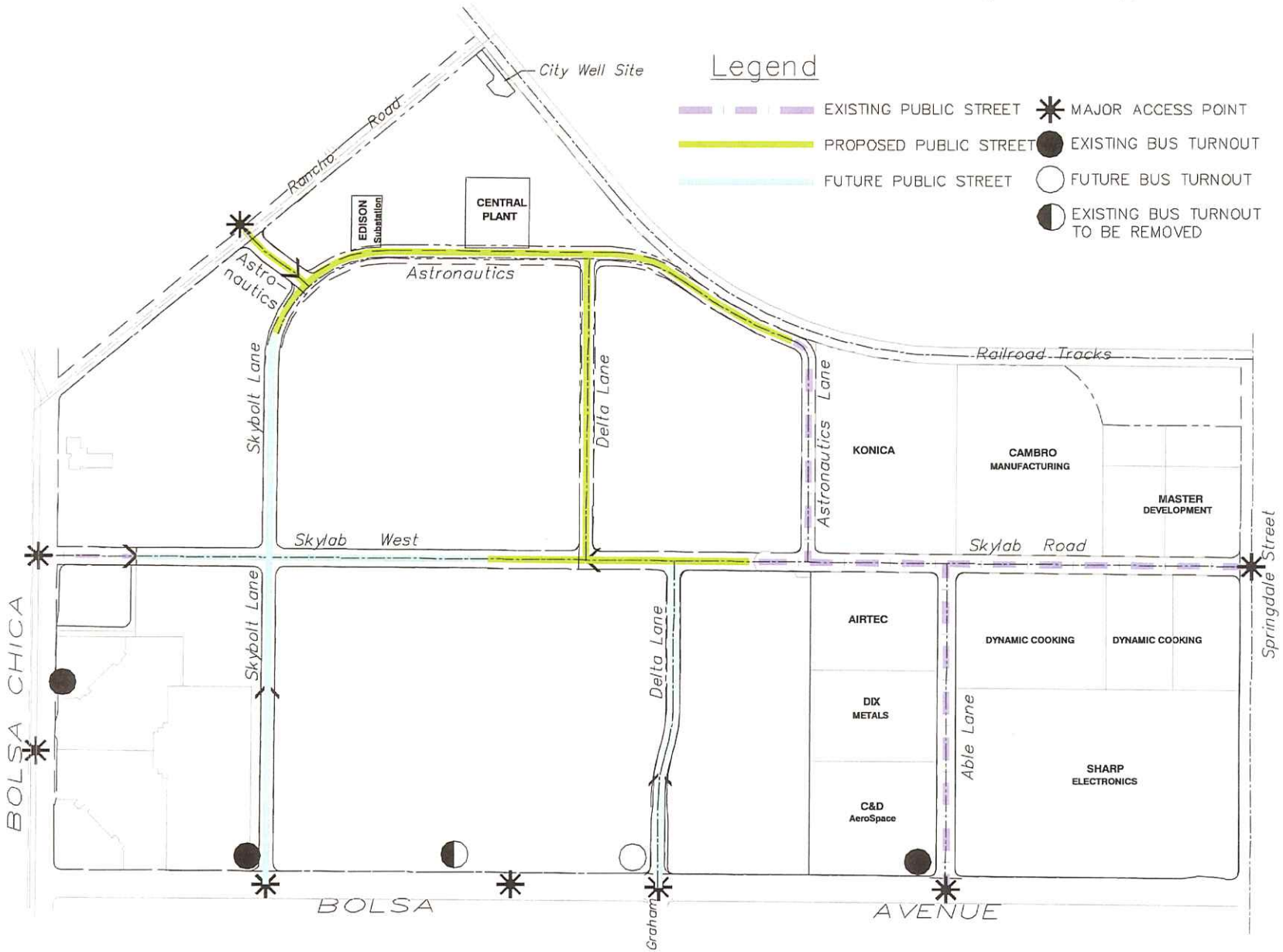
Exhibit 7

Revised Planning Areas

ADDENDUM TO MCDONNELL DOUGLAS EIR 96-1

City of Huntington Beach



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Note: The portion of Astronautics Lane shown as an existing public street has not yet been accepted by the City at the time of the 12/2001 Amendment.

EDAW, Inc.

Exhibit 8

Source: Sasaki Transportation Services

Revised Circulation Plan

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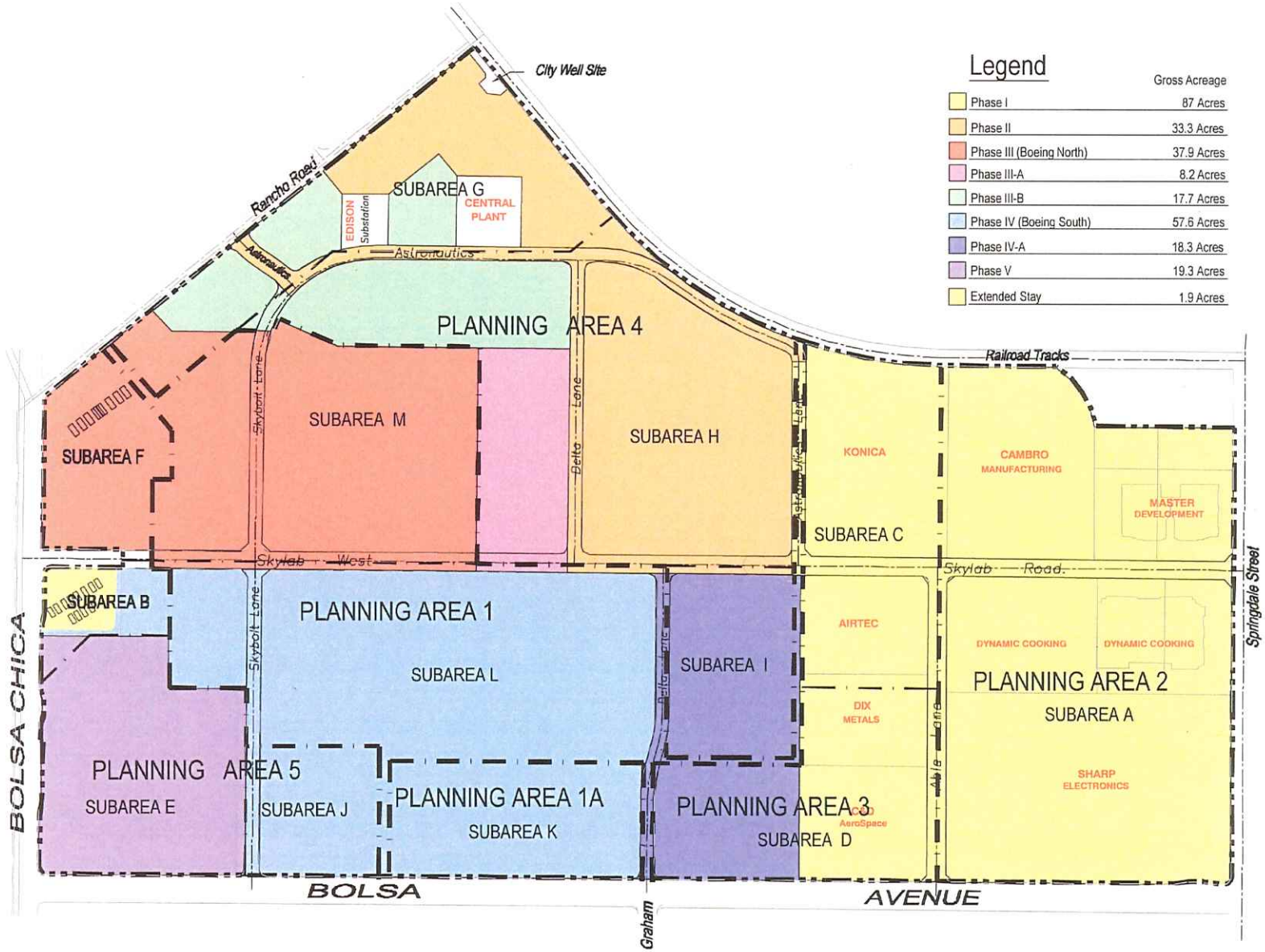

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EDAW, Inc.

Exhibit 9

Source: Adams Streeter

Revised Phasing Plan

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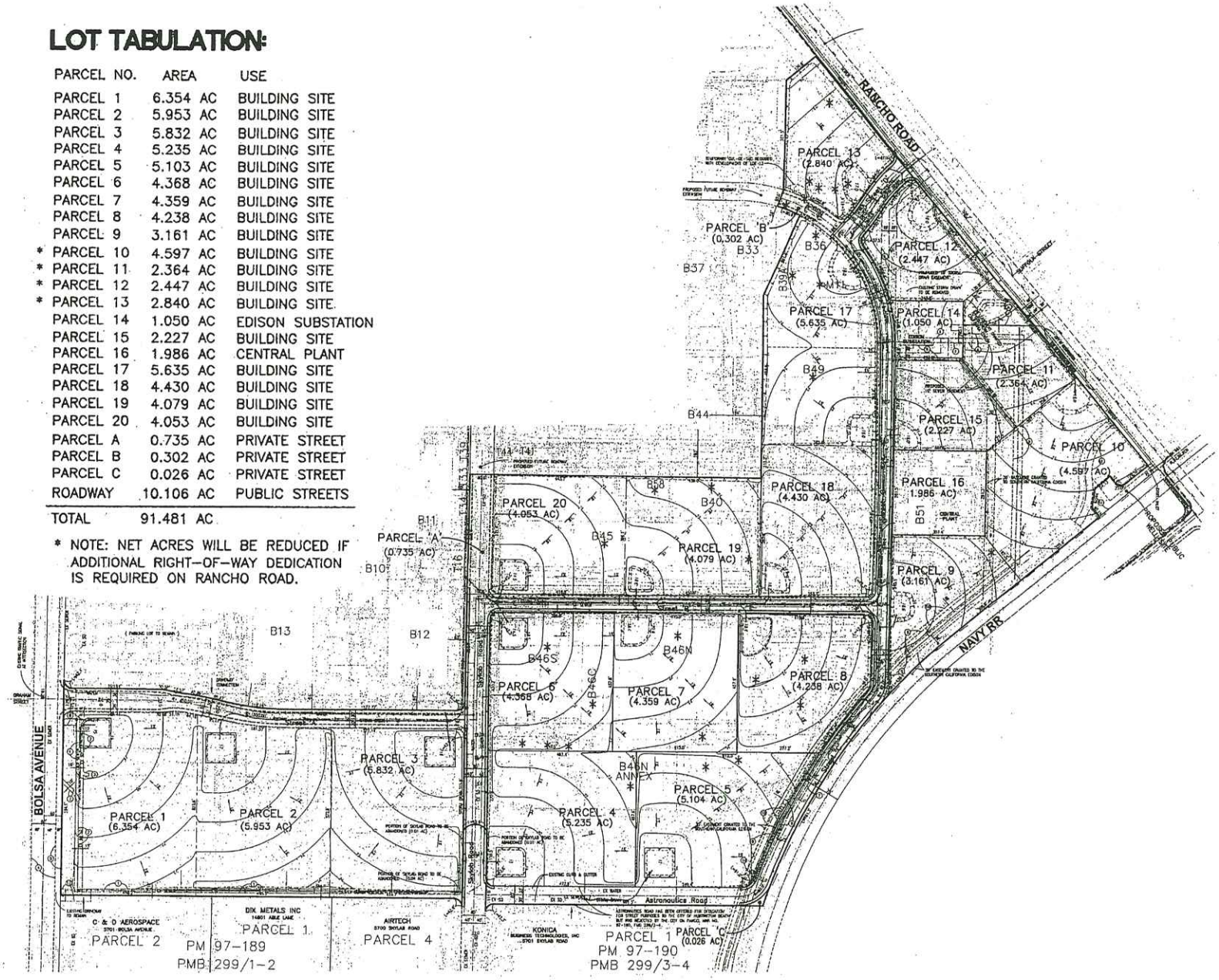
LOT TABULATION:

	PARCEL NO.	AREA	USE
	PARCEL 1	6.354 AC	BUILDING SITE
	PARCEL 2	5.953 AC	BUILDING SITE
	PARCEL 3	5.832 AC	BUILDING SITE
	PARCEL 4	5.235 AC	BUILDING SITE
	PARCEL 5	5.103 AC	BUILDING SITE
	PARCEL 6	4.368 AC	BUILDING SITE
	PARCEL 7	4.359 AC	BUILDING SITE
	PARCEL 8	4.238 AC	BUILDING SITE
	PARCEL 9	3.161 AC	BUILDING SITE
*	PARCEL 10	4.597 AC	BUILDING SITE
*	PARCEL 11	2.364 AC	BUILDING SITE
*	PARCEL 12	2.447 AC	BUILDING SITE
*	PARCEL 13	2.840 AC	BUILDING SITE
	PARCEL 14	1.050 AC	EDISON SUBSTATION
	PARCEL 15	2.227 AC	BUILDING SITE
	PARCEL 16	1.986 AC	CENTRAL PLANT
	PARCEL 17	5.635 AC	BUILDING SITE
	PARCEL 18	4.430 AC	BUILDING SITE
	PARCEL 19	4.079 AC	BUILDING SITE
	PARCEL 20	4.053 AC	BUILDING SITE
	PARCEL A	0.735 AC	PRIVATE STREET
	PARCEL B	0.302 AC	PRIVATE STREET
	PARCEL C	0.026 AC	PRIVATE STREET
	ROADWAY	10.106 AC	PUBLIC STREETS
	TOTAL	91.481 AC	

* NOTE: NET ACRES WILL BE REDUCED IF ADDITIONAL RIGHT-OF-WAY DEDICATION IS REQUIRED ON RANCHO ROAD.



No Scale

EDAW, Inc.

Exhibit 10

Source: Adams Streeter

Reduced Parcel Map

\\IR01\VOL1\PROJFILE\2001\1N15001\ADDENDUMEIR\DOCUMENT\ADDEN EIR EXHIBITS.DOC

2.3 MITIGATION MEASURES / CONDITIONS OF APPROVAL

Mitigation Measures and Standard City Policies and Requirements were included in the original Certified EIR. Based on revisions to the Specific Plan and the implementation of local infrastructure improvements within the project vicinity, certain mitigation measures are no longer applicable. Additionally, conditions of approval have been proposed as a result of the Tentative Parcel Map No.2001-122. These conditions of approval have been included in Appendix F for reference.

The following section of this document (3.0 Environmental Analysis) provides the original mitigation and Standard City Policies and Requirements, if they are still applicable to the proposed Specific Plan revision and proposed Parcel Map. Revised and/or new mitigation measures have also been added to satisfy new requirements, which were not in effect at the time of the Certified EIR, or as deemed necessary to reduce potential impacts. In order to differentiate the mitigation measures and the Standard City Policies and Requirements, the mitigation measures are listed by numbers (i.e., 1, 2, 3,...) and the Standard City Policies and Requirements are listed by letters (i.e., A, B, C,...).

3.0 ENVIRONMENTAL ANALYSIS

The following analysis compares the environmental effects of the McDonnell Centre Business Park Project originally analyzed in the Certified EIR and with the environmental impacts anticipated with the current Specific Plan revision and the proposed Parcel Map. The analysis also includes the original Mitigation Measures and Standard City Policies and Requirements, from the Certified EIR, which are still applicable to the current Specific Plan revision. Changes in the project's surrounding environment and the new information based on new requirements not in effect at the time of the Certified EIR have also been incorporated into the analysis.

Updated cumulative analyses, as appropriate, have been performed as part of this Addendum Document. The updated cumulative analysis is incorporated within the transportation and circulation, air quality, noise, and socioeconomics sections.

3.1 ENVIRONMENTAL IMPACT ANALYSIS AND PROPOSED MITIGATION

3.1.1 LAND USE

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

On-Site Land Use

The 307 acre site consists of undeveloped land, developed, urban land uses and existing roadways. The total land developed with the existing McDonnell Douglas Aerospace Facility and associated light industrial facilities consists of 173 acres. The remaining 134 acres consists of vacant, undeveloped land, of which 50 acres were previously used for strawberry fields. The topography of the site is flat.

The northern border of the site is formed by an at grade spurtrack of the U.S. Navy (Railroad Right-of-Way) and Rancho Road. The site is bounded by Springdale Street to the east. To the west, the site is bounded by Bolsa Chica Street and the Orange County Flood Control District Channel. Bolsa Avenue forms the southern boundary of the site with office and manufacturing uses along Bolsa Avenue opposite the site. Skylab Road bisects the site in an east-west direction, while Able Lane bisects the eastern portion of the site in a north-south direction.

Surrounding Land Use

Commercial uses, single family residential, U.S. Navy railroad tracks, the flood control channel, the United States Weapons Station, existing light industrial and office uses, and business park/office uses are located around the project site.

Land Use Plans

The City of Huntington Beach's General Plan Update, adopted in 1996 is comprised of 16 separate elements: land use, urban design, housing, historic and cultural resources, economic development, growth management, circulation, public facilities and public services, recreation and community services, utilities, environmental resources/ conservation, air quality, coastal, environmental hazards, noise and hazardous materials. These elements include goals designed to serve as a general guide for the future development of Huntington Beach in terms of location of uses, allowable residential densities and commercial/industrial intensities, and other criteria.

Under the present Huntington Beach Zoning and Subdivision Ordinance, the existing zoning on the property within the project site is Limited Industrial, with a multi-story suffix on a portion of the site. Property west of the western portion of the site across Bolsa Chica Street is currently located in the City of Seal Beach. Property north of the northern boundary of the project site is currently zoned Low Density Residential. Property east of the eastern boundary of the project site is currently zoned Low Density Residential and General Commercial. Property south of the southern boundary of the project site is currently zoned Limited Industrial and General Commercial.

CURRENT CONDITIONS

Since the certification of the EIR and adoption of the Specific Plan in 1997, new private developments have been built on the eastern portion of the project area, replacing the farming operations of the past. In 2001, at the time of Amendment No.1, some portions of the site have been developed with other industrial and commercial uses, including Cambro Manufacturing, Sharp Electronics, Dynamic Cooking, DIX Metals Airtec, Konica, and C&D Aerospace. Additionally, the Extended Stay facility, and Boeing Recreation facility and fitness center have been built along Bolsa Chica Street. The adopted McDonnell Centre Business Park Specific Plan No. 11 represents the existing zoning for the property.

IMPACTS

1997 Certified EIR (Original Specific Plan)

On-Site Land Use

The original Specific Plan would allow for the development of the site with a variety of aerospace, manufacturing, warehouse, office, R&D and commercial uses. The original Specific Plan divides the project site into a number of Planning Areas (see Section 2.1 of this document). The purpose of identifying Planning Areas is to create distinct sub-areas of potential future uses and to allow for private development to occur in a manner consistent with an overall Master Plan Concept. Implementation of the original Specific Plan would result in the ultimate development of an industrial, research and development business park complex with supporting office and retail facilities. These uses are consistent with the City of Huntington Beach General Plan. Additionally, implementation of the original Specific Plan would establish new on-site land use relationships. No impacts related to on-site land use compatibility were identified for the original Specific Plan.

Off-Site Land Use

Implementation of the original Specific Plan would establish new land use relationships with adjacent land uses. Land uses immediately adjacent to the project site include commercial and single family residential to the east, the existing railroad track and single family residential to the north, United States Weapons Station to the west, and light industrial/business park and commercial uses to the south. The new adjacent land use relationships that would occur as a result of the original Specific Plan include: 1) industrial, office and commercial uses (Planning Area 2) adjacent to commercial and single family residential uses across Springdale Street; 2) industrial, office, commercial, and aerospace uses (industrial, office, and commercial uses in Planning Area 2 and aerospace/industrial, office, manufacturing and R&D uses in Planning Area 4) adjacent to single family residential (i.e., homes across the railroad tracks); 3) aerospace, industrial, R&D, warehouse, manufacturing and office uses (Planning Area 4) adjacent to single family residential (i.e., homes located across Astronautics Lane and Rancho Road); 4) aerospace, industrial, office, commercial and R&D uses (Planning Area 5) adjacent to the United States Weapons Station (across Bolsa Chica Street); and 5) aerospace, industrial, R& D,

distribution, office, and commercial uses (Planning Areas 5, 1A, 3 and 2) adjacent to light industrial, business park uses (across Bolsa Avenue). Based on the type of use, proposed layout, intervening walls and distance between future uses identified in the Design Guidelines and Development Regulation sections of the original Specific Plan, compatibility impacts between off-site adjacent land uses were not anticipated to occur.

Land Use Plans

Appendix C of the existing McDonnell Centre Business Park Specific Plan, General Plan Consistency Analysis, explains how the Specific Plan achieves consistency with the City of Huntington Beach General Plan. The original McDonnell Centre Business Park Specific Plan was found not to result in impacts to the elements of the General Plan except air quality, because the original Specific Plan buildout would exceed SCAQMD emission levels. The existing Specific Plan would result in incompatibilities with the Air Quality Element, which is a significant impact. The adoption of the original Specific Plan would supersede the existing zoning and establish a new set of development regulations. This would not significantly change the existing industrial zoning and uses of the site. The zone change would be compatible with surrounding zoning and the existing uses would be compatible with surrounding uses. Approval of the original Specific Plan would not result in significant impacts to City zoning compatibility. No project specific impacts to the Huntington Beach Zoning and Subdivision Ordinance were identified for the original Specific Plan.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

On-Site and Off-Site Land Use

The proposed project would result in a slight reduction in development density to 8,361,995 square feet of industrial, office and commercial uses on 284.2 net acres. That is, the proposed Specific Plan reduces ultimate buildout of the development by 14,270 square feet and reduces net developable acreage by 4.8 acres. The decrease in net developable acres is due primarily to the increase in area required by changes in the onsite circulation plan that increase the acreage of streets and provide better access. In addition, the boundaries of the planning areas and project phasing have been adjusted to accommodate greater flexibility for incremental development and to be consistent with the proposed parcel map. However, the types of uses and development standards that would be used to build the project did not change, and therefore, no on-site or off-site land use compatibility impacts are anticipated to occur.

Land Use Plans

The revised Specific Plan Land Use Plan remains consistent with the General Plan except for the air quality element, which contains the same condition as the existing project. Because the proposed project would exceed SCAQMD's emission levels, impacts will remain significant and unavoidable. The revised Specific Plan does not include modifications to the existing Specific Plan Zoning (i.e., permitted uses and development standards), and therefore, no zoning compatibility impacts would result.

TENTATIVE PARCEL MAP NO. 2001-122

Although the finished parcels will range between 2 to 4 feet above existing grade, Tentative Parcel Map No. 2001-122 will not result in new or increased land use impacts since no change to permitted uses or allowed densities will occur. Future industrial uses within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. No new or increased compatibility impacts will occur from the realignment of Astronautics Lane because the existing railroad tracts would still act as a buffer between the existing single family and anticipated industrial uses.

MITIGATION MEASURE

No land use mitigation measures were provided in 1997 for the existing Specific Plan, since no land use compatibility impacts nor impacts associated with City Plans except air quality (please see Air Quality section for the mitigation measures) were identified with implementation of the Specific Plan and Standard City Policies and Requirements. With the implementation of the revised project and Standard City Policies and Requirements, new mitigation measures are not necessary.

STANDARD CITY POLICIES & REQUIREMENTS

A. Prior to submittal for building permits, the applicant/owner shall submit three copies of the site plan to the Planning Department for addressing purposes. If street names are necessary, submit proposal to Fire Department for review and approval.

B. Prior to submittal for building permits, the applicant/owner shall depict all utility apparatus, such as but not limited to backflow devices and Edison transformers, on the site plan. They shall be prohibited in the front and exterior yard setbacks unless properly screened by landscaping or other method as approved by the Director of Planning.

C. Prior to submittal for building permits, the applicant/owner shall depict colors and building materials as proposed.

D. The applicant/owner shall comply with all applicable provisions of the Huntington Beach Zoning and Subdivision Ordinance, Building Division, and Fire Department.

E. All improvements (including landscaping) to the property shall be completed in accordance with the approved plans and conditions of approval specified herein.

F. All building spoils, such as unusable lumber, wire, pipe, and other surplus or unusable material, shall be disposed of at an off-site facility equipped to handle them.

3.1.2 AESTHETICS AND URBAN DESIGN

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

On-Site

The visual character of the site in 1997 was partially developed land, occupied by various light industrial and office facilities and outdoor storage areas. Windrows of mature trees also exist primarily along the project's northwestern perimeter boundary and around existing surface parking areas. Typically, 1997 uses located north of Skylab Road are associated with manufacturing, processing, and assembly operations. Existing uses in 1997 located south of Skylab Road consist of office and administrative uses.

The primary use on the site in 1997 was the approximately 2,700,000 square foot McDonnell Douglas Aerospace Facility. Several other industrial-related research and development structures are located adjacent to the 235,000 square foot high-rise office building, located on the western portion of the project site (Planning Area 5). New business park developments in 1997 were occurring on the eastern portion of the project site along Springdale Street, on land that was utilized in the past for farming operations. Cambro Manufacturing has constructed and occupies a 120,000 square foot facility, located northwest of Skylab Road and Springdale Street. Sharp Electronics in 1997 was constructing a 538,859 square foot facility on the northwest corner of Springdale Street and Bolsa Avenue. Remote parking facilities are also located throughout the project site.

Project Vicinity

In 1997, the proposed site was bounded by Springdale Street on the east, Bolsa Avenue on the south, Bolsa Chica Street on the west, and the U.S. Navy railroad and Rancho Road on the north. The property is traversed by Skylab Road from east to west.

Surrounding properties which have views of the site are residential uses to the north and east of the site, commercial uses to the southeast of the site, office and manufacturing uses located to the south of the project site, and the Seal Beach Naval Weapons Station area to the west of the project site. Located along Springdale Street, east of the project site and on the opposite side of the road, is a 5 ½ - foot concrete wall, which separates the existing single-family residential area from the roadway and the project site. Adjacent to the site on the southeast corner at the intersection of Bolsa Avenue and Springdale Street is a neighborhood commercial strip center. The southwest corner of the intersection is occupied by the Springdale Plaza office/retail.

Mature trees, mainly pines and eucalyptus, also line the entrances to the McDonnell Douglas facility and the various parking areas. These mature plantings largely screen the aerospace facility, rendering it only partially visible from the site.

CURRENT CONDITIONS

The current conditions are described under Section 3.1.1, Land Use.

IMPACTS

1997 Certified EIR (Original Specific Plan)

On-Site

Buildout of the proposed Land Use Plan would permanently alter the existing visual environment of the site by developing vacant areas with additional industrial, office, and commercial uses. Implementation of the project may result in the elimination/replacement of existing mature trees. This is considered a significant impact. Implementation of Standard City Policies and Mitigation Measure 1 will reduce this to a level less than significant. The following discusses design guidelines and the landscape concept for the McDonnell Centre Business Park Specific Plan area and their potential for impacts related to aesthetics:

The Specific Plan includes design guidelines to establish the character and style for the development of a business park complex. The major elements of the Design Guidelines include: site planning, architecture, streetscape, landscaping, and signage. The Specific Plan includes several policies related to these elements with which all future development proposals within the Specific Plan area shall comply.

The Specific Plan includes a Landscape Concept to establish the design character and visual qualities of the interior and perimeter of the project area. The landscape concept is comprised of several design elements, including: the public arterials, local and private streets, entryways, access drives, parkway areas, transitional edges and security fencing and walls to create a cohesive community landscape image.

The Landscape Concept establishes the primary unifying design element for the project area. The streetscape design is intended to preserve and enhance the existing layout and variety of landscape patterns. The Landscape Concept incorporates landscaped areas adjacent to the perimeter arterials, landscaped pedestrian walkways within the right-of-way of interior streets, where feasible, the preservation of existing tree lines, and the creation of design consistency for private drives, access points and parking lot layouts. The Specific Plan includes several policies with which all individual landscape plans for future projects located within the Specific Plan area shall comply.

The original Specific Plan may result in aesthetic impacts between the existing aerospace facility and any non-aerospace new development. The Specific Plan requires that buffer areas be provided along the abutting edges between the planning area in order to provide for an aesthetic transition between different types of developments. The buffer areas shall be a minimum of 50 feet in width and shall include landscaping and berming to adequately screen adjacent on-site uses. The buffer areas may include walls, fencing, utility easements and pedestrian walkways compatible with adjacent on-site developments. The buffer may also be used for a private access drive and/or parking lot, provided an intensified landscape design is proposed. Implementation of the Specific Plan with the incorporation of its design guidelines (particularly the landscape concept) will not result in aesthetic impacts between on-site uses. Mitigation Measure 2 will ensure that the Specific Plan landscape concept is implemented on future developments within the McDonnell Centre Business Park. With the incorporation of Mitigation Measure 2, no significant impacts were identified.

Project Vicinity

Adjacent land uses in the vicinity would experience a significant aesthetic change associated with buildout of the proposed Specific Plan. Buildout of the proposed Specific Plan would permanently alter the existing visual environment of the site by developing additional industrial, office, and commercial uses.

As indicated above, the Specific Plan includes design guidelines to establish the character and style for the development of a business park complex. The major elements of the Design Guidelines include: site planning, architecture, streetscape, landscaping, and signage. The Specific Plan includes several policies related to these elements with which all future development proposals within the Specific Plan area shall comply.

Off-site improvements shall include a landscape area with a six-foot sidewalk and pedestrian walkways shall be required on both sides of all public and private streets as a necessary unifying component to the landscape theme. The Specific Plan includes several policies with which all individual landscape plans for future projects located within the Specific Plan area shall comply. With implementation of the Specific Plan design guidelines and landscape concept, the project will not result in aesthetic impacts on surrounding uses. Mitigation Measure 2 will ensure that the Specific Plan landscape concept is implemented on future developments within the McDonnell Centre Business Park. With the incorporation of Mitigation Measure 2, no significant impacts were identified.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

Buildout of the revised Specific Plan Land Use Plan will alter the existing on-site and surrounding visual environment in a similar manner as the originally adopted Specific Plan. Although the Planning Area boundaries and internal street alignments have been modified, the types of future land uses (i.e., industrial, office and commercial) remain the same. Additionally, the revised Specific Plan will result in 14,270 less square feet of development at buildout. The revised Specific Plan will result in the elimination/replacement of existing mature trees as would have the original Specific Plan. Standard City Policies and Mitigation Measure 1 would still apply to reduce this aesthetic impact to a level less than significant.

Furthermore, no changes are proposed to the original Specific Plan off-site improvements which include: a landscape area with a six-foot sidewalk on both sides of all public and private streets as a necessary unifying component to the landscape theme.

Implementation of the revised Specific Plan with the incorporation of its design guidelines (particularly the landscape concept) will not result in aesthetic impacts between on-site (existing aerospace and non-aerospace new development) and off-site uses. Mitigation Measure 2 would still apply to ensure no significant impacts would occur.

TENTATIVE PARCEL MAP NO. 2001-122

Tentative Parcel Map No. 2001-122 will not result in new or increased aesthetic / urban design impacts since future industrial development within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. Although proposed grading will result in finished pads 2-4 feet above existing grade, anticipated impacts are less than significant since the potential increase in building height is negligible, no retaining walls will be required along street frontages, no scenic vistas will be obstructed, and all uses surrounding the project area will be adequately buffered by planned or existing roadways. The realignment of Astronautics Lane will not result in new aesthetic impacts as it will be constructed in accordance with the Specific Plan Standards and the new alignment is more internal to the Specific Plan.

MITIGATION MEASURES

1. Prior to issuance of grading permits within the Specific Plan, the project proponent for subsequent projects located within the Specific Plan area shall submit for review and approval, an Arborist report by a City approved International Society of Arborist (ISA) certified and consulting Arborist via the Director of Public Works to the City Landscape Architect. This report shall detail the location, health, and quantity of mature trees, which currently exist within the project area. The final landscape plan shall illustrate which trees will be removed along with the quantity and location of replacement trees.

2. Prior to issuance of building permits within the Specific Plan, the applicant shall submit (first submittal) three landscape construction sets for review and approval to the Public Works and Planning Departments. The landscape plans shall be prepared by a Licensed Landscape Architect and shall incorporate the McDonnell Centre Business Park Specific Plan requirements. Plants that are attractive to rodents shall be avoided.

STANDARD CITY POLICIES & REQUIREMENTS

A. All rooftop mechanical equipment shall be screened from any view. Said screening shall be architecturally compatible with the building in terms of materials and colors. If screening is not designed specifically into the building, a rooftop mechanical equipment plan must be submitted showing screening and must be approved.

B. Prior to the issuance of building permits, the applicant/owner shall (second submittal) submit three Landscape Construction Sets to the Departments of Planning and Public Works which must be approved. The Landscape Construction Sets shall include a landscape plan prepared and wet signed by a State Licensed Landscape Architect and include all proposed/existing plant materials (location, type, size, quantity), an irrigation plan, a grading plan, an approved site plan, and a copy of the entitlement conditions of approval. The landscape plans shall be in conformance with Chapter 232 Landscape Improvements of the Huntington Beach Zoning and Subdivision Ordinance. The sets must be approved by both departments prior to issuance of building permits. Any existing mature trees that must be removed shall be replaced at a 2 to 1 ratio with minimum 36-inch box trees, which shall be incorporated into the project's landscape plan.

3.1.3 LIGHT AND GLARE

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

On-Site

Within the project area, nighttime illumination in 1997 was generated by the street and vehicular lights associated with the surrounding and internal roadway systems, including Springdale Street, Bolsa Avenue, Bolsa Chica Road, Able Lane, Rancho Road and Skylab Road. The southeastern portion of the site, which is currently undeveloped, is characterized by an absence of nighttime illumination.

Project Vicinity

Nighttime illumination in the immediate vicinity in 1997 was provided by street lighting, the unobtrusive lighting of the industrial park to the south, the well lighted commercial area at the Bolsa Avenue-Springdale Street intersection, and residential lighting to the north across Rancho Road and east across Springdale Street. Also noticeable from the site as well as from the residential area to the north and east is the illumination from the McDonnell Douglas facility to the west and the illumination from the Westminster Mall east of Edwards Avenue.

Glare in the immediate vicinity of the project is produced primarily by the business/light industrial buildings to the south, and the vehicles traveling the surrounding roadways. The amount of glare experienced in the surrounding vicinity is typical for a suburban setting.

CURRENT CONDITIONS

On-Site

Since the certification of the EIR and adoption of the Specific Plan in 1997, the eastern portion of the site has been developed with industrial and commercial uses, which adds to the existing light sources of the project site. Within the proposed project area, nighttime illumination is still generated by the street and vehicular lights associated with the surrounding and internal roadway systems.

Project Vicinity

Nighttime illumination and glare in the immediate vicinity is still provided by the same facilities as in 1997. The amount of glare experienced in the surrounding vicinity is typical for a suburban setting.

IMPACTS

1997 Certified EIR (Original Specific Plan)

On-Site

Buildout of the subject property would result in the development of industrial/business park uses on the project site. Required street lighting along with building security lighting will increase the sources of night lighting on the project site. This increase in lighting may be initially perceived by existing uses on the site as a significant impact. Carefully designed lighting can minimize these impacts. Normally, as development occurs, each new source of light is perceived as less of an impacting source. Furthermore, Sections 5.0 Design Guidelines and 6.0 Development Regulations of the Specific Plan identify policies to ensure that on-site exterior lighting is designed to minimize spillage and potential impacts. Additionally, implementation of Standard City Policies and Mitigation Measure 1 will reduce impacts related to on-site lighting to a level less than significant.

Planning Area 5, located at the southwest corner of the project site, allows for the potential development of commercial recreation and entertainment-type uses. The development of such uses, which could include movie theaters, shops, etc., may result in an increase in night-time activity, unlike that of the typical industrial and/or office uses. Implementation of Mitigation Measure 2 would reduce light impacts resulting from commercial recreation and entertainment uses within Planning Area 5 to a level less than significant.

Glare impacts are primarily related to reflective surfaces of buildings and vehicles, which may be visible from one or more locations. The project proposes a majority of the site to be developed with business park/industrial uses. Frequently, reflective glass is utilized in non-residential building construction. Restrictions on reflective building materials within the project area will substantially limit the increase in glare usually associated with non-residential development, minimizing glare impacts. Implementation of Mitigation Measure 3 would reduce impacts related to reflective surface buildings to a level less than significant.

The vehicular related glare would increase proportionately with increased levels of project-generated vehicles in the immediate area. These vehicle related increases in glare are not considered significant in a suburban setting, particularly in this location where walls are currently constructed around the perimeter of existing residential areas located to the east and north of the project area.

Project Vicinity

Buildout of the original Specific Plan would incrementally increase the amount of light and glare in this area. The project contributes to general night sky illumination. This illumination would be visible from several areas within the City of Huntington Beach.

Furthermore, Sections 5.0 Design Guidelines and 6.0 Development Regulations of the Specific Plan identify policies to ensure that on-site exterior lighting is designed to minimize spillage and potential impacts. Additionally, implementation of Mitigation Measures 1 through 3 would reduce impacts related to on-site lighting and glare to a level less than significant.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

On-Site and Surrounding Vicinity

Buildout of the subject property would still result in the development of industrial/business park uses on the project site, and the lighting associated with this type of use. The revised Specific Plan proposes a slight reduction in development density to increase the area required by changes in the onsite circulation plan which increase the acreage of streets and provide better access. However, the future proposed internal usage of the facility and buildings has not been changed. Sections 5.0 Design Guidelines and 6.0 Development Regulations of the Specific Plan, which identify policies to ensure that on-site exterior lighting is designed to minimize spillage and potential impacts have not changed and are applicable to the revised Specific Plan.

Additionally, Standard City Policies and Mitigation Measure 1 would still apply to reduce impacts related to on-site lighting to a level less than significant. Mitigation Measure 2 would still apply to ensure the reduction of the potential light impacts resulting from potential commercial recreation and entertainment uses still allowed within Planning Area 5 to a level less than significant. Also, implementation of Mitigation Measure 3 would still apply to reduce impacts related to reflective surface buildings to a level less than significant.

TENTATIVE PARCEL MAP NO. 2001-122

Although the finished parcels will range between 2 to 4 feet above existing grade, the anticipated uses to be developed in the future within the boundaries of the proposed Tentative Parcel Map are consistent with the permitted uses allowed for under the Specific Plan and no new or increased impacts will occur. Mitigation Measures for light and glare contained in the 1997 Certified EIR and as replicated in this document should be applied as the parcel map is implemented. Night lighting impacts associated with the realignment of Astronautics Lane are anticipated to be less as it will be constructed in accordance with the Specific Plan Standards and the new alignment is further from existing residential uses. Therefore, no additional light and glare impacts associated with implementation of the Parcel Map have been identified.

MITIGATION MEASURES

1. Prior to issuance of building permits within the Specific Plan, all exterior lighting shall be consistent with the standards established by the Zoning Ordinance (unless otherwise addressed within the Specific Plan) to minimize on and off-site light and glare impacts. The lighting shall be approved by the Planning, Building and Safety, and Public Works Departments.

2. Prior to issuance of building permits for buildings constructed within Planning Area 5, proposed lighting shall be approved by the Planning, Building and Safety, and Public Works Departments.

3. Buildings shall emphasize the minimization of glare by incorporating non-reflective building materials. Individual building site plans shall be reviewed and approved by the City Planning Department to assure this measure is met prior to issuance of building permits within the Specific Plan.

STANDARD CITY POLICIES & REQUIREMENTS

A. Prior to the submittal for building permits, the applicant/owner shall ensure that if outdoor lighting is included, high-pressure sodium vapor lamps or similar energy saving lamps shall be used. All outside lighting shall be directed to prevent "spillage" onto adjacent properties and shall be noted on the site plan and elevations.

3.1.4 TRANSPORTATION AND CIRCULATION

EXISTING CONDITIONS

1997 Certified EIR (Original Project)

Surrounding and On-Site Street System

Primary regional access to McDonnell Centre Business Park in Huntington Beach is provided by I-405 (San Diego Freeway), a north-south freeway located to the east of the site. Primary local east-west access to the Project site is along Bolsa Avenue and Rancho Road, while north-south access is along Bolsa Chica Street and Springdale Street. Internal circulation is provided by several internal streets including Skylab Road, Able Lane, and Astronautics Lane.

The street system and selected intersections surrounding the Specific Plan were described in terms of various common characteristics, including Average Daily Traffic volumes, volume-to-capacity ratio, and level of service. These terms and their implications for project impacts were defined and explained in the 1997 Certified EIR and summarized in this section. As a reference, the following definitions are provided:

Average Daily Traffic (ADT) – The total volume of traffic passing on a roadway on an average day of the year.

Level of Service (LOS) – a measure of the quality of flow of traffic through intersections (or on roadway segments) as indicated by six levels, A through F. In general, LOS A represents free-flow conditions with no congestion. Level F represents severe congestion with stop-and-go conditions. The City of Huntington Beach considers LOS C or better as the acceptable standard for roadway links, while LOS D or better is the acceptable standard for intersections. There are further implications for projects when these conditions occur, including the need for additional traffic analysis under specific guidelines.

Volume-To-Capacity (V/C) Ratio – Corresponding to each LOS is a V/C ratio, which is the ratio of an intersection's (or roadway segment's) traffic volume to its capacity. Capacity is defined as the theoretical maximum number of vehicles that can pass through the intersection (or a given roadway segment) during a specified time period.

Intersection and Road Segment Analysis

For the Existing Conditions portion of the 1997 Certified EIR, intersection analysis showed that all of the study intersections had acceptable (LOS D or better) operations, except for the intersections of Bolsa Avenue/Springdale Street, Bolsa Avenue/Golden West Street, Golden West Street/I-405 SB Off-Ramp, and Graham Street/McFadden Avenue during the PM peak hour. These unacceptable intersection operations were considered existing deficiencies and in most cases, improvements were identified and/or included in City improvement plans that would allow the intersections to operate at acceptable Levels of Service during both the AM and PM peak hours.

Road segment analyses performed in the 1997 Certified EIR for ten (10) study roadway segments showed that all ten segments operated at an acceptable level of service.

Further analysis showed that two unsignalized intersections warranted installation of a traffic signal under existing conditions. These intersections were 1) at McFadden Avenue and Graham Street, which was added to the City's capital improvement program and was signalized subsequent to the 1997 EIR Certification, and 2) the eastbound left turn movement on Westminster Boulevard at I-405 NB on-ramp, which was addressed in the City of Westminster Citywide Fee Program.

Parking

A February 1997 parking analysis, prepared by Paul E. Cook and Associates, Inc., found the following with respect to existing parking and potential future parking in the Specific Plan area.

The total existing (1997) gross square footage for all of Planning Area 1 buildings was 2,490,877. For the existing office, manufacturing, and laboratory buildings the total code required parking was 6,681 stalls. Warehouse/storage requirements for parking are on a graduated scale, and the total for the 131,207 square feet of warehouse is an additional 62 stalls for a grand total of 6,743 existing stalls required to meet the Specific Plan code. The number of stalls existing at the time, broken down by specific parking lot, totaled 5,944 stalls. Though the employment levels at the time resulted in a great abundance of empty stalls, an additional tabulation was provided showing the potential additional surface stalls that could be provided to meet future demand. With a total of five additional surface lots, 1990 additional stalls could be provided.

Two existing office buildings located within area 5, although currently utilized solely by MDA, had their own dedicated parking lots which provided parking consistent with the Huntington Beach Zoning and Subdivision Ordinance (ZSO) Chapter 231 for each of these stand-alone buildings.

Cumulative Effects (Non-Project Condition)

The description of traffic conditions for the 1997 Certified EIR evaluated the traffic levels generated by future non-project related growth. This condition is referred to as the baseline condition and illustrates traffic operations prior to consideration of the proposed project. This condition is also referred to as Cumulative Background traffic volumes.

Both intersections and roadway segments were analyzed. Study intersections that would have an unacceptable (worse than LOS D) operation, included Westminster Boulevard/Bolsa Chica Street, Westminster Boulevard/Rancho Road-Hammon, Bolsa Avenue/ Springdale Street, and Bolsa Avenue/Golden West Street during the PM peak hour. In addition, the following road segments were shown to be operating at an unacceptable level of service:

Bolsa Chica Street: Rancho Rd. to Bolsa Avenue - (LOS D)
Golden West Street: Bolsa Avenue to McFadden Avenue - (LOS D)
Westminster Blvd.: Springdale Street to I-405 - (LOS E)

These conditions were considered an impact of cumulative background traffic excluding the project. Improvements that would be required to allow these intersections and road segments to operate at acceptable levels were identified in the 1997 Certified EIR, but were not attributed to the Specific Plan.

CURRENT CONDITIONS

Current Parking Conditions

Paul Cook and Associates was retained to conduct an updated analysis of the existing parking conditions at the project site (see Appendix B). At the Boeing Space and Communications Facility, the total gross square footage for all of the buildings is 3,096,910 square feet. The total required parking by City code is 7,665 spaces. Presently, there are 7,700 parking spaces available for on-site parking. With a surplus of 35 spaces, the facility complies with parking standards.

Current Traffic Conditions

In order to determine whether the previous forecast of interim-year traffic conditions (Year 2000 Non-project Conditions) remains valid today, Sasaki Transportation Services conducted traffic counts at four intersections during AM and PM peak hours (included in Appendix A). It should be recognized that a substantial amount of growth and development has occurred at the Boeing site and the surrounding areas that are assumed to contribute to increased traffic on the surrounding street system.

After taking the appropriate traffic counts, Intersection Capacity Utilization (ICU) analyses were performed at the four study intersections to estimate current operating conditions. These current conditions were then compared to the assumed conditions presented in the 1997 Certified EIR traffic study. The results of the ICU analyses are shown on Table E

TABLE E
INTERSECTION CAPACITY UTILIZATION/LEVEL OF SERVICE

	Previous Interim		Current Conditions		Net ICU Change	
Intersection	**AM PK**	**PM PK**	**AM PK**	**PM PK**	**AM PK**	**PM PK**
Bolsa Chica & Westminster	0.80/C	0.98/E	0.73/C	0.80/C	-0.07	-0.18
Rancho – Hammon & Westminster	0.40/A	0.70/B	0.42/A	0.62/B	+0.02	-0.08
Springdale & Bolsa	0.69/B	0.98/E	0.78/C	0.75/C	+0.09	-0.23
Golden West & Bolsa	0.83/D	1.00/E	0.78/C	0.91/E	-0.05	-0.09

Overall Net Difference = -0.59

Upon examination of the table, it can be seen that the current conditions (includes "new" Boeing development since 1997) as documented through the traffic counts, are consistent with (overall better than) the previous study assumptions. If the net change (AM and PM both considered) at any of the four intersections is considered, the current conditions are within the previous assumptions. When the cumulative net ICU change for the four study intersections is calculated the total is 0.59 better than previously projected. In conclusion, the traffic counts show that conditions in the study area have not changed relative to the assumptions included in the previous traffic study for the McDonnell Centre Business Park. The previous traffic analysis remains valid for the proposed Specific Plan amendment and a new traffic analysis is not required.

IMPACTS

1997 Certified EIR (Original Project)

Construction Traffic

Construction related traffic would result from the future buildout of the Specific Plan and would be associated with workers arriving and leaving the project site, and truck and construction vehicle traffic. Construction worker traffic would be short-term in nature and would be mitigated to less than significant by inclusion of a measure requiring construction traffic control plans (Mitigation Measure 1).

Signal Warrant Analysis/Traffic Signalization

No significant project-specific impacts were identified related to traffic signalization on the surrounding street system.

Site Access/Circulation

The 1997 Certified EIR evaluated access and internal circulation at a general level. Several potential access issues were evaluated with recommendations to be considered by the City on a case by case basis as individual parcels are developed. For instance, future project traffic would warrant signalization of the main access points; however, the timing would depend on the types of projects developed. Mitigation was proposed which requires signal warrants be reviewed as specific projects are identified. Left turn ingress requires careful planning to allow sufficient left turn capacity in medians. As mitigation, the City would review left turn ingress as specific projects are proposed.

The capacity of the internal roadways is expected to be adequate to serve the maximum buildout potential of the proposed project.

In an effort to prevent future operational safety problems resulting from inappropriate driveway spacing, mitigation requires that any added driveways (primarily right turn only) be reviewed and approved by Transportation Division / Public Works. This is expected to occur on a case-by-case basis in conjunction with specific proposed developments.

With mitigation, access or internal circulation impacts and impacts to pedestrian safety were less than significant.

Parking

The 1997 Certified EIR found that with either surface parking lots or with parking structures, there should be adequate potential for providing additional future parking to meet Specific Plan code requirements should the demand ever become a reality. As was shown in the existing conditions section, there is a potential in the MDA area for parking demand of the future Specific Plan to exceed the parking supply. However, Mitigation Measure 2 would ensure that parking impacts will be mitigated to a less than significant level. Additionally, the Specific Plan requires future development proposals provide a parking supply (i.e. required code parking) consistent with the Huntington Beach Zoning and Subdivision Ordinance (ZSO) Chapter 231 (Refer to Section 6.0 of the Specific Plan).

Traffic Generation and Analysis

In the previous traffic study ("Traffic Impact Analyses for the McDonnell Centre Business Park in Huntington Beach"; WPA Traffic Engineering, Inc.; May, 1997) the entire Specific Plan was examined to determine the level of mitigation required to support a maximum level of development (and associated traffic) for each of the Planning Areas (PA). The maximum "additional" Specific Plan development generated a total of 56,445 daily trip ends. In addition to this total there were 14,820 daily trip ends included in the analyses, for projects that already had entitlements when the study was being prepared. Both of these trip totals were added to the existing traffic being generated by the existing site developments, so the overall traffic impacts could be evaluated.

In addition to addressing maximum build out of the Specific Plan, the EIR traffic analyses also considered an "Interim" level of development, whereby 60 percent of the 56,445 daily trip end budget ("new" traffic, excluded existing and entitled traffic) could be developed, without a subsequent traffic study. The entitled projects already had approvals so were not subject to the EIR conditions. Two pertinent traffic conditions of the previous approvals are:

1. The Citywide traffic fees would serve as mitigation for the Interim developments.

2. An updated traffic study would be required when 90 percent of the Interim trip budget is utilized by new developments within the Specific Plan. This means a traffic study would be required when 30,480 (56,445 x 60% x 90%) daily trip ends, are generated by "new" projects developed in the Specific Plan areas. (Entitled developments = 14,820 daily trip ends would not count toward the Interim budget).

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

Construction Traffic

Construction of the remaining phases of the Specific Plan would continue to generate short-term traffic impacts associated with workers arriving and leaving the project site, and truck and construction vehicle traffic. Though the 1997 Certified EIR did not quantify construction traffic, assumptions about grading have been made relative to proposed Tentative Parcel Map No. 2001-122 (discussed below in this section). Development of this map, which includes most of the remaining developable area of the Specific Plan in Planning Areas 3 and 4, will require approximately 424,760 cubic yards of fill material to be imported to the project site (Streeter, 2001). This translates to approximately 28,317 truckloads of fill material.

These truck trips would occur at various periods during buildout, but would be concentrated during grading phases of construction normally lasting three to six months, or longer. As discussed in the 1997 Certified EIR, construction traffic would be mitigated to less than significant by inclusion of a measure requiring construction traffic control plans (Mitigation Measure 1).

Parking

Paul Cook and Associates was retained to conduct an analysis of the future parking conditions at Boeing Facility that considers planned demolition of buildings and parking areas. It is assumed that parking will be provided according to City code in the other portions of the Specific Plan area.

Phase II as proposed, provides for development of non-Boeing uses on land currently used by Boeing. Phase II includes the demolition of 471,836 square feet of building and removal of 956 parking spaces in Lots G, U, W, and Y. The total number of spaces removed (956) is less than the number of spaces associated with the demolished building area (971). Consequently, there would be a surplus of parking for this phase of development.

Phase IIIA results in demolition of 322,096 square feet of buildings with no loss in parking spaces. Phase IIIB includes demolition of 216,638 square feet of buildings and loss of 1,043 parking spaces. Again, the actual parking demand associated with the demolished buildings is greater than the actual loss of parking spaces, leading to a surplus of spaces during these phases.

Upon demolition of all buildings in Phases II, IIIA, and IIIB, the required parking at the Boeing facility would be reduced by 2,137, from 7,665 to 5,528. The actual number of spaces would be reduced by 1,999, from 7,700 to 5,701. Accordingly, there would be a surplus of 173 parking spaces after implementation of Phase IIIB and no parking impacts will occur.

Traffic Generation and Analysis

The single most important traffic factor for development under remaining phases of the Specific Plan is the status of the "Interim trip budget" approved for the Boeing site. The traffic mitigation requirements are directly related to the "Interim budget" and the City Traffic Fee. If the "Interim" threshold is exceeded, then a traffic study is required. If the threshold is not exceeded then the City Traffic Fee was anticipated to address any new development traffic impacts.

One other consideration included in the approved Specific Plan, which is a part of these analyses, is the amount of "entitled" development available. The development that would be "entitled" in the updated Specific Plan was either "preexisting" (for the office tower and commercial not yet built) or is expected to result from the demolition of existing buildings (portions of the existing Boeing facility). Developments built as "entitled" projects, are subject to the overall Specific Plan maximums, but *would not be* subject to the City traffic fees since their required traffic improvements have already been implemented/addressed.

Trip Generation

The total allowable building area would be slightly reduced under the proposed Specific Plan amendment. This is due to the reduction in overall developable acreage and the shift in acres from PA 1 (0.75 FAR) and PA 5 (0.70 FAR), to PA 4 (0.65 FAR). Trip generation assumptions for the proposed Specific Plan amendment are shown in Table F. The trip generation assumptions included in these analyses are consistent with the methodologies utilized in the 1997 Certified EIR traffic study, to better facilitate evaluation of the proposed Specific Plan update. It should also be recognized that Table F accounts for the development activity that has occurred within the Specific Plan since the time of the approval and the trip generation associated with the projects that have been built. For additional details concerning the nature of these developments and how they were accounted for in the traffic analysis, please refer to Appendix A containing the August 11, 2001 Sasaki Transportation Services Traffic Analysis. The majority of development activity has occurred in PA 2 and PA 3 (Phase I) and these areas are essentially built out. When all of the various traffic factors are considered, the trip generation potential for the updated Specific Plan (93,096) would be less than under the current plan (96,295).

TABLE F
PROPOSED SPECIFIC PLAN MODIFICATIONS * TOTALS
Detailed Trip Generation Analyses

			Trip Details – For Overall Specific Plan Comparison		
Planning Area	Proposed Max. Building SF	Land Use or Description	Size	Trip Generation Rate	Daily Trip Ends (TE) Generated
				x =	
PA 1	1,764,180 SF	Existing Boeing Potential Boeing	1,734,177 SF 30,000 SF	7.49 TE/TSF(a) 7.49 TE/TSF (a)	12,989 TE 225 TE
PA 1A	566,280 SF	Office /Office Park R & D	283,140 SF 283,140 SF	15 TE/TSF 7.7TE/TSF	4,247 TE 2,180 TE
PA 2	1,642,212 SF	City Traffic Fees (b) Light Industrial Warehouse Office / Office Park	1,176,938 SF 232,637 SF 116,319 SF 116,318 SF	Various 13 TE/TSF 5 TE/TSF 15 TE/TSF	5,889 TE 3,024 TE 582 TE 1,430 TE
PA 3	1,019,304 SF	City Traffic Fees (c) Light Industrial Warehouse Office / Office Park	647,872, SF 185,716 SF 92,858 SF 92,858 SF	Various 13 TE/TSF 5 TE/TSF 15 TE/TSF	4,047 TE 2,414 TE 464 TE 1,393 TE`
PA 4	2,250,963 SF	Light Industrial Warehouse Office / Office Park	1,125,482 SF 562,740 SF 562,740 SF	13 TE/TSF 5 TE/TSF 15 TE/TSF	14,631 TE 2,814 TE 8,441 TE
Note:	A total of 1,040,710 SF of Boeing Facility is being demolished for a "credit " of 1,040.71 TSF x 7.49 TE/TSF = 7,795 TE, **but** will be saved by Boeing as trip fee credits (d).				
PA 5	1,119,056 SF	Exist. Extend. Stay City Traffic Fee Exist. Office Tower Light Industrial Office / Office Park R & D Hotel Retail Exist. Entitlements (e)	43,396 SF 235,831 SF 79,209 SF 107,976 SF 86,302 SF 96 rms/76,604 SF 120,587 SF 369,151 SF	City Previous 13 TE/TSF 15 TE/TSF 7.7 TE/TSF 10 TE/room 70 TE/TSF	1,600 TE 3,540 TE 1,030 TE 1,620 TE 665 TE 960 TE 8,441 TE 10,470 TE
					93,096 TE
		(Compare to current Specific Plan total of:)			(96, 295 TE)

* Note: The Analysis Methodology is the same as used in the Current Specific Plan, so a valid comparison is provided.

(a) Same trip rate used in the Traffic Study (May 1997) for the Boeing facility. The updated SF includes the added "modular" buildings, cryogenics building and building additions.

(b) For Sharp, Dynamic Cooking, Master Development and Cambro Manufacturing. The SF's are based on Boeing research and TE based on City Traffic Fee requirements (see Table 5 of the August 11, 2001 Sasaki Transportation Services general traffic study contained in Appendix A).

(c) For Konica, Airtec, Dix Metals and C&D Aerospace. The SF's are based on Boeing research and TE based on City Traffic Fee requirements (see Table 5 of the August 11, 2001 Sasaki Transportation Services general traffic study contained in Appendix A).

(d) Boeing preference is to "save" their City Traffic Fee "credits" for demolishing existing Boeing buildings. The new occupants of PA 4 (and part of PA 3) will pay their City Traffic Fees based on their particular operations.

(e) Boeing retains these Entitlements for an Office Tower and commercial uses, for which mitigation was provided, but not yet built.

Entitlements

In the studies for the current Specific Plan there were development entitlements for both the Boeing office tower and "non-Boeing" projects (Sharp and Cambro) in PA 2. The importance of the entitlements is that projects where entitlements (defined in terms of daily trip end totals) are "spent" would not be subject to the City's Traffic Fee. There is a difference, however, in "entitlements" when considering the daily trip ends, which would count "against" the Interim trip budget that are addressed in the Traffic Study (Appendix A). As noted in Table F, there will be added entitlements created under the proposed plans through demolition of significant amounts of building square footage, which is now a part of the Boeing facility. It is understood that Boeing plans to "keep" these daily trip generation entitlements. This would require the potential new developments (e.g., in PA 4) to pay the Traffic Fees assessed by the City of Huntington Beach. The demolition of the 1,040,710 SF of Boeing building area would translate to a total Boeing trip/fee credit of 7,795 daily trip ends (in addition to the previous office tower credit of 10,470).

Threshold for a Traffic Study

An important part of determining whether a traffic study is required for the proposed update, is to examine the on-site changes that have occurred since the approval of the current Specific Plan. Table G summarizes the Interim trip budget that was approved as a part of the environmental documentation for the current Specific Plan. These requirements were also discussed earlier in this report. It is defined in the previously prepared traffic documentation that a new traffic study is required when 30,480 "new" daily trip ends (excluding existing and entitled developments) have been approved/built. Prior to the need for a new traffic study, the City Traffic Fee was identified to serve as mitigation for the potential traffic related impacts of new development in the Specific Plan areas. The bottom of Table G provides a summary of the daily trip generation accounting (through City traffic fees paid or trip generation assumption contained in approved studies). The Traffic Study in Appendix A provides additional details on trip generation considerations for each project and other assumptions used in the analysis.

In order to conclude if a traffic study is required for the proposed Specific Plan update including the anticipated development from Tentative Parcel Map 2001-122, trip ends associated with the current Specific Plan were updated and compared to trips ends from the proposed Specific Plan Analysis (documented in Table H).

For the Specific Plan area, the previous existing site development plus the Interim trip budget (before a traffic study is required) resulted in 55,510 daily trip ends (end of column A, Table H). The updated "existing" accounting for all projects that have occurred and the demolitions that will be necessary to accommodate the proposed development of PA 4 and PA 3, plus the PA 4 and PA 3 Specific Plan maximums, result in 48,435 daily trip ends (end of column B, Table H). Since the proposed "maximum" project is less than the Interim trip budget, no traffic study should be required for the proposed Specific Plan Update.

One potentially confusing factor related to the *Interim trip budget* is the "entitlement" considerations. Since one set of entitlements existed before the current Specific Plan (office tower @ 10,470 TE) these *would not count* toward the Interim trip budget, while the entitlements obtained through demolition of the existing buildings (7,795 TE) *would count* toward the Interim trip budget. Neither would, however, be subject to the City traffic fees since actual buildings were demolished.

It should be recognized that since over one million square feet of existing buildings are proposed to be demolished, there is a significant amount of new development that can occur, before the *Interim trip budget* threshold is exceeded. In addition, it is recognized that the type of development that has been occurring at the site has been less intensive than allowed under the existing Specific Plan. This has also maintained "budget" for upcoming developments, prior to exceeding the Interim threshold.

Because of these factors and to remove potential confusion, a revised methodology to determine when a traffic study is required is included in Mitigation Measure 6 (former Mitigation Measure 8). It is also noted that former Mitigation Measures 6 and 7 relative to improvement of the Westminster Blvd./Rancho Road intersection have been satisfied and are no longer applicable.

TABLE G
CURRENT SPECIFIC PLAN CONDITIONS OF APPROVAL
Background Information

Per the EIR Mitigations / Conditions of the Overall Project:	**Daily Trip End Budget**
Total New Development Allowed (Excluding Previous Entitlements)	56,445
- When 90% of the Interim Project (60% of the Total) is Built or Has Approved Development Application = Traffic Study Trigger	
- (56,445 x 60% x 90%) = 30,480 Total New Development Trip Ends (above existing and entitled traffic allowed prior to a Traffic Study being required.	30,480
Entitled Development (At the Time of Study)	14,820
- Cambro Phase II + III (160,400 SF) and Sharp (538,871 SF) in Planning Area 2 (Note: Some buildings existed and some were un-built but entitled).	(4,350)
- Boeing Office Tower, Restaurant, Retail (369,151 SF) in Planning Area 5	(10,470)
Overall Trip Budget Before a Traffic Study is Required - At the time the current Specific Plan was approved	**45,300** **Due to New Projects**
Amount of Budget Utilized to Date (Per City Calculations):	
- New Projects: Konica, Dynamic Cooking, Dix Metals, etc.	a (6,449)
- Entitled Projects: Sharp, Extended Stay, etc.	b (5,950)
Traffic Study / Trip Budget Utilized (see Table 5 of the August 11, 2001 Sasaki Sasaki Transportation Services general traffic study contained in Appendix A)	**a + b (12,399)**

TABLE H
SPECIFIC PLAN TRIP BUDGET SUMMARY
CURRENT SPECIFIC PLAN THROUGH THE PROPOSED SUBMITTALS

Condition	Column A Current Specific Plan.	Column B Proposals & History	Proposed & Resulting Status
Existing Development	20,890 + 600 + 3,540 = 25,030 TE Boeing Facility + Cambro + Exist. Office Tower	12,989 + 5,889 + 4,047 + 1,600 + 3,540 = 28,065 TE 1,040,710 SF of the existing Boeing facility would be demolished Phase I of both PA 2 and PA 3 have been developed The Extended Stay was added in PA 5 The existing Office Tower in PA 5 remains Note the added Modular, Cryogenics and building addition are part of the remaining PA 1 Boeing facility	28,065 TE
"Entitled" (through previous approved or demolition)	4,350 + 10,470 = 14,820 TE Sharp, Cambro entitlements, which were assumed to be used as the facilities were built Boeing entitlements in PA 5 for an office tower and commercial uses	4,350 TE used by Sharp & Cambro. 10,470 TE of "Entitlement", previously held by Boeing for the second Office Tower, which remains unbuilt Demolition of 1,040,710 SF of Boeing building area resulting in "Entitlement" for 7,795 TE	18,265 TE of entitlements to be held by Boeing (also translates to a City Traffic Fee "credit")
Proposed	3,575 + 5,930 + 9,470 + 10,830 + 10,520 + 16,120 = 56,445 TE The total "new" trip ends allowed, in addition to the entitled amounts	225 + 6,427 + 5,036 + 4,271 + 18,901 + 12,716 = 46,766 TE Proposed Maximum Total based on revised PA boundaries Minus entitled, minus existing trip ends	54,561 TE (plus "Entitled") total that could be added that would be subject to City Traffic Fees. Traffic Study required to develop this total

TABLE H
SPECIFIC PLAN TRIP BUDGET SUMMARY
CURRENT SPECIFIC PLAN THROUGH THE PRPOSED SUBMITTALS (CONT'D)

Condition	Column A Current Specific Plan	Column B Proposals & History	Proposed & Resulting Status
Additional "New" Development (Trip Ends) Allowed Prior to a Traffic Study	**56,445 TE x 60% x 90% = 30,480 TE**	18,091 + 2,279 = 20,370 TE "New" limit (PA 4) (PA 3)	Max. Development (New + Entitled) PA 4 + pad in PA 3 = 28,165 TE
	New development <u>not</u> including existing or entitled	Development Areas presently being proposed. Exist. + New potential: 28,065 + 18,091 + 2,279 = 48,435 TE	See (Table 8 in Appendix A), which shows a conceptual development plan at approx. 7,350 TE, well below the 28,165 TE maximum
	For comparison, 25,030 + 30,480 = **55,510 TE** (Existing + New) Allowed prior to a Traffic Study	Since 48,435 TE is less than 55,510 TE, a Traffic Study would not be required. *In addition, the present development plans are well below the revised Specific Plan maximums.*	These conceptual developments of 7,350 TE is also within the 20,370 TE (18,091 + 2,279) "New" limit, which excludes the "Entitled" portion. These conceptual developments will pay the City Traffic Fee, so Boeing can retain its Fee Credits / Entitlements

TENTATIVE PARCEL MAP NO. 2001-122

Construction Traffic

As discussed previously for the Specific Plan amendment, grading for the development areas shown on the parcel map will require importation of fill material. The grading estimates (cut and fill quantities) associated with the parcel map were provided in Section 2, Table D. Phase II on Table D is planned for construction after map approval. A scenario for fill hauling based on Phase II has been provided.

Initial grading estimates for Phase II (Streeter, 2001) show that the parcel map will require importation of approximately 196,583 cubic yards of fill material. The duration of the grading project for Phase II could extend over a period of six months. Assuming 120 days of construction during this period, the average fill needed would average about 1,640 cubic yards per day. Using typical duel trailer hauling trucks of 15 cubic yard capacity, daily hauling truck traffic would average 110 loads per day or 220 ADT. This construction-related traffic is considered short-term in nature and less than significant in magnitude with preparation and implementation of a construction truck haul route plan as required in the 1997 Certified EIR (Mitigation Measure 1). The preparation of a truck haul route plan provides the City Engineer and Planning Director with the ability to control the hauling activity, including establishing limitations or modifications to the hours that hauling may occur specifying haul routes, and requiring other measures necessary to alleviate potential impacts of hauling.

Parking

New development facilitated under Tentative Parcel Map 2001-122 will meet City Code Parking Standards. Consequently, there are no significant parking impacts related to parcel map developments.

Traffic Generation

The traffic evaluation for the updated Specific Plan looked specifically at the proposed parcel map to ascertain that the requirements for a detailed traffic study were not met. A detailed breakdown of the development potential for portions of PA 4 and PA 3 covered by the proposed parcel map indicates that the maximum new building potential is 2,449,161 square feet, which corresponds to 20,370 TE (the breakdown is shown in Appendix A, Table 7). It is important to remember the updated Specific Plan would allow these totals, but projections based on actual development history and present planning show these levels will not be reached. For instance, an analysis of the daily trip generation for a conceptual development plan for PA 4 and PA 3 was included in the traffic report (see Appendix A, Table 8). This conceptual development plan included approximately 1,309,500 square feet of development and would generate approximately 7,350 daily TE, well below the 20,370 TE that would correspond to the maximum allowed new square footage. This confirms that a traffic study would not be required for proposed Tentative Parcel Map No 2001-122.

MITIGATION MEASURES

1. Prior to the issuance of grading permits within the Specific Plan, each applicant shall coordinate with the City of Huntington Beach in developing a truck and construction vehicle routing plan. This plan shall specify the hours in which transport activities can occur and methods to minimize construction related impacts to adjacent residences. The final plan shall be approved by the Public Works Department.

2. Prior to the issuance of building permits within the Specific Plan, each applicant shall coordinate with the City of Huntington Beach Public Works Department to ensure the following is accomplished:

   a. necessary review of signal warrants
   b. review/approval of turn ingress/egress
   c. review/approval of any added driveways
   d. parking analysis demonstrating parking supplies meet or exceed the demands

   The purpose of the above review is to: 1) ensure site specific impacts from individual projects are reduced to a level less than significant and 2) identify the timing of future signal installations/improvements.

3. Prior to the issuance of building permits within the Specific Plan, the applicant shall demonstrate to the satisfaction of the City Transportation Manager that truck access points depicted on their "Final" site plan(s), meet the City's minimum truck turning radius standards.

4. Prior to the issuance of building permits within the Specific Plan, the applicant shall demonstrate to the satisfaction of the City Transportation Manager that standards (including ADA) regarding pedestrian/bicycle safety along the perimeter sidewalks have been met.

5. The City of Huntington Beach shall collect its traffic impact fee as "interim" levels of development occur prior to the issuance of building permits. These fees will relieve the developer of traffic mitigation obligations (as detailed for Levels 1, 2, and 3 as shown in Tables K and L of the Traffic Impact Assessment) resulting from the interim levels of development. The specific Level 1-3 improvements detailed in Tables K and L shall be added to the City's CIP and implemented in a reasonable time frame.

6. An updated Traffic Impact Assessment (TIA) shall be prepared at the expense of McDonnell Douglas or successor in interest as the interim trip budget is reached. The methodology to determine when a TIA is required is to start at the anticipated "existing" trip end total of 28,065 TE. For each new building developed (where the City traffic fee is applied), add the City trip generation requirement to the 28,065 total until the original 55,510 TE threshold is reached, at which point a traffic study would be required. The first 10,470 TE of entitlements "used" by Boeing would not be added to the trip budget accounting, but any subsequent use of the remaining 7,795 entitlements (no traffic fee required) would count toward the Interim trip budget. This revised TIA shall not relieve

the developer of any obligation to pay any traffic impact fees (should the present or any other traffic impact fee program be in place) or provide for mitigation measures for development at the time of developments. Also, said TIA shall be presented to the Planning Commission for review prior to approval by Planning Director and Public Works Director.

7. Throughout the Specific Plan implementation, the City shall maintain and update an annual trip budget monitoring report to determine the status of the constructed and approved development applications (entitled) development and resulting expected trips within the McDonnell Center Specific Plan area. This annual trip budget monitoring report shall be based upon building permits issued and (entitled) development within the McDonnell Center. The trip budget monitoring report shall include gross and usable square footages of the constructed and/or entitled usage, a description of the land usage, and the trip generation rates used for the land usage proposed. The trip rates used in the monitoring report shall be those rates contained in the latest *Trip Generation* manual published by the Institute of Transportation Engineers (currently the 5th edition and 5th edition update) or another reliable source (i.e., another traffic study) as approved by the City Traffic Engineer.

STANDARD CITY POLICIES & REQUIREMENTS

A. Prior to issuance of building permits (or final inspection, if determined appropriate by the Transportation Division and Planning Department), a Trip Generation Analysis shall be submitted for review and approval by the Public Works Department, Transportation Engineering Division. The analysis shall be used to determine the project's Traffic Impact Fee. This has been accomplished; refer to Appendix B of this EIR. The traffic impact fees shall be paid prior to building permit issuance.

B. All applicable Public Works fees shall be paid.

C. An interim parking and/or building materials storage plan shall be submitted to the Planning Department to assure adequate parking is available for employees, customers, contractors, etc., during the project's construction phase.

3.1.5 AIR QUALITY

EXISTING CONDITIONS

1997 Certified EIR (Original Project)

Meteorology/Climate

The climate around the project site, as with all of Southern California, is controlled largely by the strength and position of the subtropical high pressure cell over the Pacific Ocean. The climate is characterized by moderate temperatures and comfortable humidity. Winds in the project area are typically driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night, the wind generally slows and reverses direction traveling offshore to the sea. Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed and sometimes concentrate pollutants near ground level and/or near certain sources such as roadways.

Air Quality Management

The proposed project is located in the South Coast Air Basin. This area is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD sets and enforces regulations for stationary sources in the basin. The California Air Resources Board regulates mobile source emissions. The Air Quality Management Plan mandates numerous short-, intermediate, and long-term measures to control emissions from both stationary and mobile sources. In addition, several key state and federal laws provide addition mandates regarding air emissions from a variety of sources.

Ambient Air Quality

Based on the air quality data presented in the 1997 Certified EIR, ozone and particulate matter (PM_{10}) ambient air quality standards were exceeded in each of the four years examined (1992 – 1995). Nitrogen dioxide, carbon monoxide, and sulfur dioxide were not exceeded during the years examined.

CURRENT CONDITIONS

A review of Air Resources Board published monitoring data for years since 1995, shows that a general trend of improvement in ozone air quality has occurred. Between 1996 and 2000, the federal 8-hour standard for ozone was exceeded on only one day (in 1998). The state one-hour ozone standard was exceeded 9 times between 1996 and 2000, also an improvement over the previous period. Carbon monoxide, nitrogen dioxide, and sulfur dioxide remain below ambient air standards in Orange County from 1996 to 2000. There has also been improvement in PM_{10} ambient air quality, although not as extensive as ozone. In looking at monitoring information for the Anaheim monitoring station (partial information for which was given in the 1997 Certified EIR) the state 24-hour standard for PM_{10} was exceeded about 21 times per year between 1993 and 1995. Between 1996 and 1998 at this monitoring station, the state PM_{10} standard was exceeded about 13 times per year. For 1999 and 2000, the standard was exceeded about 12 times per year.

IMPACTS

1997 Certified EIR (Original Project)

Short-term Impacts

The proposed project would have a short-term impact on air quality from construction activities. Grading of the project site, the construction of the buildings, and construction worker trips would create temporary emissions of dust, fumes, equipment exhaust, and other air contaminants throughout the project construction period. Pollutant emissions would vary substantially from day to day, depending on the level of activity, the specific operations, and the prevailing weather.

No specific inventory of construction emissions was compiled for the Specific Plan because no specific project was proposed. The project would have the potential to generate a substantial amount of short-term air emissions. It was concluded that the project would exceed SCAQMD's daily threshold emission levels for short-term construction air emissions. The exceedance of the thresholds is a short-term air quality impact. Also, the addition of emissions to an air basin designated as non-attainment is considered under CEQA to be a significant impact. Standard City Policies and Mitigation Measures 1 through 6 would reduce this impact to the extent feasible. This impact, after mitigation, remained an unavoidable adverse impact.

Long-Term Impacts

The development of the proposed project would result in long–term air quality impacts. Long–term air quality emissions associated with the proposed project would result from two types of sources: stationary and mobile. It was concluded that the project would exceed SCAQMD's daily threshold emission levels for CO, NO_x and HC. The daily exceedance of the thresholds for CO, NO_x and HC is a long-term significant air quality impact. In addition, the addition of emissions to an air basin designated as non-attainment is considered under CEQA to be a significant impact. Mitigation Measure 8 will reduce this impact to the extent feasible. This impact, after mitigation, remained an unavoidable adverse impact.

Odors

The project would result in the development of industrial uses, which have the potential to generate objectionable odors, which could affect nearby sensitive receptors. Mitigation Measure 7 would reduce this impact to a less than significant level.

Cumulative Impacts

The proposed project in conjunction with other past, present, and reasonably foreseeable future projects would result in short-term air quality impact due to construction activities and long-term impacts to air quality from mobile and stationary sources. The addition of emissions to an air basin designated as non-attainment is considered under CEQA to be a significant impact. The project's incremental contribution to cumulative impacts would be reduced to the extent feasible by Mitigation Measures 1 through 6, and 8. These impacts, after mitigation, remained an unavoidable adverse impact.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

Short-term Impacts

The proposed project as amended would have a short-term, significant impact on air quality from construction activities. Though the amount of site development is reduced from the original Specific Plan, grading and construction activities would still be extensive. Based on the scale of construction required, amount of earth movement required, need for importation of fill, and the relatively minor reduction in development on site, it can be concluded that short-term construction emissions could at times exceed SCAQMD construction emission thresholds and such impacts are significant. The determination that short-term impacts are significant is consistent with the conclusions of the 1997 Certified EIR. Standard City Policies and Mitigation Measures 1 through 6 were adopted to reduce the impact to the extent possible; however, the impact was, and still is, a significant unavoidable impact of site development.

The nature of this impact is discussed in somewhat more detail under the heading "Tentative Parcel Map No. 2001-122" below.

Long-term and Cumulative Impacts

The 1997 Certified EIR identified the operational air emissions associated with implementation of the Specific Plan. Since the proposed amendment to the Specific Plan would actually reduce the total square footage of the site by approximately 14,270 square feet at build out and reduce vehicle trips associated with the site by 3,199 daily trip ends at build out, the proposed project and incremental cumulative mobile and stationary source emissions would be reduced with the proposed amendment. Table I compares emissions calculated in the 1997 Certified EIR to the proportional emissions reductions estimated for the proposed amendment.

TABLE I
COMPARISON OF ORIGINAL AND CURRENT ESTIMATED EMISSIONS (POUNDS/DAY)

Emission	Stationary Sources[1]	Mobile Sources[2]	Total Emissions	SCAQMD Threshold	Exceeds Threshold	Percent Exceeded
Carbon Monoxide						
1997 Certified EIR	20.6	2,612.4	2,633.0	550	Yes	379%
Current Amend.	20.6	2,525.6	2,546.2		Yes	363%
Nitrogen Oxides						
1997 Certified EIR	120.3	421.4	541.7	55	Yes	885%
Current Amend.	120.1	407.4	527.5		Yes	859%
Sulfur Oxides						
1997 Certified EIR	7.4	54.9	62.3	150	No	--
Current Amend.	7.4	53.1	60.5		No	--
Particulates (PM_{10})						
1997 Certified EIR	2.5	81.2	83.7	150	No	--
Current Amend.	2.5	78.5	81.0		No	--
Hydrocarbons						
1997 Certified EIR	2.8	267.3	270.1	55	Yes	391%
Current Amend.	2.8	258.4	261.2		Yes	375%

Source: EDAW, Inc., 1997, 2001.

1 Estimates of stationary source emissions for the current amendment were proportioned for the 1997 Certified EIR based on percentage reduction in square footage.

2 Estimates of emissions for the 1997 Certified EIR were calculated using Urbemis5, an emission analysis program developed and circulated by the California Air Resources Board (CARB). Estimates of mobile source emissions for the current amendment were proportioned based on the percentage reduction in trip generation.

As can be seen from the table, the reduction in the square footage of buildings and reduction in trip generation would not change original conclusions about project's long-term impacts, or cumulative impacts. Implementation of the Specific Plan amendment would continue to have significant air quality impacts relative to carbon monoxide, nitrogen oxides, and hydrocarbons. Emissions of sulfur oxides and PM_{10} would be less than significant. Mitigation Measures 7 and 8, provided in the 1997 Certified EIR, would reduce these impacts somewhat, but the impacts would remain significant and unavoidable.

TENTATIVE PARCEL MAP NO. 2001-122

Short-term Impacts

As discussed previously in the transportation and circulation section, the proposed parcel map would require importation of a considerable quantity of fill material. The initial grading estimates (Streeter, 2001) indicate the need to import approximately 196,583 cubic yards of earth fill material for Phase II development, which would proceed immediately upon authorization. The total amount of grading associated with Phase II would be 416,160 cubic yards of cut and fill. For the entire parcel map, cut and fill grading would amount to 854,716 cubic yards, of which 424,762 cubic yards would be imported fill. These cut and fill amounts were not quantified in the 1997 Certified EIR.

In the transportation and circulation section of this document, a typical scenario for construction of the first phase of the parcel map was presented that included 120 days of construction averaging about 1,640 cubic yards of imported material per day. Using typical duel trailer hauling trucks of 15 cubic yard capacity, daily hauling truck traffic would average 110 loads per day or 220 ADT. At this time, the source of the fill material to be used at the site is unknown; however, with even a short haul distance, it is reasonable to conclude that the emissions from this activity would contribute to the project's significant short-term air quality impacts.

The types of short-term impacts that occur from earth hauling include increased diesel exhaust emissions, potential for dirt to be deposited on streets particularly at entrance and exits to the site, and potential for dirt to blow off of trailers. An increased number of trucks on the local roadways may affect traffic circulation as well (indirectly affecting air quality). The 1997 Certified EIR incorporated mitigation that anticipated the types of impacts that occur from earth transport. Mitigation Measures 1 and 5 address vehicle maintenance, watering to reduce dust generation, and avoidance of construction on high smog days. It is also noted that the state Air Resources Board has recently implemented a program to reduce diesel engine pollutant emissions in the state truck fleet by 90% by year 2010. Mitigation Measure 2, parts E, F, and G, provide for washing of trucks near site entrances and prior to leaving the site. Most importantly, measure 2G requires either covering of loads on trucks or leaving adequate freeboard to prevent materials from escaping during transport. These measures are directly applicable to haul operations. Mitigation Measures 3 and 4 provide restrictions for travel speeds on unpaved surfaces and for paving some construction surfaces. All of these measures are consistent with SCAQMD recommendations for construction impact mitigation and no additional measures are proposed. In addition, the required truck haul route plan (Transportation Mitigation Measure 1) provides the City Engineer and Planning Director with the

ability to further control the hauling activity. Specifically, the City Engineer and Director of Planning can establish limitations or modifications to the hours that hauling may occur, can specify haul routes to avoid congested streets, and otherwise control the hauling activity to reduce potential impacts.

To summarize the extent of cut and fill operations associated with development of the Specific Plan was not quantified in the 1997 Certified EIR; however, short-term impacts from construction activity was determined significant and unavoidable. Importation of the quantities of fill material associated with the Specific Plan Amendment and proposed parcel map would add to the construction related emissions, which would still be significant and unavoidable. Mitigation measures adopted for the 1997 Certified EIR included appropriate measures addressing impacts from earth hauling, and are applicable to the parcel map.

Long-term Impacts

As discussed for the Specific Plan amendment, the long-term impacts due to plan implementation (as well as all individual components) are significant and the mitigation measures proposed for the long-term impacts are applicable.

MITIGATION MEASURES

1. During grading and construction, the applicant shall be responsible for compliance with the following:

    a. During clearing, grading, earth moving or excavation, maintain equipment engines in proper tune.

    b. After clearing, grading, earth moving or excavation:

        (1) Wet the area down, sufficient enough to form a crust on the surface with repeated soakings, as necessary, to maintain the crust and prevent dust pick up by the wind.
        (2) Spread soil binders; and
        (3) Implement street sweeping as necessary.

    c. During construction:

        (1) Use water trucks or sprinkler systems to keep all areas where vehicles move damp enough to prevent dust raised when leaving the site;
        (2) Wet down areas in the late morning and after work is completed for the day;
        (3) Use low sulfur fuel (.05% by weight) for construction equipment.

    d. Phase and schedule construction activities to avoid high ozone days.

    e. Discontinue construction during second stage smog alerts.

2. During grading and construction, the applicant shall be responsible for compliance with the following:

   a. Require a phased schedule for construction activities to minimize daily emissions.

   b. Schedule activities to minimize the amount of exposed excavated soil during and after the end of work periods.

   c. Treat unattended construction areas with water (disturbed lands which have been, or are expected to be unused for four or more consecutive days).

   d. Require the planting of vegetative ground cover as soon as possible on construction sites and super pads if construction is not anticipated within one month.

   e. Install vehicle wheel-washers before the roadway entrance at construction sites.

   f. Wash off trucks leaving site.

   g. Require all trucks hauling dirt, sand, soil or other loose substances and building materials to be covered, or to maintain a minimum freeboard of two feet between the top of the load and the top of the truck bed sides.

   h. Use vegetative stabilization, whenever possible, to control soil erosion from storm water especially on super pads.

   i. Require enclosures or chemical stabilization of open storage piles of sand, dirt, or other aggregate materials.

   j. Control off-road vehicle travel by posting driving speed limits on these roads.

3. During grading and construction, the applicant shall be responsible for assuring that vehicle movement on any unpaved surface other than water trucks shall be terminated if wind speeds exceed 15 mph.

4. During grading and construction, the applicant shall be responsible for the paving of all access aprons to the project site and the maintenance of the paving.

5. Prior to issuance of grading permits within the Specific Plan, the applicant shall be responsible for assuring that construction vehicles be equipped with proper emission control equipment to substantially reduce emissions.

6. Prior to issuance of grading permits within the Specific Plan, the applicant shall be responsible for the incorporation of measures to reduce construction related traffic congestion into the project grading permit. Measures, subject to the approval and verification by the Planning Department, shall include:

- Provision of rideshare incentives.
- Provision of transit incentives for construction personnel.
- Configuration of construction parking to minimize traffic interferences.
- Measures to minimize obstruction of through traffic lanes.
- Use of a flagman to guide traffic when deemed necessary.

7. Prior to the issuance of certificate of occupancy within the Specific Plan, the applicant shall provide proof to the City Director of Planning that the use will not emit objectionable odors or provide an air quality analysis including a quantitative assessment of odors and meteorological conditions consistent with the ASTM, Standard Method D1391 or Standard Method E679-79. Project design measures or additional control technology shall be implemented to ensure that odor emissions comply with SCAQMD standards.

8. Prior to the issuance of certificates of occupancy within the Specific Plan, the applicant shall prepare a Transportation Demand Management Plan (TDM) for review and approval by the SCAQMD and City. At a minimum, the plan shall include the following major elements and shall be implemented in accordance with SCAQMD Rule 1501:

    - Provision of a commuter transportation coordinator, with responsibilities to include coordinating and facilitating formation of carpools and vanpools, serving as a resource person for transit information, coordinating sale of transit passes, monitoring progress towards TDM goals and surveying employees, etc.

    - Provision of a commuter center which would include such information as: bus and rail transit schedules/maps; telephone numbers for the designated transportation coordinator; bus route and Metrolink schedules; ridesharing promotional material; bicycle route and facility information; and location of on-site vanpool/carpool spaces.

    - Carpool and vanpool program, including participation in a computerized matching system, provision of preferential parking, and provision of travel allowances/financial incentives.

    - Encouragement of non-vehicle modes, such as bicycle, walk, or bus transit.

    - Transit incentives and improvements, including subsidization of transit passes and dissemination of transit information and schedules.

STANDARD CITY POLICIES & REQUIREMENTS

A. During construction, the applicant shall use water trucks or sprinkler systems on all areas where vehicles travel to keep damp enough to prevent dust from being raised when leaving the site.

B. During construction, the applicant shall use low sulfur fuel (.05%) by weight for construction equipment.

C. During construction, the applicant shall attempt to phase and schedule construction activities to avoid high ozone days (first stage smog alerts).

D. During construction, the applicant shall discontinue construction during second stage smog alerts.

3.1.6 NOISE

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

Existing Traffic Noise Levels

The principal source of noise on the project site and in the vicinity of the project site is vehicular traffic. The major source of traffic related noise occurs from the three major arterial streets that run adjacent to the site. These roadways are Bolsa Chica Street on the west, Bolsa Avenue on the south, and Springdale Street on the east. In addition, collector roads provide access to the site: Able Lane, Skylab Road, and Rancho Road. The greatest volume of traffic occurs on Bolsa Chica Street followed by Springdale Street then Bolsa Avenue.

Some land uses are considered more sensitive to intrusive noise levels than others, due to the amount of noise exposure (in terms of both exposure time and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, and recreation areas are generally more sensitive to noise than are sports facilities, and commercial and industrial land uses. Residential uses exist north and east of the project site.

The existing noise levels used in the 1997 analysis for the original Specific Plan were estimated in terms of the CNEL index by modeling the roadways for current traffic speed characteristics. No actual noise measurements were made. The roadway noise levels were computed using the Highway Noise Model published in the Federal Highway Administration ("FHWA Highway Traffic Noise Prediction Model," FHWA-RD-77-108, December 1978.).

The FHWA Model uses traffic volume (average number of vehicle trips per day), vehicle mix (percentage of cars, trucks, and heavy trucks), vehicle speed, and roadway geometry to compute the CNEL. Equivalent noise levels are computed for each of the time periods. Weighing these noise levels and adding them, results in the CNEL for the existing traffic estimated. For roadway analysis, worst-case assumptions were made and incorporated in the modeling effort.

Six roadway segments were originally analyzed because they were in close proximity to the project and were identified to experience project-generated increases in traffic. The roadway segments originally modeled are: 1) Springdale Street between Bolsa Avenue and Westminster Boulevard, 2) Bolsa Chica Street between Bolsa Avenue and Rancho Road, 3) Rancho Road between Bolsa Chica Street and Westminster Boulevard, 4) Bolsa Chica Street between Rancho Road and Westminster Boulevard, 5) Westminster Boulevard between Bolsa Chica Street and Rancho Road, and 6) Westminster Boulevard between Rancho Road and Springdale Street. These roadway segments have concentrations of residential units which are representative of the surrounding area.

Based on the original modeling results, it was estimated that five of the roadways segments exposed sensitive receptors to noise levels which exceeded the 65 CNEL exposure limit. The noise projections did not take into account the mitigating effects of any intervening structures, such as walls, that may effect ambient noise levels, thus the original analysis was considered a worst case analysis. The location of sensitive receptors located in areas which experience noise levels above 65 CNEL was considered a significant impact. This impact was identified as an existing impact and not related to project implementation.

On-Site Noise Levels

Due to concerns voiced at the Scoping Meetings for EIR 91-2 project, a 24-hour noise measurement was completed near the north side of the original Specific Plan along Rancho Road and the U.S. Navy Railroad. The measurements were taken at the property line between the north side of the existing McDonnell Douglas facility and the Navy railroad line adjacent to residential units (refer to Exhibit 2).

The measurement reported an existing 1997 noise level of 59.5 CNEL at the property line. This is below the City of Huntington Beach General Plan standard of 65 CNEL. Based on the results of this analysis, existing daytime conditions were found to comply with the City's General Plan guidelines for noise levels.

CURRENT CONDITIONS

An updated noise study has been prepared by Hans Giroux & Associates to incorporate the findings of the document entitled "Traffic Analysis for the Boeing Specific Plan Update" (Sasaki Trans. Svcs., 2001). The updated Noise Study is contained in Appendix C.

The noise study update also established existing conditions based upon the rate of cumulative growth and the proportionate share of the project completed to date. The study also included an updated noise measurement since the last project vicinity noise measurement reported in the Specific Plan EIR was taken on September 18, 1991.

Baseline Noise Monitoring

The previously reported noise measurement was made at the curve on Rancho Road at the U.S. Navy Railroad. The weighted 24-hour CNEL at this location was 59.5 dB CNEL. A short-term measurement update was conducted at this location, and in two adjacent residential subdivisions, on Friday afternoon on September 7, 2001. Although the current measurements are short term (20-minutes per site) readings, monitoring experience has shown that traffic noise during the p.m. rush hour, and the weighted 24-hour CNEL are fairly similar, i.e. CNEL $\simeq$ LEQ + 2 dB.

The results of the noise measurements were as follows:

NOISE LEVELS (dBA)

Location	LEQ	Lmax	Lmin	L10	L50	L90
Residences on Nugget Circle	49	63	45	50	48	46
Rancho Road @ Railroad Tracks	55	70	44	59	49	46
Suffolk Street @ Victoria Place	59	68	48	62	57	52

Adjustment of the late afternoon LEQ (3-4:30 p.m.) to CNEL suggest that the typical noise exposure around the project perimeter is in the upper 50 dB range. This level has not changed much in the last decade, and may even have declined somewhat due to decreased aerospace research activities on this site within recent times.

Measured noise levels have not changed appreciably near the project site because the level of existing site development is likely less intense than it was ten years ago as the McDonnell-Douglas Research Center.

IMPACTS

1997 Certified EIR (Original Specific Plan)

Short-term Construction Noise

The original Specific Plan had the potential to result in short-term construction noise impacts to onsite and surrounding land uses due to the grading and construction activities. Construction noise represents a short-term impact on ambient noise levels. Although most of the types of exterior construction activities associated with the original Specific Plan would not generate continually high noise levels, occasional single-event disturbances from grading and construction activities are possible. Construction activities would occur during daylight hours. Construction equipment noise is controlled by the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations).

During the construction phases of the Specific Plan, noise from construction activities was determined to add to the noise environment in the immediate area. Activities involved in construction would generate maximum noise levels, ranging from 85 to 88dB at a distance of 50 feet. Construction activities would be temporary in nature and would occur during normal daytime working hours. Construction noise impacts could result in annoyance or sleep disruption for nearby residences if nighttime operations occurred, or if unusually noisy equipment was used.

Noise would also be generated during the construction phase by increased traffic associated with transport of heavy materials and equipment. The noise would be short in duration and would occur primarily during daytime hours.

The original Specific Plan was anticipated to result in significant short-term noise impacts on nearby sensitive noise receptors. Implementation of Mitigation Measures 1 and 2 was proposed to reduce short-term construction noise impacts to noise sensitive land uses to a level less than significant.

Long-term Impacts

On-Site

The 24-hour measurement taken at the property line between the north side of the existing McDonnell Douglas facility and the Navy Railroad line reports a noise level of 59.5 CNEL. This is below the City's General Plan standard of 65 CNEL. This noise value was measured at the northern property line of the McDonnell Douglas Facility. Existing residential uses are located approximately 50 feet to the north of this measurement location. Noise levels experienced at the existing residential homes in this area are less than the measured value of 59.5 CNEL. This segment of Rancho Road near the Navy Railroad was not modeled in the traffic study prepared for the project. It was unknown what level of traffic increases would occur with project implementation. It was possible that increased traffic due to the project may cause this roadway segment to experience higher CNEL values in the future which have the potential to impact nearby residential units. This was considered a significant impact. Mitigation Measure 3 was proposed to monitor noise levels on this roadway segment and ensure compliance with City noise standards. With implementation of proposed Mitigation Measure 3, this impact would be reduced to a level less than significant.

Off-Site

A potential acoustic impact of buildout of the original Specific Plan is noise from project generated traffic along nearby roadways. Noise modeling for long-term impacts is based on year 2015 buildout future traffic conditions as discussed in the Transportation and Circulation section of the original EIR. In order to determine project impacts, the base year 2015 traffic conditions (traffic volumes without the project), as well as year 2015 traffic conditions with project buildout were modeled for estimated noise levels. Based upon the original modeling results, buildout of the original Specific Plan was found to result in potential impacts to sensitive receptors being exposed to noise levels above 65 CNEL. However, this would occur even without project implementation. With implementation of proposed Mitigation Measure 3, this impact would be reduced to a level less than significant.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

Short-term Impacts

The proposed project as amended would result in short-term noise impacts from grading and construction activities similar to those addressed in Certified EIR #96-1. Mitigation Measures 1 and 2 would still apply to reduce short-term construction noise impacts to noise sensitive land uses to a level less than significant.

Long-term Impacts

Traffic noise associated with buildout of the amended Specific Plan was calculated using the federal highway traffic noise prediction model (FHWA-RD-77-108) as it was in the previously Certified EIR documentation. Traffic inputs were adjusted for the growth of the site to date (existing site development represents approximately 30 percent of buildout), and buildout traffic volumes were reduced by 3.3 percent based on currently proposed site development intensity. Off-site traffic levels will be slightly less as the proposed Boeing Specific Plan update would generate a slightly lower buildout traffic volume (93,096 daily trips proposed versus 96,295 previously approved). The proposed project will add an average of around 13 percent of average daily traffic (ADT) on surrounding roadways. The reduction is approximately 3.3 percent of the approved volumes.

The results of this update are shown in Table J (no project), Table K (with project) and Table L (project and no project compared to existing). Traffic noise levels are almost unchanged. The increase compared to existing has decreased because baseline traffic volumes are now somewhat higher. The difference between the project versus no project scenario is almost identical as it was in the prior Certified EIR because the 3.3 percent change in the project-only increment is almost undetectable within the context of the much larger no-project buildout baseline.

Noise level differences at buildout differ no more than 0.1 dB CNEL from the previously analyzed findings. Noise levels of less than ± 1.5 dBA, as stated in Tables J and K, are within the margin of error of measurement for computer modeling.

Differences of ± 0.1 dB due to any changes in the proposed development intensity for the site are clearly an imperceptible difference. Off-site noise levels due to the proposed change in Specific Plan uses will be imperceptibly different from those analyzed in the Certified EIR, and therefore, the original EIR Mitigation Measure 3 would still apply.

TABLE J
YEAR 2015 BUILDOUT WITHOUT PROJECT
DISTANCES TO CNEL NOISE CONTOURS

Roadway Segment	Distance to Contour [1]			CNEL at 50 Feet [2]
	70 CNEL	65 CNEL	60 CNEL	
1. Springdale Street (between Bolsa Ave. & Westminster Blvd.)	72'	229'	724'	71.6
2. Bolsa Chica Street (between Bolsa Ave. & Rancho Road)	178'	562'	1778'	75.5
3. Rancho Road (between (between Bolsa Chica St. & Westminster Blvd.)	<50'	76'	240'	66.8
4. Bolsa Chica Street (between Rancho Road & Westminster Blvd.)	166'	525'	1660'	75.2
5. Westminster Boulevard (between Bolsa Chica St. & Rancho Road)	87'	275'	871'	72.4
6. Westminster Boulevard (between Rancho Rd. & Springdale Street)	91'	288'	912'	72.6

Note: CNEL = Community Noise Equivalent Level Margin of error is +/- 1.5 dBA.

1 Distance to CNEL contour from centerline of roadway in feet
2 CNEL at 50 feet from the centerline

Source: FHWA-RD-77-108 (Calveno mod.)

TABLE K
YEAR 2015 BUILDOUT WITH PROJECT
DISTANCES TO CNEL NOISE CONTOURS

Roadway Segment	Distance to Contour [1]			CNEL at 50 Feet [2]
	70 CNEL	65 CNEL	60 CNEL	
1. Springdale Street (between Bolsa Ave. & Westminster Blvd.)	79'	251'	794'	72.0
2. Bolsa Chica Street (between Bolsa Ave. & Rancho Road	204'	646'	2042'	76.1
3. Rancho Road (between Bolsa Chica St. & Westminster Blvd.)	<50'	110'	347'	68.4
4. Bolsa Chica Street (between Rancho Road & Westminster Blvd.)	186'	589'	1862'	75.7
5. Westminster Blvd. (between Bolsa Chica St. & Rancho Road)	85'	269'	851'	72.3
6. Westminster Boulevard (between Rancho Rd. & Springdale Street)	95'	302'	955'	72.8

Note: CNEL = Community Noise Equivalent Level Margin of error is +/- 1.5 dBA.

1 Distance to CNEL contour from centerline of roadway in feet
2 CNEL at 50 feet from the centerline

Source: FHWA-RD-77-108 (Calveno mod.)

TABLE L
NOISE INCREASE COMPARISONS

Roadway Segment	Existing	Buildout Without Project		Buildout With Project	
	CNEL	CNEL	Increase Over Existing	CNEL	Increase Over Buildlout Without Project
1. Springdale Street (between Bolsa Ave. & Westminster Blvd.)	71.6	71.6	± 0.0	72.0	+ 0.4
2. Bolsa Chica Street (between Bolsa Ave. & Rancho Road	74.8	75.5	+ 0.7	76.1	+ 0.6
3. Rancho Road (between Bolsa Chica Street & Westminster Boulevard)	66.2	66.8	+ 0.6	68.4	+ 1.6
4. Bolsa Chica Street (between Rancho Road & Westminster Blvd.)	74.6	75.2	+ 0.6	75.7	+ 0.5
5. Westminster Boulevard (between Bolsa Chica St. & Rancho Road)	70.9	72.4	+ 1.5	72.3	- 0.1
6. Westminster Boulevard (between Rancho Rd. & Springdale Street)	71.4	72.6	+ 1.2	72.8	+ 0.2

Source: Tables J and K

CNEL at 50 feet from roadway centerline

TENTATIVE PARCEL MAP NO. 2001-122

Short-term Impacts

Implementation of the Parcel Map and associated total import of 424,762 cubic yards (immediate Phase II import of 196,583 cubic yards) to raise proposed parcels 2 to 4 feet over existing grade will result in short-term construction noise impacts on-site and along City approved truck hauling routes. Please refer to Section 3.1.4 Transportation/Circulation for discussion of anticipated truck traffic. Short-term noise impacts from grading and construction activities are addressed in the Certified EIR #96-1 and the construction noise impacts from the Parcel Map would fall within the ranges identified in the Certified EIR #96-1. Mitigation Measures 1 and 2 would still apply to reduce short-term construction noise impacts to noise sensitive land uses to a level less than significant.

Long-term Impacts

Although the finished parcels will range between 2 to 4 feet above existing grade, Tentative Parcel Map No. 2001-122 will not result in new or increased stationary source noise impacts since no change to permitted uses or allowed densities will occur. Future industrial uses within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. Mitigation Measures for noise contained in the 1997 Certified EIR and as replicated in this document should be applied as the parcel map is implemented. Traffic noise impacts associated with the realignment of Astronautics Lane are anticipated to be less as the new alignment is further from existing residential uses. Therefore, no additional long-term traffic noise impacts associated with implementation of the Parcel Map have been identified.

MITIGATION MEASURES

1. Prior to issuance of grading permits within the Specific Plan, the applicant shall submit and have approved a noise mitigation plan to the Department of Planning that will reduce or mitigate short-term noise impacts to nearby noise sensitive receptors. The plan shall comply with the City of Huntington Beach Noise Ordinance and shall include, but not be limited to:

    a. A criteria of acceptable noise levels based on type and length of exposure to construction noise levels;

    b. Physical reduction measures such as temporary noise barriers that provide separation between the source and the receptor; and

    c. Mitigation measures such as restrictions on the time of construction for activities resulting in high noise levels.

2. Prior to issuance of grading permits within the Specific Plan, the applicant shall produce evidence acceptable to the City Engineer that:

   a. All grading and construction vehicles and equipment, fixed or mobile, shall be equipped and maintained with effective muffler systems that use state of the art noise attenuation.

   b. Stockpiling and/or vehicle staging areas shall be located as far as practicable from sensitive noise receptors.

   c. All operations shall comply with the City of Huntington Beach Noise Ordinance.

3. Commensurate with the updated TIA (refer to Mitigation Measure 8 in Section 5.4 of the original EIR), an updated acoustical analysis shall be performed on the following two roadway segments: 1) Rancho Road near the Navy Railroad; and 2) Rancho Road between Bolsa Chica Street and Westminster Boulevard to determine if potential vehicular noise will impact nearby residential units. The study will be prepared under the supervision of an acoustical engineer and include a discussion of the need for noise attenuation measures and/or noise barriers to ensure compliance with City noise standards. This analysis shall be submitted to and approved by the Planning Department.

STANDARD CITY POLICIES & REQUIREMENTS

A. Construction shall be limited to Monday - Saturday 7:00am to 8:00pm. Construction shall be prohibited Sundays and Federal holidays.

3.1.7 EARTH CONDITIONS

EXISTING CONDITIONS

1997 Certified EIR (Original Project)

The project area is located near the eastern edge of the lower Santa Ana Hydrologic Unit in the coastal plain of Orange County. The upper 100 feet of fluvial and alluvial deposits are composed mainly of unconsolidated clays, silts, silty sands and sands, with some gravels derived from the Santa Ana River. Geologic issues affecting the project site include the following:

Seismicity - The project site is located in the seismically active southern California area but is not within an Alquist-Priolo Special Studies Zone. Significant ground shaking on locally active faults such as the Newport-Inglewood Fault System is likely at some time in the future. Faults within the City of Huntington Beach determined to be geologically active are the North Branch, Bolsa-Fairview, and South Branch Faults; all of these are faults within the Newport-Inglewood Fault Zone.

Liquefaction – Based upon the existing soil types onsite and the level of filtration to the soils, the potential for liquefaction to occur onsite is high. Liquefaction occurring as a result of a seismic event would result in a localized area of subsidence.

Expansive Soils – The project site has the potential to include expansive soils.

Hazardous Materials – Portions of the project site have been surveyed for potential occurrence of hazardous materials. Some remediation has occurred as well. Portions of the site previously used for agriculture had potential to contain chemical residues from crop cultivation.

No other evidence of extensive site contamination was uncovered. Based on the small quantities of stored materials at the site, the potential for extensive contamination is low.

CURRENT CONDITIONS

The only conditions that have changed since the 1997 Certified EIR involve continued development of the project site. Portions of the site that in the recent past were used for cultivation of crops have since been developed. There are no longer issues with respect to development of these lands. Additionally, as stated previously in Section 2.2.2 of this document, a small amount of diesel fuel was uncovered during building demolition activities in the vicinity of an underground structure (North of Boeing Aerospace Building #46) referred to as the "STEVS" site. The site has been monitored consistent with the Orange County Health Care Agency regulations and will be given clearance by City and State Agencies prior to grading within the Parcel Map Area.

IMPACTS

1997 Certified EIR (Original Project)

The following geotechnical conclusions were made for the 1997 Certified EIR and Specific Plan.

- The extent and depth of grading and excavation for project implementation was not known. However, the alluvial deposits and scattered fill soils occurring onsite are potentially compressible in their present states under foundation loadings. Development without proper soil compaction could result in structure failure and impacts to humans. Impacts were reduce to less than significant by implementation of City grading policies (Mitigation Measure 1).

- The possibility of damage due to ground shaking is considered likely due to proximity of the Newport-Inglewood fault, which is approximately 2 miles away. This is considered a significant impact. Mitigation Measures 2 and 3 were adopted to alleviate this impact.

- The project site lies in an area containing porous alluvial soils which when saturated or wet, have a moderate to high potential for liquefaction. Mitigation Measure 4 was adopted to reduce impacts associated with liquefaction to a level of less than significant.

- Without thorough grading and recompaction of the expansive soils known to exist onsite, structural damage may occur with project implementation. This is considered a significant impact. Mitigation Measures 5 and 6 were adopted to reduce potential impacts associated with expansive soils to less than significant.

- No significant impacts relating to hazardous materials were identified; however, standard City Policy A requires a detailed soils analysis be prepared (prior to grading application submittal) which includes onsite soil sampling and laboratory testing of materials to provide recommendations regarding grading, chemical and fill properties, foundations, retaining walls, streets and utilities.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

Geologic conditions on the project site have not changed substantially since the 1997 Certified EIR. Standard City Policies and Mitigation Measures adopted in the 1997 Certified EIR have been implemented successfully during continuing buildout to alleviate the potential geotechnical impacts. However, grading analysis done for the proposed parcel map has allowed quantification of the quantity of materials that will be excavated. The quantity of grading was not estimated in the 1997 Certified EIR; however, it was understood that grading and excavation would be required to construct various phases of the proposed project. The project description of this document indicates that buildout of portions of the Specific Plan will result in a deficit of fill material that must be imported to the site to balance grading cuts and fills. This impact is discussed in greater detail in the Tentative Parcel Map No. 2001-122 section immediately below. Within the context of the revised Specific Plan, there are no other impacts related to earth conditions. Additionally, the revision of the Planning Area boundary (i.e., acreage increase in Area 4 and acreage decrease in Area 1) will allow for development of areas that were previously

occupied by Aerospace facilities. Standard City Policy A referenced above (which is a requirement in the 1997 Certified EIR) will ensure that potential impacts related to soil contamination from past Aerospace uses do not occur with the future developments.

TENTATIVE PARCEL MAP NO. 2001-122

The geotechnical issues surrounding the development of proposed Tentative Parcel Map 2001-122 are addressed within the context of the overall Specific Plan. Potential impacts from implementation of the parcel map include essentially the same impacts as the Specific Plan, including impacts from onsite soil conditions (compressible soils, non-engineered fill soils, and expansive soils), seismic hazards, liquefaction, erosion and hazardous materials. Standard City Policies and Mitigation Measures applicable to the Specific Plan should be implemented with the construction associated with the parcel map to ensure that potential impacts remain less than significant.

Implementation of the proposed parcel map will require approximately 429,954 cubic yards of cut and 854,716 of fill, resulting in a fill deficit (or import quantity) of 424,762 cubic yards (Streeter, 2001). Potential geotechnical impacts from cut and fill operations could include inadequate fill placement and compaction (potentially resulting in fill failure), sloughing, subsidence, and erosion. However, impacts from improper cut and fill may be reduced to less than significant by implementation of mitigation measures already approved. These include Mitigation Measure 1 requiring geotechnical studies of soil engineering properties prior to grading, Mitigation Measure 4 requiring grading plans to demonstrate that required fills will be placed on competent foundation materials, and Mitigation Measure 2 (within Section 3.1.8) requiring preparation of runoff and erosion control plans during construction.

With implementation of these measures, impacts from importation and use of fill materials are less than significant. In addition, this is not a new impact for the project since the 1997 Certified EIR addressed site grading and relevant mitigation measures.

MITIGATION MEASURES

Earth Geology

1. Prior to issuance of grading permits within the Specific Plan, additional studies as deemed necessary by the Director of Public Works, shall be performed to determine native elevations and evaluate the extent of compressibility of the soils for structural design purposes. These studies shall be reviewed and approved by all appropriate departments at the City of Huntington Beach.

Seismicity

2. Prior to issuance of grading permits within the Specific Plan, it shall be proven to the Building and Safety Department that all structures are designed in accordance with the seismic design provisions of the Uniform Building Codes or Structural Engineers Association of California to promote safety in the event of an earthquake.

3. An engineering geologist shall be engaged to submit a report indicating the ground surface acceleration from earth movement for development parcels. All structures shall be constructed in compliance with the g-factors as indicated by the geologist's report. Calculations for footings and structural members to withstand anticipated g-factors shall be submitted to the City for review prior to the issuance of grading permits.

Liquefaction

4. Prior to issuance of grading permits within the Specific Plan, grading plans shall demonstrate that alluvial soils shall be removed in the areas that will receive fill or foundation loading down to competent materials and recompacted. Additional studies may be deemed necessary by the Director of Public Works, to evaluate the extent of liquefaction of the soils for structural design purposes.

Expansive Soils

5. Prior to approval of grading permits within the Specific Plan, the applicant shall prepare a report for approval by the Director of Public Works which assesses and provides recommendations for the following:

   a. Specific measures for adequate foundation, paving and flatwork design in areas of any remaining expansive soils.

   b. Identify the Expansive Index onsite and specify where necessary recommendations included, but not limited to: 1) presaturation of soils prior to concrete placement; 2) raised floors; 3) post-tensioned slabs; 4) thicker slabs; 5) deeper footings; 6) the addition of soil amendments to facilitate wetting during compaction.

6. The applicant(s) shall be responsible for remedial removal of expansive soils onsite during grading and prior to construction. Should any construction occur on expansive soils, the applicant(s) shall adhere to the recommendations identified above in Mitigation Measure 5.

STANDARD CITY POLICIES & REQUIREMENTS

A. Prior to submittal for grading permits, a detailed soils analysis shall be prepared by a registered Soils Engineer. This analysis shall include onsite soil sampling and laboratory testing of materials to provide detailed recommendations regarding grading, chemical and fill properties, foundations, retaining walls, streets and utilities.

B. Prior to issuance of grading permits, a grading plan shall be submitted to the Department of Public Works for review and approval (by issuance of a grading permit). A plan for silt control for all water runoff from the property during construction and initial operation of the project may be required if deemed necessary by the Director of Public Works.

3.1.8 DRAINAGE AND HYDROLOGY

SITE HYDROLOGY

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

On-Site Drainage

The project site is located in a low land area of Huntington Beach. The elevation at the site is approximately 20 feet above sea level in an area of gradual elevation change. The natural slope of the site is presently to the southwest. The Santa Ana River is located approximately 5 miles to the southeast.

The original drainage analysis included a total of 329.61 acres. The extra acreage includes the property to the centerline of Bolsa Avenue and Bolsa Chica Street. The commercial property on the south side of Bolsa Avenue was also included since it drains towards Bolsa Avenue into the catch basins and storm drain, which ultimately ties into the 307-acre project site drainage system. Storm water runoff currently flows from the project area by way of existing storm drains. The residential drainage areas northerly of the project area have their own area drainage facilities and do not affect the proposed property. Regional flood control channels exist along Bolsa Chica Street and Springdale Street. The existing drainage area boundaries and node numbers which relate to the calculations in the drainage analysis are shown in Appendix F of the 1997 Certified EIR. There are three existing storm drain systems surrounding the project area: the area to the east drains southerly into the Orange County Flood Control District (OCFCD) C-4 Westminster Channel; the area to the south drains westerly into the OCFCD C-2 Bolsa Chica Channel; the areas on the west and to the north drain to the OCFCD C-2 Bolsa Chica Channel and to the C-3 Anaheim Barber City Channel, respectively. The Bolsa Chica Channel, an open channel, is located adjacent to the western boundary of the site adjacent to Bolsa Chica Street. The 1997 existing condition runoff volumes for a 100-year storm event (Q100) for the existing 329.61-acre drainage area were calculated by Adams Streeter utilizing Advanced Engineering Software (AES). The results of these calculations are included in Appendix F of the 1997 Certified EIR under sections "100-year Hydrology" for existing and ultimate conditions.

A majority of the site in 1997 was considered to be in a developed condition with buildings and paved parking areas. Some areas primarily to the east and west of Able Lane were in 1997 undeveloped and/or unpaved, as they were previously utilized by agriculture. The existing storm drain system, which lies within private streets or easements, provides drainage for the site, draining the majority of the site to the west, towards Bolsa Chica Channel. A small eastern portion of the site drains to the channel adjacent to the eastern boundary of Springdale Street (Orange County Flood Control District (OCFCD) C-4 Westminster Channel).

The project's most easterly and southerly areas are tabled to drain into the storm drain system adjacent to Bolsa Avenue, which was approved by the OCFCD and the City of Huntington Beach Master Plan and constructed in fall of 1995. This system is designed for ultimate conditions as per approved *"Hydrology Study and Hydraulic Analysis for Proposed Storm Drain System North of Bolsa Avenue"*, dated August 1, 1995. Through the approximate center of the property, drainage is piped westerly to the OCFCD C-2 Bolsa Chica Channel.

The piped system currently serving the existing McDonnell Douglas Aerospace facilities is at its maximum capacity.

Flooding

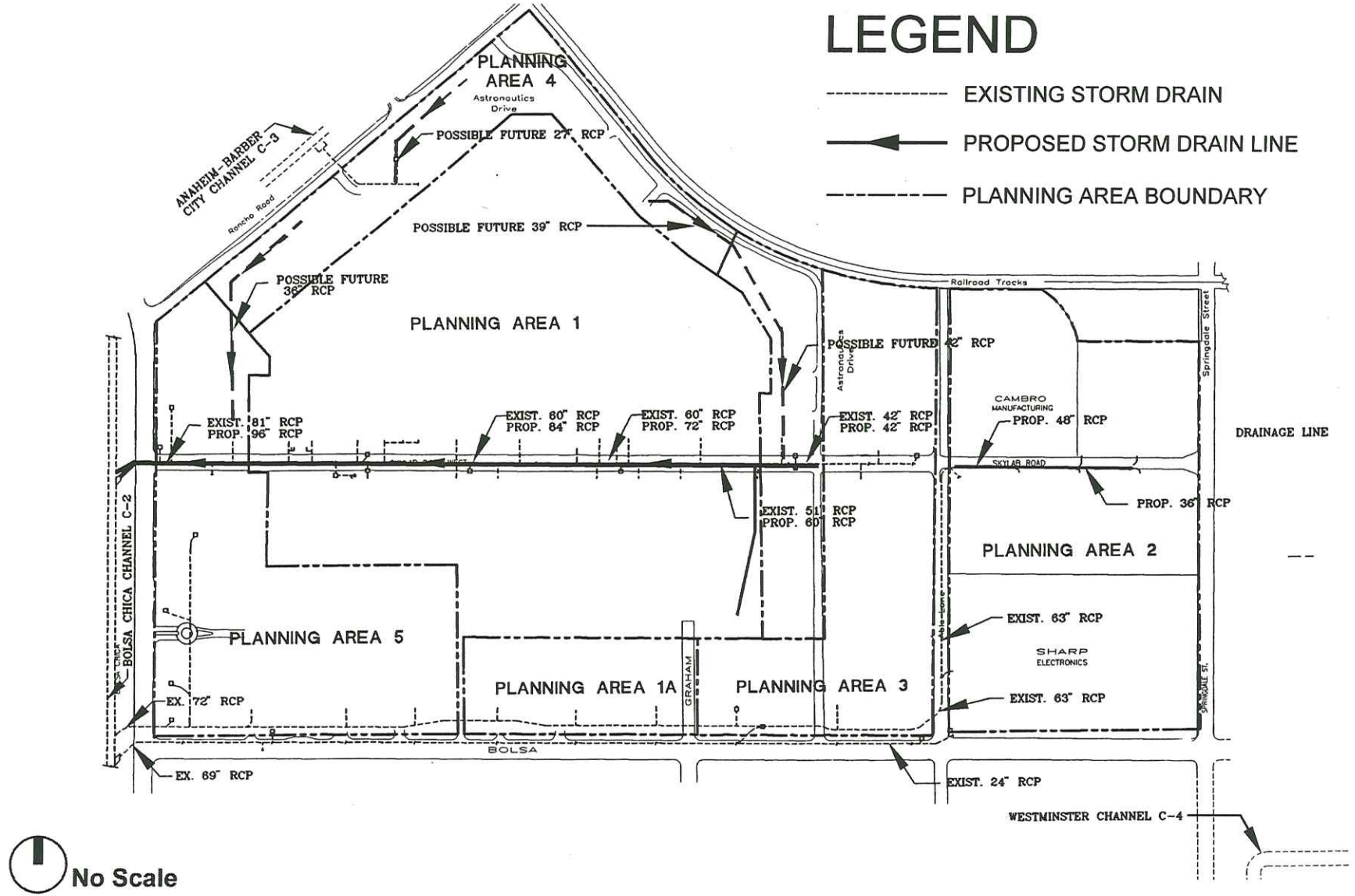
Flood Insurance Rate Maps are prepared by the Federal Emergency Management Agency (FEMA), and show flood hazard boundaries. According to the FEMA map, the project site is located in Zone X. Zone X designates areas of 500-year flood; which contain areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and which are protected by levees from 100-year flood. Zone X is not considered a flood hazard area and is not subject to Federal Flood development requirements.

Water Quality

Water quality in California is regulated by the US Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES), which controls the discharge of pollutants to water bodies from point and non-point sources. NPDES permits are required for any commercial and/or industrial construction sites. As stated above, the existing site is currently developed with existing MDA facilities, including athletic fields utilized by MDA. The site also contains open fields, which at one time were in agricultural production. It is anticipated that the existing runoff from the site contains concentrations of fertilizers and pesticides associated with the fields ands other compounds typical of urban runoff. These include particulate solids (total suspended solids), nutrients (total nitrogen compounds and phosphates) and oxygen demanding substances (BOD).

CURRENT CONDITIONS

Since the certification of the EIR and adoption of the Specific Plan in 1997, new private developments have been built on the eastern portion of the project area, replacing the farming operations of the past. In 2001, at the time of Amendment No.1, some portions of the site have been developed with other industrial and commercial uses, including Cambro Manufacturing, Sharp Electronics, Dynamic Cooking, DIX Metals Airtec, Konica, and C&D Aerospace. Additionally, the Extended Stay facility, and Boeing Recreation facility and fitness center have been built along Bolsa Chica Street. Therefore, the project site east and west of Able Lane is now in a developed condition with buildings and paved parking areas (see Exhibit 6).



EDAW, Inc.

Exhibit 11

Source: Adams Streeter

Original Storm Drain Plan

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IMPACTS

1997 Certified EIR (Original Specific Plan)

On-Site Drainage

Buildout of the property under the original Specific Plan would incrementally alter the amount of impervious surface (concrete, asphalt, etc.). The amount of storm water runoff is anticipated to increase due to additional developed areas onsite. The proposed Q100 figures for the drainage area of the project site were calculated by Adams Streeter and the results and methodology are included in Appendix F of the 1997 Certified EIR under the title "Hydraulic Calculations". Under a 100-year storm event, the original Specific Plan would result in a total flow increase of 58.5 cfs.

Changes to the existing MDA facility (i.e. new building) would not impact the drainage system, since the replacement would already be on currently developed property. In the event that the MDA facility would no longer remain, and this 100-acre area became available for new development, the Master Plan Drainage Study proposes to provide a new piped drainage facility paralleling the existing (or replacing the existing entirely), draining to the C-2 Bolsa Chica Channel.

Preliminary pipe sizes required to convey calculated 100-year flows are shown in Exhibits 11 of this Addendum EIR and SD-2, which is contained in Appendix F of the 1997 Certified EIR. The areas proposed at the project's northerly boundary will drain westerly and northerly into the OCFCD C-3 Anaheim Barber City channel. The existing mainline storm drain (48") would provide enough capacity for ultimate conditions. However, some improvements will be required for future developments upstream of the existing 48" storm drain as shown on Exhibit SD-2 for area "D" (see 1997 Certified EIR Appendix F). As stated previously, the project's most easterly and southerly areas are currently tabled to drain into the storm drain system adjacent to Bolsa Avenue, which was constructed in the fall of 1995. This system is designed for ultimate conditions as per approved *"Hydrology Study and Hydraulic Analysis for Proposed Storm Drain System North of Bolsa Avenue"*, dated August 1, 1995.

The proposed storm drain systems as shown on Exhibit 11 are considered to be Reinforced Concrete Pipe (RCP) with the minimum pipe size of 18 inches. The proposed pipe sizes are estimated for planning purposes only and are subject to refinement in the final design of the project. The proposed storm drain system has also been incorporated as part of the Specific Development Concept. The future storm drain requirements were anticipated as part of the Specific Plan process in an effort to ensure the infrastructure would adequately support future land uses that could result from the Specific Plan implementation. Since the Specific Plan buildout will occur over a period of several years, the proposed storm drain system improvements will be phased consistent with the level of future development. A potential project-specific drainage impact would occur if the future storm drain system components are not brought on line when future demands identify the need. Standard City Policies and Mitigation Measure 1 were adopted to reduce this potential impact to a level less than significant.

Construction related activities that require grading and vegetation removal would also increase runoff, causing greater erosion and downstream siltation. Runoff volume from a single storm would be increased from the present volume, depending on the existing and future soil characteristics, the storm intensity and duration, and storm drain improvements associated with buildout of the Specific Plan. This was considered a significant impact. Mitigation Measure 2 was adopted to reduce this impact to a level less than significant.

Flooding

Buildout of the original Specific Plan was not anticipated to expose people and property to flood hazards. The project is located within a 500-year flood zone (Zone X), which is not subject to Federal Flood Development requirements. Due to concerns regarding drainage into Bolsa Chica Channel, meetings between the project applicant, the City of Huntington Beach, and the County of Orange Flood Program Division have occurred. The potential for off-site flooding, which may be increased due to project implementation, is a significant impact. To ensure that no significant impacts will occur with the implementation of the project, Mitigation Measures 1 and 3 were adopted in 1997. These mitigation measures will reduce this impact to a level less than significant.

Water Quality

The original Specific Plan has the potential to result in a long-term impact on water quality due to the addition of pollutants typical of urban runoff. Volatile solids in urban runoff can originate: from accidental spills or deliberate dumping of lubricating oils or fuel oils; from emissions of engines during normal operations such as vehicle exhaust particulates or drippings of crankcase oil; from dustfall or rainout of atmospheric particulates; from spilling of crude or refined petroleum products; from leached or eroded pavement; from natural seepage on land; or from natural biogenic sources.

Stormwater flows from the future buildout of the Specific Plan were subject to the NPDES permit process. Through the NPDES Permit process, the City currently requires contributors to non-point runoff pollution to establish Best Management Practices (BMPs) to minimize the potential for pollution. Under this program, the developer is responsible for identification and implementation of a program of BMPs which can include special scheduling of project activities, prohibitions of certain practices, establishment of certain maintenance procedures, and other management practices to prevent or reduce the pollution of downstream waters. Typical elements of such a BMP program would include addressing the use of oil and grease traps, detention basins, vegetated filter strips, and other common techniques in order to preclude discharge of pollutants to local storm drains and channels. Mitigation Measures 4 and 5 were adopted in 1997 to reduce potential water quality impacts to a less than significant level.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

On-site Drainage

The following information has been provided by Adams Streeter from their October 9, 2001 study entitled "Addendum to Utility Master Plan Technical Appendix" EIR No. 96-1", and contained in Appendix D of this document. The overall drainage boundary for the project site has not changed for existing or proposed conditions as compared to the original technical appendix, which was Appendix F of the Certified EIR. The points of discharge from the site to the Westminster Channel, Bolsa Chica Channel, and Anaheim Barber City Channel remain the same as indicated in the original technical appendix and EIR. Drainage subarea boundaries for existing storm drains south of Skylab Road and east of Able Lane will remain unchanged and no changes to existing storm drain main lines are proposed for this area.

Drainage sub-areas boundaries north of Skylab Road will also remain the same as compared to the original Technical Appendix. But proposed storm drain alignments have been revised to conform to interior street realignments.

Currently, the proposed pipe sizes, as shown on Exhibit 12 are estimated for planning purposes only, and are subject to refinement based on final hydrology and hydraulic analysis for each system. Methodology and criteria for design of the future storm drain system shall remain the same as stated in the original technical appendix. The Standard City Policies and Mitigation Measure 1 shall still apply to ensure project drainage impacts are mitigated. Mitigation Measure 2 shall still apply to the revised Specific Plan to ensure that potential erosion and downstream siltation impacts are mitigated to less than significant levels.

Flooding

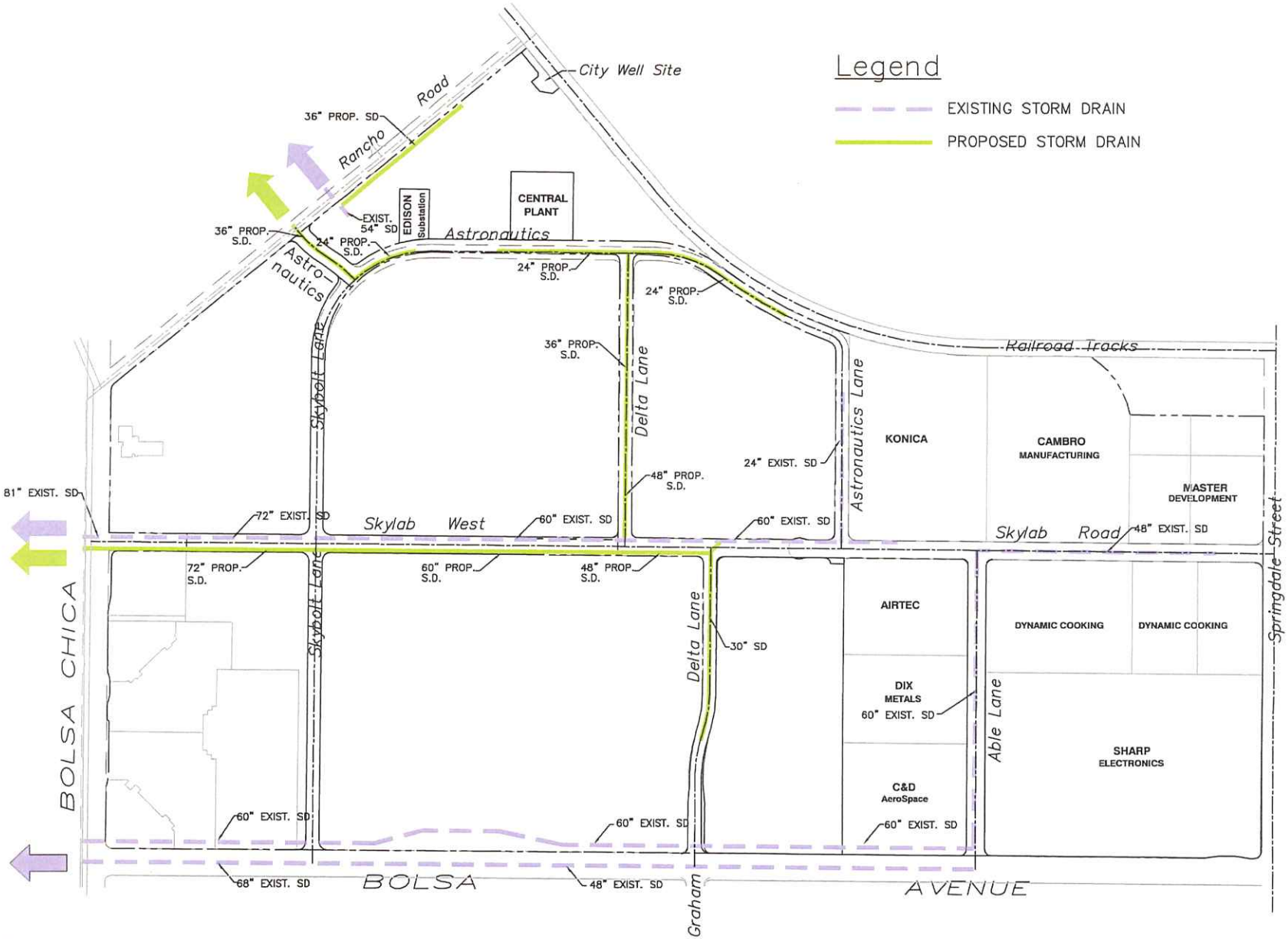
The FEMA flood designation remains the same for the project area and the revised Specific Plan with the implementation of Mitigation Measure 3 will not result in significant flood hazard impacts.

Water Quality

As stated in the original 1997 Certified EIR all dischargers of storm water runoff are regulated by National Pollution Discharge Elimination System (NPDES). Any grading within the project area larger than 5 acres will require submittal of application to State Water Quality Control Board, and preparation of Storm Water Pollution Prevention Plan (SWPPP). A SWPPP shall be prepared per the latest requirements and regulations of the Water Quality Control Board and City of Huntington Beach, and Mitigation Measures 4 and 5 shall still apply to the revised Specific Plan.

ADDENDUM TO MCDONNELL DOUGLAS EIR 96-1

City of Huntington Beach



No Scale

EDAW, Inc.

Exhibit 12

Source: Adams Streeter

Revised Storm Drain Plan

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TENTATIVE PARCEL MAP NO. 2001-122

The drainage and hydrology issues surrounding the development of proposed Tentative Parcel Map 2001-122 are addressed within the context of the overall Specific Plan. Potential impacts from implementation of the parcel map include essentially the same impacts as the Specific Plan, including impacts from on-site storm drain improvement timing, erosion, and storm water runoff (water quality). Mitigation measures contained in the 1997 Certified EIR and as replicated in this document should be applied as the Parcel Map is implemented. The mitigation measures ensure that future development within the Specific Plan boundaries will occur after review and approval of an updated water quality management plan, hydrology and hydraulic studies. Additional storm drain capacity, as necessary to accommodate any increased flow associated with the subdivision, will be designed and constructed. No additional drainage or water quality impacts have been identified.

MITIGATION MEASURES

1. Prior to the issuance of building permits within the Specific Plan, the project applicant shall implement conditions of the Public Works Department regarding storm drainage improvements which shall include, but not be limited to:

    - Construct the necessary storm drainage improvements (identified on Exhibit 12 within the Addendum EIR) to handle increased flows.

    - Ensure that building pads are placed at elevations suitable to withstand 100-year flood for sites adjacent to Bolsa Chica Street between Bolsa Avenue and Rancho Road.

    - Confine street flows within the street right-of-way.

2. Prior to the issuance of grading permits within the Specific Plan, the project applicant shall submit and obtain approval of final drainage and erosion control plans for each project component. These final drainage plans shall demonstrate that post-development stormwater discharge levels from the project will remain at or below existing stormwater discharge levels. The mitigation measures contained in the plan shall be approved by the Regional Water Quality Control Board and the City of Huntington Beach prior to any construction activities. The plans shall include measures such as the following:

    - Diversion of offsite runoff away from the construction site;

    - Prompt revegetation of proposed landscaped areas;

    - Perimeter sandbagging or temporary basins to trap sediment; and

    - Regular sprinkling of exposed soils during construction phases.

3. Prior to the issuance of building permits within the Specific Plan, the project applicant shall develop a plan to implement any recommendations from the County of Orange Flood Control Division and City Public Works Departmentwhich will reduce impacts to the Bolsa Chica Channel floodplain resulting from onsite development. For example, one such recommendation would be the removal of the wooden bridge at a future time when it is no longer utilized by the County operations and maintenance staff to access the westerly bank of the Channel. This plan shall be submitted to the City Department of Public Works for review and approval.

4. Prior to issuance of any grading permits within the Specific Plan, the applicant shall submit a "Notice of Intent" (NOI), along with the required fee to the State Water Resources Control Board to be covered under the State NPDES General Construction permit and provide the City with a copy of the written reply containing the discharger's identification number.

5. Prior to the issuance of the grading permits within the Specific Plan, the applicant shall provide a Water Quality Management Plan showing conformance to the Orange County Drainage Area Management Plan and all NPDES requirements (enacted by the EPA) for review and approval by the City Engineer. The plan shall reduce the discharge of pollutants to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and such other provisions which are appropriate.

STANDARD CITY POLICIES & REQUIREMENTS

A. Prior to issuance of grading permits, drainage and hydraulic studies shall be submitted for Public Works approval.

3.1.9 NATURAL RESOURCES/ENERGY

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

Non-renewable natural resources are resources which, once depleted, cannot be renewed. Examples include fossil fuels, gravel, sand, as well as other resources. Lumber, depending on the ratio of replacement to removal, can be considered a non-renewable resource.

Prime farmland can also be considered a non-renewable natural resource because the prime soils are lost once development occurs. Impacts to prime farmland are discussed in the Agriculture Section of this document.

Although consumption of fossil fuels in California is relatively high, when looked at on a per capita basis, California is the seventh most energy efficient state in the nation.

The market for sand and gravel in southern California is primarily in residential, commercial, and industrial construction. Statewide statistics for construction-related minerals indicate a gradual increase in production and consumption in California. Between 1985 and 1990, production of sand and gravel increased from 112,000 to 127,200 thousand short tons, a nine percent increase. Mining of crushed stone also increased seven percent between 1985 and 1990 from 41,199 to 44,000 thousand short tons. Unlike timber, sand, gravel and crushed stone are wholly non-renewable. Currently, reserves for each of these minerals are not considered to be low. A factor in the substantial increase of sand, gravel and crushed stone production is that production was driven by an extremely healthy mineral economy in 1987 relative to 1985. Among all non-fossil fuel minerals, value in 1988 increased nearly 13 percent above that of 1986, stimulating production in the market. The increase of all non-fossil fuel minerals increased only one percent from 1988 to 1990.

CURRENT CONDITIONS

Since the Certification of the EIR in 1997, the area within the Specific Plan designated as Prime Farmland has been developed with uses allowed under the existing adopted Specific Plan.

IMPACTS

1997 Certified EIR (Original Specific Plan)

At project buildout, the site was anticipated to generate 56,445 million annual vehicle miles daily from future industrial, office, and commercial land uses. This would result in the consumption of 17,000 million gallons of gasoline daily, based upon an average vehicle fuel efficiency of 20 miles per gallon. The original Specific Plan was found to be consistent with the City's adopted General Plan.

In addition, the project would indirectly contribute to the consumption of fossil fuels through the consumption of electricity (refer to Section 3.1.10 Public Services and Utilities of this document for a discussion of increases in electricity consumption).

Based upon factors provided by Adams-Streeter, the original Specific Plan will also result in the consumption of approximately 57,720 gallons of water hourly. This estimate is based upon the City of Huntington Beach Water Master Plan. This will result in a net increase from the current hourly consumption. For a more detailed discussion of water usage, please refer to Section 3.1.10 Public Services and Utilities section.

As a whole, the consumption of natural resources as a result of the use of construction-related materials, gasoline, and water is considered significant. Implementation of Mitigation Measures 1 and 2 will reduce impacts to a level less than significant.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

Buildout of the revised Specific Plan will result in a slight reduction in the consumption of natural resources due to the fact that the amendment reduces ultimate buildout of the property by 14,270 square feet. The revised project buildout will generate 54,569 million annual vehicle miles daily from the future land uses. This would result in the consumption of 16,435 million gallons of gasoline daily, based upon an average vehicle fuel efficiency of 20 miles per gallon.

Additionally, the decrease in water consumption related to the amended Specific Plan's reduction in development square footage would be less than an 1% reduction. Mitigation Measures 1 and 2 would still apply to reduce impacts to a level less than significant.

TENTATIVE PARCEL MAP NO. 2001-122

Tentative Parcel Map No. 2001-122 will not result in new or increased natural resources impacts since no change to permitted uses or allowed densities will occur. Future industrial uses within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. The realignment of Astronautics Lane will not result in additional consumption of natural resources. Therefore, no additional natural resources/energy impacts associated with implementation of the Parcel Map have been identified.

MITIGATION MEASURES

1. Building design and construction shall comply with the Energy Conservation Standards set forth in Title 24 of the California Administrative Code. Prior to approval of building permits for the Specific Plan, architectural and engineering plans shall be subject to the review and approval of the Directors of Public Works and Building and Safety to ensure conformance with these standards. Energy conservation features should include:

- Installation of thermal insulation in walls and ceilings which meet or exceed State of California, Title 24 requirements.
- Insulation of hot water pipes and duct systems.
- Use of natural ventilation where possible.
- Use of natural gas for space heating and cooking.
- Installation of ventilation devices.
- Orientation to sunlight and use of overhangs.
- Landscaping with deciduous trees, to provide shade in the summer months and allow sunlight through in the winter months.

2. Prior to approval of building permits within the Specific Plan, it is recommended that the applicant consult with both the Southern California Gas Company and Southern California Edison during the building design phase for further energy conservation measures.

STANDARD CITY POLICIES & REQUIREMENTS

No standard City conditions or requirements are applicable to identified project impacts.

3.1.10 PUBLIC SERVICES AND UTILITIES

FIRE PROTECTION

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the City of Huntington Beach Fire Department dated June 28, 1996. Fire protection for the original Specific Plan would be provided by the Huntington Beach Fire Department. The site would be served by three stations. The first is the Heil Station located at 5891 Heil Avenue, two miles from the project site. The second station serving the site is Murdy Station at 16221 Gothard Street, approximately three miles from the project site. The third station serving the site is Warner Station at 3831 Warner Avenue, approximately four and one-half miles from the project site.

The existing fire station at 5801 Heil Avenue is planned to be relocated to Graham Street and Production Lane by the year 2000. This would be the closest fire station to the subject area. At this time, staffing for this station is uncertain. Distance to the project site will be 1.4 miles and the response time will be three minutes and 40 seconds.

Currently, fire department response time to the project area does not meet the criteria established by the Cities Growth Management Committee. This policy requires a fire department response time under five minutes 80% of the time.

CURRENT CONDITIONS

Since the certification of the EIR and adoption of the Specific Plan in 1997, new private developments have been built on the eastern portion of the project area, replacing the farming operations of the past. In 2001, at the time of Amendment No.1, some portions of the site have been developed with other industrial and commercial uses, including Cambro Manufacturing, Sharp Electronics, Dynamic Cooking, DIX Metals Airtec, Konica, and C&D Aerospace. Additionally, the Extended Stay facility, and Boeing Recreation facility and fitness center have been built along Bolsa Chica Street. The Heil Avenue Station has not yet been relocated to Graham Street and Production Lane. The Fire Department has just begun the design/approval process, and the construction funding has not yet been finalized.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Future development of the project site under the original Specific Plan may create a need for additional fire protection services. The increase in the number of buildings and the number of employees brought into the area will directly affect the fire department's responses.

In 1997, fire department response time from the Heil Station to the project area did not meet the criteria established by the Cities Growth Management Committee, which requires a fire department response time under five minutes 80% of the time. As indicated previously, the Heil Station at 5801 Heil Avenue was originally planned to be relocated to Graham Street and Production Lane by the year 2000, however the Fire Department is currently in the design/approval process, and the construction funding still needs to be finalized. This would be the closest fire station to the subject area, being located 1.4 miles from the project site. Response time will then be three minutes and 40 seconds. No impacts to response times were identified with relocation of the fire station.

Potentially, one additional fire company will be required at the new facility at Graham Street and Production Lane and the most likely source for revenue will come from the City's General Fund. Buildout of the revised Specific Plan will result in a slight reduction in demand for "fire protection" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of Mitigation Measures 1 and 2 will reduce impacts related to the need for adequate response times and additional fire protection services to a level less than significant.

TENTATIVE PARCEL MAP NO. 2001-122

Please note that a separate Parcel Map Analysis will not be provided / repeated under each Public Services and Utilities category in this Section, since the conclusions would be similar.

Although the finished parcels will range between 2 to 4 feet above existing grade, the anticipated uses to be developed in the future within the boundaries of the proposed Tentative Parcel Map are consistent with the permitted uses allowed for under the Specific Plan. Future development within the Parcel Map boundaries will also be required to comply with the Development Standards and Design Guidelines of the McDonnell Centre Business Park Specific Plan. Therefore, no additional public services and utility impacts associated with implementation of the Parcel Map have been identified. The realignment of Astronautics Lane is not anticipated to result in new impacts to Public Services and Utilities as the new alignment provides better access to the proposed parcels. The Parcel Map was also reviewed by various City Departments and utility purveyors, and specific conditions of approval have been proposed (see Appendix F of this document). Additionally, mitigation measures contained in the 1997 Certified EIR and as replicated in this document should be applied as the Parcel map is implemented. Mitigation measure 24 ensures that future development within the Specific Plan boundaries will occur after review and approval of an updated sewer study, and establishment of a mechanism for financing the maintenance, operation and replacement of any sewer lift stations and force mains required by the project. Additional sanitary sewer systems, as necessary to accommodate any increased flow associated with the subdivision, will be designed and constructed. No additional impacts have been identified.

MITIGATION MEASURES

1. Prior to approval of building permits within the Specific Plan, complete building plans shall be submitted to and approved by the Fire Department. If during the Fire Department's plan check it becomes evident that fireground operations will become impeded, the department will impose standard fire code requirements such as automatic sprinkler systems, alarm systems, access roads, etc.

2. At such time as a public safety development fee is adopted by the City of Huntington Beach, the applicant / developer of the project processed within the McDonnell Centre Business Park Specific Plan shall pay such fee prior to issuance of building permits.

POLICE

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the City of Huntington Beach Police Department dated July 3, 1996. Police service is provided to the project area by the Huntington Beach Police Department. The McDonnell Douglas project site encompasses Reporting Districts #126 and #127. The department is responsible for crime prevention, investigation, and enforcement of the law, providing police support to the area with patrol responses, reporting and investigative support.

The Police Department is located approximately 5.5 miles from the project site, located at 2000 Main Street at Yorktown Avenue in Huntington Beach. The averages for response times (including dispatch time) are:

Priority 1 = 7.9 minutes
Priority 2 = 14.65 minutes
Priority 3 = 19.05 minutes

One patrol unit is out at a time with one police officer.

In 1997, the Police Department had 224 sworn officers and 131.5 civilian personnel.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section, additionally in 2001, the Police Department has 223 sworn officers and 185 civilian personnel.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Development within the project area would adversely impact the level of police services presently provided. Unless additional personnel are provided for the proposed area, the level of service needed will decrease in both response time and quality of service. According to the proposed plan, approximately one (1) additional police officer would be needed to serve the project area. This is based on the Police Department's equation of: project square footage/2.986 calls per square foot/356 calls per officer = # of police officers. 1,068,422 sq.ft./2,986 calls per sq.ft./356 calls per officer = 1 officer. The Police Department is currently on a hiring freeze for police officers. Consequently, the project would increase the calls for service, therefore, increasing the workload. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Police" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of Mitigation Measures 3 through 7 will reduce this project-specific impact to a level less than significant.

MITIGATION MEASURES

3. The Police Department shall be consulted during preliminary stages of the project design prior to approval of building permits within the Specific Plan to review the safety features, determine their adequacy, and suggest improvements.

4. At such time as a public safety development fee is adopted by the City of Huntington Beach, the applicant / developer of the project processed within the McDonnell Centre Business Park Specific Plan shall pay such fee prior to issuance of building permits.

5. During construction and at complete buildout, the project shall provide easy access into and within the project site for emergency vehicles and addresses shall be well marked to facilitate response by officers. Project site plans depicting these requirements shall be reviewed and approved by the Police Department.

6. Prior to issuance of building permits within the Specific Plan, the project shall be designed such that all areas of the project will be well lit, including alcoves, walkways, doorsteps, and parking facilities. Project site plans depicting these requirements shall be reviewed and approved by the Police Department.

7. Prior to issuance of building permits within the Specific Plan, an internal security system (e.g. security guards, alarms, access limits after hours) shall be incorporated, to be reviewed by the Police Department and the City Planning Department.

SCHOOLS

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the Westminster School District and the Huntington Beach Union High School District dated July 1, 1996 and June 26, 1996 respectively. The original Specific Plan site lies within the Westminster School District for elementary (grades K-6) and intermediate (grades 7-8) schools and the Huntington Beach Union High School District for high schools (grades 9-12). The uses onsite currently do not place a demand on this service.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

The project (original and amended) does not contain a residential component, which would generate additional students. The School Districts utilize the City of Huntington Beach General Plan to anticipate potential students resulting from ultimate buildout of the General Plan land uses. The Specific Plan is consistent with the City General Plan; therefore, buildout of the Specific Plan would have been accounted for within School District student projections. The applicant is subject to the current developer fee, which is $.30 per sq.ft. of non-residential. Buildout of the revised Specific Plan will result in a slight reduction in ultimate fees paid for "school" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of Mitigation Measure 8 will reduce project-specific impacts to a level less than significant.

MITIGATION MEASURE

8. Prior to issuance of building permits within the Specific Plan, the applicant shall provide school fees to mitigate conditions of overcrowding as part of building permit application. These fees shall be based on the state fee schedule in effect at the time of building permit applications.

COMMUNITY SERVICES

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the City of Huntington Beach Community Services Department dated July 6, 1996. The Community Services Department is responsible for recreation, park development, arts and cultural services, human services, beach maintenance, parking and marine safety. The uses onsite currently do not place a demand on this service. In 1997, the facilities operated by the Community Services Department which service the surrounding vicinity including the following:

Marina Community Park - This park is closest to the project site, and is over a mile from the project site. The park, located on the corner of Edinger Avenue and Graham Street, is 11.5 acres in size and provides lighted tennis courts, handball courts, basketball courts and a Little League baseball field. There is also a picnic shelter and a children's tot-lot.

Murdy Community Center and Park - This Community Center and park is located on the corner of Norma Avenue and Golden West Street, approximately 3.5 miles from the project site. The community center is 15 acres in size and provides tennis courts, basketball courts, a softball field, a picnic shelter and a children's tot-lot.

Community Art Center - This art center is located at 536 Main Street, approximately seven miles from the project site. The art center offers performances, classes, children's art camps, rental facilities, and three art galleries.

Seniors Recreation Center - The recreation center for seniors is located at 1706 Orange Avenue, approximately seven miles from the project site.

Seniors Outreach Center - The recreation center for seniors is located at 1708 Orange Avenue, approximately seven miles from the project site.

No neighborhood parks are located in the immediate area of the site (within a half-mile radius). Additionally, in 1997 two baseball fields were located within Planning Area 3 of the Specific Plan, along Bolsa Avenue. These fields were utilized by McDonnell Douglas employees for informal games. According to McDonnell Douglas Realty Company, these fields are neither City-owned nor operated, utilized strictly by McDonnell Douglas employees.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section, additionally, the non-City owned ball fields have been replaced with the C&D Aerospace and Boeing Recreation Facility.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

The original Specific Plan would result in the loss of the two non-City owned ball fields located in Planning Area 3 of the project site. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Community Services" due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of the original 1997 Mitigation Measure will reduce potential impacts related to the loss of the two fields to a level less than significant.

MITIGATION MEASURE

9. Prior to issuance of grading permits for Planning Area 3 in the Specific Plan resulting in removal of the existing fields, the applicant shall determine if recreation facilities are needed by existing and future employees. If deemed necessary, the applicant must enter into a lease type agreement or provision of recreation facilities for employees to replace those lost subject to the approval of the City of Huntington Beach Community Services Department.

LIBRARY

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the Huntington Central Library dated July 3, 1996. The Huntington Beach Public Library System offers a wide array of services from basic book circulating, reference research with print and electronic databases, extensive children's programming, specialized genealogy collection, media and technology center, gift shop, meeting rooms and a 320 fixed seat theater. Complete library services are provided to all residents within Huntington Beach, including the project area. Nonresidents are charged a nonresident library card fee.

The Graham Branch Library is located approximately 1 mile from the project site at 15882 Graham Street, Huntington Beach. This facility houses 17,000 volumes and has 2,000 square feet of floor space. This library has 1 full time staff member with assistance of 11 volunteer workers.

The recently expanded Huntington Central Library and Cultural Center is located in Huntington Central Park at 7111 Talbert Avenue, approximately 4.5 miles from the project site. The 125,000 square foot library provides a full spectrum of public services including circulating books, magazines, compact disc, audio/video cassettes, pamphlets and equipment. This facility houses approximately 956,000 volumes and has 46 full time staff members and 14 volunteers.

Oak View Branch is located at 17241 Oak Lane, 6.5 miles from the project site. This facility has 1,200 square feet of floor space and houses approximately 10,500 volumes. This library dose not have any full time staff member, but does have eight volunteer workers.

The Main Street Branch is located at 525 Main Street, 7.5 miles from the project site. This facility houses 30,000 volumes and has 5,000 square feet of floor space. This library has 1 full time staff member and 12 volunteer workers.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.Impacts

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

The project site is closest to the Graham Branch Library, approximately one mile away. The expansion of this branch has been listed in the City's capital improvement program for several years; however, a lack of funding has prohibited the expansion. With the development of the surrounding area, the service demand on this facility will increase. On account of the project (original and amended) not containing a residential component the increased demand on this facility by the employees of the project will not place a significant impact on this nor other libraries in the City, including the Huntington Central Library and Cultural Center, Oak View Branch Library, Main Street Branch Library, and the Banning Branch Library. The applicant is subject to the developer fee for non-residential development in place at the time of request for building permits. Buildout of the revised Specific Plan will result in a slight reduction in ultimate fees paid for "Library" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of Mitigation Measure 10 will reduce project specific impacts to a level less than significant.

MITIGATION MEASURE

10. The applicant shall provide development fees to mitigate conditions of increased demand as part of building permit application. These fees shall be based on the City fee schedule in effect at the time of building permit applications.

WATER

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

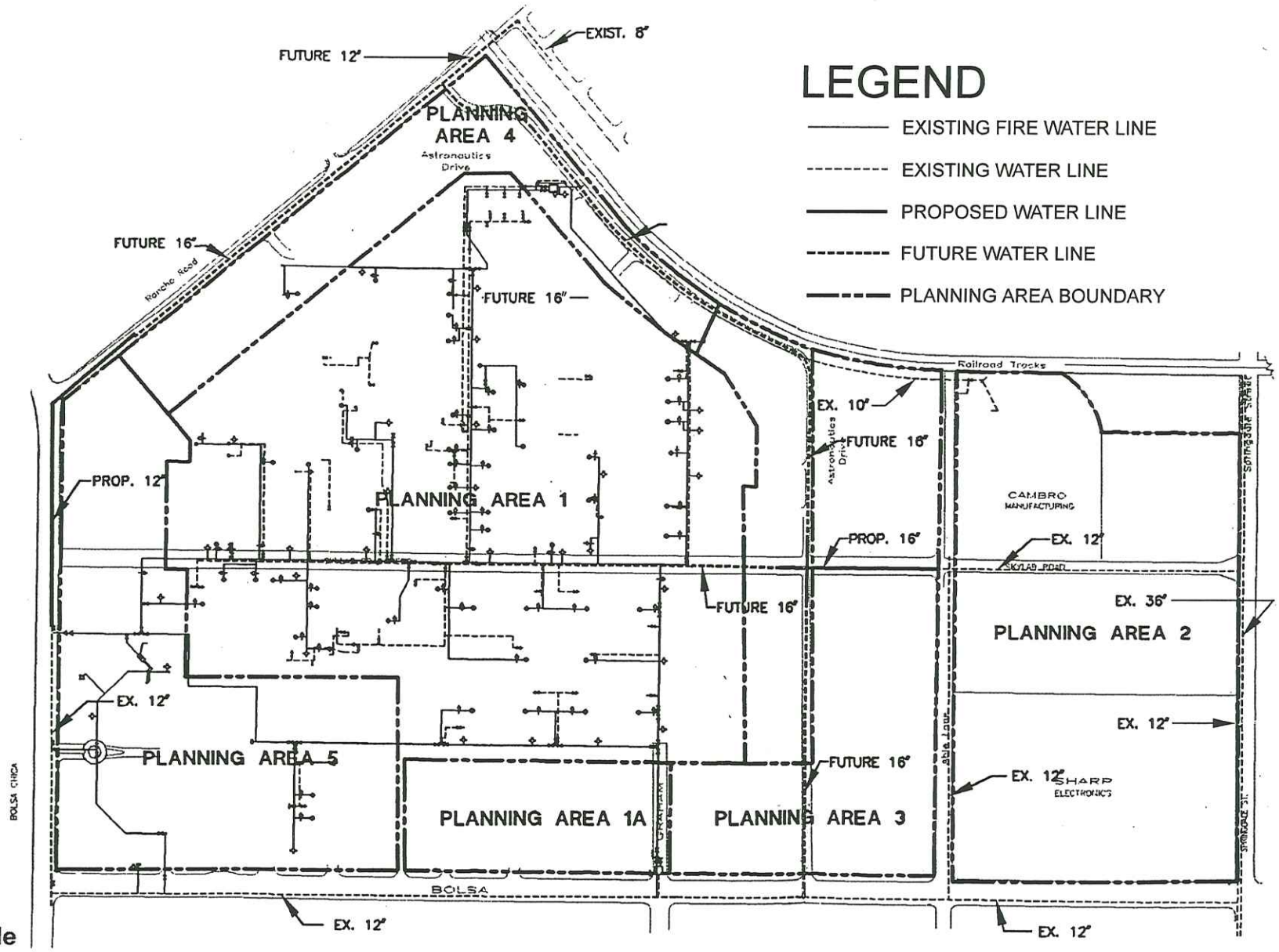
The following information is based on correspondence from the City of Huntington Beach Water Department dated July 16, 1996. The terrain of Huntington Beach is generally flat, lying on a gradual slope from northeast to southwest. The project site is located south and adjacent to Peck Reservoir (and the Springdale Reservoir to be constructed in 2001-2002) at the corner of Springdale Street and Glenwood Drive.

The Water Division of the City of Huntington Beach provides water to the project site, as well as to all customers within the City of Huntington Beach. The City of Huntington Beach water supply is derived from two primary sources: imported water from the Metropolitan Water District of Southern California and groundwater from the Orange County Groundwater Basin. On an annual average, the Water Division obtains approximately 70 percent of its water from the nine city wells and imports 30 percent of its water via the Metropolitan Water District (MWD) system. The Water Division maintains emergency connections with the Cities of Fountain Valley, Westminster and Seal Beach. According to the City of Huntington Beach 1988 Water System Master Plan, additional imported supplies of water are not probable in the near future.

The existing water supply systems are shown on Exhibit 13.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section, additionally, water lines in this area, which were originally shown as proposed are now existing.



EDAW, Inc.

Exhibit 13

Source: Adams Streeter

Original Water System Plan

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IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

The original Specific Plan may result in impacts to water supply. According to the City of Huntington Beach Water Division, the estimated water consumption rate for the proposed Specific Plan is approximately 962 gallons per minute. The MDA site has always been a part of the City's Master Plan for service. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Water" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of Mitigation Measures 11 through 18 will reduce impacts to water supply to a level less than significant.

The original Specific Plan would result in impacts to the existing water service provided to the project site. According to correspondence received from the Huntington Beach Water Division, the original Specific Plan would have an adverse impact on the level of service presently provided, until the Water Master Plan (WMP) improvements (identified in the 1995 WMP) and project related infrastructure are built. The Water Division requested that the specific impact of the original Specific Plan be determined by performing a (hydraulic) network analysis modeling of the area, with the proposed development.

As a result of this request, a water system analysis for the ultimate system required by the original Specific Plan was conducted by Sidawi and Associates (included as Appendix C of the original EIR).

According to the analysis, with the ultimate development onsite, water lines will be able to connect to the external system at more than one location to provide a second point of service (or loop) to each part of the system (see Exhibit 13). All onsite lines will be sized to deliver fire flow at adequate quantities and pressures and are 8 to 12 inches in diameter. Additionally, all water improvements will be designed to the City of Huntington Beach water standards for future City acceptance and maintenance.

The proposed water system has been incorporated as part of the Specific Development Concept (refer to Section 4.3 Public Facilities Plan of the Specific Plan). The future water requirements were anticipated as part of the Specific Plan process in an effort to ensure the infrastructure would adequately support future land uses that could result from the Specific Plan implementation. Since the Specific Plan buildout (original and amended) will occur over a period of several years, the proposed water system improvements will be phased consistent with the level of future development. A proposed phasing plan (original and amended) is included and both are discussed in Section 2.0 Project Description of this Addendum EIR. The revised water system is shown on Exhibit 14. The proposed water alignments have been revised to conform to the interior street realignments. Portions of water lines that were originally identified as "future" have been constructed to serve completed developments within Planning Area 2. These lines are now shown as existing. Some of these infrastructure improvements still need to be completed to fully conform to City Water Division requirements and the requirements of the Specific Plan adopted in 1997 (for example, even without further development of the McDonnell Centre Business Park, City and 1997 Specific Plan requirements would necessitate the completion of the 16" and 12" water pipeline in Rancho Road to connect to the existing 8" water pipeline in Spa Drive. This would provide redundancy to existing developments (including Exended Stay, Boeing Fitness Center, etc.) served from the (relatively) new water pipelines in Bolsa Chica

Street and Rancho Road. The portion of the water line in Rancho Road between the railroad and proposed entry street at Rancho Road, has been revised to 16" (12" per original EIR, Technical Appendix). A new City water well site is also part of the revised Water System Plan. The City of Huntington Beach will construct this water well and pumping facility at northeast corner of Rancho Road and Astronautics Lane. This water well will be connected to the future water system in Rancho Road, and will provide additional water supply to City system. The new water well was not a part of the original Technical Appendix. Also a new 9-million gallon reservoir contiguous (south) of the existing Peck Reservoir will be built within the Specific Plan boundary in 2001-2002. Water impact deficiencies for the original and/or amended Specific Plan will occur if the future water system components are not brought on line. Mitigation Measure 18 will reduce this potential impact to a level less than significant.

Please refer to Section 3.1.8 for a discussion of impacts to water quality.

MITIGATION MEASURES

11. Prior to issuance of Certificates of Occupancy, the following water conservation measures shall be implemented as required by state law:

    a. Ultra-low-flush toilets

    b. Ultra-low-flow showers and faucets

    c. Insulation of hot water lines in water recirculating systems

    d. Compliance with water conservation provisions of the appropriate plumbing code

    e. Refer to the "Water Efficient Landscape Requirements" of the City of Huntington Beach Municipal Code, Chapter 14.52.

12. Prior to issuance of building permits, irrigation systems which minimize water waste shall be used to the greatest extent possible. Such measures should involve such features as the following:

    a. Raised planters and berming in conjunction with closely spaced low volume, low angle (22 ½ degree) sprinkler heads.

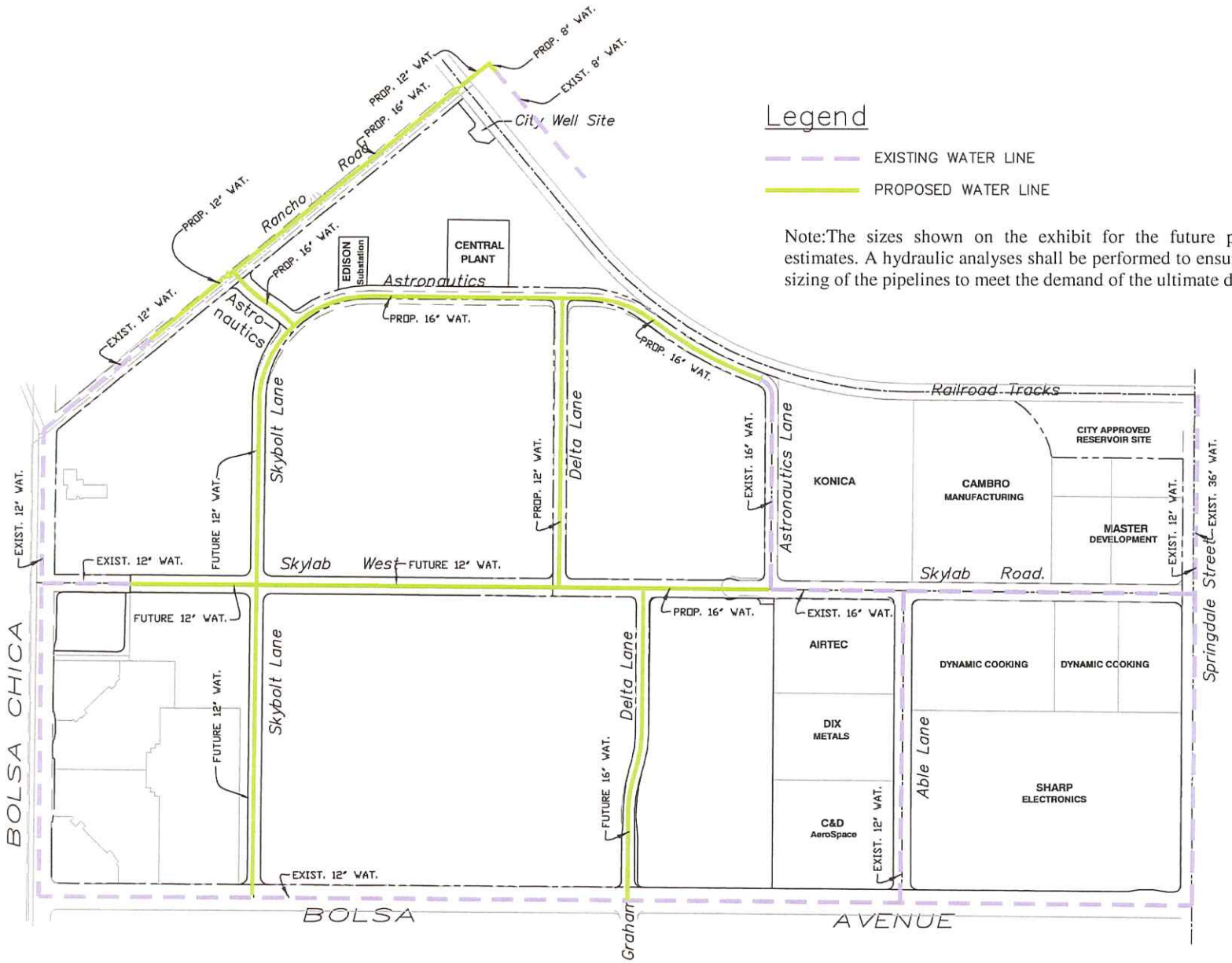
    b. Drip irrigation.

    c. Irrigation systems controlled automatically to ensure watering during early morning or evening hours to reduce evaporation losses.

    d. The use of reclaimed water for irrigated areas and grass lands. The project applicants shall connect to the Orange County Water District's "Green Acres" system of reclaimed water should this supply of water be available. Separate irrigation services shall be installed to ease this transition.

ADDENDUM TO MCDONNELL DOUGLAS EIR 96-1

City of Huntington Beach



No Scale

EDAW, Inc.

Exhibit 14

Source: Adams Streeter

Revised Water System Plan

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13. Prior to issuance of Certificates of Occupancy, water pressure regulators to limit downstream pressure to a maximum of 60 psi shall be installed.

14. Prior to issuance of building permits within the Specific Plan, the use of pervious paving material shall be encouraged to reduce surface water runoff and aid in groundwater recharge and slopes and grades shall be controlled to discourage water waste through runoff.

15. Prior to issuance of grading permits, the Developer shall provide information to prospective occupants regarding benefits of low water use landscaping and sources of additional assistance in selecting irrigation and landscaping.

16. Prior to issuance of building permits, complete landscape and irrigation plans which minimize the use of lawns and utilize warm season, drought tolerant species shall be submitted to Public Works Engineering and approved by the Park, Tree, and Landscape Division. Mulch shall be used extensively in all landscaped areas. Mulch applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction. Irrigation system shall be designed to use reclaimed water when available. The City's Municipal Code Chapter 14.52, "Water Efficient Landscape Requirements" shall be followed.

17. Prior to issuance of building permits within the Specific Plan, the Public Works, Park, Tree, and Landscape Division shall be consulted during design and construction for further water conservation measures to review irrigation designs and drought tolerant plant use, as well as measures that may be incorporated into the project to reduce peak hour water demand.

18. Prior to the issuance of building permits within the Specific Plan, the project applicant shall implement conditions of the Public Works Department regarding water infrastructure improvements (identified on Exhibit 14 within the Addendum EIR) to handle increased water flow demands.

SOLID WASTE

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the Rainbow Disposal Company dated July 15, 1996. Solid waste generated in the City is collected by Rainbow Disposal Inc., a private collection company under contract with the City. Rainbow Disposal provides the following services: solid waste removal and recycling, construction debris removal, commercial pick-up service, three cubic yard bin, roll-off container and compactor service. Commercial and industrial units contract with Rainbow Disposal on an individual basis.

Solid waste is processed through the Rainbow Transfer/Recycling Facility. Recyclables are removed and the residual is transported to the County Bauerman Landfill. The capacity of the Rainbow Transfer/Recycling Facility is 2800 tons per day and is presently at 1,500 tons per day.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Rainbow Disposal anticipates no adverse impacts in serving the proposed development. No adverse impacts were identified on Rainbow Disposal's operations, its transfer station, or the County Bauerman Landfill. In addition, the California Integrated Waste Management Act of 1989, AB939, mandates that each City must prepare, adopt or submit to the County a Source Reduction and Recycling Element for inclusion in a County Integrated Waste Management Plan. AB939 establishes a statewide goal of diverting through source reduction, recycling, and composting 25% of solid waste from landfill or incinerator by 1995, and 50% or the maximum amount feasible by 2000. These reductions required by AB939 will assist in reducing solid waste generation impacts associated with the original Specific Plan.

These facilities are presently adequate to serve the original Specific Plan. No significant impacts were identified. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Solid Waste" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Although no significant impacts have been identified, Mitigation Measures 19 and 20 are proposed to ensure that no impacts will occur.

MITIGATION MEASURES

19. To reduce the original Specific Plan impacts on waste disposal facilities, project designs shall develop a means of reducing the amount of waste generated both during construction and when the project is in use. The waste reduction program shall be approved by the Director of Planning prior to issuance of building permits within the Specific Plan. Potential ways of reducing project waste loads include implementation of recycling programs, and use of low maintenance landscaping when possible (i.e., native vegetation or ground cover (Herbaceous or Woody) instead of turf).

20. Rainbow Disposal shall be contacted during the design stage of project components to ensure the most efficient and economical means for rubbish removal. The designs shall include rubbish enclosures, projected travel areas, and turnabouts where necessary.

PUBLIC TRANSPORTATION

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the Orange County Transportation Authority dated July 3, 1996. Public transportation service to the project vicinity is provided by the Orange County Transit Authority (OCTA). OCTA presently provides local bus service to the McDonnell Douglas facility. The service in 1997 was offered during peak hours only.

OCTA bus route 64, which operates from Santa Ana to the project site primarily via Bolsa Avenue, provides service on weekdays during peak hours. Service consists of 26 daily trips operating about every 30 minutes. In 1997, there were six bus stops in the project area; four are located on Bolsa Avenue, one is located on Springdale Street just south of Bolsa Avenue and one is located on the McDonnell Douglas property. Combined, these bus stops account for about 66 daily passenger boardings and alightings. In 1997, the service was significantly underutilized.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

The increase in employees due to the original Specific Plan would generate increased demand for transit service to the area. According to the Orange County Transportation Authority (OCTA), the existing park and ride and bus stops should be retained, and if necessary, they could be modified to conform with the design of the new project. Furthermore, a project of such large scope may require expansion of service. Due to the proposed mixed use of the project, there may be the demand to provide bus service during the middle of the day.

OCTA recommends incorporating transit amenities such as bus stops, bus turnouts, bus stop shelters, and maintaining the existing park and ride. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Public Transportation" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Implementation of Mitigation Measures 21 through 23 will reduce impacts to a level less than significant.

MITIGATION MEASURES

21. Prior to issuance of building permits within the Specific Plan, a bus turnout, if determined by the City Transportation Manager to be necessary based on roadway cross sections, travel volumes or speeds, shall be provided at each bus stop located in the project area.

22. Prior to approval of a tentative map within the Specific Plan, the area adjacent to this turnout shall include a paved passenger waiting area complete with a bus shelter and bench.

23. Prior to approval of a tentative map within the Specific Plan, a concrete bus pad sufficient to support the weight of a bus (see OCTA's Design Guidelines for Bus Facilities) may have to be provided at the transit stop. This would be necessary assuming the material used to construct Bolsa Avenue would be insufficient to support continued transit use of the bus stop.

SEWER

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the City of Huntington Beach Public Works Department and the County Sanitation Districts of Orange County dated July 8, 1996, and from the Sewer Master Plan report.

The existing sewer facilities for the project area are served by two agencies: 1) the City of Huntington Beach, Public Works Department, Sewage Division, for collection of wastewater; and 2) the County Sanitation Districts (OCSD) of Orange County District 11, for the treatment of wastewater. Wastewater generated within the District's service area is processed at treatment plants; OCSD #5 is located at 10844 Ellis Avenue in Fountain Valley and Plant #2 is easterly of the City of Huntington Beach, approximately 12 miles from this property (see Exhibit 15). The District operates under a National Pollutant Discharge Elimination System (NPDES) permit issued by the California Regional Water Quality Control Board (CRWQCB). This permit has a set discharge limit for biochemical oxygen demand (BOD) and suspended solids (SS). The project area is within OCSD Number 11, and for sewage flow purposes it is tributary to the OCSD Number 11 Slater Avenue Pump Station which in 1997 was deficient.

Sewerage from project site is collected at two points. One is at the intersection of Bolsa Avenue and Graham Street, then via a 24-inch line southerly to the Sanitation District trunk line in Edinger Avenue, and then continuing to the District Plant #2. This system also collects the sewerage flows from the residential area northerly of the project site. The second collection point is at the intersection of Bolsa Avenue and Bolsa Chica Road, then via a 12-inch line southerly to the Sanitation District's trunk line located in Edinger Avenue.

Total sewer flows from the project site currently come from three sub-areas. The first sub-area is located on the southwest corner of the project site and includes the existing high-rise office building. This sub-area drains through an eight-inch sewer line and a double six-inch siphon, southerly of a 12-inch line in Bolsa Avenue. From there it flows westerly, to a 12-inch OCFCD sewer line in Bolsa Chica Street, which drains southerly to the Sanitation District's trunk line in Edinger Avenue.

The second sub-area consists of the McDonnell Douglas aerospace (MDA) plant area. Sewer flows from this area are collected through a system of pipes as shown on Exhibit 15 and directed to a pump station located north of Bolsa Avenue and east of Graham Street. The flows are then pumped through an 18-inch pipe to the existing 24-inch sewer pipe where it joins with sewer from the third sub-area.

The third sub-area includes the residential area north of the railroad tracks, Cambro Manufacturing located at the northwest corner of Skylab Road and Able Lane, and Sharp Electronics, at the northwest corner of Bolsa Avenue and Springdale Street. A 12-inch sewer line flowing southerly in Able Lane and westerly in Bolsa Avenue, conveys these flows to a 24" sewer line located in Graham Street.

The existing MDA sewer system has sufficient capacity as a stand alone system

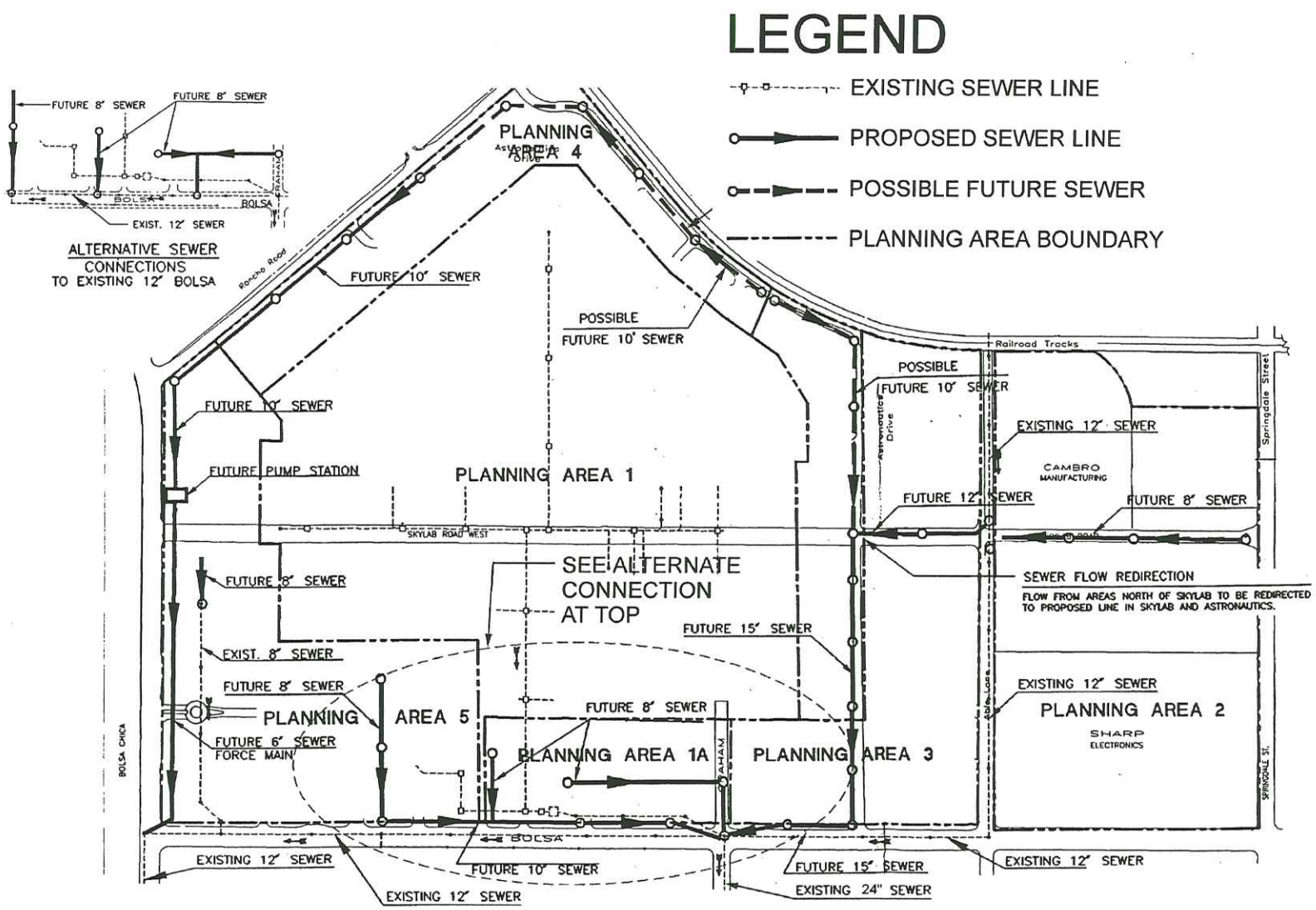
CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section, additionally, the sewer lines in this area which were originally shown as proposed are now existing.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Implementation of the original Specific Plan would result in additional demand on the existing sewer system from increased sewage flows. In response to a questionnaire submitted to the Huntington Beach Public Works Department, the Public Works Department requested that a detailed engineering sewer study be performed to determine the capacity of the existing facilities and the need for expansions of new facilities. As a result of this request, a Sewer Master Plan was prepared for the original Specific Plan. Buildout of the Specific Plan would result in additional sub-areas generating sewer flows (see Exhibit 15). Sewer flows for area L-1 and L-2 which drain through the existing eight-inch sewer line would include the future motel, restaurant, and a second office building, as well as the existing office high rise. This line has the capacity to carry the proposed calculated flows.



No Scale

EDAW, Inc.

Exhibit 15

Source: Adams Streeter

Original Sewer System Plan

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Proposed planning areas on the westerly and northerly periphery of the project site are proposed to drain through a system of pipes to a future pump station in the northwest corner of Skylab Road and Bolsa Chica Street. A forced main will convey this flow southerly to the existing 12-inch main in Bolsa Chica Street. This line has the capacity to carry the proposed calculated flows.

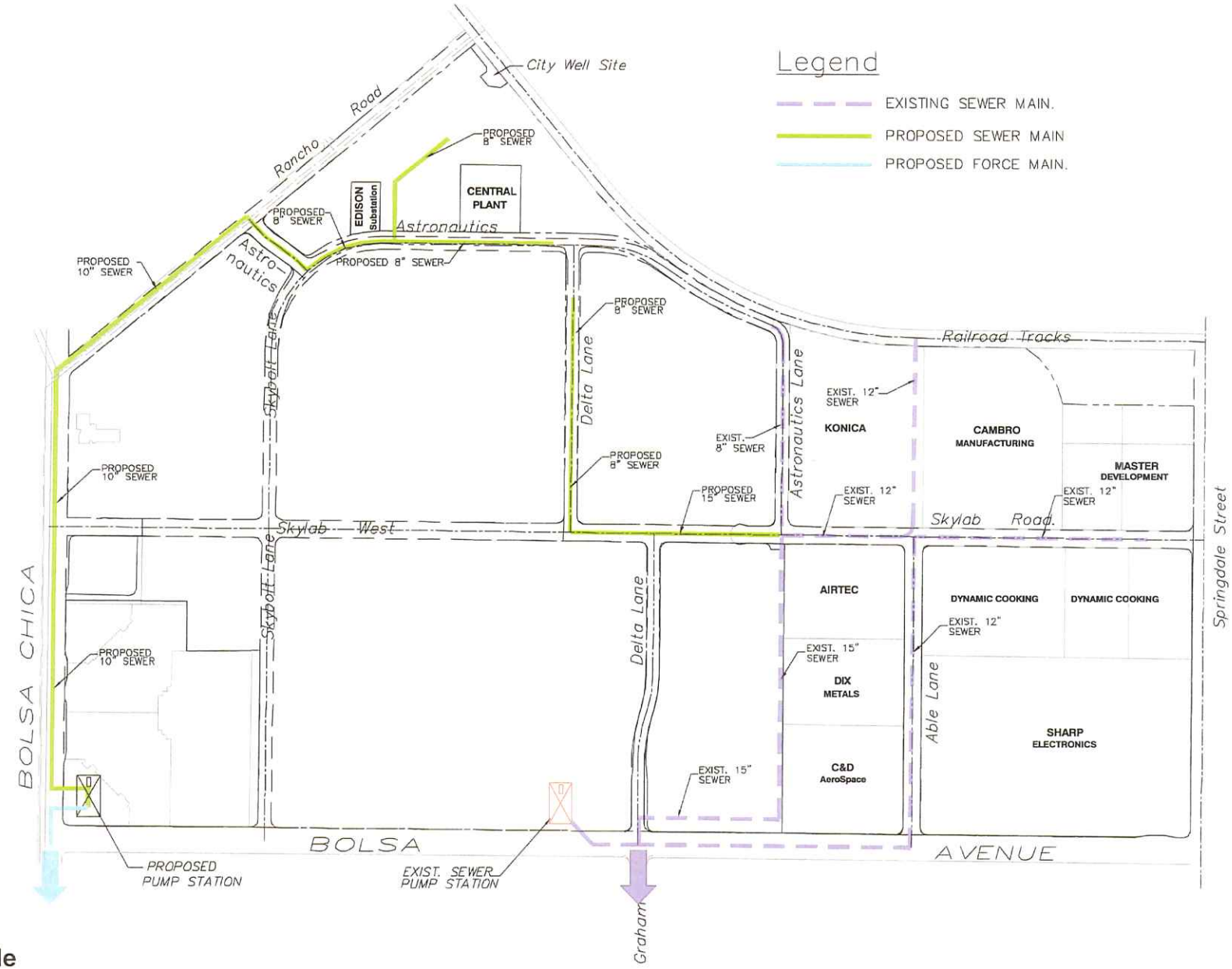
The MDA plant area sewer will remain isolated and will continue to drain via the existing pump station. New sewer lines are proposed for the planning areas located north of Bolsa Avenue to drain separately to the existing 24-inch Graham Street sewer line.

A new line is proposed in Skylab West and Astronautics Lane to convey the sewer flows from the existing residential area (not a part of the Specific Plan site) and the areas north of Skylab Road and areas adjacent to and west of Able Lane, with the exception of the Cambro facility. Cambro Manufacturing will drain to the existing 12-inch sewer in Able Lane and Bolsa Avenue, and will then drain to the Graham Street 24-inch sewer.

The proposed sewer system has been incorporated as part of the Specific Development Concept (refer to Section 4.3 Public Facilities Plan of the Specific Plan). The revised sewer system plan proposed as part of the Specific Plan Amendment is shown on Exhibit 16. The proposed sewer alignments have been revised to conform to the interior street realignments. Portions of sewer lines that were originally identified as "future" have been constructed to serve completed developments within Planning Area 2. These lines are now shown as existing. Additionally, the sewer line located in Skylab Road east of Able Lane has been increased to a twelve (12) inch line from an originally proposed eight (8) inch line. The future sewer requirements were anticipated as part of the Specific Plan process in an effort to ensure the infrastructure would adequately support future land uses that could result from the Specific Plan implementation. Since the Specific Plan buildout (original and amended) will occur over a period of several years, the proposed sewer system improvements will be phased consistent with the level of future development. A proposed phasing plan (original and amended) is included in and both are discussed in Section 2.0 Project Description of this Addendum EIR. A potential project-specific sewer impact for the original and amended Specific Plan would occur if the future sewer system components are not brought on line when future demands identify the need. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Sewer" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Mitigation Measure 24 will reduce the potential sewer impact to a level less than significant.

MITIGATION MEASURE

24. Prior to the issuance of Certificates of Occupancy within the Specific Plan, the project applicant shall implement conditions of the Public Works Department regarding sewer infrastructure improvements (identified on Exhibit 16 within the Addendum EIR) to handle increased sewer flow demands.



No Scale

EDAW, Inc.

Exhibit 16

Source: Adams Streeter

Revised Sewer System Plan

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STORM DRAIN SYSTEMS

Please refer to Section 3.1.1 of this Addendum EIR for a discussion of Drainage and Hydrology.

NATURAL GAS

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the Southern California Gas Company dated July 5, 1996. Natural gas service is provided by The Gas Company. Existing facilities in the area include an existing main located in Able Lane and in Springdale Street adjacent to the project site. The uses onsite in 1997 did not place a significant demand on this service.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

The Gas Company indicates that gas service could be provided by the existing main along Able Lane and Springdale Street. The availability of natural gas service is based upon present conditions of gas supply and regulatory policies. The Gas Company anticipates that project consumption can be accommodated by existing facilities without any significant impacts. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Natural Gas" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Mitigation Measure 2 in Section 3.1.9 is proposed to ensure energy conservation standards are met. No impacts were identified with implementation of proposed mitigation.

MITIGATION MEASURE

Please refer to Mitigation Measure 2 in Section 3.1.9 Natural Resources/Energy of this Addendum EIR.

ELECTRICITY

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

Electrical service is provided in the area by Southern California Edison Company (SCE). The project site is adjacent to standard 12kV electrical facilities located on Bolsa Avenue and Springdale Streets. An underground primarily electrical line runs along the full length of the south side of Bolsa Avenue. There are existing lateral lines along the east side of Springdale Street which connect with the Bolsa Avenue facility. All new lines installed in the City are required to be underground, and the City is working with SCE to achieve the undergrounding of existing lines. The uses onsite in 1997 did not place a significant demand on this service.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Adequate electric power supply can be provided from 12 kV distribution lines located along Bolsa Avenue and on Springdale Street. SCE does not anticipate any significant impacts given the fact that the electric loads of the project area are within the parameters of Southern California Edison's project load growth. The project site is surrounded by facilities adequate to serve it; some facilities may require relocation or removal depending on street alignments. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Electricity" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Mitigation Measure 2 in Section 3.1.9 is proposed to ensure energy conservation standards are met. No significant impacts were identified with implementation of proposed mitigation.

MITIGATION MEASURE

Please refer to Mitigation Measure 2 in Section 3.1.9 Natural Resources/Energy of this Addendum EIR.

TELEPHONE

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from the Verizon dated July 3, 1996. Verizon provides telecommunication services to the City of Huntington Beach. The service facility closest to the project area is located at the existing McDonnell Douglas facility on the site. Currently, a cable exists along Bolsa Avenue and along Springdale Street. The City of Huntington Beach requires that all new transmission lines be installed underground.

CURRENT CONDITIONS

The current conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Service for the project area would be from underground lines. The original Specific Plan would create a need for an extension of facilities toward the west along Bolsa Avenue. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Telephone" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet. Mitigation Measure 25 is proposed to ensure necessary improvements are made to provide adequate service to the project site. No significant impacts were identified with implementation of the proposed mitigation.

MITIGATION MEASURE

25. Prior to issuance of building permits within the Specific Plan, building plans shall be submitted to Verizon enabling Verizon to assess the improvements necessary to provide adequate service to the project site.

HOSPITAL

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

The following information is based on correspondence from Vencor Hospital, Orange County and Columbia Huntington Beach Hospital and Medical Center dated June 26, 1996 and July 15, 1996 respectively. The project area is serviced by these two facilities. The closest hospital to the site is the Vencor Hospital, located 2.3 miles from the site at 200 Hospital Circle in the City of Westminster. The hospital provides general medical and surgical acute care. There are 99 licensed beds, with an occupancy rate of 48%. The hospital does not maintain emergency services; there is no emergency room.

Columbia Huntington Beach Hospital and Medical Center of Huntington Beach is located at 17772 Beach Boulevard, between Slater and Talbert, approximately five miles from the project site. The hospital provides general acute care, intensive and coronary care, maternity services with labor, delivery and recovery suites, emergency room, outpatient surgical services, inpatient and outpatient psychiatric services, rehabilitation services, cardiopulmonary services, diagnostic imaging and occupational medicine program for work injuries and illnesses. The hospital is equipped with 135 beds. In 1997 operation was at 45% occupancy rate. In 1997, the hospital had recently constructed a 4,075 square foot emergency department.

CURRENT CONDITIONS

The conditions are described above under the Fire Protection Section.

IMPACTS

1997 Certified EIR (Original Specific Plan) and Proposed Specific Plan Modifications

Columbia Huntington Beach Medical Center and Vencor Hospital Orange County of Westminster foresee no impact on hospital service with buildout of the original Specific Plan. The present facilities are sufficiently capable to provide service to the project site. Buildout of the revised Specific Plan will result in a slight reduction in demand for "Hospital" services due to the fact that the amendment reduces ultimate buildout of the property by 14,240 square feet.

MITIGATION MEASURE

No mitigation measures were provided in 1997 and none are required with the project revision.

STANDARD CITY POLICIES AND REQUIREMENTS

The following City Policy was the only one provided in the 1997 Certified EIR for Public Services and Utilities, and it is still applicable to the amended Specific Plan.

A. All applicable Public Works fees shall be paid. The developer will be responsible for the payment of any additional fees adopted in the "upcoming" Water Division Financial Master Plan.

3.1.11 AGRICULTURE

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

According to MDRC, the site has not been leased for irrigated agricultural purposes since 1994.

In 1997, a portion of the site was classified as prime farmland according to the State Department of Conservation, which ranks farmlands according to soils maps produced by the U.S. Department of Agriculture, Soil Conservation Service. Exhibit 42 of the 1997 Certified EIR illustrates important farmlands within the City of Huntington Beach. Prime farmland is defined by the Department of Conservation as "land with the best combination of physical and chemical features for the production of agricultural crops."

The site is not classified as agricultural preserve under the State's Williamson Act of 1965. In order to be considered an agricultural preserve under the Williamson Act, the land must have a minimum size of 100 acres.

CURRENT CONDITIONS

Since the certification of the EIR in 1997, new private developments, including Sharp Electronics and Dynamic Cooking (see Exhibit 6), have been built on the eastern portion of the project area, replacing the farming operations of the past. Therefore, there is no agricultural activity within the project area.

IMPACTS

1997 Certified EIR (Original Specific Plan)

The original Specific Plan would convert approximately 30 acres of important farmland (not currently in agricultural production) to urbanized uses. Therefore the project is under the threshold defined by the Office of Land Conservation, and the conversion was not considered significant. The site has not been in agricultural use since 1994 and future agricultural uses are not anticipated during the implementation of the proposed Specific Plan.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN/TENTATIVE PARCEL MAP NO. 2001-122

All areas of the site that were previously farmed or were designated as prime farmland have been developed by Sharp Electronics and Dynamic Cooking and therefore, no impacts to agriculture uses are anticipated from the revised Specific Plan and Parcel Map.

MITIGATION MEASURES/STANDARD CITY POLICIES & REQUIREMENTS

No mitigation measures or Standard City Policies were provided in 1997 since the original Specific Plan was estimated to convert 30 acres (which is less than the 80 acres threshold) of important farmland to urbanized use. Mitigation measures are also not necessary with the revised Specific Plan and Parcel Map.

3.1.12 SOCIOECONOMICS

EXISTING CONDITIONS

1997 Certified EIR (Original Specific Plan)

Within Huntington Beach's private and public sectors, the City in 1997 provided employment for approximately 60,800 people. These estimates are based on California State Employment Development Department (EDD) and US Census data on employment at the city level for all cities within the Anaheim-Santa Ana Standard Metropolitan Statistical Area. Key retail, service, manufacturing and wholesaling jobs account for over 45 percent of all local employment. Many of these areas of employment have been growing recently in either the number of new establishments opening for business in the City or in expansions of existing businesses.

Aerospace and its related manufacturing suppliers, job shops, fabricators and testing houses play an important role in the City's economy. The McDonnell Douglas Aerospace facility, is the City's single largest aerospace employer. Although employment levels are known to fluctuate substantially at large aerospace companies, it is estimated that McDonnell Douglas employed approximately 8,500 persons at the Huntington Beach facility in 1991. Approximately 17 other local businesses are involved wholly or in part with the aerospace industry. It is estimated that these "aerospace-support" companies employ just under 1300 people.

Based on the historical growth rate, employment in the City of Huntington Beach is projected to increase to 70,006 in 2000 and 86,914 in the year 2010. The employment to population ratio was estimated in 1989 to be .288. This .288 figure means that there are roughly 28 jobs available for every 100 residents within the City. This is expected to increase to .320 by 2000 and .375 by the year 2010.

The 1990 Census population figure for Huntington Beach was 181,519. This represents a total increase of 6.4% from the 1980 population figure of 170,505. Huntington Beach ranks as the third most populated City in Orange County, following Anaheim and Santa Ana.

The composition of housing stock (multi-family versus single family) in Huntington Beach remained basically the same between 1980 and 1990. The predominant housing type is the single family home. In 1990, a total of 72,736 housing units were counted in the City of Huntington Beach.

CURRENT CONDITIONS

The following discussion is based on information contained in the Orange County Progress Report by Center for Demographic Research, information provided by the Department of Finance, Demographic Research Unit and the 2001 Huntington Beach Business Odyssey Community Overview.

Within Huntington Beach's private and public sectors, the City provides employment for approximately 60,000 people. Forty-one major employers provide (17,654 people) of the employment in the City. Out of those 41 major employers, The Boeing Company employees approximately 9,000 people.

According to the Center for Demographic Research, employment in the City of Huntington Beach is projected to increase to 88,511 in year 2005 and 91,845 in the year 2010.

The 2000 Census population figure for Huntington Beach was 190,342. This represents a total increase of 4.9% from the 1990 population figure of 181,519. Huntington Beach is the third largest city in Orange County.

The composition of housing stock (multi-family versus single family) in Huntington Beach remained basically the same between 1990 and 2000. The predominant housing type is the single family home. In 2000, a total of 76,148 housing units were counted in the City of Huntington Beach.

IMPACTS

1997 Certified EIR (Original Specific Plan)

Implementation of the existing Specific Plan would stimulate business opportunities within the City by allowing for and encouraging development. The existing Specific Plan provides for a range of employment opportunities in the professional, retail, service and industrial fields; thus stimulating business opportunities and widening the employee base of the community.

The original Specific Plan was not anticipated to result in a change in the City's employment base that is considered significant. The Specific Plan is consistent with the City's General Plan. Buildout of the project site with industrial-type uses has been addressed within the City's General Plan. Additionally, the Specific Plan area is anticipated to incrementally develop in phases over an extended period of time. The project site has been divided into a number of planning areas, creating distinct subareas and allowing for private development to occur in a manner within an overall Master Plan concept. This approach is to ensure that future economic development opportunities will be implemented dependent upon market conditions. No significant impacts were identified.

PROPOSED MODIFICATIONS TO SPECIFIC PLAN

The revised Specific Plan would reduce the square footage of building area at buildout by about one half of one percent. This change could result in a proportional reduction in employment in the Specific Plan area at buildout. However, with over 8,000,000 square feet of building area, the slight reduction in employment will not cause a change in the City's employment base that is considered significant. Therefore, the revised Specific Plan will not cause significant adverse employment impacts.

TENTATIVE PARCEL MAP NO. 2001-122

Tentative Parcel Map No. 2001-122 will not result in new or increased socioeconomic impacts since no change to permitted uses or allowed densities will occur. Future industrial uses within the parcel map boundaries will be designed to comply with Specific Plan Development Standards and Design Guidelines. The increase in finished parcels by approximately 2 to 4 feet, and the realignment of Astronautics Lane will not result in socioeconomic related impacts, because these types of impacts typically result from the development of specific uses. Therefore, no additional impacts associated with implementation of the Parcel Map have been identified.

MITIGATION MEASURES/STANDARD CITY POLICIES & REQUIREMENTS

No mitigation measures or Standard City Policies were provided in 1997 for the existing Specific Plan, since no socioeconomic impacts have been identified with implementation of the Specific Plan. With the revised Specific Plan and Parcel Map, mitigation measures are not necessary.

3.2 CONCLUSIONS

The proposed revision to the Specific Plan and Tentative Parcel Map No. 2001-122 would not result in any new significant environmental impacts nor would they result in a substantial increase in the severity of previously identified significant effects. Consequently major revisions to the Certified EIR are not required and none of the other conditions listed in Section 15162(a) that would require the preparation of a subsequent EIR have occurred. Therefore, the appropriate level of analysis for the proposed project revision is an addendum to the FEIR, as required by Section 15164(a). For all resource categories evaluated in the Certified EIR impacts would be either unchanged or reduced. This conclusion is supported by the impact analysis included in this report, the information included in the Certified EIR and the updated technical studies. Substantial evidence in the record supports the conclusion that the revised project does not create any new or increased significant impacts as compared to the original Specific Plan. Thus no supplemental environmental review is required.

4.0 SUMMARY OF MITIGATION MEASURES

The Environmental Analysis Section 3.0 is comprised of the following mitigation measures:

AESTHETICS AND URBAN DESIGN

1. Prior to issuance of grading permits within the Specific Plan, the project proponent for subsequent projects located within the Specific Plan area shall submit for review and approval, an Arborist report by a City approved International Society of Arborist (ISA) certified and consulting Arborist via the Director of Public Works to the City Landscape Architect. This report shall detail the location, health, and quantity of mature trees, which currently exist within the project area. The final landscape plan shall illustrate which trees will be removed along with the quantity and location of replacement trees.

2. Prior to issuance of building permits within the Specific Plan, the applicant shall submit (first submittal) three landscape construction sets for review and approval to the Public Works and Planning Departments. The landscape plans shall be prepared by a Licensed Landscape Architect and shall incorporate the McDonnell Centre Business Park Specific Plan requirements. Plants that are attractive to rodents shall be avoided.

LIGHT AND GLARE

1. Prior to issuance of building permits within the Specific Plan, all exterior lighting shall be consistent with the standards established by the Zoning Ordinance (unless otherwise addressed within the Specific Plan) to minimize on and off-site light and glare impacts. The lighting shall be approved by the Planning, Building and Safety, and Public Works Departments.

2. Prior to issuance of building permits for buildings constructed within Planning Area 5, proposed lighting shall be approved by the Planning, Building and Safety, and Public Works Departments.

3. Buildings shall emphasize the minimization of glare by incorporating non-reflective building materials. Individual building site plans shall be reviewed and approved by the City Planning Department to assure this measure is met prior to issuance of building permits within the Specific Plan.

TRANSPORTATION AND CIRCULATION

1. Prior to the issuance of grading permits within the Specific Plan, each applicant shall coordinate with the City of Huntington Beach in developing a truck and construction vehicle routing plan. This plan shall specify the hours in which transport activities can occur and methods to minimize construction related impacts to adjacent residences. The final plan shall be approved by the Public Works Department.

2. Prior to the issuance of building permits within the Specific Plan, each applicant shall coordinate with the City of Huntington Beach Public Works Department to ensure the following is accomplished:

   a. necessary review of signal warrants
   b. review/approval of turn ingress/egress
   c. review/approval of any added driveways
   d. parking analysis demonstrating parking supplies meet or exceed the demands

   The purpose of the above review is to: 1) ensure site specific impacts from individual projects are reduced to a level less than significant and 2) identify the timing of future signal installations/improvements.

3. Prior to the issuance of building permits within the Specific Plan, the applicant shall demonstrate to the satisfaction of the City Transportation Manager that truck access points depicted on their "Final" site plan(s), meet the City's minimum truck turning radius standards.

4. Prior to the issuance of building permits within the Specific Plan, the applicant shall demonstrate to the satisfaction of the City Transportation Manager that standards (including ADA) regarding pedestrian/bicycle safety along the perimeter sidewalks have been met.

5. The City of Huntington Beach shall collect its traffic impact fee as "interim" levels of development occur prior to the issuance of building permits. These fees will relieve the developer of traffic mitigation obligations (as detailed for Levels 1, 2, and 3 as shown in Tables K and L of the Traffic Impact Assessment) resulting from the interim levels of development. The specific Level 1-3 improvements detailed in Tables K and L shall be added to the City's CIP and implemented in a reasonable time frame.

6. An updated Traffic Impact Assessment (TIA) shall be prepared at the expense of McDonnell Douglas or successor in interest as the interim trip budget is reached. The methodology to determine when a TIA is required is to start at the anticipated "existing" trip end total of 28,065 TE. For each new building developed (where the City traffic fee is applied), add the City trip generation requirement to the 28,065 total until the original 55,510 TE threshold is reached, at which point a traffic study would be required. The first 10,470 TE of entitlements "used" by Boeing would not be added to the trip budget

accounting, but any subsequent use of the remaining 7,795 entitlements (no traffic fee required) would count toward the Interim trip budget. This revised TIA shall not relieve the developer of any obligation to pay any traffic impact fees (should the present or any other traffic impact fee program be in place) or provide for mitigation measures for development at the time of developments. Also, said TIA shall be presented to the Planning Commission for review prior to approval by Planning Director and Public Works Director.

7. Throughout the Specific Plan implementation, the City shall maintain and update an annual trip budget monitoring report to determine the status of the constructed and approved development applications (entitled) development and resulting expected trips within the McDonnell Center Specific Plan area. This annual trip budget monitoring report shall be based upon building permits issued and (entitled) development within the McDonnell Center. The trip budget monitoring report shall include gross and usable square footages of the constructed and/or entitled usage, a description of the land usage, and the trip generation rates used for the land usage proposed. The trip rates used in the monitoring report shall be those rates contained in the latest *Trip Generation* manual published by the Institute of Transportation Engineers (currently the 5th edition and 5th edition update) or another reliable source (i.e., another traffic study) as approved by the City Traffic Engineer.

AIR QUALITY

1. During grading and construction, the applicant shall be responsible for compliance with the following:

   a. During clearing, grading, earth moving or excavation, maintain equipment engines in proper tune.

   b. After clearing, grading, earth moving or excavation:

      (1) Wet the area down, sufficient enough to form a crust on the surface with repeated soakings, as necessary, to maintain the crust and prevent dust pick up by the wind.
      (2) Spread soil binders; and
      (3) Implement street sweeping as necessary.

   c. During construction:

      (1) Use water trucks or sprinkler systems to keep all areas where vehicles move damp enough to prevent dust raised when leaving the site;(2) Wet down areas in the late morning and after work is completed for the day;
      (3) Use low sulfur fuel (.05% by weight) for construction equipment.

   d. Phase and schedule construction activities to avoid high ozone days.

e. Discontinue construction during second stage smog alerts.

2. During grading and construction, the applicant shall be responsible for compliance with the following:

   a. Require a phased schedule for construction activities to minimize daily emissions.

   b. Schedule activities to minimize the amount of exposed excavated soil during and after the end of work periods.

   c. Treat unattended construction areas with water (disturbed lands which have been, or are expected to be unused for four or more consecutive days).

   d. Require the planting of vegetative ground cover as soon as possible on construction sites and super pads if construction is not anticipated within one month.

   e. Install vehicle wheel-washers before the roadway entrance at construction sites.

   f. Wash off trucks leaving site.

   g. Require all trucks hauling dirt, sand, soil or other loose substances and building materials to be covered, or to maintain a minimum freeboard of two feet between the top of the load and the top of the truck bed sides.

   h. Use vegetative stabilization, whenever possible, to control soil erosion from storm water especially on super pads.

   i. Require enclosures or chemical stabilization of open storage piles of sand, dirt, or other aggregate materials.

   j. Control off-road vehicle travel by posting driving speed limits on these roads.

3. During grading and construction, the applicant shall be responsible for assuring that vehicle movement on any unpaved surface other than water trucks shall be terminated if wind speeds exceed 15 mph.

4. During grading and construction, the applicant shall be responsible for the paving of all access aprons to the project site and the maintenance of the paving.

5. Prior to issuance of grading permits within the Specific Plan, the applicant shall be responsible for assuring that construction vehicles be equipped with proper emission control equipment to substantially reduce emissions.

6. Prior to issuance of grading permits within the Specific Plan, the applicant shall be responsible for the incorporation of measures to reduce construction related traffic congestion into the project grading permit. Measures, subject to the approval and verification by the Planning Department, shall include:

- Provision of rideshare incentives.
- Provision of transit incentives for construction personnel.
- Configuration of construction parking to minimize traffic interferences.
- Measures to minimize obstruction of through traffic lanes.
- Use of a flagman to guide traffic when deemed necessary.

7. Prior to the issuance of certificate of occupancy within the Specific Plan, the applicant shall provide proof to the City Director of Planning that the use will not emit objectionable odors or provide an air quality analysis including a quantitative assessment of odors and meteorological conditions consistent with the ASTM, Standard Method D1391 or Standard Method E679-79. Project design measures or additional control technology shall be implemented to ensure that odor emissions comply with SCAQMD standards.

8. Prior to the issuance of certificates of occupancy within the Specific Plan, the applicant shall prepare a Transportation Demand Management Plan (TDM) for review and approval by the SCAQMD and City. At a minimum, the plan shall include the following major elements and shall be implemented in accordance with SCAQMD Rule 1501:

- Provision of a commuter transportation coordinator, with responsibilities to include coordinating and facilitating formation of carpools and vanpools, serving as a resource person for transit information, coordinating sale of transit passes, monitoring progress towards TDM goals and surveying employees, etc.

- Provision of a commuter center which would include such information as: bus and rail transit schedules/maps; telephone numbers for the designated transportation coordinator; bus route and Metrolink schedules; ridesharing promotional material; bicycle route and facility information; and location of on-site vanpool/carpool spaces.

- Carpool and vanpool program, including participation in a computerized matching system, provision of preferential parking, and provision of travel allowances/financial incentives.

- Encouragement of non-vehicle modes, such as bicycle, walk, or bus transit.

- Transit incentives and improvements, including subsidization of transit passes and dissemination of transit information and schedules.

NOISE

1. Prior to issuance of grading permits within the Specific Plan, the applicant shall submit and have approved a noise mitigation plan to the Department of Planning that will reduce or mitigate short-term noise impacts to nearby noise sensitive receptors. The plan shall comply with the City of Huntington Beach Noise Ordinance and shall include, but not be limited to:

    a. A criteria of acceptable noise levels based on type and length of exposure to construction noise levels;

    b. Physical reduction measures such as temporary noise barriers that provide separation between the source and the receptor; and

    c. Mitigation measures such as restrictions on the time of construction for activities resulting in high noise levels.

2. Prior to issuance of grading permits within the Specific Plan, the applicant shall produce evidence acceptable to the City Engineer that:

    a. All grading and construction vehicles and equipment, fixed or mobile, shall be equipped and maintained with effective muffler systems that use state of the art noise attenuation.

    b. Stockpiling and/or vehicle staging areas shall be located as far as practicable from sensitive noise receptors.

    c. All operations shall comply with the City of Huntington Beach Noise Ordinance.

3. Commensurate with the updated TIA (refer to Mitigation Measure 8 in Section 5.4 of the original EIR), an updated acoustical analysis shall be performed on the following two roadway segments: 1) Rancho Road near the Navy Railroad; and 2) Rancho Road between Bolsa Chica Street and Westminster Boulevard to determine if potential vehicular noise will impact nearby residential units. The study will be prepared under the supervision of an acoustical engineer and include a discussion of the need for noise attenuation measures and/or noise barriers to ensure compliance with City noise standards. This analysis shall be submitted to and approved by the Planning Department.

EARTH CONDITIONS

Earth Geology

1. Prior to issuance of grading permits within the Specific Plan, additional studies as deemed necessary by the Director of Public Works, shall be performed to determine native elevations and evaluate the extent of compressibility of the soils for structural design purposes. These studies shall be reviewed and approved by all appropriate departments at the City of Huntington Beach.

Seismicity

2. Prior to issuance of grading permits within the Specific Plan, it shall be proven to the Building and Safety Department that all structures are designed in accordance with the seismic design provisions of the Uniform Building Codes or Structural Engineers Association of California to promote safety in the event of an earthquake.

3. An engineering geologist shall be engaged to submit a report indicating the ground surface acceleration from earth movement for development parcels. All structures shall be constructed in compliance with the g-factors as indicated by the geologist's report. Calculations for footings and structural members to withstand anticipated g-factors shall be submitted to the City for review prior to the issuance of grading permits.

Liquefaction

4. Prior to issuance of grading permits within the Specific Plan, grading plans shall demonstrate that alluvial soils shall be removed in the areas that will receive fill or foundation loading down to competent materials and recompacted. Additional studies may be deemed necessary by the Director of Public Works, to evaluate the extent of liquefaction of the soils for structural design purposes.

Expansive Soils

5. Prior to approval of grading permits within the Specific Plan, the applicant shall prepare a report for approval by the Director of Public Works which assesses and provides recommendations for the following:

    a. Specific measures for adequate foundation, paving and flatwork design in areas of any remaining expansive soils.

    b. Identify the Expansive Index onsite and specify where necessary recommendations included, but not limited to: 1) presaturation of soils prior to concrete placement; 2) raised floors; 3) post-tensioned slabs; 4) thicker slabs; 5) deeper footings; 6) the addition of soil amendments to facilitate wetting during compaction.

6. The applicant(s) shall be responsible for remedial removal of expansive soils onsite during grading and prior to construction. Should any construction occur on expansive soils, the applicant(s) shall adhere to the recommendations identified above in Mitigation Measure 5.

DRAINAGE AND HYDROLOGY

1. Prior to the issuance of building permits within the Specific Plan, the project applicant shall implement conditions of the Public Works Department regarding storm drainage improvements which shall include, but not be limited to:

   - Construct the necessary storm drainage improvements (identified on Exhibit 12 within the Addendum EIR) to handle increased flows.

   - Ensure that building pads are placed at elevations suitable to withstand 100-year flood for sites adjacent to Bolsa Chica Street between Bolsa Avenue and Rancho Road.

   - Confine street flows within the street right-of-way.

2. Prior to the issuance of grading permits within the Specific Plan, the project applicant shall submit and obtain approval of final drainage and erosion control plans for each project component. These final drainage plans shall demonstrate that post-development stormwater discharge levels from the project will remain at or below existing stormwater discharge levels. The mitigation measures contained in the plan shall be approved by the Regional Water Quality Control Board and the City of Huntington Beach prior to any construction activities. The plans shall include measures such as the following:

   - Diversion of offsite runoff away from the construction site;

   - Prompt revegetation of proposed landscaped areas;

   - Perimeter sandbagging or temporary basins to trap sediment; and

   - Regular sprinkling of exposed soils during construction phases.

3. Prior to the issuance of building permits within the Specific Plan, the project applicant shall develop a plan to implement any recommendations from the County of Orange Flood Control Division and City Public Works Departmentwhich will reduce impacts to the Bolsa Chica Channel floodplain resulting from onsite development. For example, one such recommendation would be the removal of the wooden bridge at a future time when

it is no longer utilized by the County operations and maintenance staff to access the westerly bank of the Channel. This plan shall be submitted to the City Department of Public Works for review and approval.

4. Prior to issuance of any grading permits within the Specific Plan, the applicant shall submit a "Notice of Intent" (NOI), along with the required fee to the State Water Resources Control Board to be covered under the State NPDES General Construction permit and provide the City with a copy of the written reply containing the discharger's identification number.

5. Prior to the issuance of the grading permits within the Specific Plan, the applicant shall provide a Water Quality Management Plan showing conformance to the Orange County Drainage Area Management Plan and all NPDES requirements (enacted by the EPA) for review and approval by the City Engineer. The plan shall reduce the discharge of pollutants to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and such other provisions which are appropriate.

NATURAL RESOURCES/ENERGY

1. Building design and construction shall comply with the Energy Conservation Standards set forth in Title 24 of the California Administrative Code. Prior to approval of building permits for the Specific Plan, architectural and engineering plans shall be subject to the review and approval of the Director of Public Works and Building and Safety to ensure conformance with these standards. Energy conservation features should include:

   - Installation of thermal insulation in walls and ceilings which meet or exceed State of California, Title 24 requirements.
   - Insulation of hot water pipes and duct systems.
   - Use of natural ventilation where possible.
   - Use of natural gas for space heating and cooking.
   - Installation of ventilation devices.
   - Orientation to sunlight and use of overhangs.
   - Landscaping with deciduous trees, to provide shade in the summer months and allow sunlight through in the winter months.

2. Prior to approval of building permits within the Specific Plan, it is recommended that the applicant consult with both the Southern California Gas Company and Southern California Edison during the building design phase for further energy conservation measures.

PUBLIC SERVICES AND UTILITIES

Fire Protection

1. Prior to approval of building permits within the Specific Plan, complete building plans shall be submitted to and approved by the Fire Department. If during the Fire Department's plan check it becomes evident that fireground operations will become impeded, the department will impose standard fire code requirements such as automatic sprinkler systems, alarm systems, access roads, etc.

2. At such time as a public safety development fee is adopted by the City of Huntington Beach, the applicant / developer of the project processed within the McDonnell Centre Business Park Specific Plan shall pay such fee prior to issuance of building permits.

Police

3. The Police Department shall be consulted during preliminary stages of the project design prior to approval of building permits within the Specific Plan to review the safety features, determine their adequacy, and suggest improvements.

4. At such time as a public safety development fee is adopted by the City of Huntington Beach, the applicant / developer of the project processed within the McDonnell Centre Business Park Specific Plan shall pay such fee prior to issuance of building permits.

5. During construction and at complete buildout, the project shall provide easy access into and within the project site for emergency vehicles and addresses shall be well marked to facilitate response by officers. Project site plans depicting these requirements shall be reviewed and approved by the Police Department.

6. Prior to issuance of building permits within the Specific Plan, the project shall be designed such that all areas of the project will be well lit, including alcoves, walkways, doorsteps, and parking facilities. Project site plans depicting these requirements shall be reviewed and approved by the Police Department.

7 .Prior to issuance of building permits within the Specific Plan, an internal security system (e.g. security guards, alarms, access limits after hours) shall be incorporated, to be reviewed by the Police Department and the City Planning Department.

Schools

8. Prior to issuance of building permits within the Specific Plan, the applicant shall provide school fees to mitigate conditions of overcrowding as part of building permit application. These fees shall be based on the state fee schedule in effect at the time of building permit applications.

Community Services

9. Prior to issuance of grading permits for Planning Area 3 in the Specific Plan resulting in removal of the existing fields, the applicant shall determine if recreation facilities are needed by existing and future employees. If deemed necessary, the applicant must enter into a lease type agreement or provision of recreation facilities for employees to replace those lost subject to the approval of the City of Huntington Beach Community Services Department.

Library

10. The applicant shall provide development fees to mitigate conditions of increased demand as part of building permit application. These fees shall be based on the City fee schedule in effect at the time of building permit applications.

Water

11. Prior to issuance of Certificates of Occupancy, the following water conservation measures shall be implemented as required by state law:

    a. Ultra-low-flush toilets

    b. Ultra-low-flow showers and faucets

    c. Insulation of hot water lines in water recirculating systems

    d. Compliance with water conservation provisions of the appropriate plumbing code

    e. Refer to the "Water Efficient Landscape Requirements" of the City of Huntington Beach Municipal Code, Chapter 14.52.

12. Prior to issuance of building permits, irrigation systems which minimize water waste shall be used to the greatest extent possible. Such measures should involve such features as the following:

a. Raised planters and berming in conjunction with closely spaced low volume, low angle (22 ½ degree) sprinkler heads.

b. Drip irrigation.

c. Irrigation systems controlled automatically to ensure watering during early morning or evening hours to reduce evaporation losses.

d. The use of reclaimed water for irrigated areas and grass lands. The project applicants shall connect to the Orange County Water District's "Green Acres" system of reclaimed water should this supply of water be available. Separate irrigation services shall be installed to ease this transition.

13. Prior to issuance of Certificates of Occupancy, water pressure regulators to limit downstream pressure to a maximum of 60 psi shall be installed.

14. Prior to issuance of building permits within the Specific Plan, the use of pervious paving material shall be encouraged to reduce surface water runoff and aid in groundwater recharge and slopes and grades shall be controlled to discourage water waste through runoff.

15. Prior to issuance of grading permits, the Developer shall provide information to prospective occupants regarding benefits of low water use landscaping and sources of additional assistance in selecting irrigation and landscaping.

16. Prior to issuance of building permits, complete landscape and irrigation plans which minimize the use of lawns and utilize warm season, drought tolerant species shall be submitted to Public Works Engineering and approved by the Park, Tree, and Landscape Division. Mulch shall be used extensively in all landscaped areas. Mulch applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction. Irrigation system shall be designed to use reclaimed water when available. The City's Municipal Code Chapter 14.52, "Water Efficient Landscape Requirements" shall be followed.

17. Prior to issuance of building permits within the Specific Plan, the Public Works Park, Tree, and Landscape Division shall be consulted during design and construction for further water conservation measures to review irrigation designs and drought tolerant plant use, as well as measures that may be incorporated into the project to reduce peak hour water demand.

18. Prior to the issuance of building permits within the Specific Plan, the project applicant shall implement conditions of the Public Works Department regarding water infrastructure improvements (identified on Exhibit 14 within the Addendum EIR) to handle increased water flow demands.

Solid Waste

19. To reduce the original Specific Plan impacts on waste disposal facilities, project designs shall develop a means of reducing the amount of waste generated both during construction and when the project is in use. The waste reduction program shall be approved by the Director of Planning prior to issuance of building permits within the Specific Plan. Potential ways of reducing project waste loads include implementation of recycling programs, and use of low maintenance landscaping when possible (i.e., native vegetation or ground cover (Herbaceous or Woody) instead of turf).

20. Rainbow Disposal shall be contacted during the design stage of project components to ensure the most efficient and economical means for rubbish removal. The designs shall include rubbish enclosures, projected travel areas, and turnabouts where necessary.

Public Transportation

21. Prior to issuance of building permits within the Specific Plan, a bus turnout, if determined by the City Transportation Manager to be necessary based on roadway cross sections, travel volumes or speeds, shall be provided at each bus stop located in the project area.

22. Prior to approval of a tentative map within the Specific Plan, the area adjacent to this turnout shall include a paved passenger waiting area complete with a bus shelter and bench.

23. Prior to approval of a tentative map within the Specific Plan, a concrete bus pad sufficient to support the weight of a bus (see OCTA's Design Guidelines for Bus Facilities) may have to be provided at the transit stop. This would be necessary assuming the material used to construct Bolsa Avenue would be insufficient to support continued transit use of the bus stop.

Sewer

24. Prior to the issuance of Certificates of Occupancy within the Specific Plan, the project applicant shall implement conditions of the Public Works Department regarding sewer infrastructure improvements (identified on Exhibit 16 within the Addendum EIR) to handle increased sewer flow demands.

Telephone

25. Prior to issuance of building permits within the Specific Plan, building plans shall be submitted to Verizon enabling Verizon to assess the improvements necessary to provide adequate service to the project site.

5.0 REFERENCES

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Center for Demographic Research. 2000 (July). *Orange County Progress Report.*

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APPENDIX A

STEVE SASAKI
TRANSPORTATION SERVICES TRAFFIC STUDY
AUGUST 11, 2001

AND

UPDATED TRAFFIC COUNTS
REGARDING CONSISTENCY WITH THE
PREVIOUS STUDY FOR THE BOEING PROJECT
OCTOBER 5, 2001

SASAKI TRANSPORTATION SERVICES

August 11, 2001

Mr. Steve Sandland, Vice President
Project Dimensions, Inc.
3 Park Plaza, Suite 1490
Irvine, CA 92614

SUBJECT: Traffic Analyses Regarding the Street "A" (Delta East) Access for the Boeing Project

Dear Mr. Sandland:

This letter provides information in response to your request, regarding the ultimate design for Street "A"(Delta East), which is aligned with Graham Street at Bolsa Avenue. There has been a request from the City to increase the right-of –way (ROW) of the roadway on the Boeing site, from 60 feet to 80 feet in width. The following are some traffic factors pertinent to the requested increased in ROW/roadway width.

BACKGROUND and EVALUATION

The access for the Boeing (Mcdonnell Centre) Specific Plan at the Delta East (Street "A") location, was approved with a two-lane divided roadway to be provided within a 60 foot right-of way. This was for ultimate buildout conditions, as described in the traffic study for the Boeing project and the Specific Plan document. The Specific Plan for the ultimate project envisioned Delta East to align with Astronautics Road (at its northerly end), at its connection with Skylab Road. The presently proposed alignment of Delta East would provide a more direct connection with Skylab Road, at a location westerly of Astronautics Road.

The existing private driveway, which exists where Street "A" is proposed to be located and serves the current Boeing site, is presently wider than the approved access connection. It should also be noted, however, the present access directly serves several major parking lots for the existing Boeing facility. The present access, therefore, accommodates a high "concentration" of vehicles and all from one user. The existing driveway essentially provides three outbound lanes and one (two for a short distance) inbound lane.

The existing parking lots, served by the approved Specific Plan connection and now the proposed Delta East, were assumed to have buildings developed in accordance with the Specific Plan. The Environmental/Specific Plan traffic study showed this access plus two additional driveways (to the west), serving a total of 15,000 vehicles per day (VPD), if all areas throughout the Specific Plan were developed to their maximum potential. Since the Specific Plan approval, the new uses/buildings that

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have been occupying the Boeing sites have actually been less intensive traffic generators than previously anticipated. The type of development that has occurred to date and is expected to be constructed in the near future, generates significantly less traffic than allowed under the current Specific Plan. Since there is less traffic expected to be generated by the Boeing Specific Plan as it is built out, there should be less traffic on Delta East, than previously analyzed. Our initial review of the traffic factors, therefore, appears to support maintenance of the two-lane divided road, within a 60-foot ROW width, as previously approved.

POTENTIAL DEVELOPMENT TIMING

It is anticipated the Delta East road connection would be constructed in conjunction with "Phase IV-A" of the currently proposed project. This would involve redevelopment of Parking Lots "D", "E" and "F" with three new project sites and buildings. The proposed redevelopment (of the Parking Lots) would significantly reduce the concentration of vehicles at Delta East, in the vicinity of Bolsa Avenue. There would be other vehicles from other areas due to a new connection to Skylab Road, but this was also anticipated in the current Specific Plan.

Another factor which can also be noted, it is likely the Parking Lot (Lot "C") on the west side of the Delta East would not be developed in the same time frame as Phase IV-A. The potential order of development, could serve as a "factor of safety" for City staff. This could be accomplished through traffic operational determinations for Delta East, after the connection to Skylab Road is made. The northerly portion (about the north half) of Street "A" (Delta East) is expected to provide adequate operations within the currently planned 60-foot ROW and the roadway could be constructed as Phase IV-A is developed. At the intersection with Bolsa Avenue, however, there would be an opportunity to evaluate if an added southbound (right turn lane) would be need on Delta East, as Parking Lot "D" is developed. In other words, two southbound lanes at Delta East/Bolsa would be planned (per the approved Specific Plan), but if needed a third southbound lane (e.g. for a length of 200 feet) could be added to the intersection if needed.

It is also recognized that the project Phasing is a benefit to the actual traffic operations, since the west side of Delta East (just north of Bolsa Avenue) can remain at its existing (three lane southbound) configuration until Parking Lot C is developed. It is assumed the Delta East/Bolsa intersection, would be more impacted with Parking Lot C in operation, but less critical as this (Parking Lot C) is occupied with buildings. Once the connection of Delta East to Skylab Road is made and the developments on the East side occur; the intersection of Bolsa Avenue/Graham-Delta East can be examined to verify if a third southbound approach lane would be required in the future. It may be the most reasonable to conduct these evaluations in conjunction with a project development proposal for Parking Lot C.

The curve in the roadway is needed to avoid two existing Boeing buildings (B12 and B13). A reverse curve is not uncommon for this type of internal roadway and a design should be available to satisfy the City of Huntington Beach standard. One advantage of a curve in the design, is the potential for some reduction in speed, when compared to a longer straight roadway section

We trust these analyses will be of assistance to you and the City of Huntington Beach. If you have any questions or require further information, please do not hesitate to contact us.

Respectfully submitted,
Sasaki transportation services

Steven S. Sasaki, P.E.
Principal
State of California
Civil and Traffic Engineer
C52768 & TR1462

Sasaki transportation services

August 11, 2001

Mr. Steve Sandland
Project Dimensions, Inc.
3 Park Plaza, Suite 1490
Irvine, CA 92614

SUBJECT: Traffic Analyses of the Boeing Specific Plan Update - Regarding Consistency With the Specific Plan, History of Site Development, Updated Land Use Maximums and Evaluation of the Currently Proposed Projects

Dear Mr. Sandland:

This letter provides a review of the proposed Boeing Specific Plan update to the existing/approved Boeing (McDonnell Centre) Specific Plan, and pertinent background traffic analyses. There are evaluations referenced from previously approved documents, critical to the proposed Boeing plans, which include the previously approved Environmental Impact Report (EIR) and Boeing (McDonnell Douglas) Specific Plan. The previously completed analyses set forth assumptions utilized, which can be related to the current proposals, conditions, and requirements.

There are several traffic issues addressed by this report, which include: 1) If the proposed Specific Plan update is consistent with the existing Specific Plan, 2) An accounting of the development activity at the site and analyses of related traffic factors, to update the status of the "thresholds", 3) Identify the maximum amount of new projects that could be developed, given the history for the Boeing site, 4) And determine the requirements related to the detailed development proposal and anticipated Boeing entitlements.

The single most important traffic factor, for the current development proposals, is the status of the "Interim trip budget" approved for the Boeing site. The traffic mitigation requirements are directly related to the "Interim budget" and the City Traffic Fee. If the "Interim" threshold is exceeded, then a traffic study is required. If the threshold is not exceeded then the City Traffic Fee was anticipated to address any new development traffic impacts. Various *Tables* are provided to document the detailed calculations, required to evaluate the issues identified above.

One other consideration included in the approved Specific Plan, which is a part of these analyses, is the amount of "entitled" development available. The development that would be "entitled" in the updated Specific Plan was either "preexisting" (for the office tower and commercial not yet built) or is expected to result from the demolition of existing buildings (portions of the existing Boeing facility). Developments built as "entitled" projects, are subject to the overall Specific Plan maximums, but *would not be* subject to the City traffic fees since their required traffic improvements have already been implemented/addressed.

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BACKGROUND

In the previous traffic study ("Traffic Impact Analyses for the McDonnell Centre Business Park in Huntington Beach"; WPA Traffic Engineering, Inc.; May, 1997) the entire Boeing Specific Plan was examined to determine the level of mitigation required to support a maximum level of development (and associated traffic) for each of the Planning Areas (PA). The maximum "additional" Specific Plan development considered generated a total of 56,445 daily trip ends. In addition to this total there were 14,820 daily trip ends included in the analyses, for projects that already had entitlements when the study was being prepared. Both of these trip totals were added to the existing traffic being generated by the existing site developments, so the overall traffic impacts could be evaluated.

In addition to addressing maximum build out of the Specific Plan, the EIR traffic analyses also considered an "Interim" level of development, whereby 60 percent of the 56,445 daily trip end budget ("new" traffic, excluded existing and entitled traffic) could be developed, without a subsequent traffic study. The entitled projects already had approvals so were not subject to the EIR conditions. Two pertinent traffic conditions of the previous approvals are:

1. The Citywide traffic fees would serve as mitigation for the Interim developments.

2. An updated traffic study would be required when 90 percent of the Interim trip budget is utilized by new developments within the Specific Plan. This means a traffic study would be required when 30,480 (56,445 x 60% x 90%) daily trip ends, are generated by "new" projects developed in the Specific Plan areas. (Entitled developments = 14,820 daily trip ends would not count toward the Interim budget).

CONSISTENCY: UPDATED PROPOSAL VS. APPROVED SPECIFIC PLAN

Overall Comparisons

In order to understand how the current development plans relate to the proposed Specific Plan update, there needs to be a comparison of the planned "Development Phases" (Phases) and the proposed adjustment of the Specific Plan, "Planning Areas" (PA). *Figures* of the Boeing site by both Phases and Planning Areas are provided as Attachments to this study. A comparison of the land use sizes of the Phases and Planning Areas, and their relationship to one another, is detailed in *Table 1*.

The first comparison in *Table 1* is the proposed Specific Plan update size(s), to the current Specific Plan. *Table 1* shows that PA 1, PA 4 and PA 5 are proposed to change in size, which occurs through a shifting of the PA boundaries. It is important to note, the total Specific Plan developable acreage is proposed to decrease, due to added internal roadways included in the current development plan. The acreage per PA and Phase is important, as it results in the maximum building area that could be developed.

The approved Specific Plan (S.P.) defines the maximum floor area ratios (FAR) that would be allowed within various Planning Areas. In the current S.P. the maximum FAR allowed for a particular building is actually greater than the average FAR allowed for an entire Planning Area. This would be changed in the updated S.P., so the maximum FAR for

individual buildings and the overall PA would be the same. The maximum allowable building square footage that would be allowed in each Planning Area is summarized in *Table2*.

The total allowable building area would be slightly reduced under the proposed S.P. update. This is due to the reduction in overall developable acreage and the shift in acres from PA 1 (0.75 FAR) and PA 5 (0.70 FAR), to PA 4 (0.65 FAR). The maximum building square footage totals, also relate to daily trip generation potentials, which are presented in *Table* 2 as well. The trip generation assumptions included in these analyses are consistent with the methodologies utilized in the approved S.P. traffic study, to better facilitate evaluation of the proposed Specific Plan update. It can be seen in *Table 2*, the overall trip generation potential for the updated S.P., is less than presently allowed under the current Specific Plan.

Trip Generation Details

Table 3 details the trip generation summaries provided in *Table 2*. It should also be recognized that *Table 3* accounts for the development activity that has occurred within the S.P. since the time of the approval and the trip generation associated with the projects that have been built. The majority of development activity has occurred in PA 2 and PA 3 (Phase I) and these areas are essentially built out. The total square footage that now exists in these Planning Areas was provided to us (see Attachments), and the trip generation assumptions for these buildings was referenced from the City's Traffic Fee records and previously completed traffic studies.

For Phase I (PA 2 and most of PA 3) full development exists, but in *Table 3* there is still a significant amount of potential new development included. (The new land uses were included in the same percentage splits and same trip generation rates, as the current S.P. for comparison purposes.) This results since the actual projects developed, did not reach the building or trip generation "maximum" allowed under the Specific Plan. The potential square footage and trip generation must be analyzed so the overall S.P. consistency comparison can be made (even though redevelopment of these areas is not likely to occur in the near future).

The maximum building potential for PA 1 will be sufficient to accommodate the remaining Boeing facilities in this area. The remaining facilities include the added building SF and cryogenics facility that was built after the S.P. approval. PA 4 is where virtually all of the currently planned buildings (except for one parcel in PA 3 – Parking Lot "C"), would be developed. The updated PA 4 also includes a significant amount (1,040,710 SF) of existing Boeing facility that is planned to be demolished in conjunction with the proposed project. In PA 5 the Extended Stay has been incorporated in the calculations and the existing Boeing entitlements (for the office tower and commercial, approved/mitigated but not yet built) accounted for. When all of the various traffic factors are considered, *Table 2 and Table 3* show, the trip generation potential for the updated S.P. (93,096) would be less than under the current plan (96,295).

Entitlements

In the studies for the current Specific Plan there were development entitlements for both the Boeing office tower and "non-Boeing" projects (Sharp and Cambro) in PA 2. It is assumed the entitlements for Sharp and Cambro were utilized to build out their projects. The Boeing entitlements, however, have not yet been used. The maximum amount of development is set forth by the requirements of the S.P. regardless of any entitlements. The importance of the entitlements, however, is that for projects where entitlements (defined in terms of daily trip end totals) are "spent" would not be subject to the City's Traffic Fee. There is a difference, however, in "entitlements" when considering the daily trip ends, which would count "against" the Interim trip budget. The "office tower" credits (10,470 daily trip ends) would not count against the Interim budget, but the "demolition" credits (7,795 daily trip ends) would count. (This is addressed further below).

As noted in *Table 3*, there will be added entitlements created under the proposed plans through demolition of significant amounts of building square footage, which is now a part of the Boeing facility. It is our understanding Boeing plans to "keep" these daily trip generation entitlements. This would require the potential new developments (e.g., in PA 4) to pay the Traffic Fees assessed by the City of Huntington Beach. The demolition of the 1,040,710 SF of Boeing building area, would translate to a total Boeing trip/fee credit of 7,795 daily trip ends (in addition to the previous office tower credit of 10,470).

PROPOSED PROJECT COMPARED TO THE INTERIM TRIP THRESHOLD

The areas planned to be developed, as a part of the updated submittals are PA 4 and the one (remaining) parcel in PA 3. In addition as required in this study, there are two levels of potential development that must be examined: 1) The maximum development (and associated trip generation) that could occur if the updated S.P. is approved, 2) The type and size of projects that are actually anticipated to be developed. These two levels of development were reviewed to determine if the Interim trip threshold is exceeded under either consideration.

Threshold for a Traffic Study

Table 4 summarizes the Interim trip budget that was approved as a part of the environmental documentation for the current Specific Plan. These requirements were also discussed earlier in this report. It is defined in the previously prepared traffic documentation that a new traffic study is required when 30,480 "new" daily trip ends (excluding existing and entitled developments) have been approved/built. Prior to the need for a new traffic study, the City Traffic Fee was identified to serve as mitigation for the potential traffic related impacts of new development in the Specific Plan areas.

An important part of determining whether a traffic study is required for the proposed update, is to examine the on-site changes that have occurred since the approval of the current Specific Plan. The bottom of *Table 4* provides a summary of the daily trip generation accounting (through City traffic fees paid or trip generation assumption contained in approved studies). The detailed breakdown of the trip generation assumption for each project is listed in *Table 5*. In *Table 5* the Planning Area, where each project is located is also noted. This is important for use in *Table 3 and Table 6,* where the trip generation considerations are based on the Planning Areas.

The overall considerations regarding the status of the Interim trip budget is complicated, due to the various components considered as a part of these analyses (i.e., history of what has occurred, consideration of entitlements, maximum potential development, likely project to be developed and the demolition of existing buildings). Details of the considerations, related to all of these factors are summarized in *Table 6*. The most beneficial information is likely to be, a presentation of the conclusions and a description of how the upcoming developments should be addressed.

In order to conclude if a traffic study is required for the proposed S.P. update and the actual anticipated development, both development "plans" were examined in detail. *Table 6* provides consideration of the case where the maximum development potential for PA 4 and the one parcel in PA 3, is presumed. A detailed breakdown of PA 4 and PA 3 (portion) is provided in *Table 7*. It is important to remember the updated Specific Plan would allow these totals, but actual development history and present planning shows these levels will not be reached.

Table 8 provides daily trip generation calculations for a conceptual development plan for PA 4 and PA 3 (portion). This is representative of the anticipated development in these areas and the resulting trip totals generated. These totals are also addressed in *Table 6* and the conclusions are summarized below.

Conclusion and Methodology for Future "Tracking"

- The previous existing site development plus the Interim trip budget (before a traffic study is required) resulted in 55,510 daily trip ends. The updated "existing" (accounting for all projects that have occurred and the demolitions that will be necessary to accommodate the proposed development of PA 4 and PA 3, portion) plus the PA 4 and PA 3 Specific Plan maximums, result in 48,435 daily trip ends (details in *Table 6*). Since the proposed "maximum" project is less than the Interim trip budget, **no traffic study should be required**.
- The maximum trip end potentials for PA 4 and PA 3 (portion) total 20,370 TE (18,091 + 2,279). When the actual conceptual development for these Planning Areas are considered (*Table 8*), it can be seen that approximately 7,350 daily TE are expected, which is well below the 20,370 TE maximum. This further confirms that a traffic study should not be required.
- One potentially confusing factor related to the *Interim trip budget* is the "entitlement" considerations. Since one set of entitlements existed before the current Specific Plan (office tower @ 10,470 TE) these *would not count* toward the Interim trip budget, while the entitlements obtained through demolition of the existing buildings (7,795 TE) *would count* toward the Interim trip budget. Neither would, however, be subject to the City traffic fees (e.g., since actual buildings were demolished).
- The suggested "accounting" methodology to determine when a traffic study would be required (assuming the proposed S.P. update is approved) is to start at the anticipated "existing" trip end total of 28,065 TE (see *Table 6*). For each new building developed (where the City traffic fee is applied), add the City trip generation

requirement (in developing the City traffic fee) to the 28,065 total until the original 55,510 TE threshold is reached (at which point a traffic study would be required per the current S.P. and environmental documentation). The first 10,470 TE of entitlements "used" by Boeing would not be added to the trip budget accounting, but any subsequent use of the remaining 7,795 entitlements (no traffic fee required) **would count** toward the *Interim trip budget.*

- It should be recognized that since over one million square feet of existing buildings are proposed to be demolished, there is a significant amount of new development that can occur, before the *Interim trip budget* threshold is exceeded. In addition, it is recognized that the type of development that has been occurring at the site has been less intensive than allowed under the existing Specific Plan. This has also maintained "budget" for upcoming developments, prior to exceeding the Interim threshold.

SUMMARY

The proposed update of the Specific Plan and the anticipated development plans, result in a number of traffic factors that required examination and documentation. A history of the previously approved documents, accounting of development activity at the site and evaluation of the present proposals was completed as a part of this study. In addition, a methodology for "tracking" future projects, as they relate to the *Interim trip budget* is provided as a part of the analyses.

The primary conclusions that result from the analyses contained in this study are:

- The proposed Specific Plan update results in *less* total developable acreage, building area and trip generation potential than allowed within the current Specific Plan.
- The maximum development that could occur in PA 4 and PA 3 (one parcel) would not cause the *Interim trip budget* to be exceeded so a traffic study should not be required. Any traffic mitigation required for new development in these areas, would be addressed through payment of the required City traffic fees.
- The actual development in PA 4 and PA 3 (portion) is estimate to generate 7,350 daily TE, which is significantly less than the allowed maximum of 20,370 daily TE.
- Although the various traffic consideration were relatively complex, the end result for "tracking" future projects can be accomplished in a relatively simple manner, as described above in the "Conclusions and Methodology for Future Tracking" section of this report.

We appreciate the opportunity to be of service to you on this project. If there are any comments or question regarding these analyses, please do not hesitate to contact us.

Respectfully submitted,
SASAKI TRANSPORTATION SERVICES

Steven S. Sasaki, P.E., PTOE
Principal
Civil and Traffic Engineer
State of California
C52768 & TR 1462

TABLE 1

OVERVIEW OF PLANNING AREAS (PA)
VS.
DEVELOPMENT PHASES (PHASES)

Planning Area (PA)	PA Size (acres) Current Specific Plan	PA Size (acres) Proposed Specific Plan	Phases (Description)	Phase Size (acres)
PA 1:	100 acres	54.0 acres	III (East Side)	25.0 ac
			IV (North Side)	29.0 ac
			Subtotal	54.0 ac
PA 1A:	20 acres	20.0 acres	IV (South Side)	20.0 ac
PA 2:	58 acres	58.0 acres	I (East Side - Sharp, Dynamic, Master & Cambro)	58.0 ac
PA 3:	36 acres	36.0 acres	I (West Side - Konica, Airtec, DIX, C&D Aero)	30.0 ac
			IV A Parking Lot D	7.0 ac
			Subtotal	37.0 ac
PA 4:	35 acres	79.5 acres	II (all) (33.3 + 2.4 + 2.2)	37.9 ac
			III A (all)	8.2 ac
			III B (all) (17.7 - 2.4 - 2.2)	13.1 ac
			Central Plan	2.0 ac
			SCE	1.0 ac
			III (By Rec. Area)	6.0 ac
			IV A (Parking lots E & F)	11.3 ac
			Subtotal	79.5 ac
PA 5:	40 acres	36.7 acres	V	19.3 ac
			Extended Stay	1.9 ac
			IV (east of Delta West)	8.6 ac
			III (West Side)	6.9 ac
			Subtotal	36.7 ac
TOTALS	289 acres	284.2 acres		284.2 ac

TABLE 2

SPECIFIC PLAN (S.P.) CONSISTENCY - OVERALL TOTALS

(By Planning Area - Size, Maximum SF and Trip Generation)

Planning Area	Revised Size (acres)	Maximum "F.A.R."	Maximum Allowable Bldg. Square Footage	Maximum Allowable Daily Trip Generation (trip ends) (a)	Comments
PA1	54.0 ac	0.75	1,764,180 SF	12,989 TE + 225 TE	Existing Boeing per current S.P. assumptions Possible Expansion
PA 1A	20.0 ac	0.65	566,280 SF	6,427 TE	
PA 2	58.0 ac	0.65	1,642,212 SF	5,889 TE + 5,036 TE	City Traffic Fees Charged Possible Expansion
PA 3	36.0 ac	0.65	1,019,304 SF	4,047 TE + 4,271 TE	City Traffic Fees Charged Possible Expansion
PA 4	79.5 ac	0.65	2,250,963 SF	18,091 TE 7,795 TE	Net "new" TE (Total - Entitled) Extended to Boeing through demolition (1,040,710 SF)
PA 5	36.7 ac	0.70	1,119,056 SF	1,600 TE 3,540 TE 10,470 TE 12,716 TE	City Traffic Fees Extended Stay Existing Office Tower 369,151 SF of Development Entitled to Boeing Remaining Potential Development
TOTALS	**284.2 ac**		**8,361,995 SF**	**93,096 TE**	
Comparison to the current S.P. Totals	**(289 ac)** (b)		**(8,376,265 SF)** (b)	**(96,295 TE)** (c)	

(a) For Comparison purposes, applied the same assumptions used in the current S.P. (Details provided in Table 3)

(b) "McDonnell Centre Business Park, Specific Plan No. 11"; Volume 1 of 2; Exhibit 8, Page 26

(c) "Traffic Impact Analysis for the McDonnell Centre Business Park in Huntington Beach"; WPA Traffic Engineering, Inc., May 1997; Table 10, Page 38

Note: Typically the daily trip generation estimates would be "rounded" for traffic analysis purposes, but for these trip budget type purposes, the nearest vehicle is shown.

TABLE 3

PROPOSED SPECIFIC PLAN (S.P.) MODIFICATIONS* TOTALS

Detailed Trip Generation Analyses

			Trip Details - For Overall S.P. Comparison		
Planning Area	Proposed Max. Building SF	Land Use or Description	Size	x Trip Generation Rate	= Daily Trip Ends (TE) Generated
PA1	1,764,180 SF	Existing Boeing	1,734,177 SF	7.49 TE/TSF (a)	12,989 TE
		Potential Boeing	30,000 SF	7.49 TE/TSF (a)	225 TE
PA 1A	566,280 SF	Office/Office Park	283,140 SF	15 TE/TSF	4,247 TE
		R & D	283, 140 SF	7.7 TE/TSF	2,180 TE
PA 2	1,642,212 SF	City Traffic Fees (b)	1,176,938 SF	Various	5,889 TE
		Light Industrial	232,637 SF	13 TE/TSF	3,024 TE
		Warehouse	116,319 SF	5 TE/TSF	582 TE
		Office/Office Park	116,318 SF	15 TE/TSF	1,430 TE
PA 3	1,019,304 SF	City Traffic Fees (c)	647,872 SF	Various	4,047 TE
		Light Industrial	185,716 SF	13 TE/TSF	2,414 TE
		Warehouse	92,858 SF	5 TE/TSF	464 TE
		Office/Office Park	92,858 SF	15 TE/TSF	1,393 TE
PA 4	2,250,963 SF	Light Industrial	1,125,482 SF	13 TE/TSF	14,631 TE
		Warehouse	562,740 SF	5 TE/TSF	2,814 TE
		Office/Office Park	562,740 SF	15 TE/TSF	8,441 TE
	[Note: A total of 1,040,710 SF of Boeing Facility is being demolished for a "credit" of 1,040.71 TSF x 7.49 TE/TSF = 7,795 TE, BUT will be saved by Boeing as trip fee credits. (d)				
PA 5	1,119.056 SF	Exist. Extend. Stay City Traffic Fee	43,396 SF	City	1,600 TE
		Exist. Office Tower	235,831 SF	Previous	3,540 TE
		Light Industrial	79,209 SF	13 TE/TSF	1,030 TE
		Office/Office Park	107,976 SF	15 TE/TSF	1,620 Te
		R & D	86,302 SF	7.7 TE/TSF	665 TE
		Hotel	96 rms/76,604 SF	10 TE/room	960 TE
		Retail	120,587 SF	70 TE/TSF	8,441 TE
		(e) Exist. Entitlements	369,151 SF		10,470 TE
					93,096 TE
			(Compare to current S.P. Total of:)		(96,295 TE)

* Note: The Analysis Methodology is the same as used in the Current S.P., so a valid comparison is provided.

(a) Same trip rate used in the Traffic Study (May 1997) for the Boeing facility. The updated SF includes the added "modular" buildings, cryogenics building and building additions.

(b) For Sharp, Dynamic Cooking, Master Development and Cambro Manufacturing. The SF's are based on Boeing research and TE based on City Traffic Fee requirements (see Table 5).

(c) For Konica, Airtec, Dix Metals and C & D Aerospace. The SF's are based on Boeing research and TE based on City Traffic Fee requirements (see Table 5).

(d) Boeing preference is to "save" their City Traffic Fee "credits" for demolishing existing Boeing buildings. The new occupants of PA 4 (and part of PA 3) will pay their City Traffic Fees based on their particular operations.

(e) Boeing retains these Entitlements for an Office Tower and commercial uses, for which mitigation was provided but not yet been built.

TABLE 4

CURRENT SPECIFIC PLAN CONDITIONS OF APPROVAL
BACKGROUND INFORMATION

Per the EIR Mitigations / Conditions of the Overall Project:	**Daily Trip End Budget**
- Total New Development Allowed (Excluding Previous Entitlements)	56,445
o When 90% of the Interim Project (60% of the Total) is Built or Has Approved Development Application = Traffic Study Trigger	
o (56,445 x 60% x 90%) = 30,480 * Total New Development Trip Ends (above existing and entitled traffic allowed prior to a Traffic Study being required	30,480
- Entitled Development (At the Time of Study)	14,820
o Cambro Phase II + III (160,400 SF) and Sharp (538,871 SF) in Planning Area 2 [Note: Some buildings existed and some were un-built but entitled]	(4,350)
o Boeing Office Tower, Restaurant, Retail (369,151 SF) in Planning Area 5	(10,470)
- **Overall Trip Budget Before a Traffic Study is Required** * At the time the current Specific Plan was approved	**45,300** **Due to New Projects**

Amount of Budget Utilized to Date (Per City Calculations):	
- New Projects: Konica, Dynamic Cooking, Dix Metals, etc.	a (6,449)
- Entitled Projects: Sharp, Extended Stay, etc.	b (5,950)
Traffic Study / Trip Budget Utilized (see Table 5)	a + b (12,399)

- The EIR traffic study identified a trip budget based on the combination of building square footage and trip generation rates. It was envisioned as a simple method for the City to monitor use of the trip budget. As added buildings were developed, the added square footage combined with appropriate trip rates, would result in the trip generation, which could be counted against the interim trip budget.

TABLE 5

TRIP BUDGET "ACCOUNTING"
BASED ON CITY TRAFFIC FEE REQUIREMENTS

Amount of Total Budget Utilized to Date:

Project	Planning Area	Size	Use / Rate	Daily Trip Generation (b)	Comments
Boeing Facility Consilidation	PA 1				
- Modular Units, Cryolab and Testing Area			(a)	235 (c)	
- Fitness Facility			(a)	628 (c)	
Sharp Electronics	PA 2	538,871 SF	(a)	4,350 (E)	Entitled Prior to the Specific Plan
Cambro Phases I & II	PA 2	160,400 SF	(a)		
Dynamic Cooking	PA 2		(a)	1,140	
Master Development	PA 2		(a)	399	
DIX Metals	PA 3		(a)	427	
Airtec	PA 3		(a)	307	
Konica	PA 3		(a)	1,402	
C & D AeroSpace	PA 3		(a)	1,911	
Extended Stay	PA 5	104 Room 4000 SF Restaurant	(a)	1,600 (E)	
			TOTALS	**6,449** **+ 5,950 (E)**	

(a) Based on Previous Studies

(b) Based on City traffic fees paid and past traffic studies.

(c) Has been incorporated as a part of the PA 1 Boeing facility for Specific Plan comparison purposes.

(E) Not shown as paying a fee and/or assumed to have utilized entitled "credits."

TABLE 6

SPECIFIC PLAN TRIP BUDGET SUMMARY
CURRENT S.P. THROUGH THE PROPOSED SUBMITTALS

Condition	Current S.P.	Proposals & History	Proposed & Resulting Status
EXISTING DEVELOPMENT	20,890 + 600 + 3,540 = 25,030 TE	12,989 + 5,889 + 4,047 + 1,600 + 3,540 = 28,065 TE	28,065 TE
	◆Boeing Facility +Cambro +Exist. Office Tower	◆1,040,710 SF of the existing Boeing facility would be demolished ◆Phase I of both PA 2 and PA 3 have been developed ◆The Extended Stay was added in PA 5 ◆The existing Office Tower in PA 5 remains ◆Note the added Modular, Cryogenics and building addition are part of the remaining PA 1 Boeing facility	
"ENTITLED" (Through previous approved or demolition)	4,350 + 10,470 = 14,820 TE	- 4,350 TE used by Sharp & Cambro. 10,470 TE of "Entitlement," previously held by Boeing for the second Office Tower, which remains unbuilt	18,265 TE of entitlements to be held by Boeing (also translates to a City Traffic Fee "credit")
	◆Sharp, Cambro entitlements, which were assumed to be used as the facilities were built ◆Boeing entitlements in PA 5 for an office tower and commercial uses	Demolition of 1,040,710 SF of Boeing building area resulting in "Entitlement" for 7,795 TE	
PROPOSED	3,575 + 5,930 + 9,470 + 10,830 + 10,520 + 16,120 = 56,445 TE	225 + 6,427 + 5,036 + 4,271 + 18,901 + 12,716 = 46,766 TE	
	◆The total "new" trip ends allowed, in addition to the entitled amounts	◆Proposed Maximum Total based on revised PA boundaries ◆Minus entitled, minus existing trip ends	◆54,561 TE (plus "Entitled") total that could be added that would be subject to City Traffic Fees. **Traffic Study required to develop this total**

TABLE 6

SPECIFIC PLAN TRIP BUDGET SUMMARY
CURRENT S.P. THROUGH THE PROPOSED SUBMITTALS
(Cont'd)

Condition	Current S.P.	Proposals & History	Proposed & Resulting Status
ADDITIONAL "NEW" DEVELOPMENT (TRIP ENDS) ALLOWED PRIOR TO A TRAFFIC STUDY	**56,445 TE x 60% x 90% = 30,480 TE**	18,091 + 2,279 = "New" (PA 4) (PA 3)	Max. Development (New + Entitled) PA 4 + pad in PA 3 = 23,165 TE
	◆New development not including existing or entitled ◆For comparison, 25,030 + 30,480 **= 55,510 TE** (Existing + New) Allowed prior to a Traffic Study	◆Development Areas presently being proposed. Exist. + New potential: 28,065 + 18,091 + 2,279 = 48,435 TE ◆Since 48,435 TE exceeds 55,510 TE, a Traffic Study would not be required. IN ADDITION, THE PRESENT DEVELOPMENT PLANS ARE WELL BELOW THE REVISED S.P. MAXIMUMS	◆See Table 8, which shows a conceptual development plan at approx. 7,350 TE, well below the 28,165 TE maximum ◆These conceptual development of 7,350 TE is also within the 20,370 TE (18,091 + 2,279) "New" limit, which excludes the "Entitled" portion. ◆These conceptual developments will pay the City Traffic Fee so Boeing can retain its Fee Credits/Entitlements

TABLE 7

MAXIMUM DEVELOPMENT TOTALS - PROPOSED SPECIFIC PLAN
(PA 4 and PA 3 is Where Development is Proposed)

PA 4 (Total Development)

	Existing Bldg.	Existing Building to be Demolished	Acres	FAR	Maximum Bldg. Potential
Total PA - 4	1,070,710 SF	1,040,710 SF	79.5 ac	0.65	2,250,963 SF
◆ Phase II	510,801 SF	510,801 SF	37.9 ac	0.65	1,073,100 SF
◆ Phase III A	323,909 SF	323,909 SF	8.2 ac	0.65	232,175 SF
◆ Phase III B	206,000 SF	206,000 SF	13.1 ac	0.65	370,914 SF
◆ Central Plant	15,000 SF	0	2.0 ac	0.65	56,628 SF
◆ SCE	15,000 SF	0	1.0 ac	0.65	23,314 SF
◆ Phase III (Portion; Rec. Area)	0	0	6.0 ac	0.65	169,884 SF
◆ Phase IV A	0	0	11.3 ac	0.65	319,948 SF
				TOTAL	2,250,963 SF

[Note: The trip generation (maximum) for PA 4 is shown in Table 3]

PA 3 (Portion - Parking Lot D)

◆ Phase IV A	0	0	7.0 ac	0.65	198,198 SF

[Note: This parcel (Parking Lot D) is a part of the total shown in Table 3 for PA 3]

TABLE 8

CONCEPTUAL DEVELOPMENT PLAN and TRIP GENERATION
(PA 4 and Parcel in PA 3)

Planning Area	Building No.	Land Use	Size	Trip Rate (TE/TSF)	Conceptual Trip Generation Potential
PA 3	1	R & D	110,300 SF	8.11	895
PA 4:	2	Manf./Warehouse	114,000 SF	4.96	565
	3	Manf./Warehouse	111,200 SF	4.96	552
	4	Manf./Warehouse	89,100 SF	4.96	442
	5	Manf./Warehouse	88,100 SF	4.96	437
	6	Manf./Warehouse	67,500 SF	4.96	335
	7	Manf./Warehouse	68,300 SF	4.96	339
	8	Manf./Warehouse	82,900 SF	8.11	672
	9	Manf./Warehouse	46,300 SF	4.96	230
	10	Manf./Warehouse	80,800 SF	4.96	401
	11	Manf./Warehouse	40,000 SF	4.96	198
	12	R & D	32,400 SF	8.11	263
	13	R & D	35,800 SF	8.11	290
	14	Edison			
	15	Manf./Warehouse	33,200 SF	4.96	165
	16	Central Plant			
	17	Manf./Warehouse	96,500 SF	4.96	479
	18	Manf./Warehouse	77,500 SF	4.96	384
	19	Manf./Warehouse	68,600 SF	4.96	340
	20	Manf./Warehouse	67,000 SF	4.96	332
				TOTAL	7,319
				CALL	7,350
					Daily Trip Ends

[Note: Conceptual sizes provided by DeRevere & Associates. The exact sizes are expected to change but those estimates are sufficient for comparison purposes. In addition, the "Daily Trip End" total is well within the maximum of 28,165 TE for the development areas (PA 4 and part of PA 3) being examined].

SASAKI TRANSPORTATION SERVICES

October 5, 2001

Mr. Steve Sandland, Vice President
Project Dimensions, Inc.
3 Park Plaza, Suite 1490
Irvine, CA 92614

SUBJECT: Updated Traffic Counts Regarding Consistency With the Previous Study for the Boeing Project

Dear Mr. Sandland:

This letter provides a summary of further information, in response to a request from the City of Huntington Beach, based on new peak hour turning movement traffic counts at four intersections. These counts serve to update the status of the previously conducted "McDonnell Centre Business Park" (Boeing) traffic study prepared by WPA Traffic Engineering, Inc. in May 1997analysis. The counts and related analyses also supplement the recent evaluations (8/11/01 and 9/19/01) prepared by our firm, specific to the proposed project. The following are some traffic factors pertinent to the issue of whether the previous cumulative analyses are still valid.

BACKGROUND

It is known that the current Boeing proposal is slightly less intensive (from a traffic perspective) than the currently approved Specific Plan. The environmental consultant needs to verify the cumulative traffic analyses are still applicable for the currently proposed project. The previously approved traffic analyses for the "McDonnell Centre Business Park" (Boeing) prepared by WPA Traffic Engineering, Inc. (WPA) in May 1997, contains evaluations that include long-range "Buildout" conditions. The traffic projections for these analyses were performed through utilization of traffic modeling assumptions and procedures accepted by the City of Huntington Beach.

The requested traffic counts at selected (by the City of Huntington Beach) intersections allows evaluation of the current traffic condition, compared to the assumed conditions contained within the previous study (dated May 1997). It should also be recognized that a significant amount of

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development has occurred at the Boeing site, which combined with general traffic growth was previously assumed to translate to increased traffic on the surrounding street system. The evaluations contained in this letter address whether the current conditions are consistent with or less impacted, than assumptions included in the previous traffic analyses.

Some other factors that may be applicable to the subject question are the previous mitigations and conditions for the approved Boeing project. It can be noted the proposed development at the project site is subject to the City Traffic Fees, which serve as mitigation for the proposed project. At the time of the hearings for the previously approved project, it was confirmed that payment of the City Traffic Fees actually exceeded the project's CEQA responsibilities by a significant amount, if the potential improvement responsibilities were translated to dollar costs. In addition, the project conditions identified a specific threshold for when a new traffic study would be required, to verify if the Specific Plan assumptions/mitigations were still valid. This threshold has not been crossed and a new traffic study is not required by the conditions on the project.

ANALYSES

Turning movement traffic counts were conducted at four intersections during the AM and PM peak hours. The intersection count summary sheets are provided in the Appendix to this letter. These counts were then used in Intersection Capacity Utilization (ICU) analyses performed for the study intersections, to document current operating conditions. These current conditions were than compared to the assumed conditions presented in the approved WPA traffic study. **Table 1** provides a comparison of the previously assumed and the current conditions.

It should be recognized that a significant amount of development has already been constructed and occupied on the Boeing site. In addition, the previous traffic study anticipated cumulative growth of traffic in the surrounding area. For purposes of these evaluations, however, the current conditions will be compared to "interim" conditions *without any Boeing development* and *without any intersection improvements*. This provides a conservative analysis since the "new" Boeing development (the Boeing development since the Specific Plan approval) is a part of the current counts, but is *not included* in the ICU results assumed for the "previous study". If the results are consistent under this comparison, then it can be easily concluded that the previous traffic study findings are still applicable.

Upon examination of **Table 1** it can be seen that current conditions (includes "new" Boeing development) as documented through the traffic counts, are consistent with (overall better than) the previous study assumptions. If the net change (AM and PM both considered) at any of the four intersections is considered, the current conditions are within the previous assumptions. When the cumulative net ICU change for the four study intersections is calculated the total is 0.59 better than previously projected.

Table 1

INTERSECTION ANALYSES COMPARISON

	Intersection Capacity Utilization / Level of Service					
	Previous Interim		Current Conditions		Net ICU Change	
INTERSECTION	**AM Pk**	**PM Pk**	**AM Pk**	**PM Pk**	**AM Pk**	**PM Pk**
Bolsa Chica & Westminster	0.80/C	0.98/E	0.73/C	0.80/C	-0.07	-0.18
Rancho – Hammon & Westminster	0.40/A	0.70/B	0.42/A	0.62/B	+0.02	-0.08
Springdale & Bolsa	0.69/B	0.98/E	0.78/C	0.75/C	+0.09	-0.23
Golden West & Bolsa	0.83/D	1.00/E	0.78/C	0.91/E	-0.05	-0.09

Overall Net Difference = -0.59

CONCLUSION

The updated traffic counts of intersections pertinent to the project study area, show that the previous traffic study for the "McDonnell Centre Business Park" is still valid. The previous study considered interim and long-range traffic effects through a City approved traffic model, which provided reasonable estimates of future traffic impacts. These analyses should still be valid based on the analyses current conditions, presented in this letter report.

It can also be noted the Boeing site has been and will continue to provide mitigation through City Traffic Fee payments, which actually exceed the "fair share" CEQA responsibilities. Finally there was a designated threshold identified as a project condition, which specified when a new traffic study would be required and that threshold has not yet been met. The overall conclusion is that new traffic analyses should not be required, as the present approved analyses and conditions serve to address the potential impacts of the proposed updated project.

We trust these analyses will be of assistance to you and the City of Huntington Beach. If you have any questions or require further information, please do not hesitate to contact us.

Respectfully submitted,
SASAKI TRANSPORTATION SERVICES

Steven S. Sasaki

Steven S. Sasaki, P.E.
Principal
State of California
Civil and Traffic Engineer
C52768 & TR1462

Cc: Gary Powley
Jayna Morgan
Dick Harlow

APPENDIX

Intersection Capacity Utilization Worksheet

Intersection BOLSA CHICA & WESTMINSTER

Movement	Lanes	Capacity	AM Volume	PM Volume	AM ICU Value	PM ICU Value
NB Lt	2	3400	458	580	0,13 *	0,17 *
NB Th	3	5100	1098	1511	0,23	0,31
NB Rt	0	—	67	75	—	—
SB Lt	2	3400	209	186	0,06	0,05
SB Th	3	5100	1320	1700	0,26 *	0,33 *
SB Rt	1	1700	213	128	0,13	0,08
EB Lt	1	1700	99	126	0,06 *	0,07
EB Th	2	3400	404	698	0,12	0,21 *
EB Rt	1	1700	441	539	0,26	0,32
WB Lt	1	1700	83	70	0,05	0,04 *
WB Th	2	3400	773	388	0,23 *	0,11
WB Rt	1	1700	84	101	0,05	0,06
				CLEARANCE	0,05 *	0,05 *
				ICU VALUE	0,73	0,80
				LOS	C	C

Intersection Capacity Utilization Worksheet

Intersection RANCHO - HAMMON + WESTMINSTER

Movement	Lanes	Capacity	AM Volume	PM Volume	AM ICU Value	PM ICU Value
NB Lt	0	0	28	19	—	
NB Th	1	1700	7	25	0,08	0,18 *
NB Rt	0	0	102	254	—	
SB Lt	0	0	113	84	0,08 *	0,06
SB Th	1	1700	6	7	—	
SB Rt	0	0	10	4	—	
EB Lt	1	1700	5	3	NOM	NOM
EB Th	2	3400	717	999	0,22 *	0,30 *
EB Rt	0	0	40	27	—	
WB Lt	1	1700	119	147	0,07 *	0,09 *
WB Th	2	3400	871	611	0,27	0,22
WB Rt	0	0	36	142	—	
			CLEARANCE		0,05*	0,05*
			ICU VALUE		0,42	0,62
			LOS		A	B

Intersection Capacity Utilization Worksheet

Intersection SPRINGDALE + BOLSA

Movement	Lanes	Capacity	AM Volume	PM Volume	AM ICU Value	PM ICU Value
NB Lt	2	3400	166	33	0,05 *	0,01
NB Th	2	3400	635	860	0,21	0,30 *
NB Rt	0	—	67	156	—	—
SB Lt	1	1700	237	179	0,14	0,11 *
SB Th	2	3400	1119	821	0,33 *	0,24
SB Rt	1	1700	229	59	0,13	0,03
EB Lt	1	1700	63	246	0,04 *	0,14
EB Th	3	5100	224	985	0,05	0,21 *
EB Rt	0	—	33	102	—	—
WB Lt	1	1700	213	144	0,13	0,08 *
WB Th	2	3400	1050	254	0,31 *	0,07
WB Rt	1	1700	140	95	0,08	0,06
			CLEARANCE		0,05 *	0,05 *
			ICU VALUE		0,78	0,75
			LOS		C	C

Intersection Capacity Utilization Worksheet

Intersection GOLDEN WEST & BOLSA

Movement	Lanes	Capacity	AM Volume	PM Volume	AM ICU Value	PM ICU Value
NB Lt	2	3400	163	259	0.05 *	0,08
NB Th	3	5100	928	1353	0,21	0,31 *
NB Rt	0	—	141	209	—	—
SB Lt	1	1700	174	135	0,10	0,08 *
SB Th	3	5100	1670	1292	0,37 *	0,27
SB Rt	0	—	195	83	—	—
EB Lt	2	3400	127	309	0,04 *	0,09 *
EB Th	2	3400	439	1055	0,13	0,31
EB Rt	1	1700	133	335	0,08	0,20
WB Lt	2	3400	306	547	0,09	0,16 *
WB Th	3	5100	1399	790	0,27 *	0,15
WB Rt	1	1700	459	531	0,27	0,31
			CLEARANCE		0,05 *	0,05 *
			ICU VALUE		0,78	0,91
			LOS		C	E

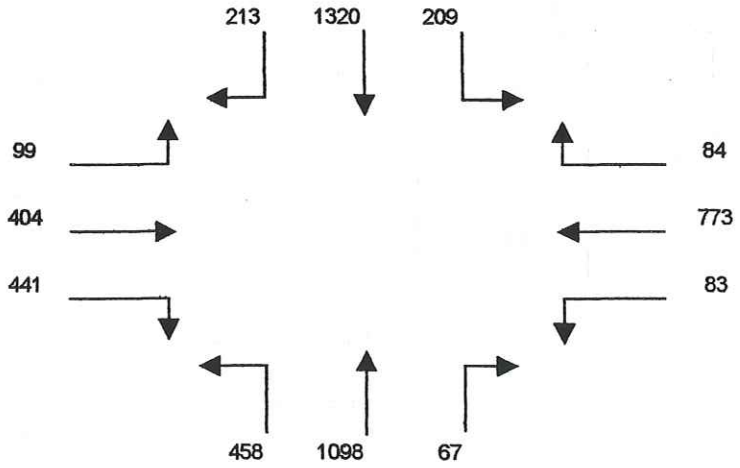
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION N/S BOLSA CHICA RD.
E/W WESTMINSTER BLVD.
FILE NUMBER: 1-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	47	270	39	19	142	7	16	252	92	50	70	16
715-730	54	313	45	24	179	16	16	274	115	89	95	22
730-745	57	344	46	18	189	24	17	285	117	112	109	26
745-800	53	336	53	19	205	23	16	277	117	128	104	27
800-815	49	327	65	23	200	20	18	262	109	112	96	24
815-830	43	325	50	19	197	18	18	243	96	86	81	20
830-845	37	307	43	20	182	10	18	227	95	71	77	17
845-900	36	291	40	18	169	9	16	213	87	63	69	15

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	211	1263	183	80	715	70	65	1088	441	379	378	91	4964
715-815	213	1320	209	84	773	83	67	1098	458	441	404	99	5249
730-830	202	1332	214	79	791	85	69	1067	439	438	390	97	5203
745-845	182	1295	211	81	784	71	70	1009	417	397	358	88	4963
800-900	165	1250	198	80	748	57	70	945	387	332	323	76	4631

A.M. PEAK HOUR
715-815



WESTMINSTER BLVD.

BOLSA CHICA RD.

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

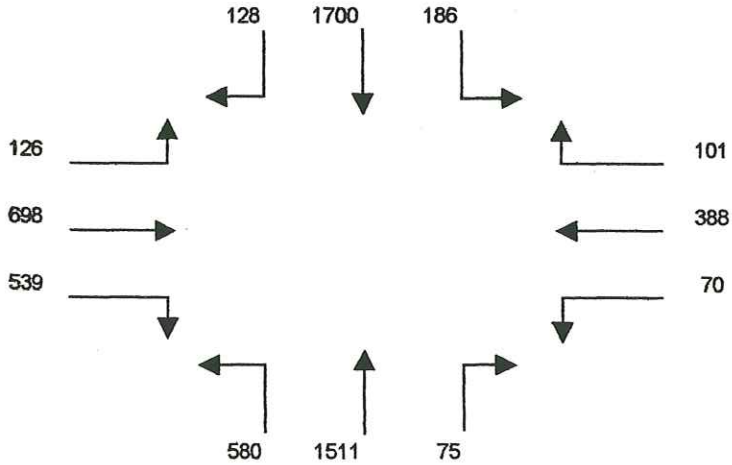
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES.
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S BOLSA CHICA RD.
E/W WESTMINISTER BLVD.
FILE NUMBER: 1-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	26	294	42	17	96	6	24	391	162	90	163	39
415-430	25	363	40	26	92	16	11	380	134	122	210	39
430-445	19	371	39	18	59	15	24	437	166	140	170	34
445-500	28	414	63	24	95	13	19	378	163	119	162	31
500-515	31	420	40	37	92	20	24	409	146	144	181	33
515-530	31	425	35	23	88	14	19	382	139	154	172	31
530-545	38	441	48	17	113	23	13	342	132	122	183	31
545-600	35	417	66	36	103	21	14	277	64	125	154	24

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	98	1442	184	85	342	50	78	1586	625	471	705	143	5809
415-515	103	1568	182	105	338	64	78	1604	609	525	723	137	6036
430-530	109	1630	177	102	334	62	86	1606	614	557	685	129	6091
445-545	128	1700	186	101	388	70	75	1511	580	539	698	126	6102
500-600	135	1703	189	113	396	78	70	1410	481	545	690	119	5929

P.M. PEAK HOUR
445-545



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

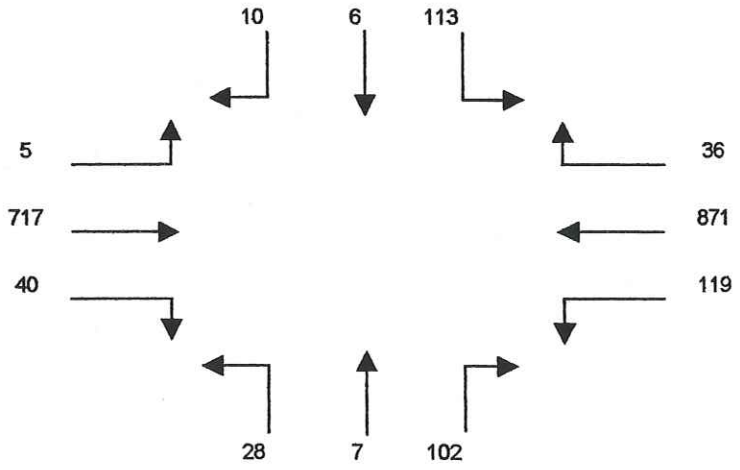
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION N/S HAMMON AVE. / RANCHO RD.
E/W WESTMINSTER BLVD.
FILE NUMBER: 2-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	1	0	23	3	191	22	17	1	5	5	152	1
715-730	2	1	30	7	234	33	25	1	10	8	176	1
730-745	4	3	32	12	249	27	32	3	9	14	208	1
745-800	3	2	28	14	197	37	28	2	4	13	181	0
800-815	3	2	19	11	167	26	33	0	1	10	145	0
815-830	1	0	19	7	163	23	45	1	3	5	146	0
830-845	0	4	15	8	131	20	37	1	4	7	125	0
845-900	0	1	17	8	108	13	24	2	1	4	118	0

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	10	6	113	36	871	119	102	7	28	40	717	3	2052
715-815	12	8	109	44	847	123	118	6	24	45	710	2	2048
730-830	11	7	98	44	776	113	138	6	17	42	680	1	1933
745-845	7	8	81	40	658	106	143	4	12	35	597	0	1691
800-900	4	7	70	34	569	82	139	4	9	26	534	0	1478

A.M. PEAK HOUR
700-800



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

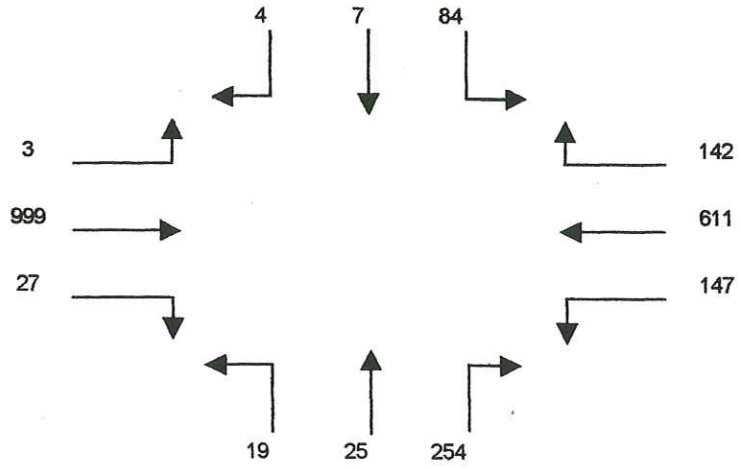
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES.
PROJECT: HUNTINGTON BEACH
CLIENT: SASAKI TRANSPORTATION SERVICES.
PROJECT: HUNTINGTON BEACH
CLIENT: N/S SASAKI TRANSPORTATION SERVICES.
E/W RANCHO RD.- WESTMINISTER BLVD.
FILE NUMBER: 2-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	4	4	10	12	150	36	70	2	6	14	188	2
415-430	0	2	21	24	122	44	53	4	4	4	192	0
430-445	4	6	18	25	137	35	58	0	7	8	181	0
445-500	0	2	12	39	137	24	54	6	10	9	237	1
500-515	0	2	19	31	154	39	69	8	3	5	262	1
515-530	0	3	26	32	138	39	66	8	7	6	235	1
530-545	2	1	21	35	151	26	44	5	3	10	246	0
545-600	2	1	18	44	168	43	75	4	6	6	256	1

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	8	14	61	100	546	139	235	12	27	35	798	3	1978
415-515	4	12	70	119	550	142	234	18	24	26	872	2	2073
430-530	4	13	75	127	566	137	247	22	27	28	915	3	2164
445-545	2	8	78	137	580	128	233	27	23	30	980	3	2229
500-600	4	7	84	142	611	147	254	25	19	27	999	3	2322

P.M. PEAK HOUR
500-600



SASAKI TRANSPORTATION SERVICES.

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

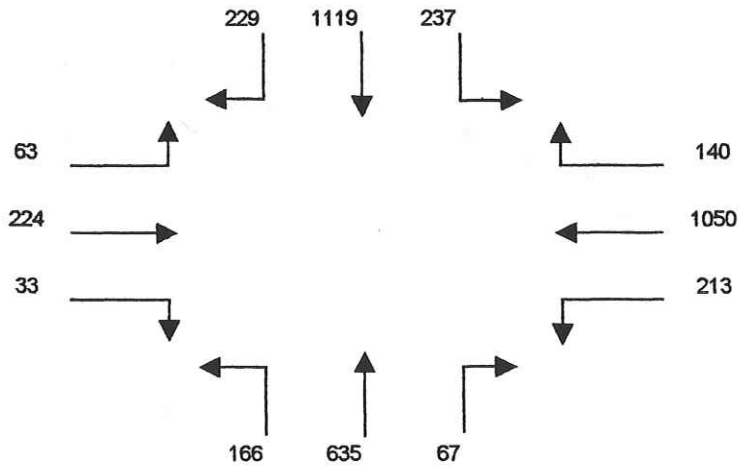
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION N/S SPRINGDALE ST.
E/W BOLSA AVE.
FILE NUMBER: 3-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	32	208	38	19	201	33	9	122	29	3	40	11
715-730	48	259	51	28	240	45	15	137	45	3	50	16
730-745	50	308	58	31	282	51	17	159	47	9	56	18
745-800	62	291	62	38	271	57	16	178	40	13	61	15
800-815	69	261	66	43	257	60	19	161	34	8	57	14
815-830	45	215	43	28	216	55	15	134	22	4	49	12
830-845	32	172	23	12	168	49	16	130	19	9	52	12
845-900	30	143	21	14	132	41	17	119	15	13	50	10

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	192	1066	209	116	994	186	57	596	161	28	207	60	3872
715-815	229	1119	237	140	1050	213	67	635	166	33	224	63	4176
730-830	226	1075	229	140	1026	223	67	632	143	34	223	59	4077
745-845	208	939	194	121	912	221	66	603	115	34	219	53	3685
800-900	176	791	153	97	773	205	67	544	90	34	208	48	3186

A.M. PEAK HOUR
715-815



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

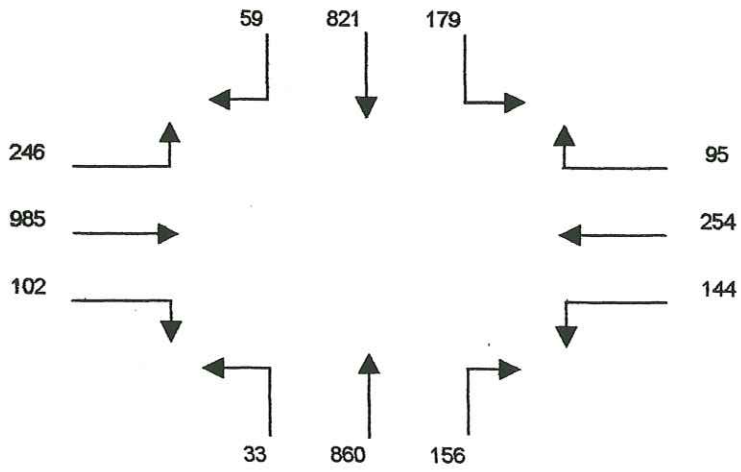
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES.
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S SPRINGDALE ST.
E/W BOLSA AV.
FILE NUMBER: 3-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	10	148	47	27	71	33	57	204	10	29	204	53
415-430	10	193	44	32	57	37	22	183	12	35	214	37
430-445	20	176	54	15	70	44	53	209	3	31	287	57
445-500	10	238	36	39	60	38	39	227	15	25	243	44
500-515	15	200	49	21	66	30	34	209	5	17	252	99
515-530	14	207	40	20	58	32	30	215	10	29	203	46
530-545	9	200	54	30	72	37	34	196	10	21	177	59
545-600	10	235	50	31	69	31	20	189	5	15	140	25

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	50	755	181	113	258	152	171	823	40	120	948	191	3802
415-515	55	807	183	107	253	149	148	828	35	108	996	237	3906
430-530	59	821	179	95	254	144	156	860	33	102	985	246	3934
445-545	48	845	179	110	256	137	137	847	40	92	875	248	3814
500-600	48	842	193	102	265	130	118	809	30	82	772	229	3620

P.M. PEAK HOUR
430-530



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

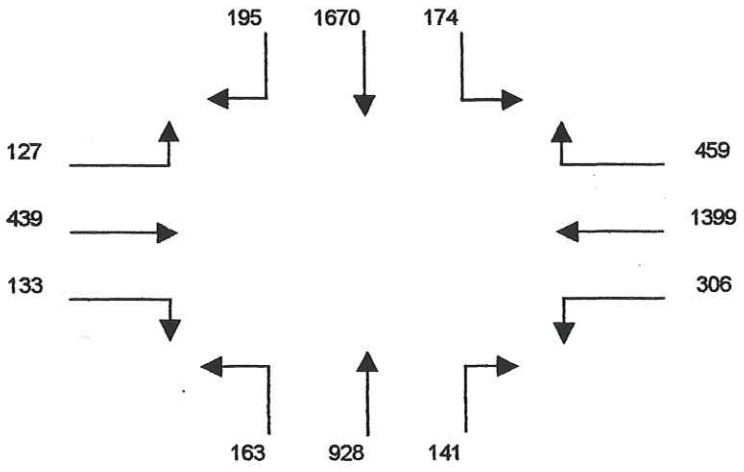
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 7:00 AM TO 9:00 AM
INTERSECTION N/S GOLDEN WEST ST.
E/W BOLSA AVE.
FILE NUMBER: 4-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
700-715	37	312	32	75	271	49	31	197	29	24	92	24
715-730	50	371	43	91	323	56	41	222	42	37	107	33
730-745	53	433	48	116	356	65	44	242	46	38	114	37
745-800	51	459	43	135	394	87	34	236	41	35	110	32
800-815	41	407	40	117	326	98	22	228	34	23	108	25
815-830	30	354	39	96	253	105	28	231	29	20	96	22
830-845	26	309	36	93	248	99	33	232	22	15	81	19
845-900	24	275	34	88	190	101	26	217	20	13	77	17

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-800	191	1575	166	417	1344	257	150	897	158	134	423	126	5838
715-815	195	1670	174	459	1399	306	141	928	163	133	439	127	6134
730-830	175	1653	170	464	1329	355	128	937	150	116	428	116	6021
745-845	148	1529	158	441	1221	389	117	927	126	93	395	98	5642
800-900	121	1345	149	394	1017	403	109	908	105	71	362	83	5067

A.M. PEAK HOUR
715-815



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

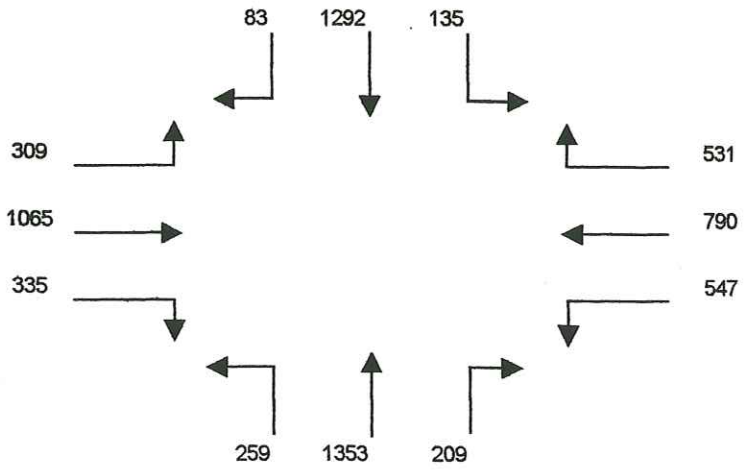
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: SASAKI TRANSPORTATION SERVICES.
PROJECT: HUNTINGTON BEACH
DATE: THURSDAY, SEPTEMBER 27, 2001
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S GOLDENWEST ST.
E/W BOLSA AV.
FILE NUMBER: 4-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
400-415	20	245	25	144	193	68	55	253	58	26	271	91
415-430	30	313	29	154	225	94	31	301	69	64	277	60
430-445	21	328	29	143	203	109	65	311	65	90	286	71
445-500	14	304	33	124	178	124	64	304	62	89	284	90
500-515	22	307	36	140	198	123	49	351	72	82	272	95
515-530	26	346	41	132	183	109	42	336	56	82	266	49
530-545	21	335	25	135	231	191	54	362	69	82	243	75
545-600	24	335	24	123	152	113	57	309	83	76	263	64

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-500	85	1190	116	565	799	395	215	1169	254	269	1118	312	6487
415-515	87	1252	127	561	804	450	209	1267	268	325	1119	316	6785
430-530	83	1285	139	539	762	465	220	1302	255	343	1108	305	6806
445-545	83	1292	135	531	790	547	209	1353	259	335	1065	309	6908
500-600	93	1323	126	530	764	536	202	1358	280	322	1044	283	6861

P.M. PEAK HOUR
445-545



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

APPENDIX B

PARKING ANALYSIS
BOEING SPACE AND COMMUNICATIONS FACILITY
BY PAUL E. COOK & ASSOCIATES
NOVEMBER 9, 2001

PAUL E. COOK AND ASSOCIATES

November 9, 2001

Mr. Steve Sandland
Project Dimensions, Inc.
3 Park Plaza, Suite 1490
Irvine, CA 92614

Subject: Parking Analysis, Boeing Space and Communications Facility

Dear Mr. Sandland,

The following are the results of an analysis of the existing and future parking conditions at the Boeing Space and Communications Facility in the City of Huntington Beach. This study has been prepared because of proposed non-Boeing development in three phases on property within the existing Boeing Facility.

The study consists of three sections. Section I evaluates required and available parking in the terms required by Section 6.3.4 of the McDonnell Centre Business Park Specific Plan. Section II presents the results of parking surveys conducted at the facility in March, 2001. Section III quantifies the effect on required and available parking based on the demolition of existing buildings and parking lots in Phases II, IIIA and IIIB of non-Boeing development.

Any pre-entitled buildings will be parked in accordance to their entitlement requirements.

The existing fitness center on Bolsa Chica Street is for Boeing employees only. If there is a change of ownership or the facility becomes open to the public, parking will be provided according to requirements in the Specific Plan.

I CURRENT REQUIRED AND AVAILABLE PARKING

The following is an evaluation of parking at the Boeing Space and Communications Facility in the terms required by Section 6.3.4 of the McDonnell Centre Business Park Specific Plan. The Specific Plan requires that parking be provided based on floor area and use. Accordingly, a data table showing compliance with the appropriate standards must be submitted.

221 Main Street, Suite P • Huntington Beach, California 92648 • (714) 960-8298 Fax (714) 536-1333

Phase IIIA Conditions

Phase IIIA is the continued development of non-Boeing uses on land currently used by Boeing. Phase IIIA development includes the demolition of 322,096 square feet of buildings as shown on Table III. Phase IIIA does not include the demolition of any parking lots.

Phase III B Conditions

Phase IIIB is the continued development of non-Boeing uses on land currently used by Boeing. Phase IIIB development includes the demolition of 216,638 square feet of buildings as shown on Table III and the removal of 1,043 parking spaces in Lots U and W as shown in Table IV.

Summary

Table III shows the effect on required parking when existing buildings are demolished in Phases II, IIIA and IIIB. Upon demolition of all buildings in these phases, the required parking for the Boeing Facility would be reduced by 2,137 from 7,665 to 5,528 spaces.

Table IV shows the effect on available parking when existing parking lots are demolished in Phases II, IIIA and IIIB. Upon demolition of parking lots in these phases, the available parking for the Boeing Facility would be reduced by 1,999 from 7,700 to 5,701 spaces.

Table V summarizes required, available and surplus parking for the Boeing Facility under existing conditions and after implementation of each of the three phases analyzed in this study.

CONCLUSIONS

- Under existing conditions at the Boeing Facility, there are 35 surplus parking spaces over those required by the McDonnell Centre Business Park Specific Plan.

- On-site parking surveys indicate vacancy rates ranging from 29% to 40%.

Boeing Facilities Building Analysis

Building	Office	Manufacturing & Lab	Warehouse & Storage	Construction Gross Area	Planning Area
5 PLEX	1,081	0	13,176	14,257	1
B10	116,911	37,135	36,558	190,604	1
B11	166,078	946	13,488	180,512	1
B12	147,060	1,190	32,394	180,644	1
B13	158,109	4,367	17,897	180,373	1
B14	147,309	7,851	24,908	180,068	1
B16	499	0	20,975	21,474	1
B17	192,429	13,566	32,997	238,992	5
B19	73,244	267	6,169	79,680	1
B20	75,003	0	4,677	79,680	1
B21	61,531	83,068	20,604	165,203	1
B21	0	0	0		1
B22	33,368	93,747	4,415	131,530	1
B28	40,653	472	11,907	53,031	5
B30	16,783	80,763	4,889	102,434	1
B31	5,560	45,056	4,843	55,459	1
B32	1,539	12,998	364	14,900	1
B32A	0	2,491	0	2,491	1
B32B	0	588	0	588	1
B32C	0	0	684	684	1
B33	1,076	0	21,358	22,434	1
B36 (Demo I)	0	0	15,862	15,862	4
B37	333	0	4,006	4,339	1
B38	0	0	10,487	10,487	1
B39	4,901	1,215	31,581	37,698	1
B39A (Demo IIIB)	106	0	13,689	13,795	1
B39B	0	800	0	800	4
B39C	0	0	484	484	1
B40 (Demo IIIA)	448	22,288	514	23,250	4
B41	988	21,031	1,902	23,921	1
B42	3,585	22,771	4,140	30,497	1
B43	0	8,667	0	8,667	1
B44	0	7,272	3,031	10,303	1
B44A	0	1,582	0	1,582	1
B45 (Demo IIIA)	70,436	201,081	17,465	288,982	4
B45A (Demo II)	0	15,550	5,415	20,965	4
B45B (Demo IIIA)	279	8,987	598	9,864	4
B45C (Demo II)	0	1,393	0	1,393	4
B45D (Demo II)	364	11,968	155	12,487	4

Building	Office	Manufacturing & Lab	Warehouse & Storage	Construction Gross Area	Planning Area
B46N (Demo II)	35,473	110,460	100,915	246,849	4
B46 Annex (Demo II)	0	0	0		4
B46S (Demo II)	89,783	66,762	14,637	171,182	4
B46 Central (Demo II)	0	0	0		4
B47 (Demo II)	0	0	3,099	3,099	4
B49 (Demo IIIB)	35,388	145,869	4,576	185,833	4
M03	0	0	1,813	1,813	1
M05	0	0	2,400	2,400	4
M1C	0	0	9,000	9,000	1
M11 (Demo IIIB)	0	0	17,010	17,010	4
T17	4,615	0	3,568	8,183	4
T19	0	675	0	675	1
T20	0	0	513	513	4
T21	0	0	312	312	1
T23	0	550	0	550	4
T24	0	720	0	720	4
T25	320	0	0	320	4
T32	992	0	0	992	4
T33	3,914	0	346	4,260	1
T34	3,904	0	356	4,260	1
T35	140	0	560	700	1
T36	0	0	1,464	1,464	1
T37	0	0	520	520	4
T39	4,177	0	83	4,260	1
T41	3,803	117	339	4,260	1
T44	2,989	0	0	2,989	1
T50	1,903	0	2,357	4,260	1
T59	0	0	1,552	1,552	4
T68	3,493	0	767	4,260	1
T69	3,886	0	374	4,260	1
Grand Total	1,514,453	1,034,263	548,194	3,096,910	
Divided By	300	500	1000	*Total Parking Spaces Required*	
	5,048	2,069	548	7,665	

CURRENT ON-SITE PARKING LOT SPACES AVAILABLE

PARKING LOT	SPACES AVAILABLE
A	130
B1	185
B2	184
B3	48
C	1,017
D	876
E	471
F	764
G	402
H	367
K	823
K-1	464
L	201
R	171
U	671
W	836
Y	90
TOTAL	7,700

TABLE II

RESULTS OF PARKING SURVEYS

PARKING LOT	SPACES AVAILABLE	3/06/01 9:00-11:00 AM	3/06/01 1:30-3:30 PM	3/12/01 9:00-11:00 AM	3/08/01 1:30-3:30 PM
A	130	63	48	53	38
B1	185	121	145	132	118
B2	184	174	156	178	175
B3	48	41	45	47	39
C	1,017	1,004	935	965	960
D	876	445	413	386	537
E	471	306	211	278	279
F	764	687	464	611	655
G	402	332	241	300	283
H	367	228	202	235	249
K	823	798	774	740	749
K-1	464	233	270	246	252
L	201	151	181	169	143
R	171	153	119	163	157
U	671	416	248	423	482
W	836	247	180	181	249
Y	90	35	16	33	37
TOTAL	7,700	5,434	4,648	5,140	5,402

EXHIBIT B

BUILDING DEMOLITION AND EFFECT ON PARKING REQUIREMENTS

PHASE	BUILDING	OFFICE (SF)	MANUFACTURING/ LAB (SF)	WAREHOUSE/ STORAGE (SF)	GROSS BLDG (SF)
II	B36	0	0	15,862	15,862
II	B45A	0	15,550	5,415	20,965
II	B45C	0	1,393	0	1,393
II	B45D	364	11,968	155	12,487
II	B46N	35,475	110,460	100,915	246,848
II	B46S	89,783	66,762	14,637	171,182
II	B47	0	0	3,099	3,099
		125,620	206,133	140,083	471,836
Parking Ratio		1/300sf	1/500sf	1/1000sf	
Required Parking		419	412	140	Total 971
IIIA	B40	448	22,288	514	23,250
IIIA	B45	70,436	201,081	17,465	288,982
IIIA	B45B	279	8,987	598	9,864
		71,163	232,356	18,577	322,096
Parking Ratio		1/300sf	1/500sf	1/1000sf	
Required Parking		237	465	19	Total 721
IIIB	B39A	106	0	13,689	13,795
IIIB	B49	35,388	145,869	4,576	185,833
IIIB	M11	0	0	17,010	17,010
		35,494	145,869	35,275	216,638
Parking Ratio		1/300sf	1/500sf	1/1000sf	
Required Parking		118	292	35	Total 445

REDUCTION IN PARKING REQUIREMENTS DUE TO BUILDING DEMOLITION

Phase II	971 spaces
Phase IIIA	721 spaces
Phase IIIB	445 spaces
Total Reduction	2,137 spaces

TABLE III

PARKING LOT DEMOLITION AND EFFECT ON AVAILABLE PARKING

PHASE II

Demolish Lot G	- 402 spaces
Demolish Lot Y	- 90 spaces
Demolish Portion of Lot U	- 206 spaces
Demolish Portion of Lot W	- 258 spaces
Total spaces removed in Phase II	- 956 spaces

PHASE IIIA

No parking lots are demolished in Phase IIIA	
Total spaces removed in Phase IIIA	- 0 spaces

PHASE IIIB

Demolish Remainder of Lot U	- 465 spaces
Demolish Remainder of Lot W	- 578 spaces
Total spaces removed in Phase IIIB	-1,043 spaces
Total spaces removed on all phases	- 1,999 spaces

TABLE IV

SUMMARY OF REQUIRED, AVAILABLE AND SURPLUS ON-SITE PARKING

Conditions	Parking Spaces Required	Parking Spaces Available	Parking Space Surplus
Existing Conditions	7,665	7,700	35
Effect of Phase II	-971	-956	
Conditions after Phase II	6,694	6,744	50
Effect of Phase IIIA	-721	0	
Conditions after Phase IIIA	5,973	6,744	771
Effect of Phase IIIB	-445	-1,043	
Conditions after Phase IIIB	5,528	5,701	173

TABLE V

APPENDIX C

NOISE IMPACT ANALYSIS UPDATE
BY HANS GIROUX
SEPTEMBER 21, 2001

NOISE IMPACT ANALYSIS UPDATE

BOEING (McDONNELL) SPECIFIC PLAN

HUNTINGTON BEACH, CALIFORNIA

Prepared for:

EDAW, Inc.
Attn: Jayna Morgan
17875 Von Karman Avenue, Ste. 400
Irvine, CA 92614

Date:

September 21, 2001

INTRODUCTION

An updated noise study has been prepared to incorporate the findings of the document entitled "Traffic Analysis for the Boeing Specific Plan Update" (Sasaki Trans. Svcs., 2001). The traffic study compared the traffic levels associated with approved development plans versus those attributable to some "fine tuning" of the previously approved McDonnell Centre Specific Plan. The traffic study update did not identify any substantive changes to traffic patterns associated with this update. Off-site traffic levels will be slightly less as the proposed Boeing Specific Plan update would generate a slightly lower buildout traffic volume (93,096 daily trips proposed versus 96,295 previously approved). The reduction is approximately 3.3 percent of the approved volumes. Noise level changes associated with this change in average daily traffic (ADT) will be minimal because:

(1) Off-site, project-related traffic levels are only a small fraction of ADT,

(2) The 3.3 percent change of only a small fraction is an even smaller fraction, and,

(3) Noise levels are on a logarithmic scale. The logarithm of a small number is an even smaller number.

This study update established existing conditions based upon the rate of cumulative growth and the proportionate share of the project completed to date. This analysis also included an updated noise measurement since the last project vicinity noise measurement reported in the Specific Plan EIR was in September 18, 1991. With the passage of ten (10) years, an updated noise measurement appeared to be indicated.

Baseline Noise Monitoring

The previously reported noise measurement was made at the curve on Rancho Road at the U.S. Navy Railroad. The weighted 24-hour CNEL at this location was 59.5 dB CNEL. A short-term measurement update was conducted at this location, and in two adjacent residential subdivisions, on Friday afternoon on September 7, 2001. Although the current measurements are short term (20-minutes per site) readings, monitoring experience has shown that traffic noise during the p.m. rush hour, and the weighted 24-hour CNEL are fairly similar, i.e. CNEL $\simeq$ LEQ + 2 dB.

The results of the noise measurements were as follows:

	NOISE LEVELS (dBA)					
Location	**LEQ**	**Lmax**	**Lmin**	**L10**	**L50**	**L90**
Residences on Nugget Circle	49	63	45	50	48	46
Rancho Road @ Railroad Tracks	55	70	44	59	49	46
Suffolk Street @ Victoria Place	59	68	48	62	57	52

Adjustment of the late afternoon LEQ (3-4:30 p.m.) to CNEL suggest that the typical noise exposure around the project perimeter is in the upper 50 dB range. This level has not changed much in the last decade, and may even have declined somewhat due to decreased aerospace research activities on this site within recent times.

Traffic Noise Impacts

Traffic noise calculated using the federal highway traffic noise prediction model (FHWA-RD-77-108) as in the previously approved project documentation. Traffic inputs were adjusted for the growth of the site to date (existing site development represents approximately 30 percent of buildout), and buildout traffic volumes were reduced by 3.3 percent based on currently proposed site development intensity.

The results of this update are shown in Table 1 (no project), Table 2 (with project) and Table 3 (project and no project compared to existing. Traffic noise levels are almost unchanged. The increase compared to existing has decreased because baseline traffic volumes are now somewhat higher. The difference between the project versus no project scenario is almost identical as it was in the previous EIR because the 3.3 percent change in the project-only increment is almost undetectable within the context of the much larger no-project buildout baseline.

Noise level differences at buildout differ no more than 0.1 dB CNEL from the previously analyzed findings. Noise levels of less than ± 1.5 dBA, as stated in Tables 1 and 2, are within the margin of error of measurement or computer modeling.

Differences of ± 0.1 dB due to any changes in the proposed development intensity for the site are clearly an imperceptible difference.

TABLE 1

YEAR 2015 BUILDOUT WITHOUT PROJECT
DISTANCES TO CNEL NOISE CONTOURS

ROADWAY SEGMENT	DISTANCE TO CONTOUR[1]			CNEL AT 50 FEET[2]
	70 CNEL	65 CNEL	60 CNEL	
1. Springdale Street (between Bolsa Ave. & Westminster Ave.)	72'	229'	724'	71.6
2. Bolsa Chica Street (between Bolsa Ave. & Rancho Road	178'	562'	1778'	75.5
3. Rancho Road (between Bolsa Chica Street & Westminster Avenue)	<50'	76'	240'	66.8
4. Bolsa Chica Street (between Rancho Road & Westminster Ave.)	166'	525'	1660'	75.2
5. Westminster Ave. (between Bolsa Chica St. & Rancho Road)	87'	275'	871'	72.4
6. Westminster Avenue (between Rancho Rd. & Springdale Street)	91'	288'	912'	72.6

Source: FHWA-RD-77-108 (Calveno mod.)

[1] Distance to CNEL contour from centerline of roadway in feet
[2] CNEL at 50 feet from the centerline

Note: CNEL = Community Noise Equivalent Level Margin of error is +/- 1.5 dBA.

TABLE 2

YEAR 2015 BUILDOUT WITH PROJECT
DISTANCES TO CNEL NOISE CONTOURS

ROADWAY SEGMENT	DISTANCE TO CONTOUR[1]			CNEL AT 50 FEET[2]
	70 CNEL	65 CNEL	60 CNEL	
1. Springdale Street (between Bolsa Ave. & Westminster Ave.)	79'	251'	794'	72.0
2. Bolsa Chica Street (between Bolsa Ave. & Rancho Road	204'	646'	2042'	76.1
3. Rancho Road (between Bolsa Chica Street & Westminster Avenue)	<50'	110'	347'	68.4
4. Bolsa Chica Street (between Rancho Road & Westminster Ave.)	186'	589'	1862'	75.7
5. Westminster Ave. (between Bolsa Chica St. & Rancho Road)	85'	269'	851'	72.3
6. Westminster Avenue (between Rancho Rd. & Springdale Street)	95'	302'	955'	72.8

Source: FHWA-RD-77-108 (Calveno mod.)

[1] Distance to CNEL contour from centerline of roadway in feet
[2] CNEL at 50 feet from centerline

Note: CNEL = Community Noise Equivalent Level Margin of error is +/- 1.5 dBA.

TABLE 3

NOISE INCREASE COMPARISONS

ROADWAY SEGMENT	EXIST.	BUILDOUT WITHOUT PROJECT		BUILDOUT WITH PROJECT	
	CNEL	CNEL	Increase Over Existing	CNEL	Increase Over "Buildout Without Project"
1. Springdale Street (between Bolsa Ave. & Westminster Ave.)	71.6	71.6	±0.0	72.0	+0.4
2. Bolsa Chica Street (between Bolsa Ave. & Rancho Road)	74.8	75.5	+0.7	76.1	+0.6
3. Rancho Road (between Bolsa Chica Street & Westminster Avenue)	66.2	66.8	+0.6	68.4	+1.6
4. Bolsa Chica Street (between Rancho Road & Westminster Ave.)	74.6	75.2	+0.6	75.7	+0.5
5. Westminster Ave. (between Bolsa Chica St. & Rancho Road)	70.9	72.4	+1.5	72.3	-0.1
6. Westminster Avenue (between Rancho Rd. & Springdale Street)	71.4	72.6	+1.2	72.8	+0.2

Source: Tables 1 and 2

CNEL at 50 feet from roadway centerline

SUMMARY

1. Measured noise levels have not changed appreciably near the project site because the level of existing site development is likely less intense than it was ten years ago as the McDonnell-Douglas Research Center.

2. Off-site noise levels due to the proposed change in specific plan uses will be imperceptibly different from those analyzed in the McDonnell-Douglas Centre Specific Plan EIR.

APPENDIX D

ADDENDUM TO TECHNICAL APPENDIX EIR NO. 96-1 FOR MCDONNELL DOUGLAS AEROSPACE BY ADAMS STREETER JANUARY 8, 2002

00-1340

ADDENDUM TO TECHNICAL APPENDIX
EIR NO. 96-1
FOR
MCDONNELL CENTRE BUSINESS PARK

PREPARED FOR

BOEING REALTY CORPORATION
3760 KILROY AIRPORT WAY, SUITE 500
LONG BEACH, CA 90806

PREPARED BY

ADAMS STREETER CIVIL ENGINEERS INC.
15 CORPORATE PARK
IRVINE, CA 92606

January 8, 2002

Subject: **Addendum to Technical Appendix to EIR No. 96-1**
For McDonnell Douglas Aerospace

As requested by Boeing Realty Corporation and EDAW, Inc., Adams Streeter Civil Engineers, Inc. has conducted a review of the technical appendix dated November 18, 1996 (revised March 1997) for subject project. EDAW Inc. is in process of revising the specific plan for McDonnell Douglas Business Center and preparing an addendum to EIR 96-1 based on proposed changes to phasing of improvements and developments. In general the proposed changes are all internal to the specific plan area and no changes are proposed in perimeter streets and perimeter infrastructure. The proposed changes to the interior improvement phasing limits, streets, storm drain, sewer and water facilities will not have any significant impact on the overall system serving the project area. It is recognized that the 12" and 16" water pipeline in Rancho Road has not yet been completed. When this pipeline construction is completed, and continued to loop with the City's existing water piping system, the Water Division requirements and design criteria will be satisfied for the existing development.

A discussion about drainage, sewer and water systems for proposed improvements in McDonnell Douglas Business Center is presented in the following sections.

l. Existing and Proposed Drainage Facilities

The overall drainage boundary for the project site has not changed for existing or proposed conditions as compared to the original technical appendix. The points of discharge from the site to the Westminster Channel, Bolsa Chica Channel and Anaheim Barber City Channel remain the same as indicated in the technical appendix. Drainage subarea boundaries for existing storm drains south of Skylab Road and east of Able Lane will remain unchanged and no changes to existing storm drain main lines are proposed for this area.
Drainage sub-areas boundaries north of Skylab Road will also remain the same as compare to the original Technical Appendix. But proposed storm drain alignments are revised to conform to interior street realignment.

The proposed pipe sizes, as shown on enclosed storm drain exhibit, are estimated for planning purposes only and are subject to refinement based on final hydrology and hydraulic analysis for each system. Methodology and criteria for design of the future storm drain system shall remain the same as stated in the technical appendix.

1.1 Existing County and City Water Quality and Regulations

As stated in the original Technical appendix all dischargers of storm water runoff are regulated by National Pollution Discharge Elimination System (NPDES). Any grading within the project area larger than 5 acres will require submittal of application to State Water Quality Control Board, and preparation of Storm Water Pollution Prevention Plan (SWPPP).
SWPPP shall be prepared per the latest requirements and regulations of Water Quality Control Board and City of Huntington Beach.

2. Sanitary Sewer

Conditions of existing sewer systems receiving sewer flows generated from the project site remain the same as indicated in the original technical appendix. Portions of sewer lines indicated as "future" system in the Technical Appendix have been constructed to serve completed developments on West Side of Able Lane and Skylab Road east of Able Lane. Existing and proposed sewer lines and tributary areas associated with them are shown in sewer exhibit and sewer tributary area exhibit.

The existing Boeing aerospace facility will continue to be served by a pump station located north of Bolsa Road and Graham Street. As stated in the original technical appendix this pump station will remain in operation until such time that Boeing plant stops operating. At which time requirements for upgrading of existing pump station or rerouting of sewer lines shall be reviewed as required by new development plans for area within Boeing plant.

As indicated in the original technical appendix, sewer drainage for areas along Rancho Road and Bolsa Chica will drain to a proposed pump station along Bolsa Chica and then in a force main to existing sewer line in Bolsa Chica.

The proposed sizes and locations of proposed sewer lines and pump station as shown on enclosed exhibits are estimated for planning purposes only and are subject to refinement based on final design of proposed improvements. Methodology and design criteria for future sewer system remains the same as stated in the Technical Appendix.

3. Water System

The water system serving the project site as stated in the Technical Appendix has not changed. Portions of the water system in Skylab, Astronautics Drive and Bolsa Chica that are shown as proposed water lines in the Technical Appendix have been completed and are shown as existing water line on enclosed domestic water line exhibit. As indicated in the enclosed Domestic Water Exhibit, the portion of the water line on Rancho Road between railroad and proposed entry street at Rancho Road, is revised to 16" (12" per original technical appendix).

A city water well site is also shown on the enclosed water line exhibit. City of Huntington Beach will construct this water well and pumping facility at southeast of the intersection of Rancho Road and Navy Railroad. This water well will be connected to the future water system in Rancho Road and will provide additional water supply to City system. The new water well was not a part of the original Technical Appendix.

Water system demands and design criteria will remain the same as stated in the original Technical Appendix and any changes in the interior system due to refinement of alignments shall be addressed with new developments.

00-1340

Subject: **Revision and addendum to technical appendix for grading in future development.**

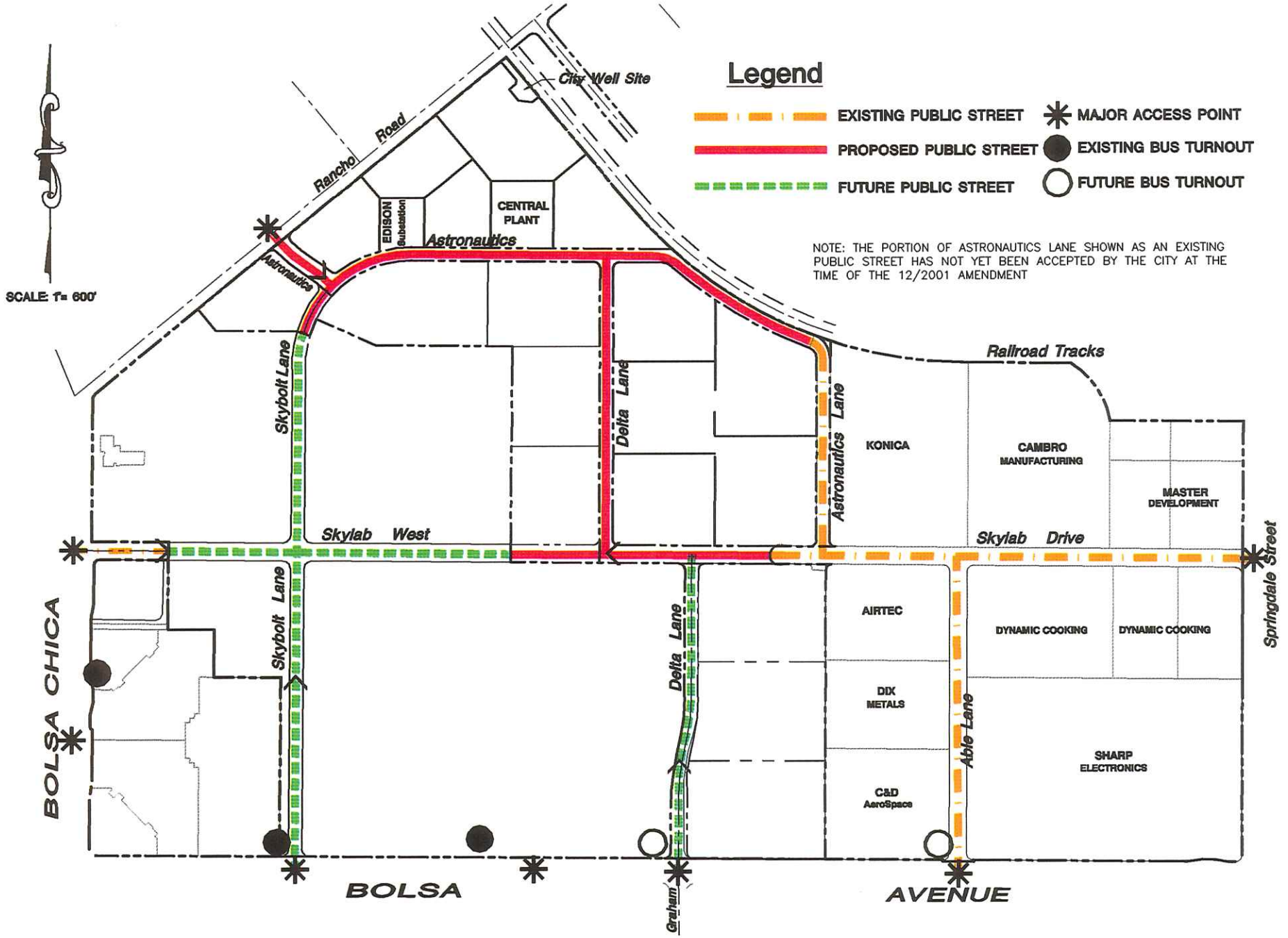
Future development areas outside of the boundaries of the tentative parcel map 2001-122 will require additional grading to provide flood protection and accommodate the construction of future utilities. These areas will require an approximate 2' to 4' of fill from existing finish ground. The exact depths of fill required for future developments will be determined by hydrologic and flood plain studies as well as depth requirements for future utilities in the development areas.

1-08-02

Subject: **Response to comments on McDonnell Center AEIR dated 12/27/01**

Comment No. 6 , sewer exhibit and specific plan comment No. 2

Sewer service for lot 13 will be provided from the sewer line in Astronautics, sewer service for lot 20 will be provided from the sewer line in Delta Lane. Therefore extension of sewer mains as stated in the comments is not required.



BOEING SPACE & COMMUNICATIONS
CIRCULATION PLAN

JANUARY 8, 2002

Prepared by:
ADAMS • STREETER
CIVIL ENGINEERS, INC.

DATE: 1/8/2002
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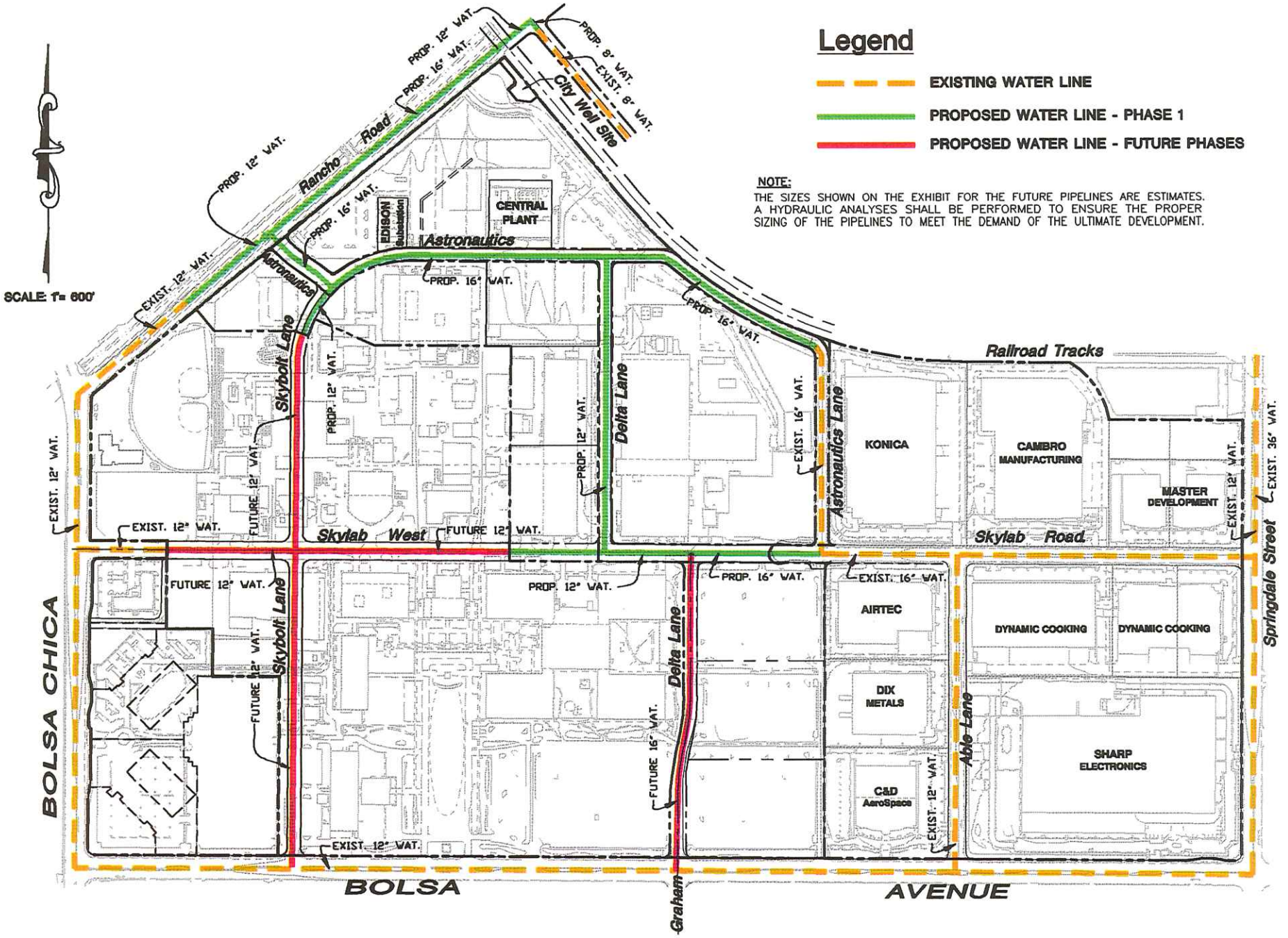

Prepared by:

ADAMS • STREETER
CIVIL ENGINEERS, INC.

BOEING SPACE & COMMUNICATIONS
DOMESTIC WATER EXHIBIT

JANUARY 8, 2002

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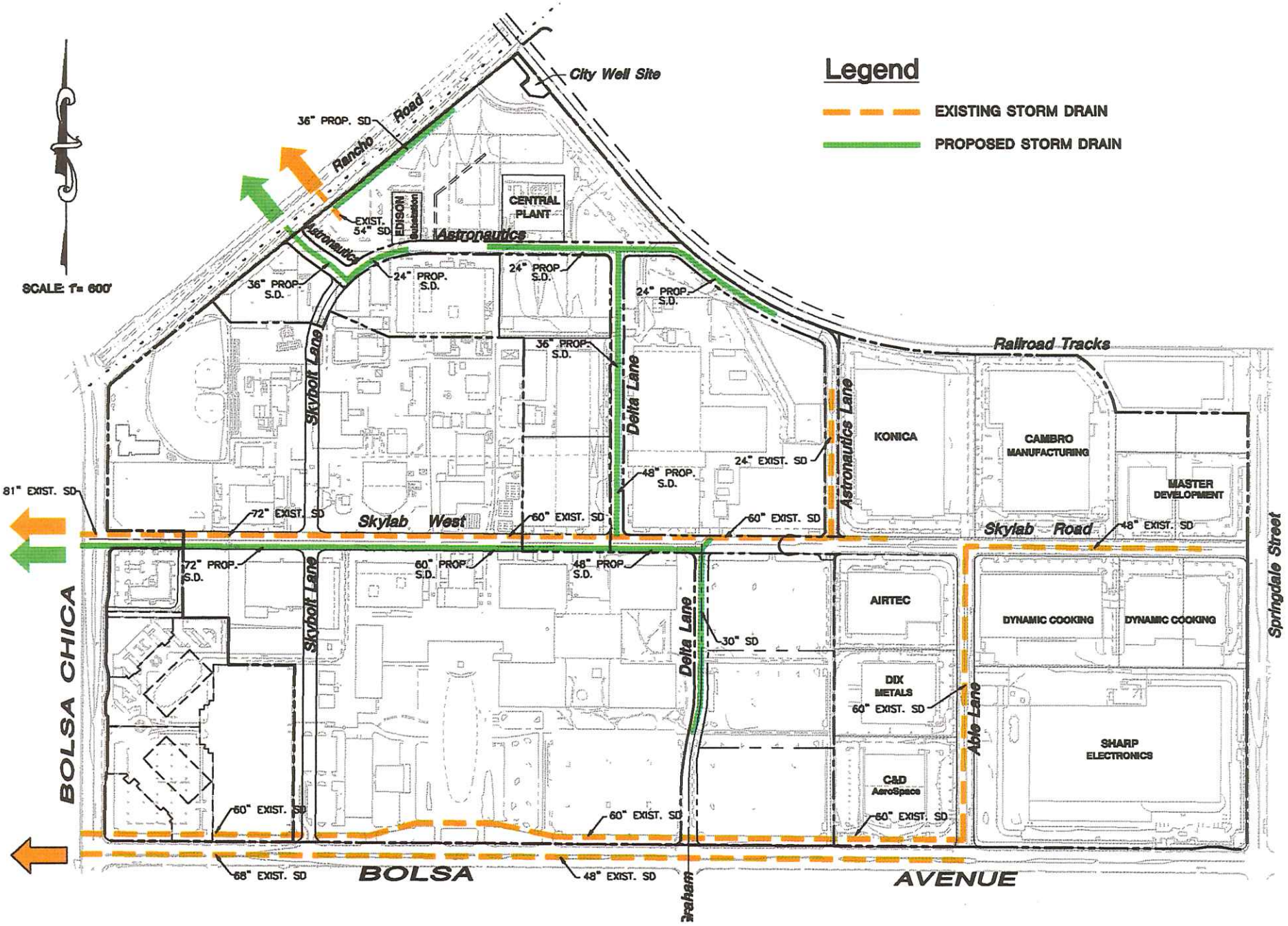


BOEING SPACE & COMMUNICATIONS
STORM DRAIN EXHIBIT

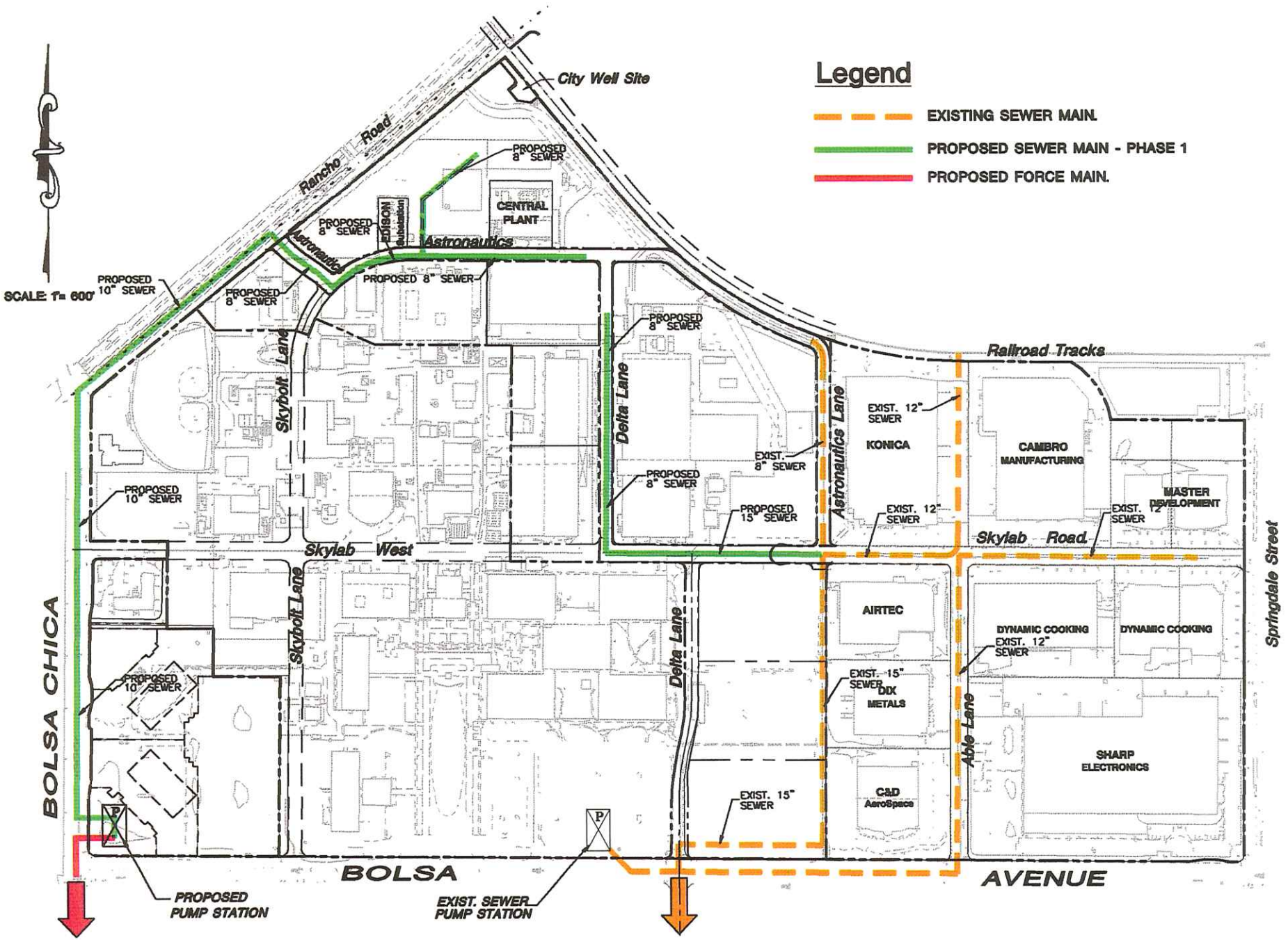
DECEMBER 14, 2001

Prepared by:

ADAMS • STREETER
CIVIL ENGINEERS, INC.

DATE: 12/15/2001
TIME: 12:48 a.m.

PATH: N:\001340\EXHIBIT\exdrw\
DWG NAME: StormDrain-Exhibit



BOEING SPACE & COMMUNICATIONS
SEWER EXHIBIT

DECEMBER 14, 2001

Prepared by:

ADAMS • STREETER
CIVIL ENGINEERS, INC.

DATE: 12/15/2001

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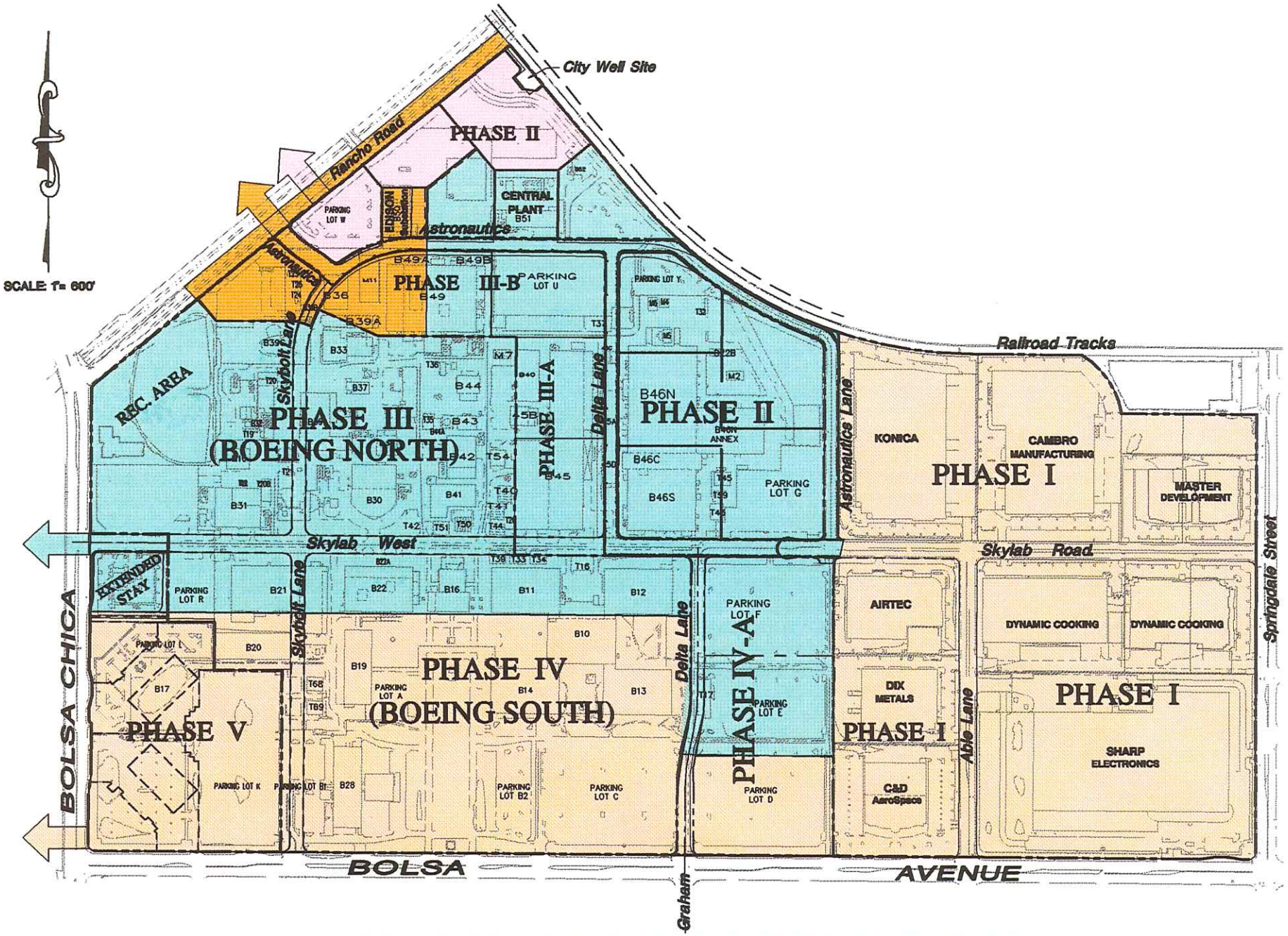

BOEING SPACE & COMMUNICATIONS
DRAINAGE AREA AND POINT OF DISCHARGE EXHIBIT

DECEMBER 14, 2001

Prepared by:
ADAMS • STREETER
CIVIL ENGINEERS, INC.

DATE: 12/15/2001
TIME: 12:39 p.m.
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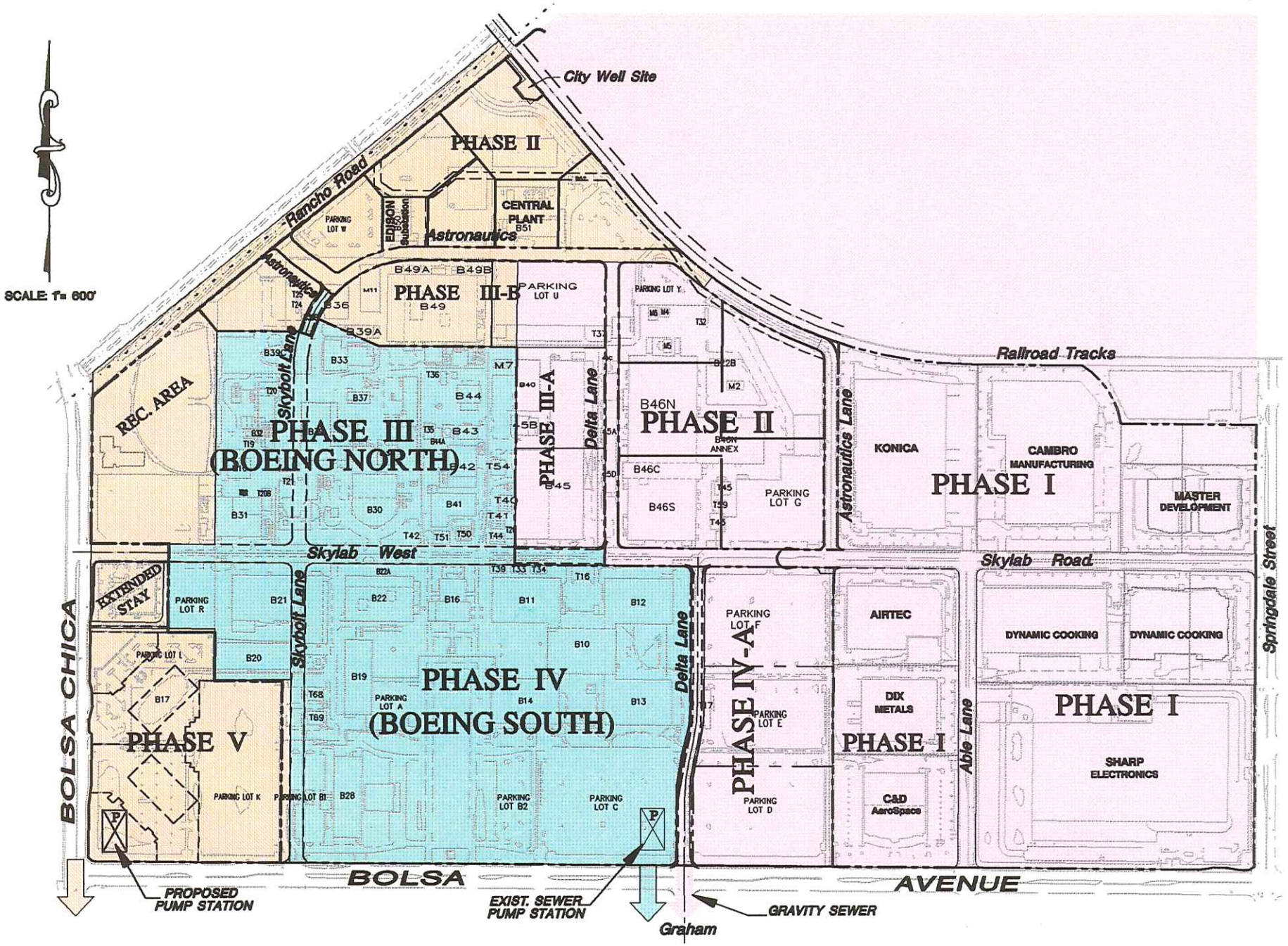

Prepared by:

ADAMS • STREETER
CIVIL ENGINEERS, INC.

BOEING SPACE & COMMUNICATIONS
SEWER TRIBUTARY AREA EXHIBIT

JANUARY 10, 2002

DATE: 1/10/2002

PATH: N:\001340\EXHIBIT\eddw\

APPENDIX F

TENTATIVE MAP
CONDITIONS OF APPROVAL

4) A separate drawing file shall be submitted for each individual sheet.

5) Digital data shall be in compliance with the Huntington Beach Standard Sheets, drawing names, pen color and layering conventions.

6) Feature compilation shall include, but shall not be limited to: Assessor's Parcel Numbers (APN), street addresses and street names with suffix.

ii. File Format and Media Specification:

1) Shall be in compliance with the following file format: AutoCAD (version 13 or later) drawing file: ___.DWG

2) Shall be in compliance with the following media type: CD Recordable (CD-R) 650 Megabytes

d. All vehicular access rights to Bolsa Avenue, Streets "A," "B," "C," and "D," Skylab Road, Astronautics Lane and Rancho Road shall be released and relinquished to the City of Huntington Beach except at locations approved by the Directors of Planning and Public Works pursuant to Site Plan Review approval. **(PW)**

e. Portions of Skylab Road shall be vacated on the Final Parcel Map as shown on the Tentative Parcel Map. **(PW)**

f. If the Final Map is to be recorded before required improvements are completed, a Subdivision Agreement and accompanying security may be substituted for construction in accordance with the provisions of the Subdivision Map Act. **(PW)**

g. All streets shown on the Tentative Parcel Map shall be dedicated in fee to the public for street and utility purposes, and fully improved to City standards with curb, gutter, sidewalk, street lighting, parkway landscaping, pavement, water lines, sewer lines and storm drain improvements. The water main improvements shall be consistent with the improvements identified in Specific Plan No. 11 for the McDonnell Centre Business Park. **(PW)**

h. The following shall also be dedicated to the City of Huntington Beach on the final map as shown on the improvement plans for the subdivision: **(PW)**

i. The water system and appurtenances.

ii. The sanitary sewer system and appurtenances (except for the McDonnell Douglas Aerospace private sewer system, which is to remain isolated from the public system.)

iii. The storm drain system and appurtenances.

i. A phasing plan shall be submitted for review and approval. The phasing plan shall address the following criteria: **(PW)**

Phase II –Parcels 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, and 16, OR any development on Parcels 18, 19, or 20, shall have the following infrastructures completed prior to Final Inspection for any parcel:

i. Skylab Road – 80-foot right of way, fully improved from the curb return west of Street "B" to the curb return west of Astronautics Lane. Approximately 1300 LF of 16-inch water main in Skylab Road extending westerly from the existing 16-inch stub (located west of Astronautics Lane) in Skylab Road.

ii. Street "B" – 60-foot right of way, fully improved from Skylab Road to Street "C." Approximately 1400 LF of 12-inch water main in Street "B" points of connection to the new 16-inch water main in Street "C" and Skylab Road.

iii. Street "C" – 60-foot right of way, fully improved from the existing improvements on Astronautics Lane to the curb return southwesterly of Street "D." Approximately 2700 LF of 16-in water main in Astronautics (including Streets "C" and "D") from point of connection to the new 16-inch water main in Rancho Road and connecting to the existing 16-inch water main in Astronautics Lane.

iv. Street "D" – 80-foot right of way, fully improved from Street "C" to Rancho Road.

v. Rancho Road - 81-foot right of way, fully improved from the southwest corner of Parcel 13 to the northeast corner of Parcel 10. The following water mains within Rancho Road, shall be designed and constructed to the City's Water Division standards. If the City constructs water improvements in Rancho Road prior to BRC development, BRC shall reimburse the City for all associated costs for the design and construction of the water improvements at the time the parcels are developed. These improvements include the following:

1) Approximately 2000 LF of 12-inch diameter water main in Rancho Road extending from the existing 12-inch stub (located east of Bolsa Chica Road) to Street "D".

2) Approximately 1300 LF of 16-inch water main in Rancho Road extending easterly from the point of connection to the new 16-inch water main in Street "D" and northeasterly to the proposed well connection at the Navy Easement and continuing northeasterly with 250 LF of 12-inch water main in Rancho Road from the Navy Easement and connecting to the existing 8-inch water main in Spa Drive.

Phase IIIB – Parcels 13, 17, and 18, shall have the following infrastructure improvements completed prior to Final Inspection for any parcel:

vi. Street "C" – 60-foot right of way, fully improved from the existing improvements at Street "D" to the southwest property line of Parcel 13. The terminus of Street "C" shall be a temporary cul-de-sac at the time that Street "C" is extended into Parcel "B" concurrent with development of Parcel 13.

Phase IV or IVA – Parcels 1, 2, or 3 shall have the following infrastructure improvements completed prior to Final Inspection for any parcel:

vii. Street "A" – shall be constructed from Bolsa Avenue to Skylab Road. Approximately 1500 LF of 16-inch water main in Street "A" from point of connection to new 16-inch water main in Skylab Road and connecting to existing 12-inch water main in Bolsa Avenue.

j. The Water Facilities Agreements between the City of Huntington Beach and McDonnell Douglas (now Boeing Corporation), dated March 18, 1997 shall be modified by agreement with the City, at no cost to the City. Refer to Section 13. Successors and Assigns of the Agreement. Conditions of the new agreement shall include exchange of property(s) and various other conditions related to the well site; access to the well site; landscape mitigations; grading; pipeline easements; design and construction and/or reimbursement of such costs by Boeing Corporation for the water system improvements identified in these conditions and other issues. The modified agreement with the City shall precede issuance of first building permit for the entire parcel map. **(PW)**

3. The following conditions shall be completed upon recordation of the final map and prior to issuance of grading permits within the Specific Plan boundaries:

   a. A Grading Plan, prepared by a Licensed Civil Engineer, shall be submitted to the Public Works Department for review and approval. Final grades and elevations on the grading plan shall not vary by more than one (1) foot from the grades and elevations on the approved Tentative Map. **(PW)(Mitigation Measure)**

   b. A detailed soils analysis shall be prepared by a registered Soils engineer. This analysis shall include on-site soil sampling and laboratory testing of materials to provide detailed recommendations for grading, chemical and fill properties, retaining walls, streets, and utilities. **(PW)(Mitigation Measure)**

   c. An updated sewer study shall be prepared and submitted for Public Works review and approval. The subdivider shall design and construct the sanitary sewer system required to serve the development including any offsite improvements necessary to accommodate any increased flow associated with the subdivision either in its entirety or by individual phasing. **(PW)**

   d. The developer shall establish and initiate a financing mechanism for the maintenance, operations and replacement of any sewer lift stations and force mains required by the project. **(PW)**

   e. In accordance with NPDES requirements, a "Water Quality Management Plan" for each development plan or phase shall be prepared by a Civil or Environmental Engineer and its recommendations shall be incorporated into the project design. **(PW)**

   f. Hydrology and hydraulic studies shall be submitted to the Department of Public Works for review and approval, and shall address the provisions of Chapter 222 of the Huntington Beach Zoning and Subdivision Ordinance, including Section

222.10C. Methods of attenuation shall be defined in the studies. Additional underground storm drainage capacity shall be provided in Skylab Road. **(PW)**

g. A focused traffic study must be prepared which analyzes traffic conditions within and outside the Specific Plan boundary. The report will address lane configurations and geometrics at intersections, traffic control method, and the number of lanes required on links, and recommend street cross sections, including the interaction of Suffolk Street (within the City of Westminster) and Street "D" on Rancho Road. A signal warrant shall be conducted for Street "D" at Rancho Road. A copy of this traffic study shall be provided to the City of Westminster for a review and comment period not to exceed ninety days. **(PW)**

h. An Arborist report by a City approved International Society of Arborist (ISA) certified and consulting Arborist shall be submitted for review and approval, via the Director of Public Works to the City Landscape Architect. Said report shall quantify, identify, size and analyze the health of the existing trees. The report shall also recommend how the existing trees that are to remain (if any) shall be protected and how far construction/grading shall be kept from the trunk. Existing healthy mature trees that are to be removed must be replaced at a 2 for 1 ratio with a 36" box tree or palm equivalent (13'-14' of trunk height for Queen Palms and 8'-9' of brown trunk). The final landscape plan shall illustrate which trees will be removed along with the quantity and location of replacement trees. **(PW)(Mitigation Measure)**

i. The project applicant shall file a Notice of Intent (NOI) along with the required fee to the State Water Resources Control Board and comply with the requirements of the NPDES General Construction Permit, including the preparation of a SWPPP incorporating BMPs and provide the City with a copy of the written reply containing the discharger's identification number. The SWPPP shall be prepared by a Civil or Environmental Engineer for review and approval by the City's Department of Public Works. The plan shall reduce the discharge of pollutants to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and other such provisions, which are appropriate. **(PW)(Mitigation Measure)**

j. If soil remediation is required, a remediation plan shall be submitted to the Planning, Public Works and Fire Departments for review and approval in accordance with City Specifications No. 431-92 and the conditions of approval. The plan shall include methods to minimize remediation-related impacts on the surrounding properties; details on how all drainage associated with the remediation efforts shall be retained on site and no wastes or pollutants shall escape the site; and shall also identify wind barriers around remediation equipment. **(PW)**

k. The name and telephone number of an on-site field supervisor hired by the developer shall be submitted to the Departments of Planning and Public Works. In addition, clearly visible signs shall be posted on the perimeter of the site every 250 feet indicating who shall be contacted for information regarding this development and any construction/grading-related concerns. This contact person

shall be available immediately to address any concerns or issues raised by adjacent property owners during the construction activity. He/She will be responsible for ensuring compliance with the conditions herein, specifically, grading activities, truck routes, construction hours, noise, etc. Signs shall include the applicant's contact number, City contact Sudi Shoja (714) 536-5571) regarding grading and construction activities, and "1-800-CUTSMOG" in the event there are concerns regarding fugitive dust and compliance with AQMD Rule No. 403.

l. The applicant shall notify all property owners and tenants within 300 feet of the perimeter of the property of a tentative grading schedule at least 30 days prior to such grading. **(PW)**

m. The developer shall coordinate the development of a truck haul route with the Department of Public Works if the import or export of material is required. This plan shall include the approximate number of truck trips and the proposed truck haul routes. It shall specify the hours in which transport activities can occur and methods to mitigate construction-related impacts to adjacent residents. These plans must be submitted for approval to the Department of Public Works. **(PW)(Mitigation Measure)**

n. The applicant's grading/erosion control plan shall abide by the provisions of AQMD's Rule 403 as related to fugitive dust control. **(PW)**

o. Installation and/or removal of underground flammable or combustible liquid storage tanks (UST) requires the applicant to first obtain an approved Orange County Environmental Health Care UST permit/site plan. This approved plan must be presented to obtain the required Huntington Beach Fire Department *Fire Code Permit Application* to conduct Installation and/or removal operations. **(FD)**

p. Vapor extraction treatment areas may require conformance to City Specification #431-*Gas Fired Appliances*. **(FD)**

q. Blockwall/fencing plans (including a site plan, section drawings, and elevations depicting the height and material of all proposed retaining walls, walls, and fences) consistent with the grading plan shall be submitted to and approved by the Planning Department. Double walls shall be prohibited. Prior to construction of any new walls, a plan must be submitted identifying the removal of any existing walls next to the new walls, and shall include approval by property owners of adjacent properties. The plans shall identify materials, seep holes and drainage.

r. The applicant shall be responsible for the incorporation of measures to reduce construction related traffic congestion into the project grading permit. Measures, subject to the approval and verification by the Planning Department, shall include: **(Mitigation Measure)**

    i. Provision of rideshare incentives;

    ii. Provision of transit incentives for construction personnel;

    iii. Configuration of construction parking to minimize traffic interferences;

iv. Measures to minimize obstruction of through traffic lanes;

v. Use of a flagman to guide traffic when deemed necessary.

s. The applicant shall be responsible for assuring that construction vehicles be equipped with proper emission control equipment to substantially reduce emissions. **(Mitigation Measure)**

t. The applicant shall submit and have approved a noise mitigation plan to the Department of Planning that will reduce or mitigate short-term noise impacts to nearby noise sensitive receptors. The plan shall comply with the City of Huntington Beach Noise Ordinance and shall include, but not be limited to: **(Mitigation Measure)**

i. A criteria of acceptable noise levels based on type and length of exposure to construction noise levels;

ii. Physical reduction measures such as temporary noise barriers that provide separation between the source and the receptor;

iii. Mitigation measures such as restrictions on the time of construction for activities resulting in high noise levels.

u. The applicant shall produce evidence acceptable to the City Engineer that: **(Mitigation Measure)**

i. All grading and construction vehicles and equipment, fixed or mobile, shall be equipped and maintained with effective muffler systems that use state of the art noise attenuation;

ii. Stockpiling and/or vehicle staging areas shall be located as far as practicable from sensitive noise receptors;

iii. All operations shall comply with the City of Huntington Beach Noise Ordinance.

v. Additional studies as deemed necessary by the Director of Public Works, shall be performed to determine native elevations and evaluate the extent of compressibility of the soils for structural design purposes. These studies shall be reviewed and approved by all appropriate departments at the City of Huntington Beach. **(Mitigation Measure)**

w. Grading plans shall demonstrate that alluvial soils shall be removed in the areas that will receive fill or foundation loading down to competent materials and re-compacted. Additional studies may be deemed necessary by the Director of Public Works, to evaluate the extent of liquefaction of the soils for structural design purposes. **(Mitigation Measure)**

x. The applicant shall prepare a report for approval by the Director of Public Works which assesses and provides recommendations for the following: **(Mitigation Measure)**

i. Specific measures for adequate foundation, paving and flatwork design in areas of any remaining expansive soils;

ii. Identify the Expansive Index onsite and specify where necessary recommendations included, but not limited to: 1) pre-saturation of soils prior to concrete placement; 2) raised floors; 3) post-tensioned slabs; 4) thicker slabs; 5) deeper footings; 6) the addition of soil amendments to facilitate wetting during compaction.

y. The project applicant shall submit and obtain approval of final drainage and erosion control plans for each project component. These final drainage plans shall demonstrate that post-development stormwater discharge levels from the project will remain at or below existing stormwater discharge levels. The mitigation measures contained in the plan shall be approved by the Regional Water Quality Control Board and the City of Huntington Beach prior to any construction activities. The plans shall include measures such as the following: **(Mitigation Measure)**

i. Diversion of offsite runoff away from the construction site;

ii. Prompt re-vegetation of proposed landscaped areas;

iii. Perimeter sandbagging or temporary basins to trap sediment; and

iv. Regular sprinkling of exposed soils during construction phases.

z. The applicant shall provide a Water Quality Management Plan showing conformance to the Orange County Drainage Area Management Plan and all NPDES requirements (enacted by the EPA) for review and approval by the City Engineer. The plan shall reduce the discharge of pollutants to the maximum extent practical using management practices, control techniques and systems, design and engineering methods, and such other provisions which are appropriate. **(PW)(Mitigation Measure)**

aa. The Developer shall provide information to prospective occupants regarding benefits of low water use landscaping and sources of additional assistance in selecting irrigation and landscaping. **(Mitigation Measure)**

4. During demolition, grading, site development, and/or construction within the Specific Plan boundaries, the following shall be adhered to:

a. Water trucks will be utilized on the site and shall be available to be used throughout the day during site grading to keep the soil damp enough to prevent dust being raised by the operations. **(PW)**

b. All haul trucks shall arrive at the site no earlier than 8:00 a.m. or leave the site no later than 5:00 p.m., and shall be limited to Monday through Friday only. **(PW)**

c. Use water trucks or sprinkler systems to wet down the areas that are to be graded or that are being graded with repeated soakings, sufficient enough to form a crust on the surface, and as necessary to maintain the crust and prevent dust pick up by the wind; and after work is completed for the day. **(PW) (Mitigation Measure)**

d. The construction disturbance area shall be kept as small as possible. **(PW)**

e. All haul trucks shall be covered or have water applied to the exposed surface prior to leaving the site to prevent dust from impacting the surrounding areas. **(PW)**

f. Prior to leaving the site, all haul trucks shall be washed off on-site on a gravel surface to prevent dirt and dust from leaving the site and impacting public streets. **(PW)(Mitigation Measure)**

g. Require all trucks hauling dirt, sand, soil or other loose substances and building materials to be covered, or to maintain a minimum freeboard of two feet between the top of the load and the top of the truck bed sides. **(Mitigation Measure)**

h. Comply with appropriate sections of AQMD Rule 403, particularly to minimize fugitive dust and noise to surrounding areas. **(PW)**

i. Wind barriers shall be installed along the perimeter of the site. **(PW)**

j. Remediation operations, if required, shall be performed in stages concentrating in single areas at a time to minimize the impact of fugitive dust and noise on the surrounding areas. **(PW)**

k. After clearing, grading, earth moving or excavation spread soil binders and implement street sweeping as necessary. **(Mitigation Measure)**

l. Construction equipment shall be maintained in peak operating condition to reduce emissions. **(Mitigation Measure)**

m. Use low sulfur (0.5%) fuel by weight for construction equipment. **(Mitigation Measure)**

n. Truck idling shall be prohibited for periods longer than 10 minutes.

o. Phase and schedule construction and grading activities to avoid high ozone days. **(Mitigation Measure)**

p. Discontinue operation during second stage smog alerts.

q. Implement a phased schedule for construction activities to minimize daily emissions. **(Mitigation Measure)**

r. Schedule activities to minimize the amount of exposed excavated soil during and after the end of work periods. **(Mitigation Measure)**

s. Treat unattended construction areas with water (disturbed lands which have been, or are expected to be unused for four or more consecutive days). **(Mitigation Measure)**

t. Vegetative ground cover shall be planting as soon as possible on construction sites and super pads if construction is not anticipated within one month. **(Mitigation Measure)**

u. Use vegetative stabilization, whenever possible, to control soil erosion from storm water especially on super pads. **(Mitigation Measure)**

v. Require enclosures or chemical stabilization of open storage piles of sand, dirt, or other aggregate materials. **(Mitigation Measure)**

w. Install vehicle wheel-washers before the roadway entrance at construction sites. **(Mitigation Measure)**

x. Control off-road vehicle travel by posting driving speed limits on these roads. **(Mitigation Measure)**

y. During grading and construction, the applicant shall be responsible for assuring that vehicle movement on any unpaved surface other than water trucks shall be terminated if wind speeds exceed 15 mph. **(Mitigation Measure)**

z. During grading and construction, the applicant shall be responsible for the paving of all access aprons to the project site and the maintenance of the paving. **(Mitigation Measure)**

aa. Ensure clearly visible signs are posted on the perimeter of the site identifying the name and phone number of a field supervisor to contact for information regarding the development and any construction/ grading activity.

bb. Compliance with all Huntington Beach Zoning and Subdivision Ordinance and Municipal Code requirements including the Noise Ordinance. All activities including truck deliveries associated with construction, grading, remodeling, or repair shall be limited to Monday - Saturday 7:00 AM to 8:00 PM. Such activities are prohibited Sundays and Federal holidays. **(Code Requirement)**

cc. On-site parking shall be provided for all construction workers and equipment unless approved otherwise by the Public Works Department.

dd. The property owner is responsible for all required clean up of off-site dirt, pavement damage and/or re-striping of the public rights-of-way as determined by the Public Works Department.

ee. Within 30 days of completion of grading and public infrastructure work, a dust control plan for all undeveloped parcels shall be submitted to the Planning Department for review and approval by the Departments of Planning and Public Works. The plan shall include a schedule for implementation of approved dust control measures by the property owner(s). Notice of any obligation of future property owner(s) pursuant to the approved dust control plan shall be given by the applicant prior to the sale of any parcel.

ff. Discovery of additional contamination/pipelines, etc., must be reported to the Fire Department immediately and the approved workplan modified accordingly.

gg. The applicant(s) shall be responsible for remedial removal of expansive soils onsite during grading and prior to construction. Should any construction occur on expansive soils, the applicant(s) shall adhere to the recommendations identified above (Mitigation Measure 5) **(Mitigation Measure)**

hh. During construction and at complete buildout, the project shall provide easy access into and within the project site for emergency vehicles and addresses shall be well marked to facilitate response by officers. Project site plans depicting these requirements shall be reviewed and approved by the Police Department. **(Mitigation Measure)**

5. Prior to final grading inspection, the following shall be completed:

   a. All improvements shall be completed in accordance with the approved Grading plan, the adopted design criteria and mitigation requirements of the Specific Plan and conditions of approval specified herein. **(PW)**

   b. The number and location of off-site fire hydrants shall be determined by the Fire Department as part of the final design. **(PW)**

   c. Signing and striping shall be designed and constructed in accordance with Public Works Department Standards. **(PW)**

   d. Street lighting owned by SCE shall be designed and installed to the satisfaction of the Transportation Division. **(PW)**

   e. Any existing water service that will not continue in use shall be abandoned at the main in accordance with Public Works Department Water Division specifications. **(PW)**

   f. Design and construct traffic signalization at the following locations (traffic signals shall be designed by a Licensed Civil or Traffic Engineer and shall conform to City standards and guidelines): **(PW)**

      i. New signal at the intersection of Rancho Road and Street "D" if warranted. Completion of the signal modification shall be prior to final building inspection for Phase II.

      ii. Modification of the existing signal at Bolsa Avenue and Street "A". Completion of the signal modification shall be prior to final building inspection for Phase IV or IVA.

   g. All landscape irrigation and planting installation shall be certified to be in conformance to the City approved landscape plans by the Landscape architect of record in written form to the City Landscape Architect prior to the final landscape inspection and approval. **(PW)**

   h. All landscaped areas that are to be maintained by the City shall be maintained by the developer for a 90 day establishment period and a 365 day maintenance period, prior to being accepted and turned over to the City. **(PW)**

   i. Applicant shall provide the City with Microfilm copies (in City format) and CD (AutoCAD only) copy of complete City approved landscape construction drawings as stamped "Permanent File Copy" prior to starting landscape work. Copies shall be given to the City Landscape Architect for permanent City record. **(PW)**

   j. The Departments of Planning, Public Works and Fire are responsible for verifying compliance with all conditions of approval herein as noted after each condition. The Directors of Planning and Public Works shall be notified in writing if any changes to parcel map are proposed as a result of the plan check process. Permits shall not be finalled until the Directors of Planning and Public Works have reviewed and approved the proposed changes for conformance with the intent of the Zoning Administrator's action and the conditions herein. If the proposed

changes are of a substantial nature, an amendment to the original entitlement reviewed by the Zoning Administrator may be required pursuant to the HBZSO.

6. An updated Traffic Impact Assessment (TIA) shall be prepared at the expense of McDonnell Douglas or successor in interest as the interim trip budget is reached. The methodology to determine when a TIA is required is to start at the anticipated "existing" trip end total of 28,065 TE. For each new building developed (where the City traffic fee is applied), add the City trip generation requirement to the 28,065 total until the original 55,510 TE threshold is reached, at which point a traffic study would be required. The first 10,470 TE of entitlements "used" by Boeing would not be added to the trip budget accounting, but any subsequent use of the remaining 7,795 entitlements (no traffic fee required) would count toward the Interim trip budget. This revised TIA shall not relieve the developer of any obligation to pay any traffic impact fees (should the present or any other traffic impact fee program be in place) or provide for mitigation measures for development at the time of developments. Also, said TIA shall be presented to the Planning Commission for review prior to approval by Planning Director and Public Works Director. **(Mitigation Measure)**

7. Commensurate with the updated TIA (refer to Mitigation Measure 8 in Section 5.4 of the original EIR), an updated acoustical analysis shall be performed on the following two roadway segments: 1) Rancho Road near the Navy Railroad; and 2) Rancho Road between Bolsa Chica Street and Westminster Boulevard to determine if potential vehicular noise will impact nearby residential units. The study will be prepared under the supervision of an acoustical engineer and include a discussion of the need for noise attenuation measures and/or noise barriers to ensure compliance with City noise standards. This analysis shall be submitted to and approved by the Planning Department. **(Mitigation Measure)**

8. Throughout the Specific Plan implementation, the City shall maintain and update an annual trip budget monitoring report to determine the status of the constructed and approved development applications (entitled) development and resulting expected trips within the McDonnell Center Specific Plan area. This annual trip budget monitoring report shall be based upon building permits issued and (entitled) development within the McDonnell Center. The trip budget monitoring report shall include gross and usable square footages of the constructed and/or entitled usage, a description of the land usage, and the trip generation rates used for the land usage proposed. The trip rates used in the monitoring report shall be those rates contained in the latest *Trip Generation* manual published by the Institute of Transportation Engineers (currently the 5th edition and 5th edition update) or another reliable source (i.e., another traffic study) as approved by the City Traffic Engineer. **(Mitigation Measure)**

9. Exhibit 12 – Water System Plan of McDonnell Centre Specific Plan No. 11 (p. 34) shall be revised to be consistent with the "Domestic Water Exhibit" in Appendix D of A-EIR 96-1. The exhibit shall illustrate a distinction between the water pipelines constructed in Phase 1 versus those constructed in future phases.

INFORMATION ON SPECIFIC CODE REQUIREMENTS - TENTATIVE PARCEL MAP NO. 01-122:

1. Tentative Parcel Map No. 01-122 shall not become effective until the ten calendar day appeal period has elapsed.

2. Tentative Parcel Map No.01-122 shall become null and void unless exercised within two (2) years of the date of final approval, which is February 6, 2004. An extension of time may be granted by the Director of Planning pursuant to a written request submitted to the Planning Department a minimum of 60 days prior to the expiration date.

3. The subdivision and associated improvements shall comply with all applicable provisions of the Municipal Code, Building & Safety Department, and Fire Department, as well as applicable local, State and Federal Fire Codes, Ordinances and standards, except as noted herein.

4. All applicable Building and Safety, Public Works, and Fire Department fees shall be paid prior to map recordation.

5. An Encroachment Permit is required for all work within the City's right-of-way. **(PW)**

6. The Water Ordinance No. 14.52, "Water Efficient Landscape Requirements" apply for projects with 2,500 square feet of landscaping. **(PW)**

7. All existing and new utilities shall be installed underground (66kV not applicable). **(PW)**

8. Traffic impact fees shall be paid at a rate of $120 per net new added daily trip. **(PW)**

9. Standard landscape code requirements apply (Chapter 232 of the Huntington Beach Zoning and Subdivision Ordinance and the McDonnell Centre Business Park Specific Plan).

10. The applicant shall submit a check in the amount of $43 for the posting of the Notice of Determination at the County of Orange Clerk's Office. The check shall be made out to the County of Orange and submitted to the Planning Department within two (2) days of the Zoning Administrator's action.

11. A Mitigation Monitoring Fee shall be paid to the Planning Department prior to the issuance of Grading Permits. *(This fee pertains to projects with a negative declaration or an EIR.)* The fee is $285 plus 10% of A-EIR cost ($19,900) or $2,275.

All landscaping shall be maintained in a neat and clean manner, and in conformance with the HBZSO. Prior to removing or replacing any landscaped areas, check with the Departments of Planning and Public Works for Code requirements. Substantial changes may require approval by the Director of Planning.