RESOLUTION NO. 21-9017

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA CLARA, CALIFORNIA TO ADOPT AND CERTIFY AN ENVIRONMENTAL IMPACT REPORT, ADOPT CEQA FINDINGS WITH RESPECT THERETO, ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS, AND ADOPT A MITIGATION MONITORING OR REPORTING PROGRAM FOR THE 1200 MEMOREX DATA CENTER PROJECT LOCATED AT 1200-1310 MEMOREX DRIVE, SANTA CLARA, CALIFORNIA

PLN2019-14055

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, on August 8, 2019, Skybox Development LLC ("Applicant") filed a development application for a 9.18-acre site located at 1200-1310 Memorex Drive which is currently occupied by three buildings: a three-story, approximately 350,037 square foot building, a two-story, approximately 45,986 square foot building, and a one-story, approximately 2,944 square foot buildings, landscaping and surface paving ("Project Site");

WHEREAS, the development application involves Architectural Review of the development proposal to construct a four-story, 472,920 square-foot data center building with an attached six-story 87,520 square foot ancillary use office and storage component, for a combined square footage of 560,440, electrical substation, surface parking, landscaping and site improvements ("Project"), as shown on the Development Plans, attached hereto and incorporated by this reference;

WHEREAS, the Project includes the demolition of the existing buildings, surface paving and site landscaping;

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), and the regulations implementing the Act, specifically 14 Cal. Code of Regs § 15081, this Project was determined to potentially have a significant effect on the environment, resulting in the drafting of an Environment Impact Report ("EIR");

//

WHEREAS, on July 17, 2020, the City of Santa Clara ("City") distributed a Notice of Preparation of a Draft Environmental Impact Report ("DEIR") and posted the Notice at the Santa Clara County Clerk's office, soliciting guidance on the scope and content of the environmental information to be included in the DEIR;

WHEREAS, in conformance with CEQA, the EIR was circulated for a 45-day public review period to the Santa Clara County Clerk's Office, public agencies that have jurisdiction by law with respect to the Project, and property owners within 300 feet of the Project Site from June 17, 2021 to August 2, 2021, and on August 2, 2021, one comment letter was received from the Bay Area Air Quality Management District (BAAQMD);

WHEREAS, the environmental consultant, David J. Powers and Associates, prepared a "Response to Comments" (RTC) document on the EIR that responds to the BAAQMD's August 2, 2021 comments, and on October 29, 2021 , the City transmitted the RTC document to the BAAQMD;

WHEREAS, the City subsequently prepared a Final Environmental Impact Report ("FEIR"). The FEIR consists of a list of agencies and organizations to whom the DEIR was sent, a list of the comment letters received on the DEIR, revisions to the text of the DEIR, responses to comments received on the DEIR, and a copy of the BAAQMD comment letter;

WHEREAS, the DEIR and FEIR constitute the EIR for the Project;

WHEREAS, the City Council has reviewed the EIR prepared for the Project, the City Staff reports pertaining to the EIR and all evidence received at a duly noticed public hearing on November 9, 2021. All of these documents and evidence are herein incorporated by reference into this Resolution;

WHEREAS, the EIR identified certain significant and potentially significant adverse effects on the environment that would be caused by the Project as proposed;

//

//

WHEREAS, the EIR outlined various mitigation measures that would substantially lessen or avoid the Project's significant effects on the environment, as well as alternatives to the Project as proposed that would provide some environmental advantages;

WHEREAS, whenever possible, CEQA requires the City to adopt all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant environmental effects of the Project;

WHEREAS, Public Resources Code § 21081, subdivision (a) requires a lead agency, before approving a project for which an EIR has been prepared and certified, to adopt findings specifying whether mitigation measures and, in some instances, alternatives discussed in the EIR, have been adopted or rejected as infeasible;

WHEREAS, the "CEQA Findings and Statement of Overriding Considerations" attached to this Resolution is a set of Findings of Fact prepared in order to satisfy the requirements of Public Resources Code § 21081, subdivision (a);

WHEREAS, on September 2, 2021 the Historical and Landmarks Commission voted unanimously to recommend the City Council to certify the EIR with an alternative, the "Preservation Alternative - Retain Historical Resource" set forth in Section 7.3.3 of the EIR, selected as the Project;

WHEREAS, as the CEQA Findings of Fact explain, the City Council, reflecting the advice of City staff and input from various state and local agencies, has expressed its intention to approve the proposed Project as described;

WHEREAS, the City Council has determined that the alternatives addressed in the EIR would not be feasible and would not sufficiently satisfy the Project Objectives. The details supporting these determinations are set forth in the CEQA Findings;

WHEREAS, in taking this course, the City Council has acted consistent with the CEQA mandate to look to project mitigations and/or alternatives as a means of substantially lessening or avoiding the environmental effects of projects as proposed;

//

WHEREAS, many of the significant and potentially significant environmental effects associated with the Project, as approved, can either be substantially lessened or avoided through the inclusion of mitigation measures proposed in the EIR;

WHEREAS, the City Council, in reviewing the Project as proposed, intends to adopt all mitigation measures set forth in the EIR;

WHEREAS, the significant effects that cannot be avoided or substantially lessened by the adoption of feasible mitigation measures will necessarily remain significant and unavoidable;

WHEREAS, Public Resources Code § 21081, subdivision (b) and CEQA Guidelines § 15093 require the City Council to adopt a Statement of Overriding Considerations before approving a project with significant unavoidable environmental effects;

WHEREAS, as detailed in the CEQA Findings, the City Council has determined that, despite the occurrence of significant unavoidable environmental effects associated with the Project, as mitigated and adopted, there exist certain overriding economic, social and other considerations for approving the Project which justify the occurrence of those impacts and render them acceptable;

WHEREAS, on October 29, 2021, the notice of public hearing for the November 9, 2021 City Council meeting was posted in three conspicuous locations within 300 feet of the Project Site, and on October 29, 2021, notice was mailed to interested parties within 1,000 feet of the Project Site boundaries, in accordance with the City Code; and,

WHEREAS, on November 1, 2021 the City Council held a duly noticed public hearing to consider the adoption of the EIR and approval of the architectural review of the Project, at which time all interested persons were given an opportunity to provide testimony and present evidence, both in support of and in opposition to the project.

//

//

//

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. That the City Council finds that the above Recitals are true and correct and by this reference makes them a part hereof.

2. That the City Council finds, pursuant to Public Resources Code Section 21081 and California Code of Regulations, Title 14, Section 15091, that many of the proposed mitigation measures described in the EIR are feasible, and therefore will become binding upon the City and affected landowners and their assigns or successors in interest when the Project is approved.

3. That the City Council hereby finds that none of the Project Alternatives set forth in the EIR can feasibly substantially lessen or avoid those significant adverse environmental effects not otherwise lessened or avoided by the adoption of all feasible mitigation measures while satisfying project objectives.

4. That, in order to comply with Public Resources Code Section 21081.6, the City Council hereby adopts the Mitigation Monitoring or Reporting Program as set forth in the attached "MMRP". The Program is designed to ensure that, during project implementation, the City, affected landowners, their assigns and successors in interest and any other responsible parties comply with the feasible mitigation measures identified. The MMRP identifies, for each mitigation measure, the party responsible for implementation.

5. That the FEIR set forth project-level and cumulative environmental impacts that are significant and unavoidable that cannot be mitigated or avoided through the adoption of feasible mitigation measures or feasible alternatives. As to these impacts, the City Council hereby finds that there exist certain overriding economic, social and other considerations for approving the Project that justify the occurrence of those impacts, as detailed in the "CEQA Findings" exhibit attached hereto.

//

6. That the City Council hereby finds that the EIR completed for this Project has been completed in compliance with CEQA, that the Final EIR was presented to the City Council and the Council reviewed and considered the information contained in the FEIR prior to approving the Project, and the EIR reflects the City Council's independent judgement and analysis.

7. That the City Council hereby adopts the EIR as required by the CEQA Guidelines (14 Cal. Code of Regs. § 15090).

8. That the City Council hereby designates the Planning Division of the Community Development Department as the location for the documents and other materials that constitute the record of proceedings upon which this decision is based and designates the Director of Community Development as the custodian of records.

9. Effective date. This resolution shall become effective immediately.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING THEREOF HELD ON THE 9TH DAY OF NOVEMBER, 2021, BY THE FOLLOWING VOTE:

AYES:	COUNCILORS:	Becker, Hardy, Jain, Park, and Watanabe, and Mayor Gillmor
NOES:	COUNCILORS:	None
ABSENT:	COUNCILORS:	Chahal
ABSTAINED:	COUNCILORS:	None

ATTEST: _____
NORA PIMENTEL, MMC
ASSISTANT CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:
1. Development Plans
2. CEQA Findings
3. Statement of Overriding Considerations
4. EIR and MMRP

1200 MEMOREX

PCC PACKAGE

SCOPE OF WORK

THE PROJECT PROPOSES TO DEMOLISH THE EXISTING IMPROVEMENTS ON THE SITE TO CONSTRUCT A FOUR-STORY 472,920 SQUARE FOOT DATA CENTER BUILDING WITH AN ATTACHED SIX-STORY 87,520 SQUARE FOOT ANCILLARY USE OFFICE AND STORAGE COMPONENT, FOR A COMBINED SQUARE FOOTAGE OF 560,440.

SKYBOX DATA CENTERS | CORGAN | CRITICAL PROJECT SERVICES, LLC | R+G RUTH AND GOING, INC. Civil Engineering Land Surveying Planning | REED ASSOCIATES LANDSCAPE ARCHITECTURE 477 SOUTH MATHILDA AVENUE SUNNYVALE, CALIFORNIA 94086 | kW mission critical engineering

1200 Memorex - Santa Clara, CA

Development, Design, and Construction Anticipated Milestones

ACTIVITY	DATE
PCC Approval	4/09/2020
CEC CEQA Exemption	12/10/2020
Building Permit Issued	3/12/2021
Demolition Complete	5/24/2021
Grading Complete	6/21/2021
Building Shell Complete	6/13/2022
Interior Finish Out Complete	6/13/2022
Substantial Completion	**9/1/2022**

SHEET INDEX

PROJECT DATA AND CODE INFORMATION

PROJECT NARRATIVE

1200 Memorex

1.1.1 Existing Development

1.1.2 Proposed Development

1.1.2.1 Site Access and Parking

Project Number: 19110.0000

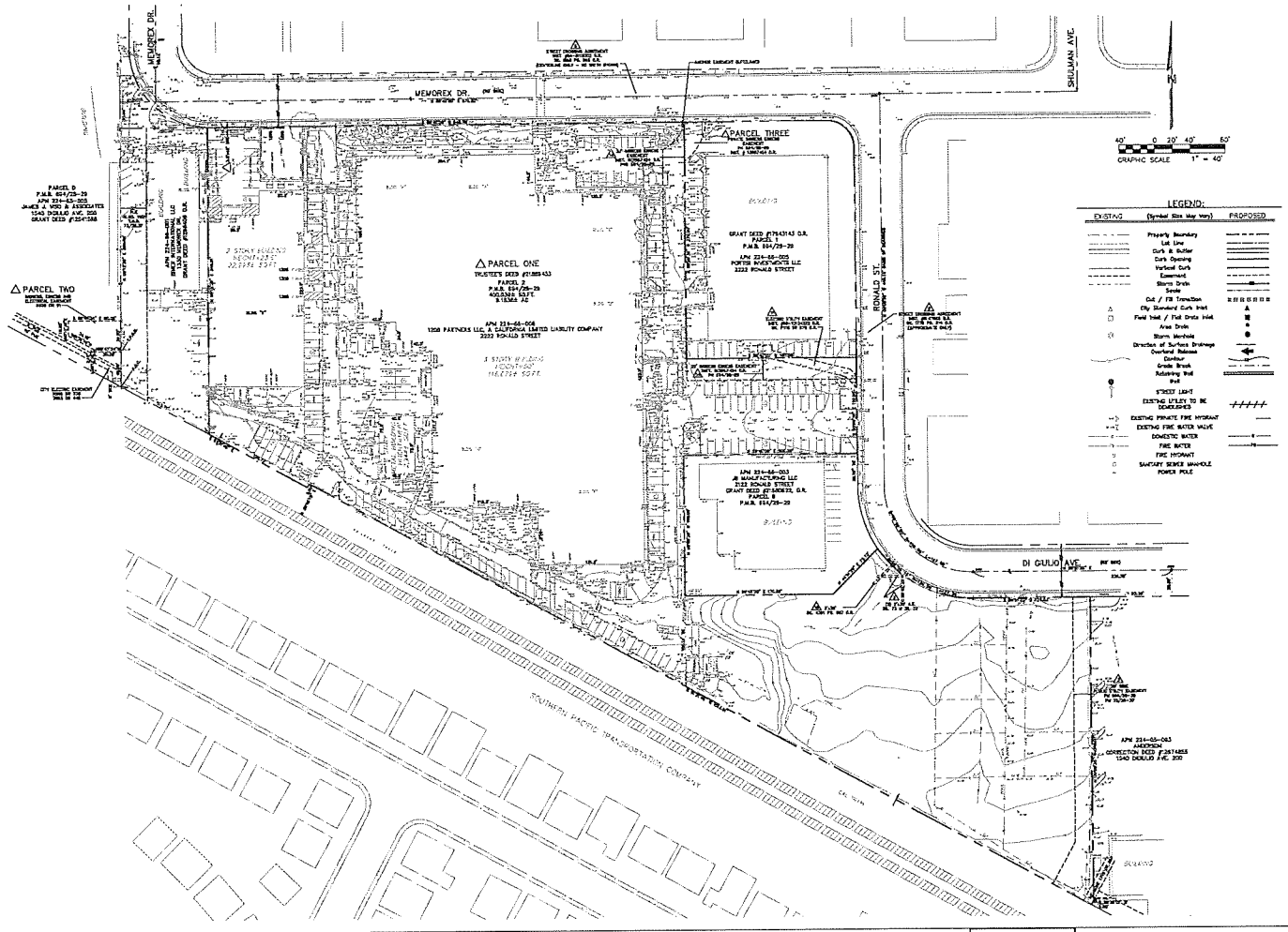
SKYBOX CORGAN R·G CRITICAL kW REED ASSOCIATES

PROJECT INFORMATION

04.09.2020

DATA HALL OFFICE

G-100



Project Number 19110.0000

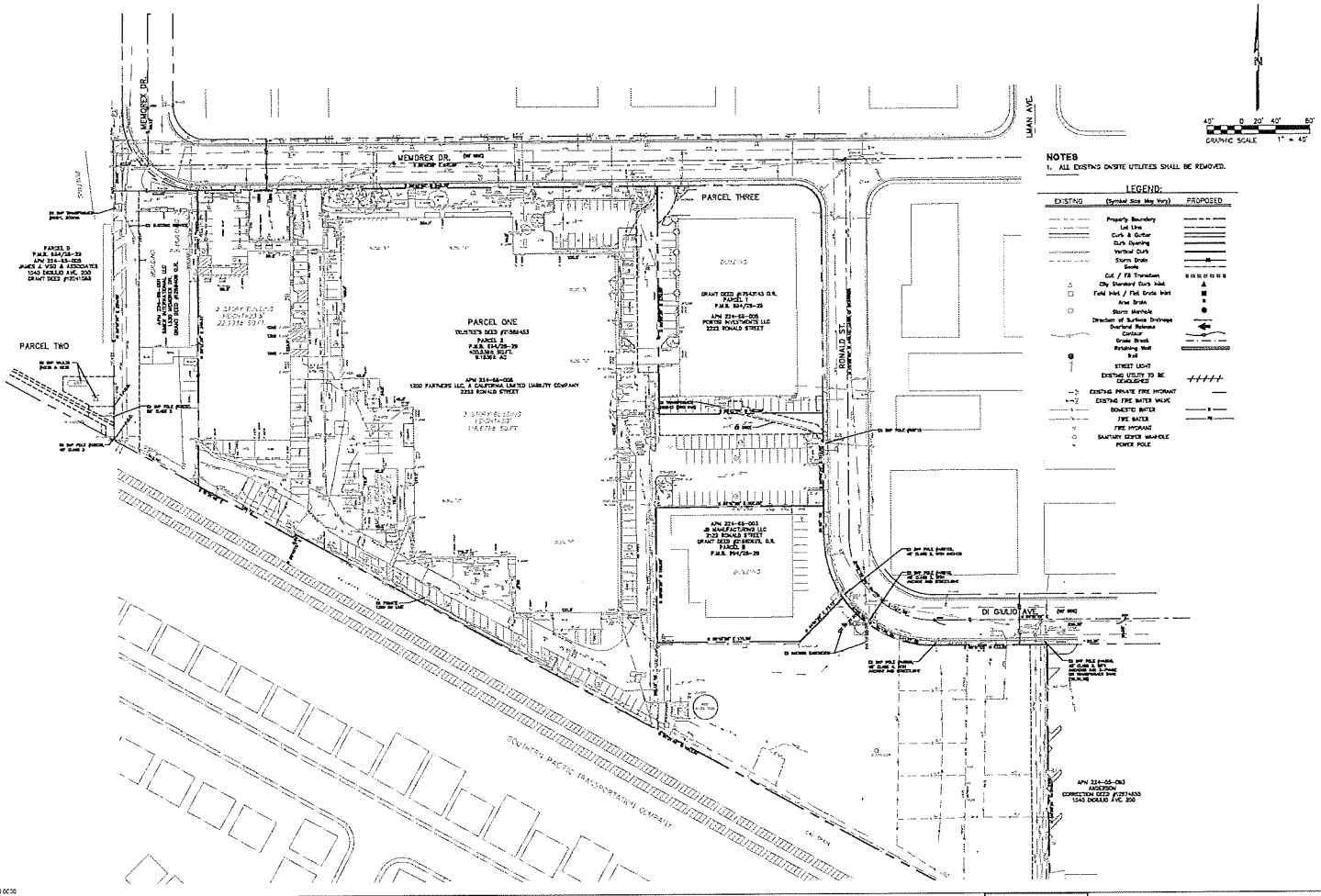
SKYBOX CORGAN RG CRITICAL KW REED & ASSOCIATES

EXISTING SITE CONDITIONS

04.09.2020

DEVELOPMENT SERVICES

C100



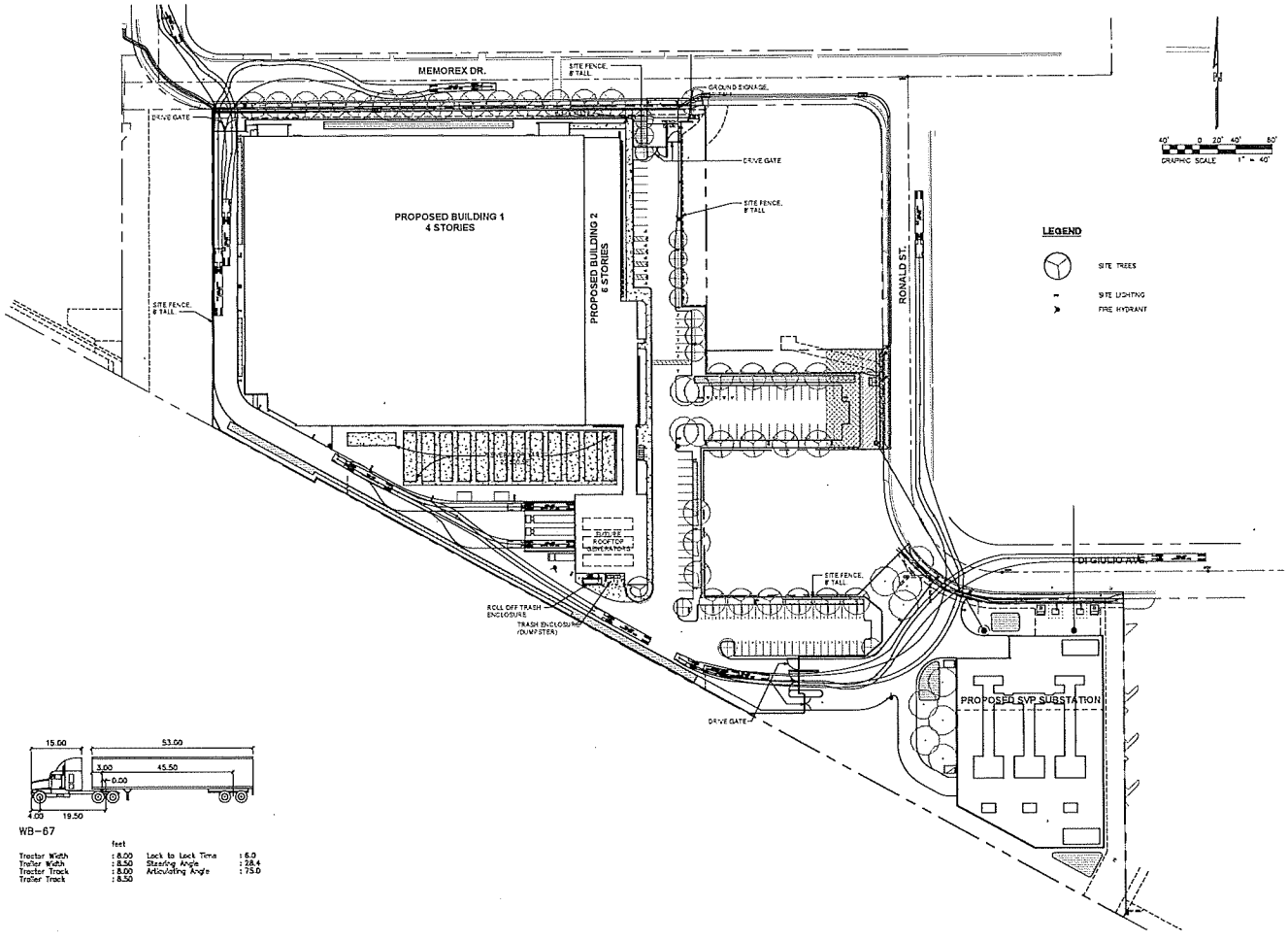
Project Number 19110.0030

SKYBOX CORGAN RG REED ASSOCIATES CRITICAL kw

EXISTING UTILITY CONDITIONS

04.09.2020

C110



WB-67

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

Project Number: 19110.0030

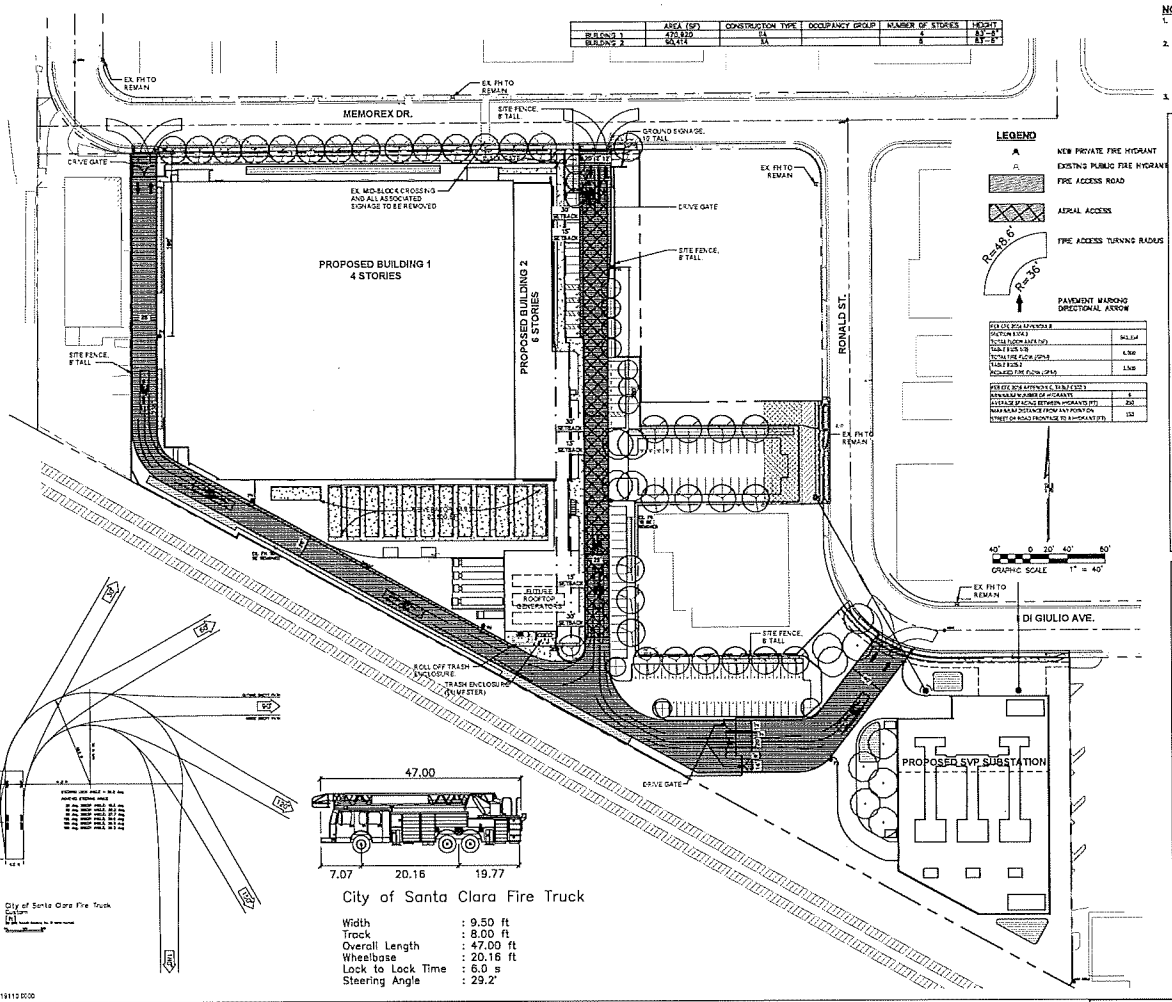
SKYBOX CORGAN RG REED AND GERKE, INC.

CRITICAL kw REED ASSOCIATES

SITE ACCESS AND CIRCULATION PLAN

04.09.2020

DETAIL # SHEET # C200



BUILDING	AREA (SF)	CONSTRUCTION TYPE	OCCUPANCY GROUP	NUMBER OF STORIES	HEIGHT
BUILDING 1	470,920	IIA		4	63'-5"
BUILDING 2	504,414	IIA		6	83'-5"

NOTES

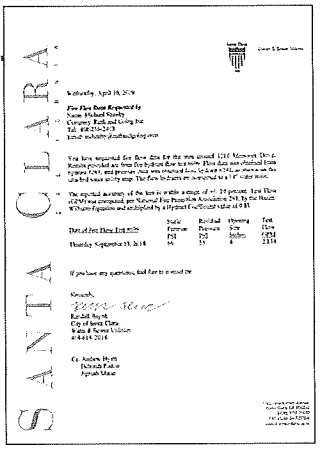
1. SECURITY GATES SHALL BE EQUIPPED WITH OPTICOM SWITCH OR APPROVED ALTERNATIVE FOR FIRE DEPARTMENT ACCESS.
2. SCFD DEFICIENCY: ALL PORTIONS OF THE BUILDING (SOUTH WALL NEAR THE GENERATORS) ARE NOT WITH 150 FEET FROM AN APPROVED FIRE DEPARTMENT ACCESS ROAD. THE DIMENSION OF 150 FEET IN RELATION TO FIRE DEPARTMENT ACCESS IS COMMONLY REFERRED TO AS HOSE PULL DISTANCE. HOSE PULL IS MEASURED ALONG THE PATH THAT SIMULATES THE ROUTE A FIRE FIGHTER MAY TAKE TO ACCESS ALL PORTIONS OF THE EXTERIOR OF A STRUCTURE FROM THE NEAREST FIRE ROAD.
3. AHJ#5: PROJECT DESIGN TEAM WILL SUBMIT AN AHJ# TO SCFD, PROPOSING TO INCREASE BLDG FIRE SPRINKLER DENSITY TO SATISFY DEFICIENCY DURING PERMIT DOCS.

BUILDING AREA	963,334
TABLE B105.1(2)	4,500
TABLE B105.2	1,500
REQUIRED FIRE FLOW (GPM)	1,500

MINIMUM NUMBER OF HYDRANTS	6
AVERAGE SPACING BETWEEN HYDRANTS (FT)	250
MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT (FT)	150

City of Santa Clara Fire Truck

Width	: 9.50 ft
Track	: 8.00 ft
Overall Length	: 47.00 ft
Wheelbase	: 20.16 ft
Lock to Lock Time	: 6.0 s
Steering Angle	: 29.2°



Water Utility Map: 1210 Memorex Drive (Industrial)

Purpose: Circle (single family home, fire service upgrade, new fire service installation)
Type of Improvement: Circle (Tenant improvement, new construction, other)
Applicant Name
Date of Application
Circle fire hydrants to be tested
Note: Identify locations of ex. fire service to be upgraded or new fire service to be installed
* All information above shall be provided prior to scheduling the test *

Project Number: 19113.0030

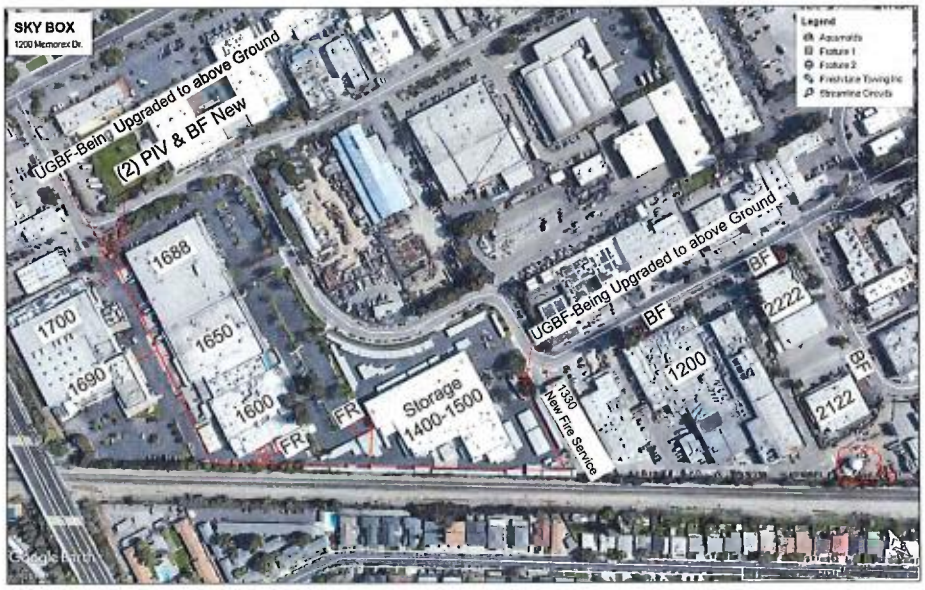
SKYBOX CORGAN RG REED ASSOCIATES CRITICAL kw

FIRE ACCESS AND APPARATUS DIAGRAM

04.09.2020

DATANOC

C210



ABBREVIATIONS

1700	ADDRESS NUMBER
BF	CSC BACKFLOW
FR	FIRE RAISER
PIV	POST INDICATOR VALVE
UGBF	UNDERGROUND BACKFLOW

ADJACENT FIRE PERMITS

PERMIT #	ADDRESS
18-1101	1555 & 1700 RICHARD AVE
18-1094	1500, 1650 & 1690 RICHARD AVE

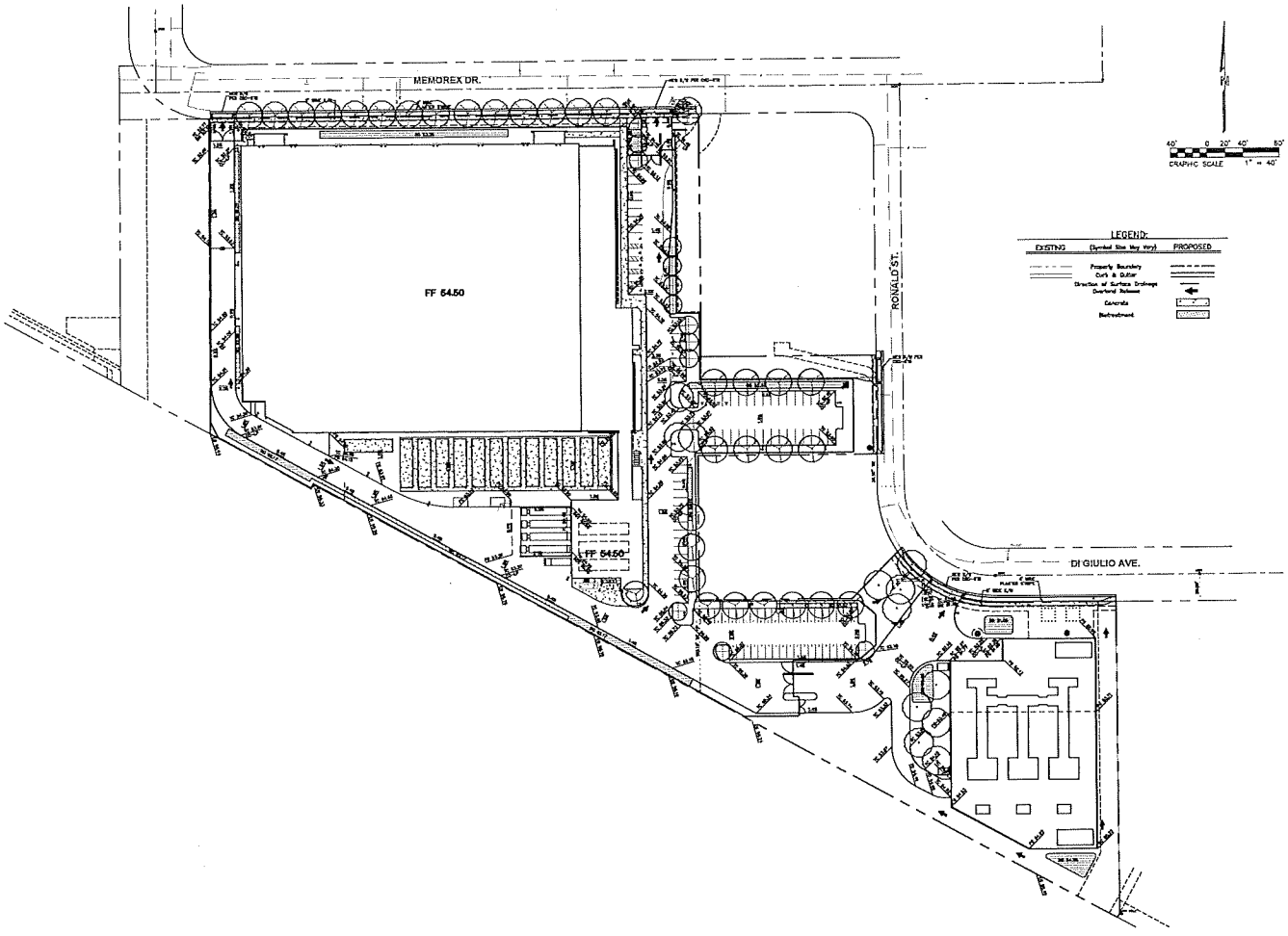
Project Number: 19110.6000

SKYBOX CORGAN RG CRITICAL kw REED ASSOCIATES

ADJACENT PARCEL
EXISTING FIRE SERVICE PLAN

04.09.2020

SHEET NO. C211



Project Number 18110.0600

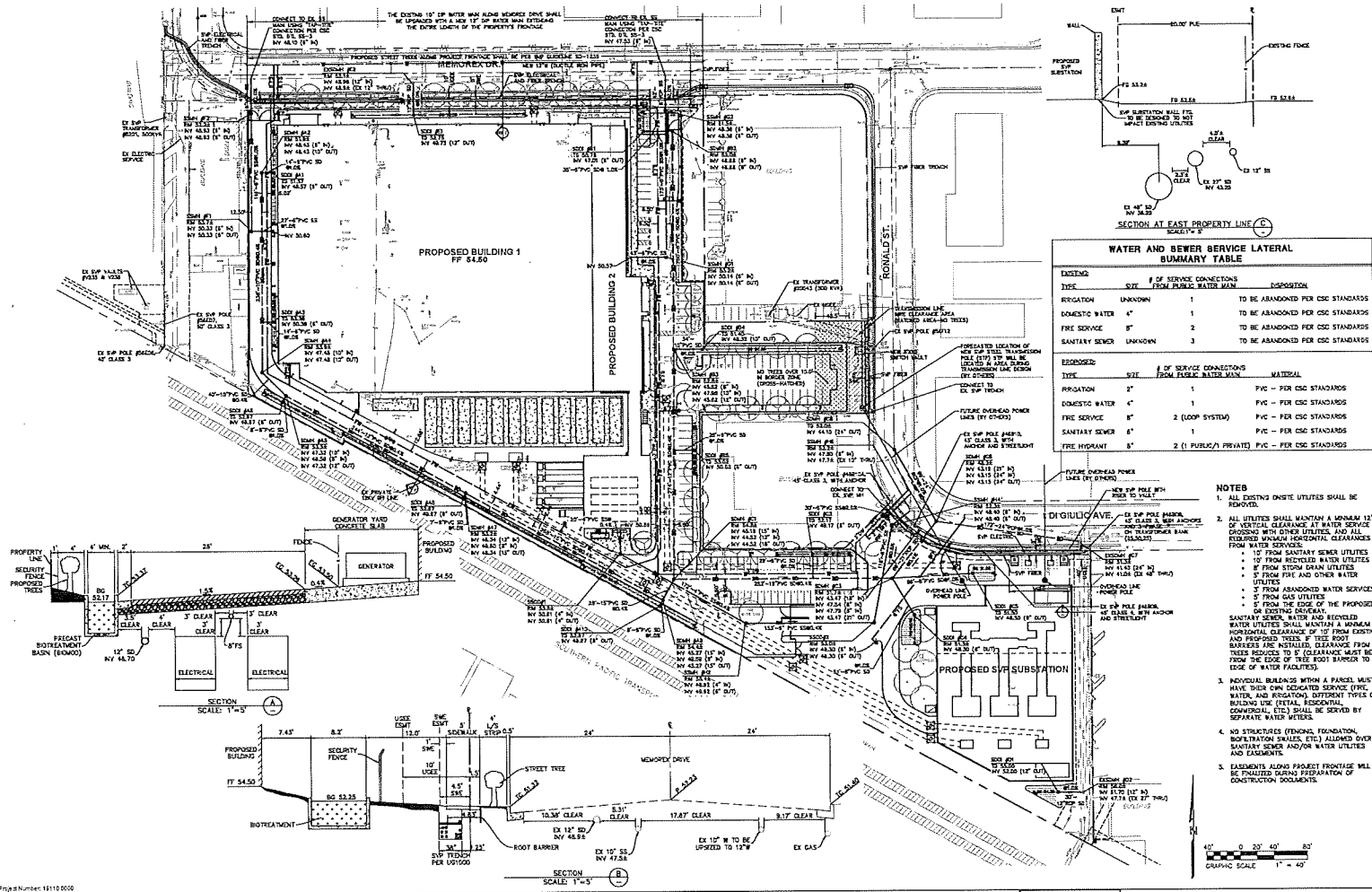
SKYBOX CORGAN RG CRITICAL kw HEAD ASSOCIATES

PRELIMINARY GRADING AND DRAINAGE PLAN

04.09.2020

DATA HALL OFFICE

C300



WATER AND SEWER SERVICE LATERAL SUMMARY TABLE

EXISTING TYPE	SIZE	# OF SERVICE CONNECTIONS FROM PUBLIC WATER MAIN	DISPOSITION
IRRIGATION	UNKNOWN	1	TO BE ABANDONED PER CSC STANDARDS
DOMESTIC WATER	4"	1	TO BE ABANDONED PER CSC STANDARDS
FIRE SERVICE	8"	2	TO BE ABANDONED PER CSC STANDARDS
SANITARY SEWER	UNKNOWN	3	TO BE ABANDONED PER CSC STANDARDS

PROPOSED TYPE	SIZE	# OF SERVICE CONNECTIONS FROM PUBLIC WATER MAIN	MATERIAL
IRRIGATION	2"	1	PVC – PER CSC STANDARDS
DOMESTIC WATER	4"	1	PVC – PER CSC STANDARDS
FIRE SERVICE	8"	2 (LOOP SYSTEM)	PVC – PER CSC STANDARDS
SANITARY SEWER	6"	1	PVC – PER CSC STANDARDS
FIRE HYDRANT	8"	2 (1 PUBLIC/1 PRIVATE)	PVC – PER CSC STANDARDS

NOTES

1. ALL EXISTING ONSITE UTILITIES SHALL BE REMOVED.
2. ALL UTILITIES SHALL MAINTAIN A MINIMUM 12" OF VERTICAL CLEARANCE AT WATER SERVICE CROSSING WITH OTHER UTILITIES, AND ALL REQUIRED MINIMUM HORIZONTAL CLEARANCES FROM WATER SERVICES:
   - 10' FROM SANITARY SEWER UTILITIES
   - 10' FROM RECYCLED WATER UTILITIES
   - 8' FROM STORM DRAIN UTILITIES
   - 5' FROM FIRE AND OTHER WATER UTILITIES
   - 3' FROM ABANDONED WATER SERVICES
   - 5' FROM GAS UTILITIES
   - 5' FROM THE EDGE OF THE PROPOSED OR EXISTING DRIVEWAY.

   SANITARY SEWER, WATER AND RECYCLED WATER UTILITIES SHALL MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 10' FROM EXISTING AND PROPOSED TREES. IF TREE ROOT BARRIERS ARE INSTALLED, CLEARANCE FROM TREES INCREASES TO 5' (CLEARANCE MUST BE FROM THE EDGE OF TREE ROOT BARRIER TO EDGE OF WATER FACILITIES).
3. INDIVIDUAL BUILDINGS WITHIN A PARCEL MUST HAVE THEIR OWN DEDICATED SERVICE (FIRE, WATER, AND IRRIGATION). DIFFERENT TYPES OF BUILDING USE (RETAIL, RESIDENTIAL, COMMERCIAL, ETC.) SHALL BE SERVED BY SEPARATE WATER METERS.
4. NO STRUCTURES (FENCING, FOUNDATION, BIOFILTRATION SWALES, ETC.) ALLOWED OVER SANITARY SEWER AND/OR WATER UTILITIES AND EASEMENTS.
5. EASEMENTS ALONG PROJECT FRONTAGE WILL BE FINALIZED DURING PREPARATION OF CONSTRUCTION DOCUMENTS.

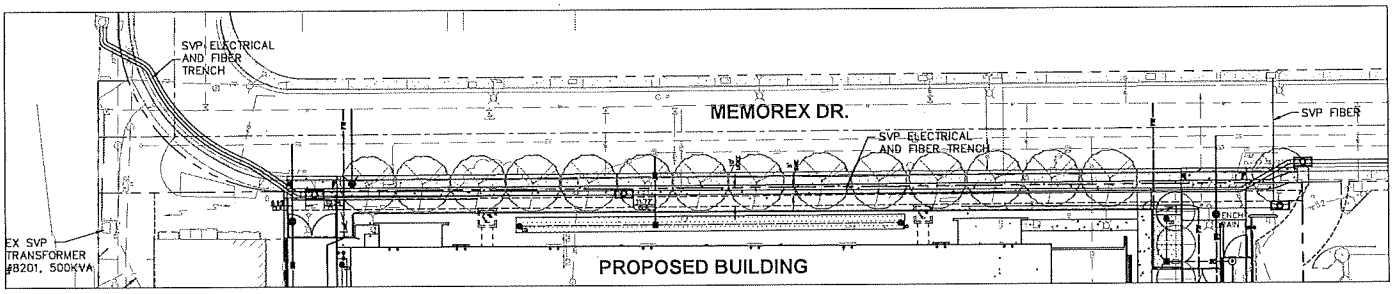
Project Number: 19110.0000

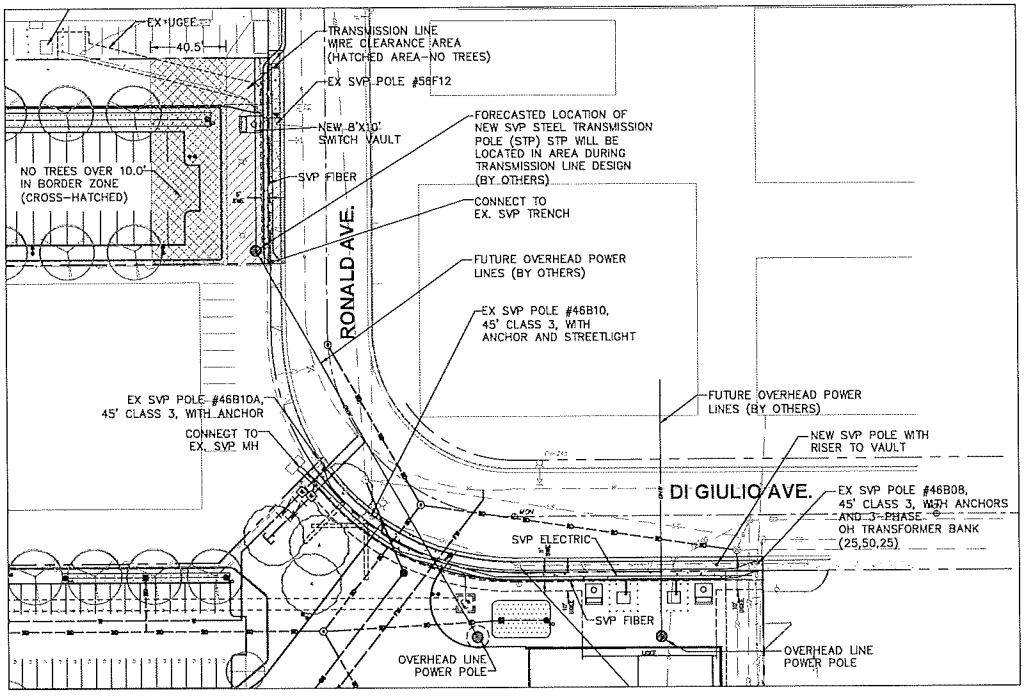
SKYBOX CORGAN RGD CRITICAL KW REED ASSOCIATES

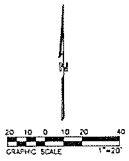
PRELIMINARY SITE UTILITY PLAN

04.09.2020

C400







Project Number: 19110.0000

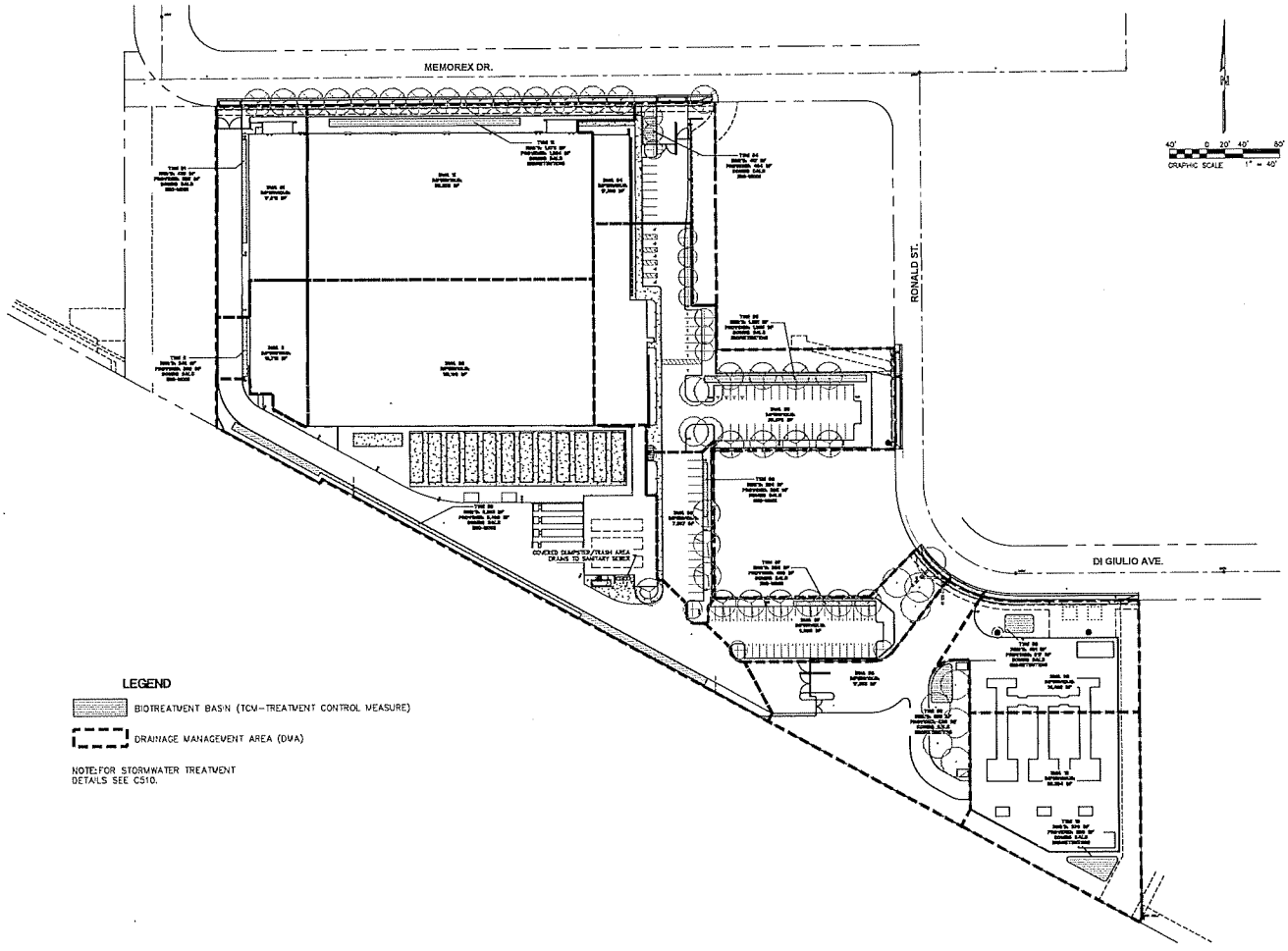
SKYBOX CORGAN RG CRITICAL kw REEG ASSOCIATES

ENLARGED SVP CLEARANCE PLAN

04.09.2020

DATE HILL DESIGN

C401



Project Number 19110.0000

SKYBOX CORGAN RG CRITICAL kW REED ASSOCIATES

PRELIMINARY STORMWATER CONTROL PLAN

04.09.2020

C500

BIOTREATMENT SOIL REQUIREMENTS

- BIORETENTION SOIL MIX SHALL MEET THE REQUIREMENTS AS OUTLINED IN APPENDIX C OF THE C.3 STORM WATER HANDBOOK AND SHALL BE A MIXTURE OF FINE SAND AND COMPOST MEASURED ON A VOLUME BASIS OF 60–70% SAND AND 30–40% COMPOST. CONTRACTOR TO REFER TO APPENDIX C FOR SAND AND COMPOST MATERIAL SPECIFICATIONS.
- PRIOR TO ORDERING THE BIOTREATMENT SOIL MIX OR DELIVERY TO THE PROJECT SITE, CONTRACTOR SHALL PROVIDE A BIOTREATMENT SOIL MIX SPECIFICATION CHECKLIST, COMPLETED BY THE SOIL MIX SUPPLIER AND CERTIFIED TESTING LAB.

STANDARD STORMWATER CONTROL NOTES:

- STANDING WATER SHALL NOT REMAIN IN THE TREATMENT MEASURES FOR MORE THAN FIVE DAYS, TO PREVENT MOSQUITO GENERATION. SHOULD ANY MOSQUITO ISSUES ARISE, CONTACT THE SANTA CLARA VALLEY VECTOR CONTROL DISTRICT (DISTRICT). MOSQUITO LARVICIDES SHALL BE APPLIED ONLY WHEN ABSOLUTELY NECESSARY, AS INDICATED BY THE DISTRICT AND THEN ONLY BY A LICENSED PROFESSIONAL OR CONTRACTOR. CONTACT INFORMATION FOR THE DISTRICT IS PROVIDED BELOW.
- DO NOT USE PESTICIDES OR OTHER CHEMICAL APPLICATIONS TO TREAT DISEASED PLANTS, CONTROL WEEDS OR REMOVED UNWANTED GROWTH. EMPLOY NON-CHEMICAL CONTROLS (BIOLOGICAL, PHYSICAL AND CULTURAL CONTROLS) TO TREAT A PEST PROBLEM. PRUNE PLANTS PROPERLY AND AT THE APPROPRIATE TIME OF YEAR. PROVIDE ADEQUATE IRRIGATION FOR LANDSCAPE PLANTS. DO NOT OVER WATER.

BIORETENTION NOTES:

1. SEE GRADING PLAN FOR BASIN FOOTPRINT AND DESIGN ELEVATIONS.
2. PLACE 3 INCHES OF COMPOSTED, NON-FLOATABLE MULCH IN AREAS BETWEEN STORMWATER PLANTINGS.
3. SEE LANDSCAPE PLAN FOR MULCH, PLANT MATERIALS AND IRRIGATION REQUIREMENTS.
4. CURB CUTS SHALL BE A MINIMUM 18" WIDE AND SPACED AT MAXIMUM 12' O.C. INTERVALS AND SLOPED TO DIRECT STORMWATER TO DRAIN INTO THE BASIN. CURB CUTS SHALL ALSO NOT BE PLACED INLINE WITH OVERFLOW CATCH BASIN.
5. A MINIMUM 0.2' DROP BETWEEN STORM WATER ENTRY POINT (I.E. CURB OPENING, FLUSH CURB, ETC.) AND ADJACENT LANDSCAPE FINISHED GRADE.
6. DO NOT COMPACT NATIVE SOIL / SUBGRADE AT BOTTOM OF BASIN. LOOSEN SOIL TO 12" DEPTH.

PROJECT SITE INFORMATION:

1. SOILS TYPE ____
2. GROUND WATER DEPTH ____
3. NAME OF RECEIVING BODY ____
4. FLOOD ZONE: ZONE X - AREAS OF 0.2% ANNUAL CHANCE FLOOD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD ____
5. FLOOD ELEVATION (IF APPLICABLE) ____

OPERATION AND MAINTENANCE INFORMATION:

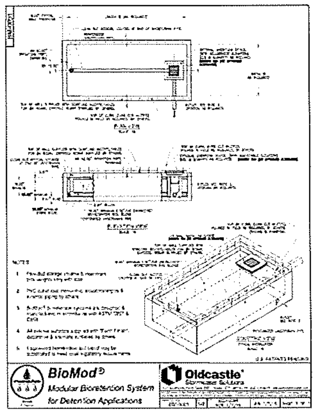
I. PROPERTY INFORMATION
   I.A. PROPERTY ADDRESS:
   1220 MEMOREX DRIVE
   SANTA CLARA, CA 95050
   I.B. PROPERTY OWNER:
   1220 SANTA CLARA PROPCO, LLC
II. RESPONSIBLE PARTY FOR MAINTENANCE
   II.A. CONTACT:
   JOHN SHANK
   II.B. PHONE NUMBER OF CONTACT:
   (408) 872-8500
   II.C. EMAIL:
   JOHN@FELD.COM
   II.D. ADDRESS:
   14271 BIG BASIN WAY
   SARATOGA, CA 95070

SOURCE CONTROL MEASURES:

1. CONNECT THE FOLLOWING FIXTURES TO SANITARY SEWER:
   a. COVERED TRASH/ RECYCLING ENCLOSURES.
   b. COVERED LOADING DOCKS AND MAINTENANCE BAYS.
2. BENEFICIAL LANDSCAPING.
3. USE OF WATER EFFICIENT IRRIGATION SYSTEMS.
4. MAINTENANCE (PAVEMENT SWEEPING, CATCH BASIN CLEANING, GOOD HOUSEKEEPING).
5. STORM DRAIN LABELING.

SITE DESIGN MEASURES:

1. PROTECT EXISTING TREES, VEGETATION, AND SOIL.
2. REDUCE EXISTING IMPERVIOUS SURFACES.
3. CREATE NEW PERVIOUS AREAS.
4. LANDSCAPING
   a. PARKING STALLS.
   b. PRIVATE STREETS AND SIDEWALKS.
5. DIRECT RUNOFF FROM ROOFS, SIDEWALKS, PATIOS TO LANDSCAPED AREAS.
6. CLUSTER STRUCTURES/PAVEMENT.
7. PLANT TREES ADJACENT TO AND IN PARKING AREAS AND ADJACENT TO OTHER IMPERVIOUS AREAS.
8. PARKING
   a. NOT PROVIDED IN EXCESS OF CODE.



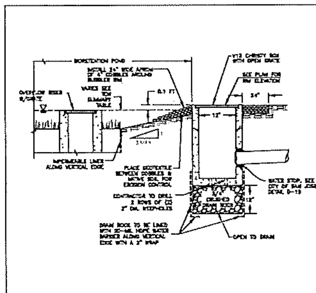
PERVIOUS AND IMPERVIOUS SURFACES COMPARISON TABLE

a. Total Site Area: [illegible] acres	b. Total Site Area Disturbed: [illegible]				
Impervious Area (IA)	Pre-project (Existing) IA (ft²)	Existing IA Retained (ft²)	Existing IA Replaced with IA (ft²)	New IA Created (ft²)	Total Post-Project IA (ft²)
Roof	[illegible]	0	[illegible]	[illegible]	[illegible]
Surface Parking	[illegible]	0	[illegible]	0	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]
c. Total Impervious Area	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
d. Total new and replaced impervious area			[illegible]		
Pervious Area (PA)	Pre-project (Existing) PA (ft²)				Total Post-Project PA (ft²)
Landscaping	[illegible]				[illegible]
Pervious Paving	0				0
Other (e.g. Green Roof)	0				0
e. Total Pervious Area	[illegible]				[illegible]
f. Total Area (c+e)	[illegible]				[illegible]
g. Percent Replacement of IA in Redevelopment Projects					[illegible] %

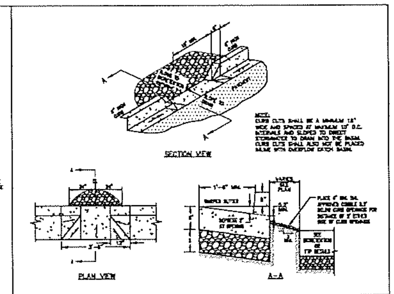
TREATMENT CONTROL MEASURE SUMMARY TABLE

DMA #	TCM #	Location	Treatment Type	LID or Non-LID	Sizing Method	Drainage Area (s.f.)	Impervious Area (s.f.)	Pervious Area (Permeable Pavement) (s.f.)	Pervious Area (Other) (s.f.)	% Onsite Area Treated by LID or Non-LID TCM	Bioretention Area Required (s.f.)	Bioretention Area Provided (s.f.)	Overflow Riser Height (in)	Comments
1	1	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	23,439	17,015	0	3,420	6.11%	433	565	6	
2	2	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	11,358	10,715	0	643	2.84%	245	320	5	
3	3	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	120,239	112,100	0	8,529	30.23%	2,592	7,400	5	
4	4	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	19,400	17,203	0	2,197	4.85%	417	434	11	
5	5	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	50,925	39,678	0	11,247	12.73%	1,031	1,335	7	
6	6	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	13,629	7,567	0	2,032	3.72%	224	235	6	
7	7	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	17,148	9,893	0	7,255	4.29%	335	450	5	
8	8	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	32,265	17,253	0	15,012	8.07%	620	838	5	
9	9	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	23,278	14,409	0	8,349	5.61%	451	617	5	
10	10	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	33,283	22,604	0	10,579	8.32%	573	853	6	
11	11	Onsite	Bioretention lined* w/ underdrain	LID	3 Flow-Volume Combo	53,134	50,252	0	5,882	15.33%	1,273	1,654	6	
					Totals:	400,235	319,178	0	80,842	100.00%				

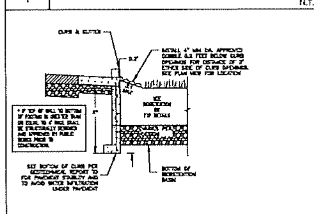
Footnotes
* "Lined" refers to an impermeable liner placed on the bottom of a Bioretention basin or a concrete Flow-Through Planter, such that no infiltration into native soil occurs.



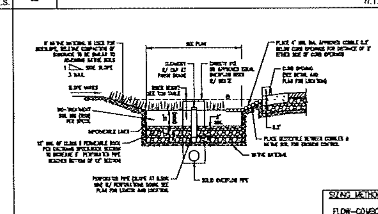
1 BUBBLER BOX DETAIL N.T.S.



2 CURB OPENING N.T.S.



3 CURB ADJACENT TO BIORETENTION N.T.S.



4 BIORETENTION BASIN W/ LINER N.T.S.

TABLE 1
ROUTINE MAINTENANCE ACTIVITIES FOR BIORETENTION AREAS

NO.	MAINTENANCE TASK	FREQUENCY OF TASK
1	REMOVE OBSTRUCTIONS, WEEDS, DEBRIS AND TRASH FROM BIORETENTION AREA AND ITS INLETS AND OUTLETS, AND DISPOSE OF PROPERLY.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
2	INSPECT BIORETENTION AREA FOR STANDING WATER. IF STANDING WATER DOES NOT DRAIN WITHIN 2-3 DAYS, TILL AND REPLACE THE SURFACE BIOTREATMENT SOIL WITH THE APPROVED SOIL MIX AND REPLANT.	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
3	CHECK UNDERDRAINS FOR CLOGGING. USE THE CLEANOUT RISER TO CLEAN ANY CLOGGED UNDERDRAINS	QUARTERLY, OR AS NEEDED AFTER STORM EVENTS
4	MAINTAIN THE IRRIGATION SYSTEM AND ENSURE THAT PLANTS ARE RECEIVING THE CORRECT AMOUNT OF WATER (IF APPLICABLE)	QUARTERLY
5	ENSURE THAT THE VEGETATION IS HEALTHY AND DENSE ENOUGH TO PROVIDE FILTERING AND PROTECT SOILS FROM EROSION. PRUNE AND WEED THE BIORETENTION AREA. REMOVE AND/OR REPLACE ANY DEAD PLANTS	ANNUALLY, BEFORE THE WET SEASON BEGINS
6	USE COMPOST AND OTHER NATURAL SOIL AMENDMENTS AND FERTILIZERS INSTEAD OF SYNTHETIC FERTILIZERS, ESPECIALLY IF THE SYSTEM USES AN UNDERDRAIN	ANNUALLY, BEFORE THE WET SEASON BEGINS
7	CHECK THAT MULCH IS AT APPROPRIATE DEPTH (2 - 3 INCHES PER SOIL SPECIFICATIONS) AND REPLENISH AS NECESSARY BEFORE WET SEASON BEGINS. IT IS RECOMMENDED THAT 2" – 3" OF ARBOR MULCH BE REAPPLIED EVERY YEAR.	ANNUALLY, BEFORE THE WET SEASON BEGINS
8	INSPECT THE ENERGY DISSIPATION AT THE INLET TO ENSURE IT IS FUNCTIONING ADEQUATELY, AND THAT THERE IS NO SCOUR OF THE SURFACE MULCH. REMOVE ACCUMULATED SEDIMENT	ANNUALLY, BEFORE THE WET SEASON BEGINS
9	INSPECT OVERFLOW PIPE TO ENSURE THAT IT CAN SAFELY CONVEY EXCESS FLOWS TO A STORM DRAIN. REPAIR OR REPLACE DAMAGED PIPING	ANNUALLY, BEFORE THE WET SEASON BEGINS
10	REPLACE BIOTREATMENT SOIL AND MULCH, IF NEEDED. CHECK FOR STANDING WATER, STRUCTURAL FAILURE AND CLOGGED OVERFLOWS. REMOVE TRASH AND DEBRIS. REPLACE DEAD PLANTS	ANNUALLY, BEFORE THE WET SEASON BEGINS
11	INSPECT BIORETENTION AREA USING THE ATTACHED INSPECTION CHECKLIST.	ANNUALLY, BEFORE THE WET SEASON

Project Number: 19110.0000

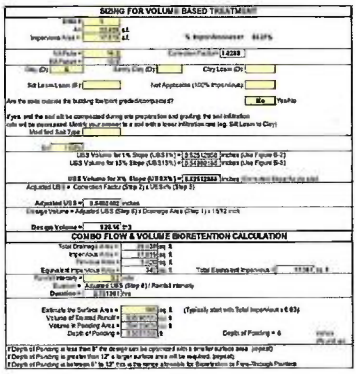
SKYBOX CORGAN R G CRITICAL kW FEED ASSOCIATES

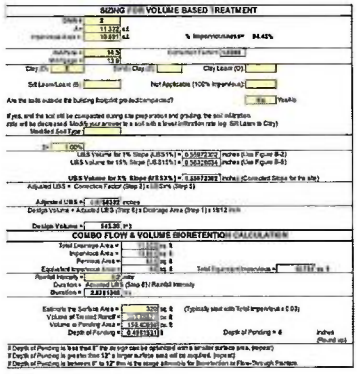
STORMWATER CONTROL DETAILS

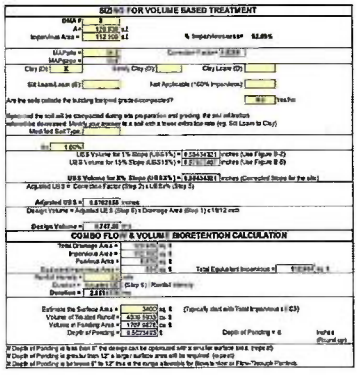
04.09.2020

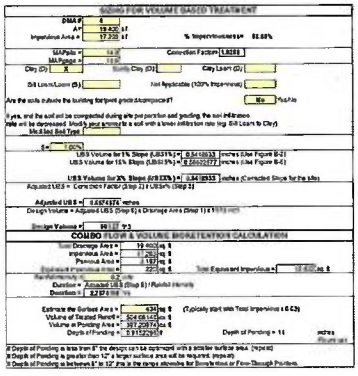
DATA HALL

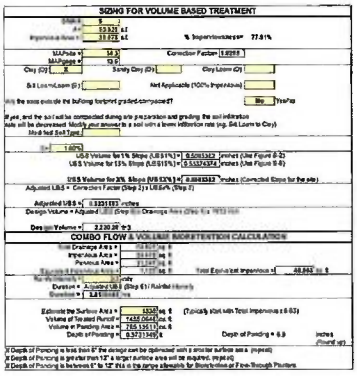
C510

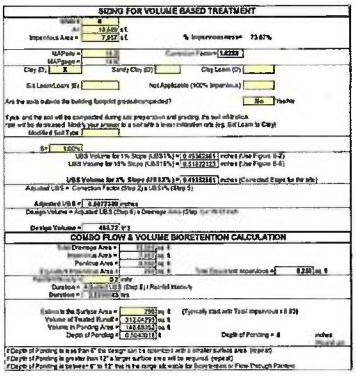


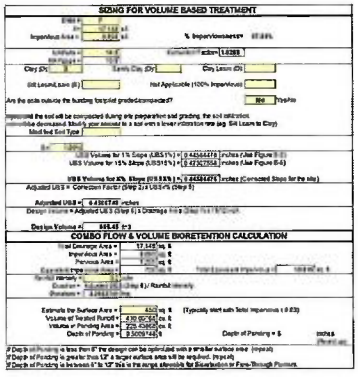


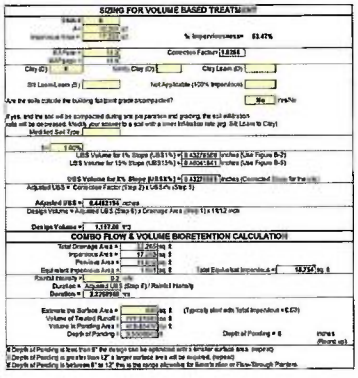












SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

SIZING FOR VOLUME BASED TREATMENT

COMBO FLOW & VOLUME BIORETENTION CALCULATION

Project Number: 18113.0000

SKYBOX

CORGAN

CRITICAL

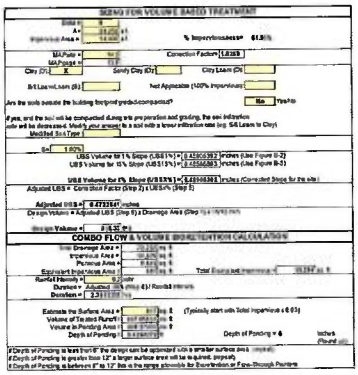
kW

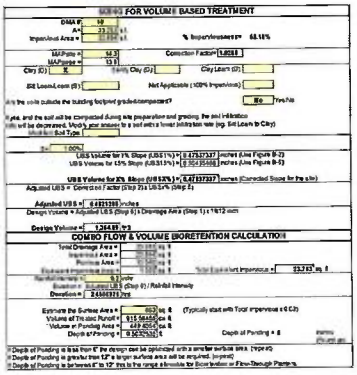
REED ASSOCIATES

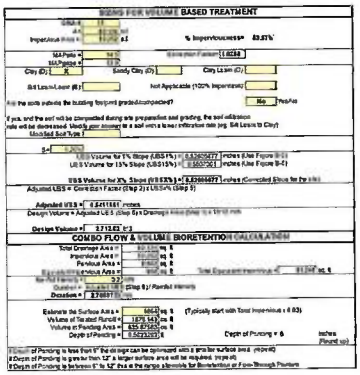
PRELIMINARY STORMWATER CALCULATIONS

04.09.2020

C520







Project Number: 19110.0000

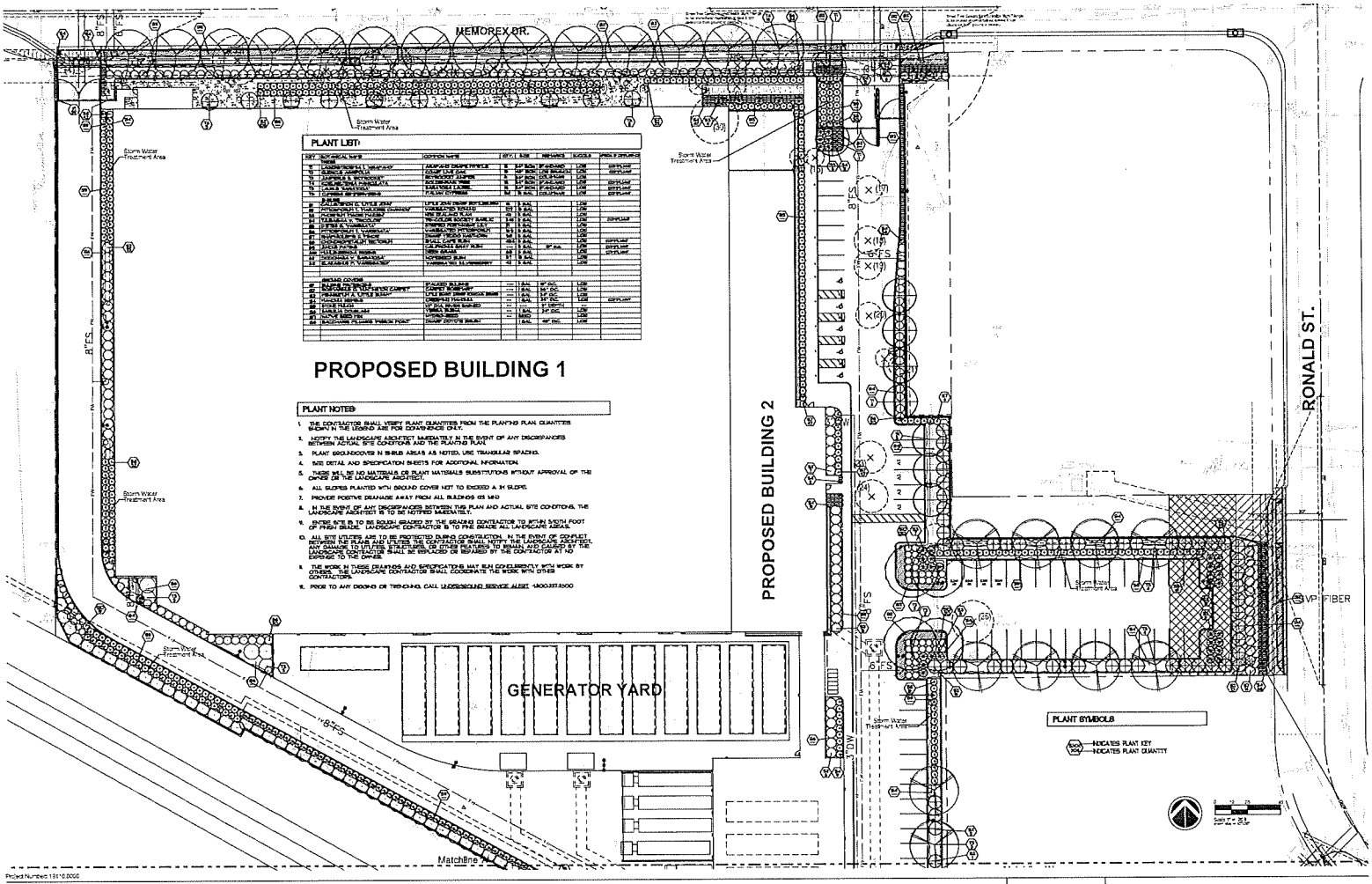
SKYBOX CORGAN RG CRITICAL kW REED ASSOCIATES

PRELIMINARY STORMWATER CALCULATIONS

04.09.2020

OFFICIAL DOCUMENT

C521

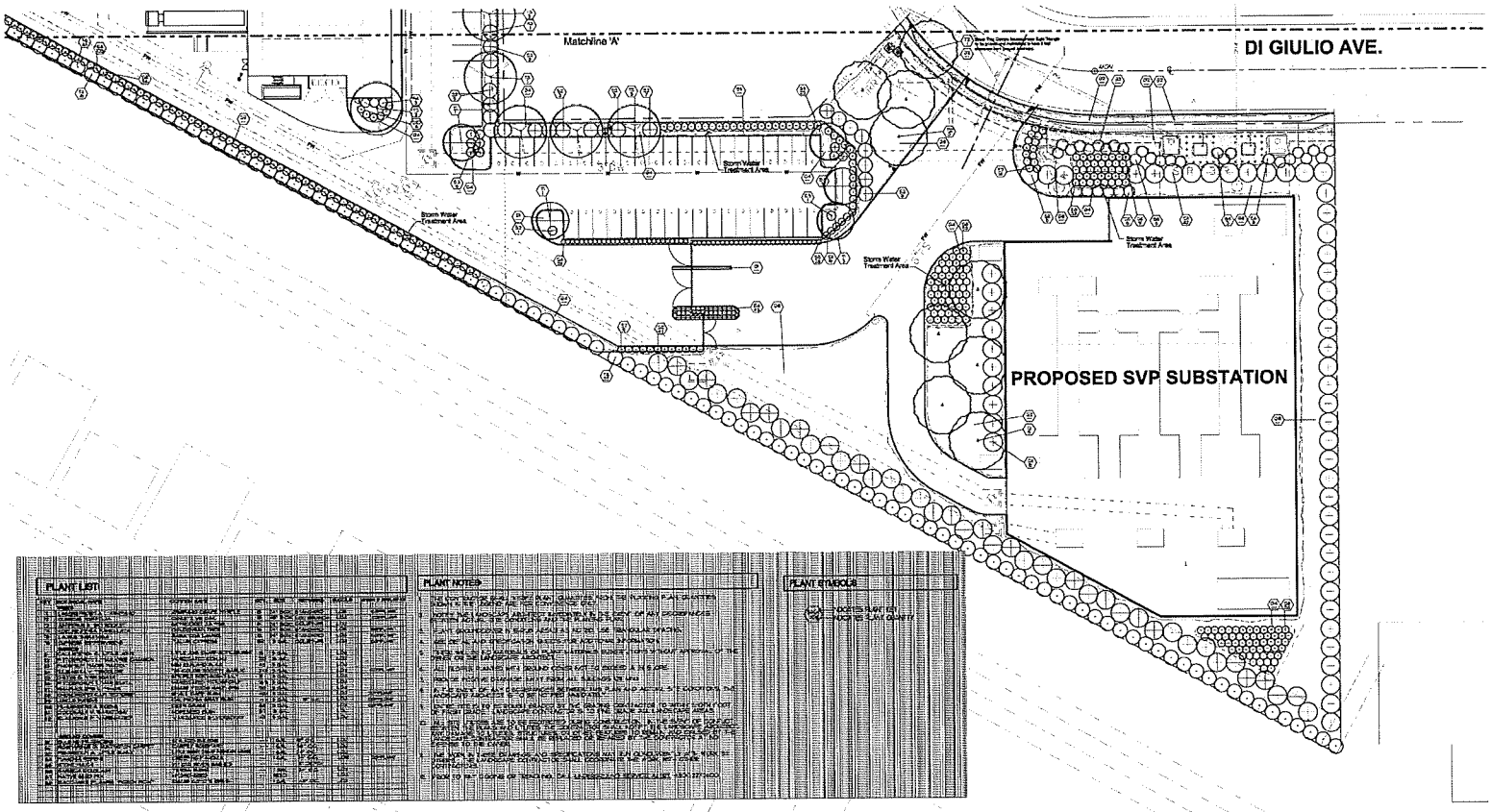


SKYBOX CORGAN RG CRITICAL kw REED ASSOCIATES

LANDSCAPE PLANTING PLAN

04-09-2020

L-100



PLANT LIST

PLANT NOTES

PLANT SYMBOLS

Project Number: 19110.0000

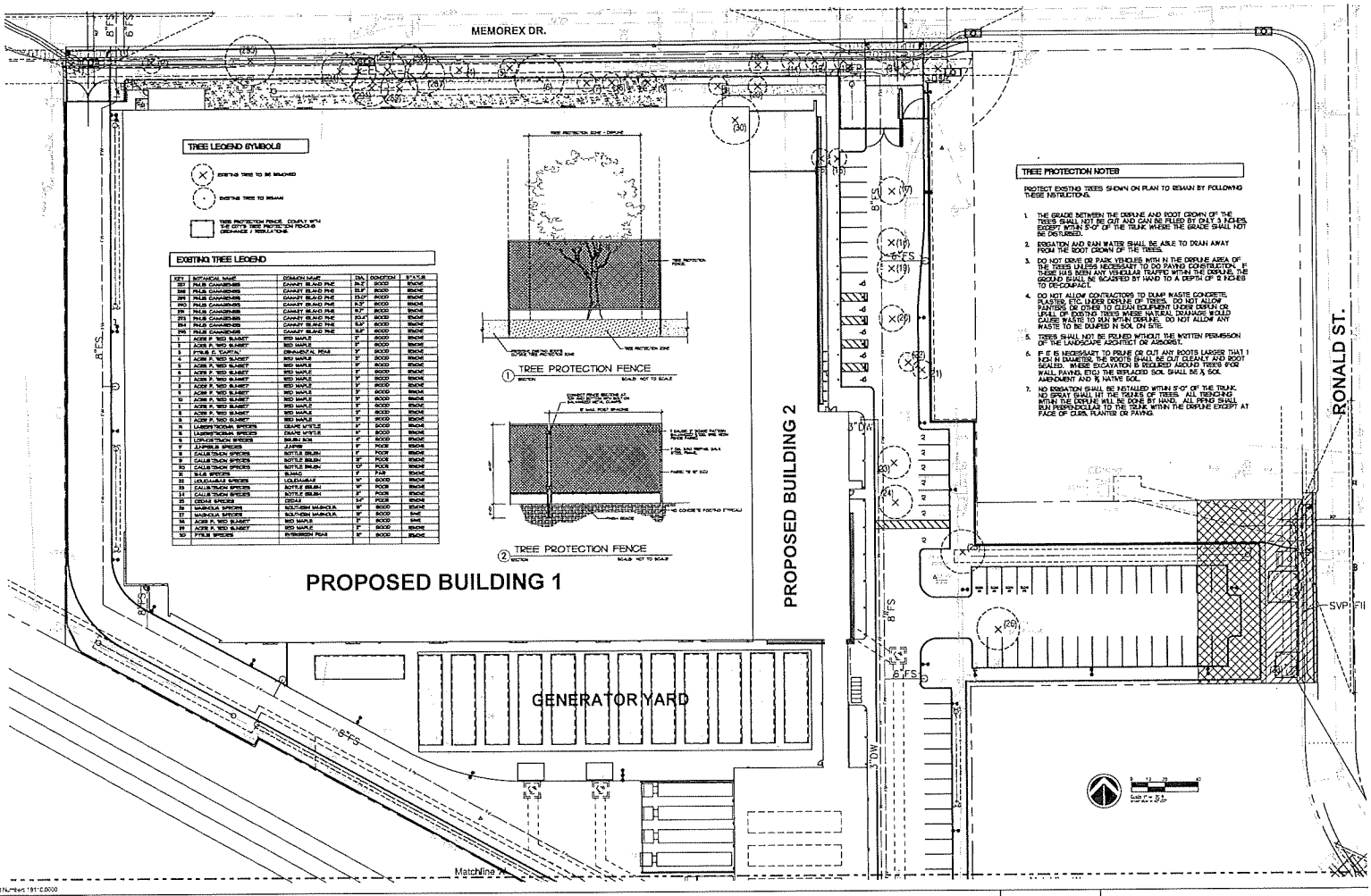
SKYBOX CORGAN RG CRITICAL kW REED ASSOCIATES

LANDSCAPE PLANTING PLAN

04-09-2020

DATA HALL OFFICE LD

L-101

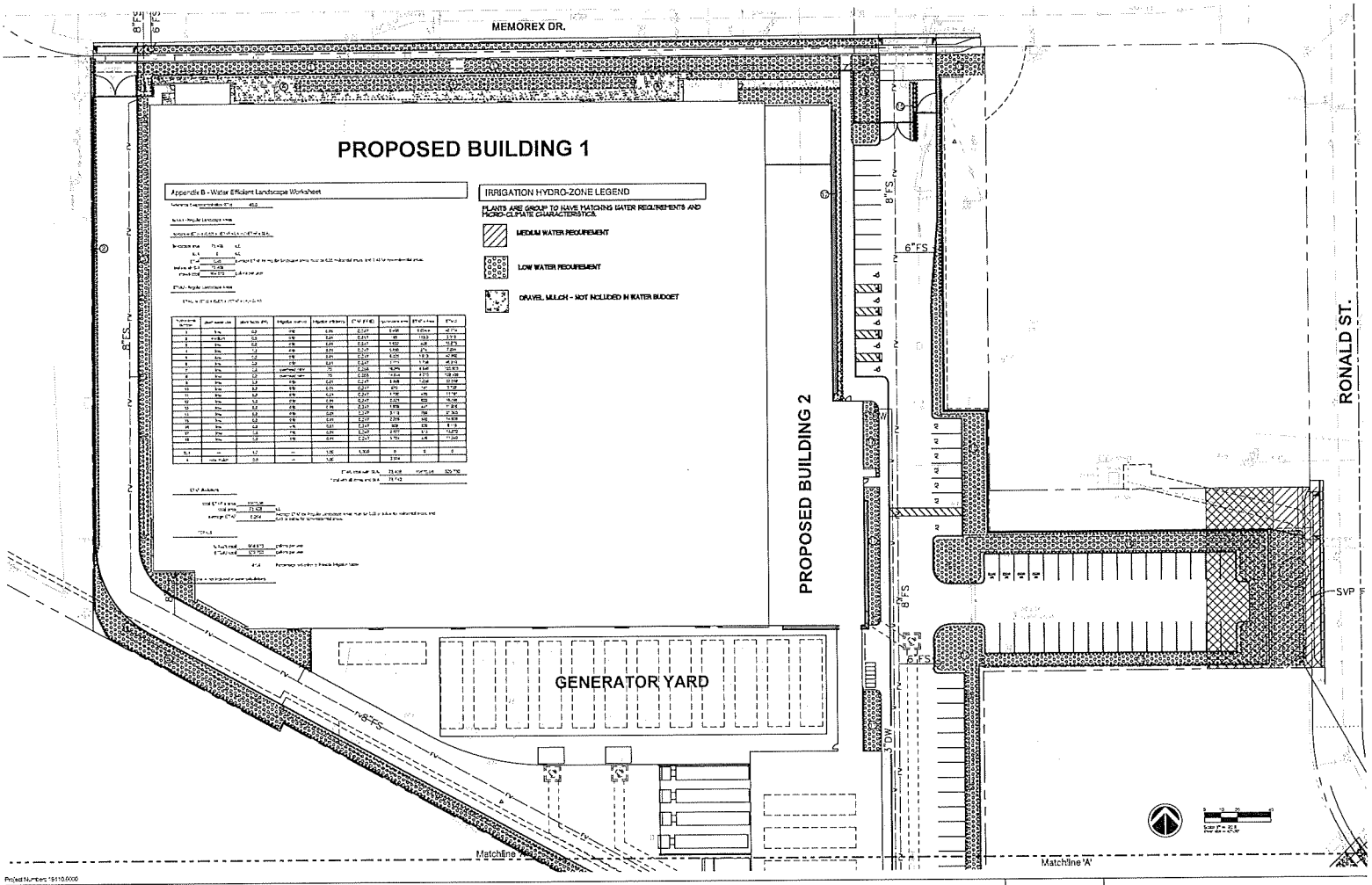


SKYBOX CORGAN RG CRITICAL kw REED ASSOCIATES

EXISTING TREE PLAN

04-09-2020

L-102



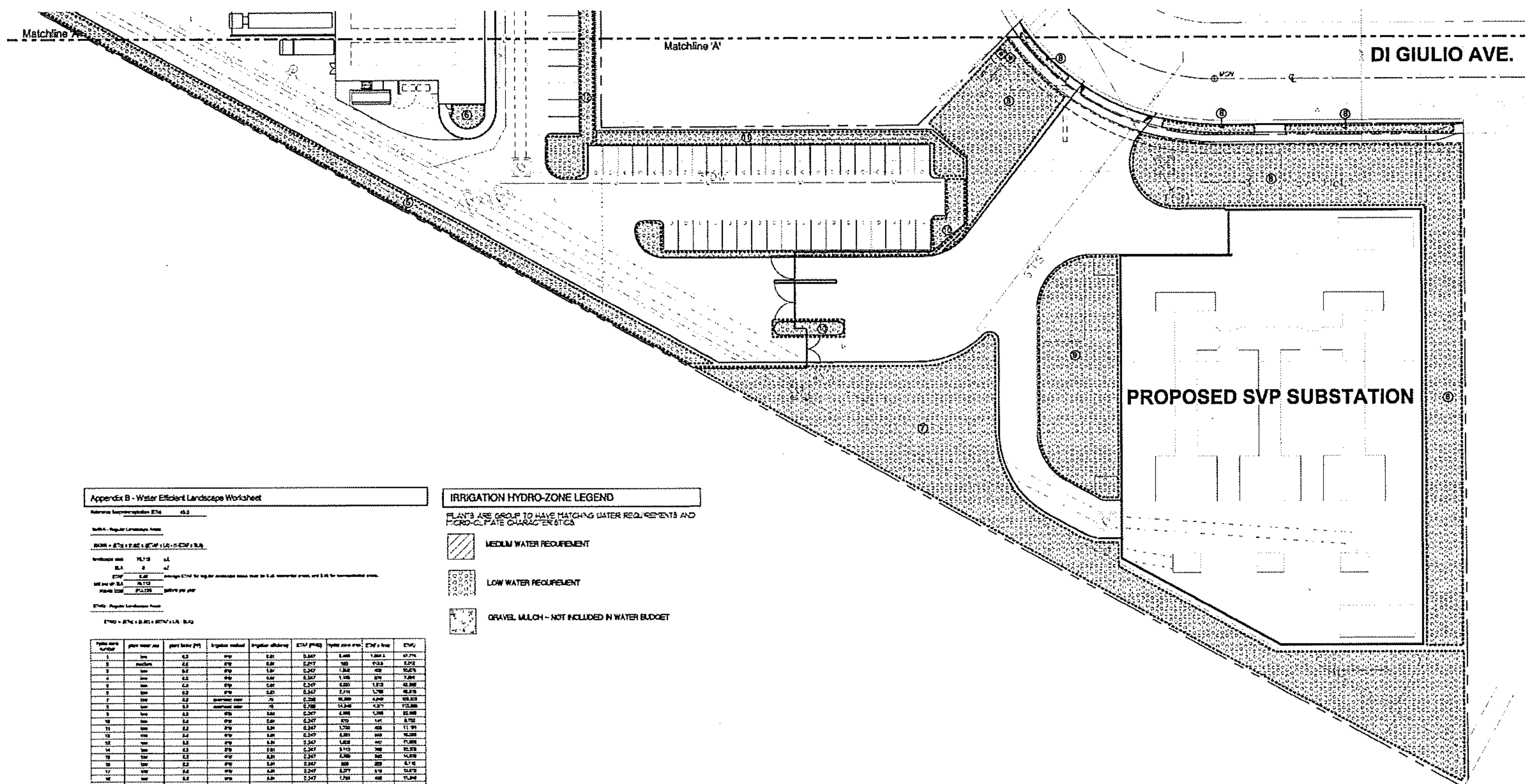
Project Number: 19110.0000

SKYBOX CORGAN RG REED ASSOCIATES CRITICAL kw

LANDSCAPE HYDROZONE PLAN

04-09-2020

L-103



Appendix B - Water Efficient Landscape Worksheet

Hydro zone number	plant water use	plant factor (PF)	irrigation method	irrigation efficiency	ETAF (PF/IE)	hydro zone area	ETAF x Area	ETWU
1	low	0.2	drip	0.81	0.247	[illegible]	[illegible]	[illegible]
2	medium	0.5	drip	0.81	0.617	[illegible]	[illegible]	[illegible]
3	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
4	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
5	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
6	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
7	low	0.2	overhead spray	.75	[illegible]	[illegible]	[illegible]	[illegible]
8	low	0.2	overhead spray	.75	[illegible]	[illegible]	[illegible]	[illegible]
9	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
10	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
11	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
12	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
13	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
14	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
15	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
16	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
17	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
18	low	0.2	drip	[illegible]	0.247	[illegible]	[illegible]	[illegible]
SLA	—	1.0	—	1.00	1.000	0	0	0
A	[illegible]	0.0	—	1.00		[illegible]		

ETAF, total (w/o SLA) 75,113 [illegible] [illegible]

Total with all zones and SLA [illegible]

ETAF calculations

average ETAF [illegible]

TOTALS

MAWA total [illegible] gallons per year

ETWU total [illegible] gallons per year

IRRIGATION HYDRO-ZONE LEGEND

PLANTS ARE GROUP TO HAVE MATCHING WATER REQUIREMENTS AND HYDRO-CLIMATE CHARACTERISTICS

- MEDIUM WATER REQUIREMENT
- LOW WATER REQUIREMENT
- GRAVEL MULCH - NOT INCLUDED IN WATER BUDGET

Project Number: 13110.0000

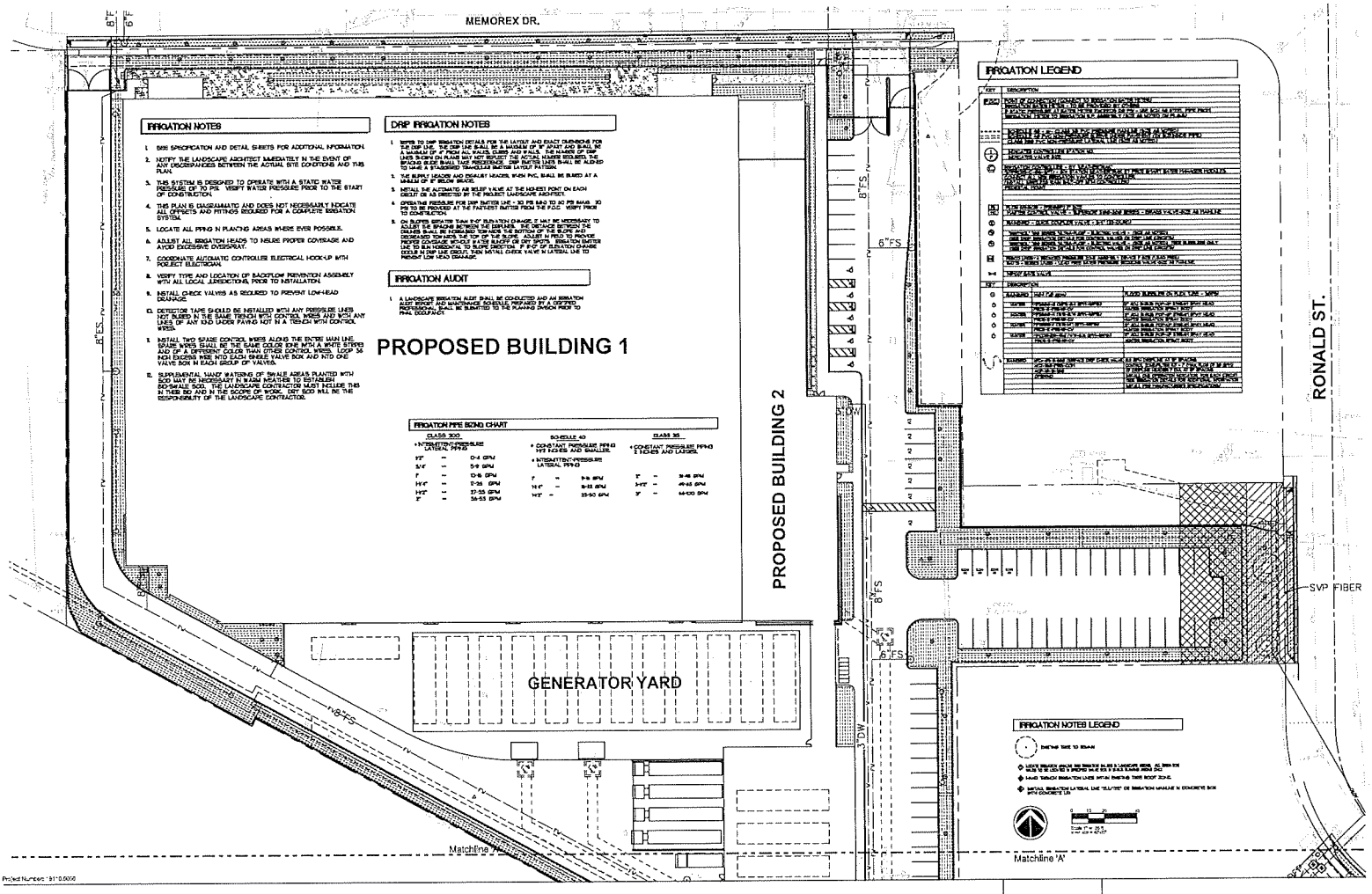
SKYBOX | CORGAN | R G | CRITICAL | kW mission critical engineering | REED ASSOCIATES

LANDSCAPE HYDROZONE PLAN

04-09-2020

DATA HALL | OFFICE

L-104



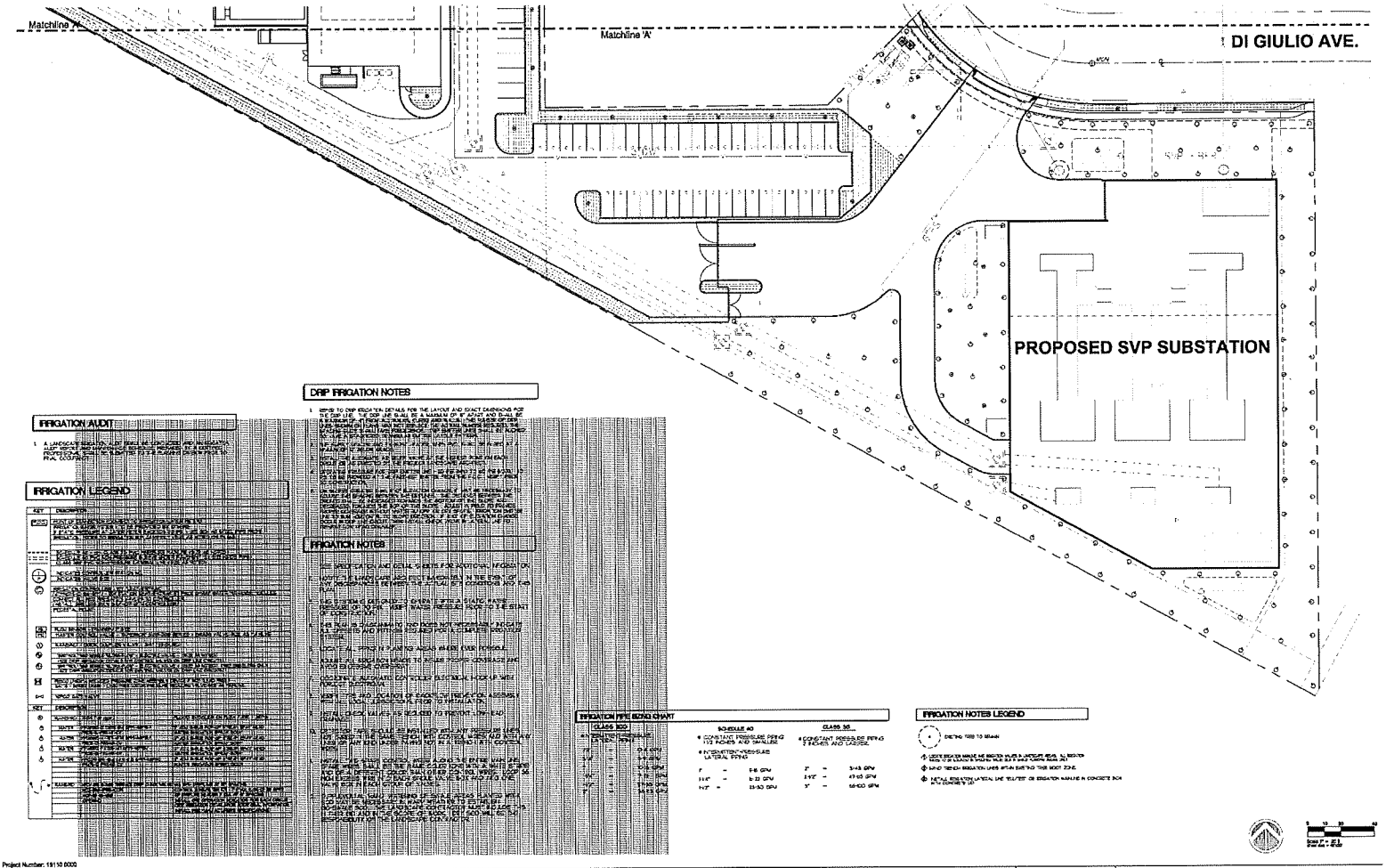
SKYBOX CORGAN RG REED ASSOCIATES

CRITICAL kw

PRELIMINARY IRRIGATION PLAN

04-09-2020

L-105



DRIP IRRIGATION NOTES

IRRIGATION AUDIT

IRRIGATION LEGEND

IRRIGATION NOTES

IRRIGATION PIPE SIZING CHART

IRRIGATION NOTES LEGEND

Project Number: 1911.0.0000

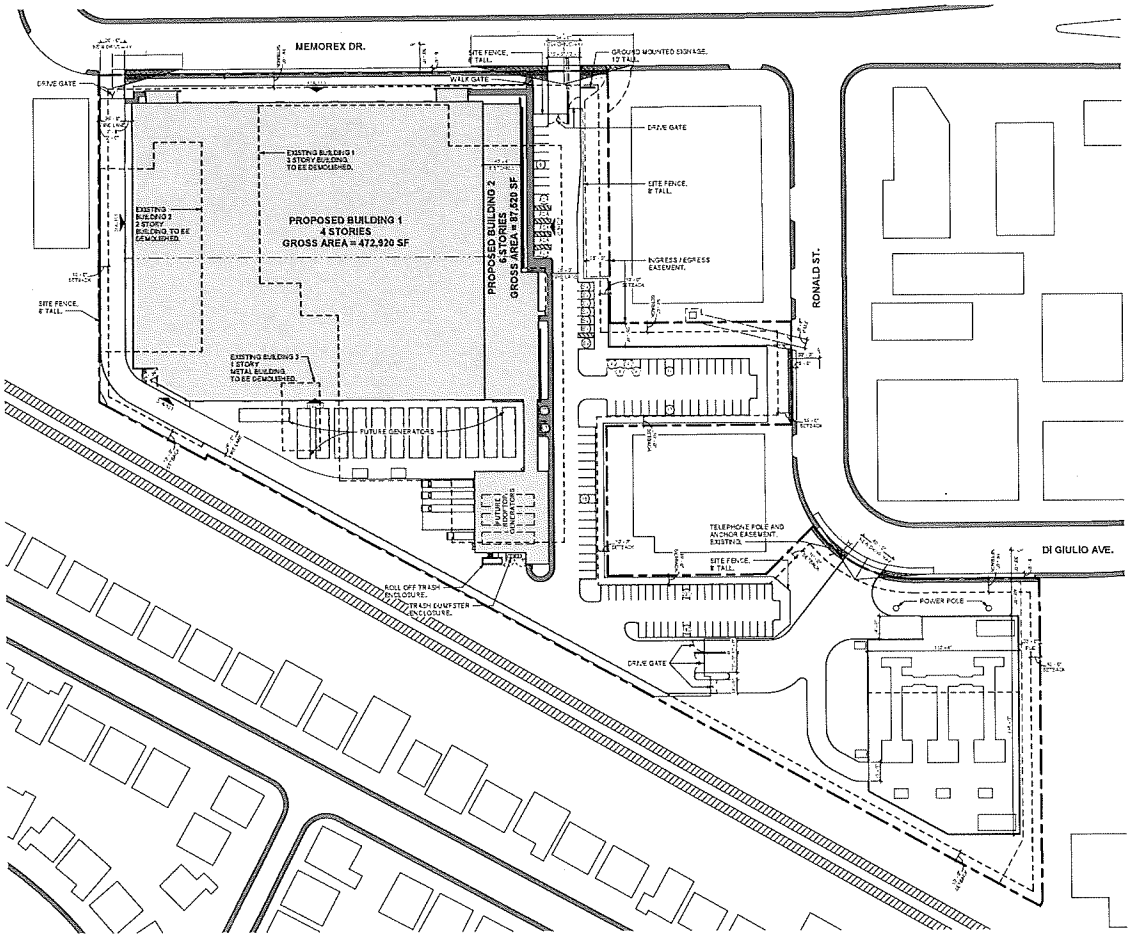
SKYBOX CORGAN RG CRITICAL kW REED ASSOCIATES

PRELIMINARY IRRIGATION PLAN

04-09-2020

DATA HALL OFFICE LD

L-106



EXISTING

LOT SIZE - 456,838± SF - 9.19 ACRES

3 EXISTING BUILDINGS - TO BE DEMOLISHED

BUILDING 1 - FACTORY - 3 STORIES @ 116,679± SF BUILDING FOOTPRINT
BUILDING 2 - FACTORY - 2 STORIES @ 22,856± SF BUILDING FOOTPRINT
BUILDING 3 - STORAGE - 1 STORY @ 2,844± SF BUILDING FOOTPRINT

LOT COVERAGE - 142,618± SF - 31%

PROPOSED

LOT SIZE - 456,838± SF - 9.19 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE II - 4 STORIES @ 118,230± SF GROSS - 472,920 SF±
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"
BUILDING 2 - STORAGE II - 4 STORIES @ 14,568± SF GROSS - 87,820 SF±
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"

FAR - 1.49
LOT COVERAGE - 143,300± SF - 30%
OUTDOOR EQUIP STORAGE - 22,300± SF - 6%

GROSS BUILDING - 560,440± SF
PROD. DATA HALL - 6 @ 19,765 SF = 118,650 SF
GEO DATA HALL - 5 @ 19,730 SF = 118,650 SF
MEDIA GALLERY - 24 @ 3,536 SF = 84,865 SF
UPS - 30 @ 2,275 SF = 68,250 SF
OPEN OFFICE - 5,100 SF + 8,225 SF + 4 @ 9430 SF = 51,000 SF
MISC. - 119,970 SF

PARKING

113 REQUIRED SPACES @ 1 PER 5,000 SF
113 PARKING SPACES PROVIDED
56 PARKING SPACES
41 COMPACT PARKING SPACES (C)
11 CLEAN AIR VEHICLE PARKING SPACES (CAV)
7 FUTURE EV CHARGING SPACES (EV)
5 ADA ACCESSIBLE SPACES (ADA)

BICYCLE PARKING - 5% SHORT & LONG TERM
6 SHORT TERM SPACES (ST)
6 LONG TERM SPACES (LT)

Project Number: 19110.6000

SKYBOX CORGAN RG REED ASSOCIATES
CRITICAL kw

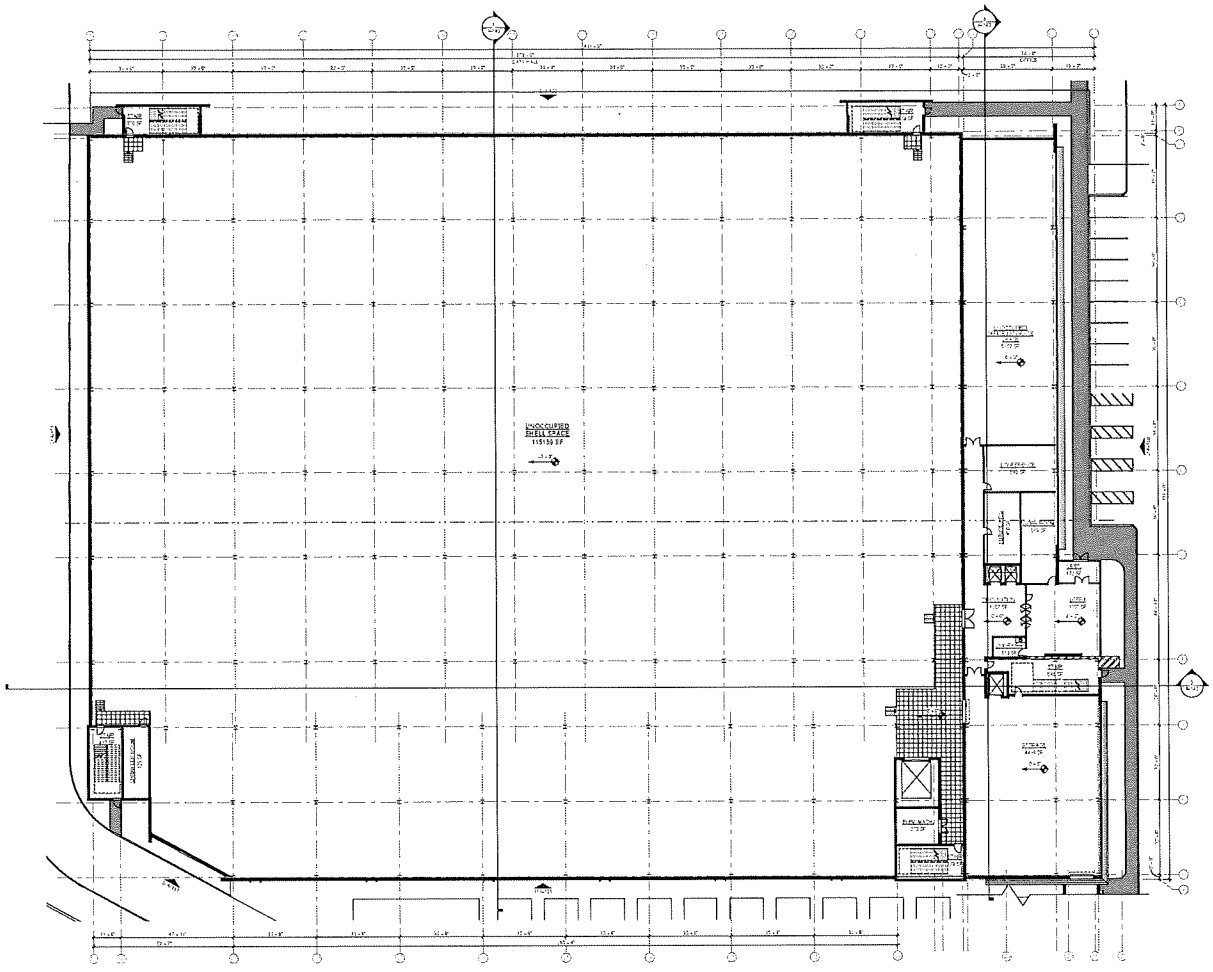
SITE PLAN

1" = 40'-0"
04.09.2020

7/9/2020

DATA HALL CONCEPT

A-110



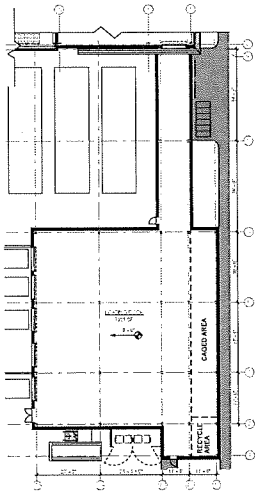
PROPOSED

LOT SIZE - 499,9785 SF - 8.18 ACRES

2 PROPOSED BUILDINGS - TYPE 8A
BUILDING 1 - STORAGE B - 4 STORIES @ 118,2304 SF GROSS - 472,920 SFs
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"
BUILDING 2 - STORAGE B - 5 STORIES @ 14,555± SF GROSS - 87,330 SFs
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"

FAR - 1.49
LOT COVERAGE - 143,305± SF - 29%
OUTDOOR EQUIP STORAGE - 22,300± SF - 6%

GROSS BUILDING - 560,440± SF
PROD. DATA HALL - 1 @ 19,765 SF = 118,590 SF
DEV. DATA HALL - 6 @ 19,705 SF = 118,653 SF
MECH GALLERY - 24 @ 3,536 SF = 84,860 SF
UPS - 33 @ 2,275 SF =69,250 SF
OPEN OFFICE - 5,155 SF + 8,220 SF = 1 @ 6420 SF = 51,000 SF
MISC. - 118,970 SF



Project Number 19116.0000

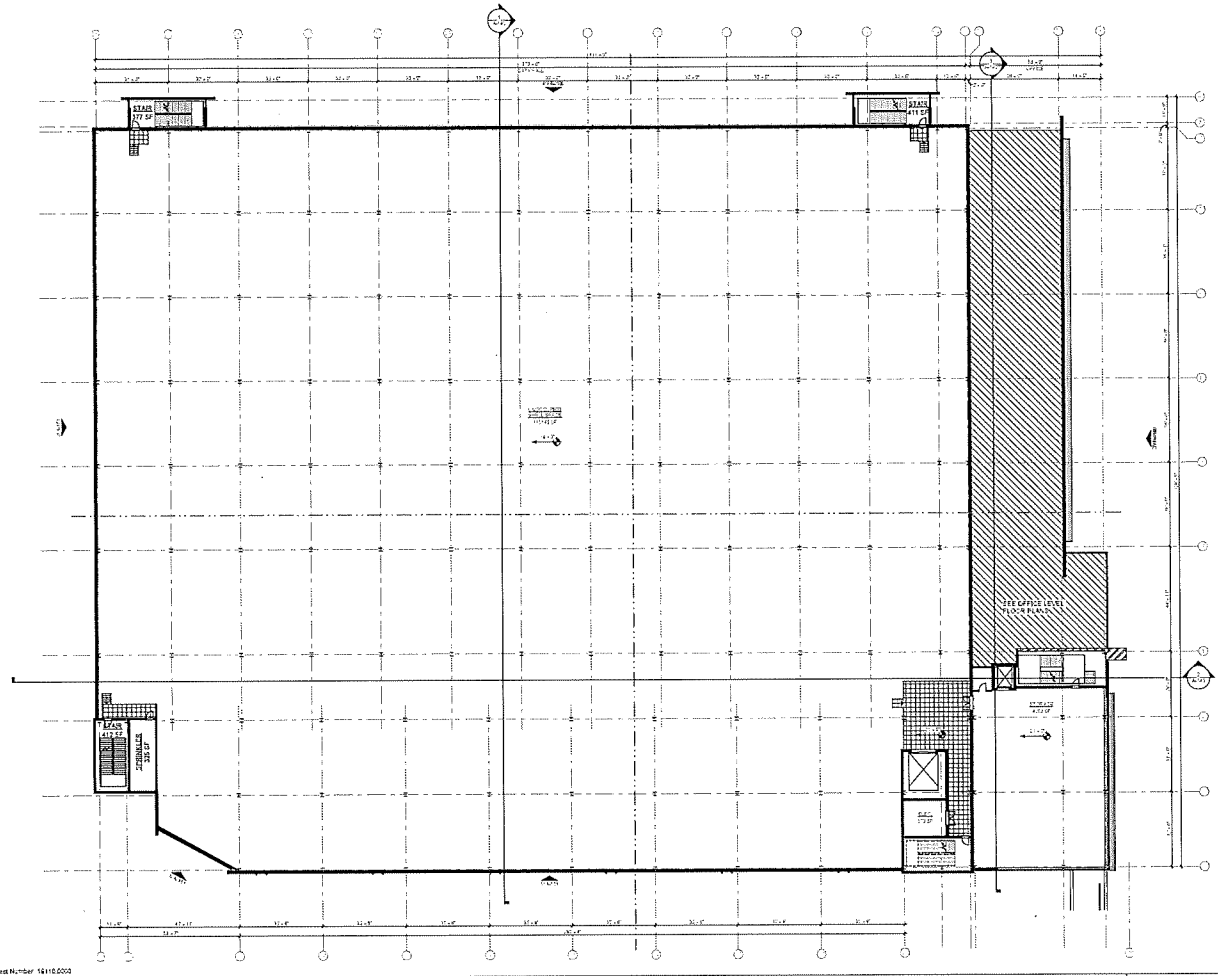
SKYBOX | CORGAN | R·G | CRITICAL | kw | REED ASSOCIATES

LEVEL 1 FLOOR PLAN

1/16" = 1'-0"
04.09.2020

DATA HALL
OFFICE

A-121



PROPOSED

LOT SIZE - 460,838± SF - 9.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIB
BUILDING 1 - STORAGE II - 4 STORIES @ 118,230± SF GROSS - 472,920 SF±
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"
BUILDING 2 - STORAGE II - 5 STORIES @ 14,585± SF GROSS - 87,520 SF±
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"

FAR - 1.40
LOT COVERAGE - 143,305± SF - 31%
OUTDOOR EQUIP STORAGE - 22,335± SF - 5%

GROSS BUILDING - 560,440± SF
PROD. DATA HALL - 1 @ 19,700 SF = 118,650 SF
DEV. DATA HALL - 6 @ 19,780 SF = 118,680 SF
MECH GALLERY - 14 @ 3,536 SF = 64,869 SF
UPS - 30 @ 2,275 SF =63,253 SF
OPEN OFFICE - 5,150 SF + 8,320 SF + 4 @ 6420 SF = 51,000 SF
MISC. - 118,973 SF

Project Number 16110.0000

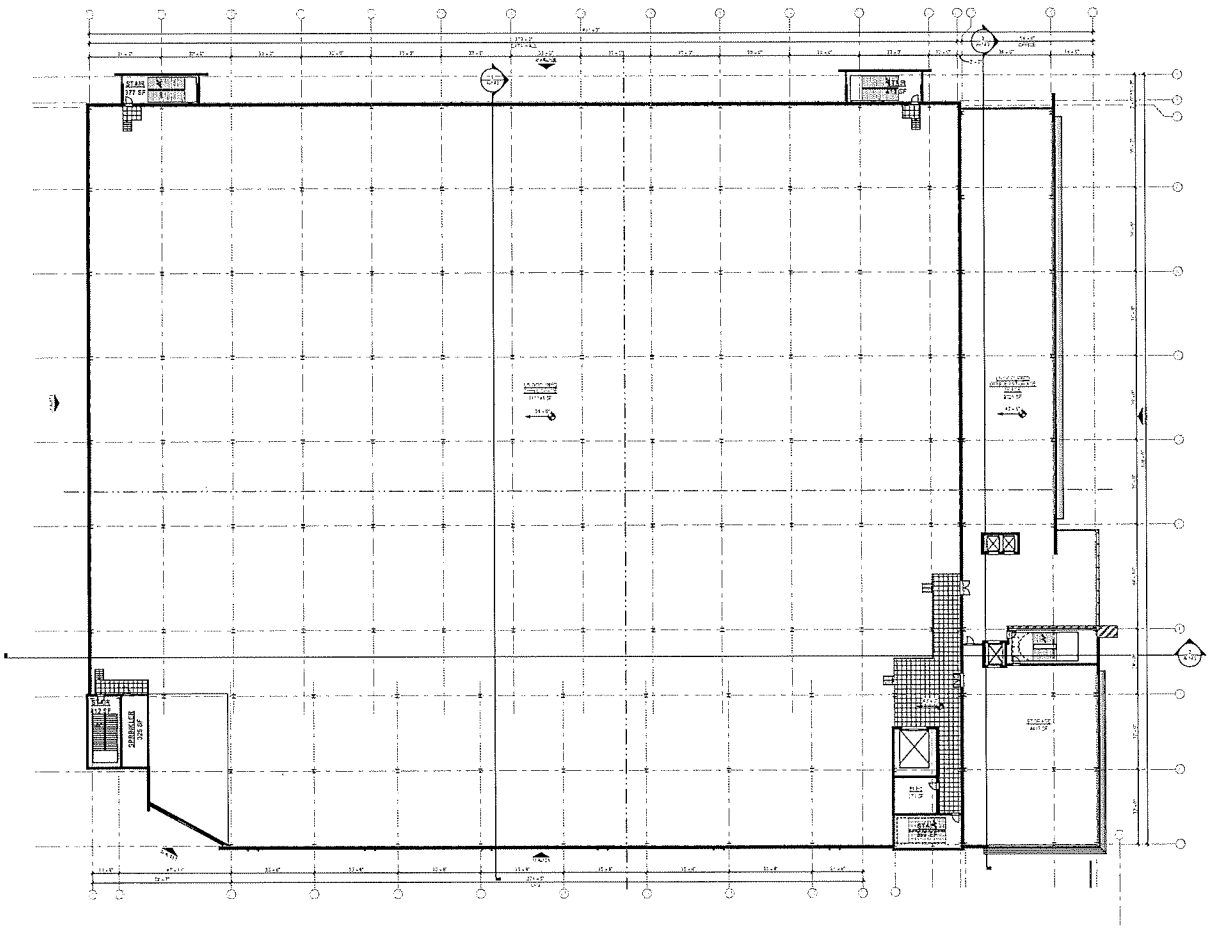
SKYBOX CORGAN R·G REED ASSOCIATES
CRITICAL kW

LEVEL 2 FLOOR PLAN

1/16" = 1'-0"
04.09.2020

DATA HALL OFFICE

A-122



PROPOSED

LOT SIZE - 490,673± SF - 9.15 ACRES

2 PROPOSED BUILDINGS - TYP IIB A
BUILDING 1 - STORAGE B - 4 STORIES @ 118,200± SF GROSS - 472,800 SF±
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"
BUILDING 2 - STORAGE B - 5 STORIES @ 14,535± SF GROSS - 87,520 SF±
PARAPET - 87'-0" MID SLOPE OF ROOF - 83'-6"

FAR - 1.49
LOT COVERAGE - 143,300± SF - 30%
OUTDOOR EQUIP STORAGE - 22,330± SF - 5%

GROSS BUILDING - 560,440± SF
FP DD, DATA HALL - 5 @ 19,780 SF = 118,680 SF
DEV. DATA HALL - 16 @ 19,780 SF = 316,480 SF
MECH GALLERY - 134 @ 3,336 SF = 84,603 SF
UPS - 33 @ 2,275 SF =69,350 SF
OPEN OFFICE - 3,135 SF + 8,325 SF = 1 @ 8420 SF = 51,000 SF
MISC. - 118,973 SF

Project Number 19113.0000

SKYBOX | CORGAN | R·G | CRITICAL | kW | REED ASSOCIATES

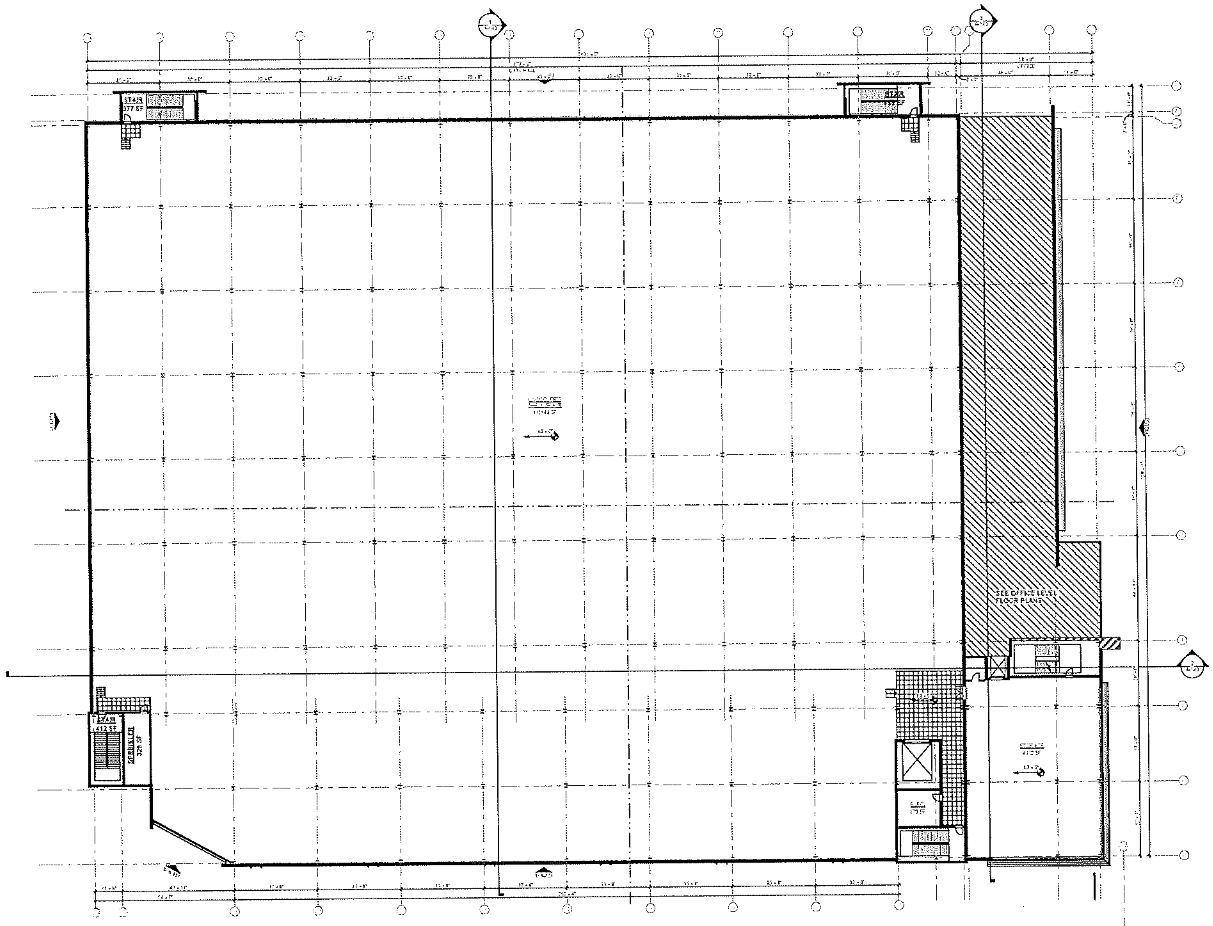
LEVEL 3 FLOOR PLAN

1/16" = 1'-0"
04.09.2020

4/9/2020

DATA HALL OFFICE

A-123



PROPOSED

LOT SIZE - 400,033± SF - 9.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE II - 4 STORIES @ 118,230± SF   GROSS - 472,920 SF±
PARAPET - 87' 0"   MID SLOPE OF ROOF - 83' 6"
BUILDING 2 - STORAGE II - 6 STORIES @ 14,585± SF   GROSS - 87,520 SF±
PARAPET - 87'0"   MID SLOPE OF ROOF - 83' 6"

FAR - 1.40
LOT COVERAGE - 143,300± SF - 36%
OUTDOOR EQUIP STORAGE - 22,300± SF - 6%

GROSS BUILDING - 560,440± SF

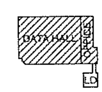
PROD. DATA HALL	- 6 @ 19,780 SF = 118,680SF
DEV. DATA HALL	- 6 @ 19,780 SF = 118,680 SF
MECH GALLERY	- 24 @ 3,536 SF = 84,860 SF
UPS	- 30 @ 2,275 SF =68,250 SF
OPEN OFFICE	- 5,100 SF + 8,220 SF + 4 @ 9430 SF = 51,000 SF
MISC.	-118,970 SF

Project Number: 19110.0000

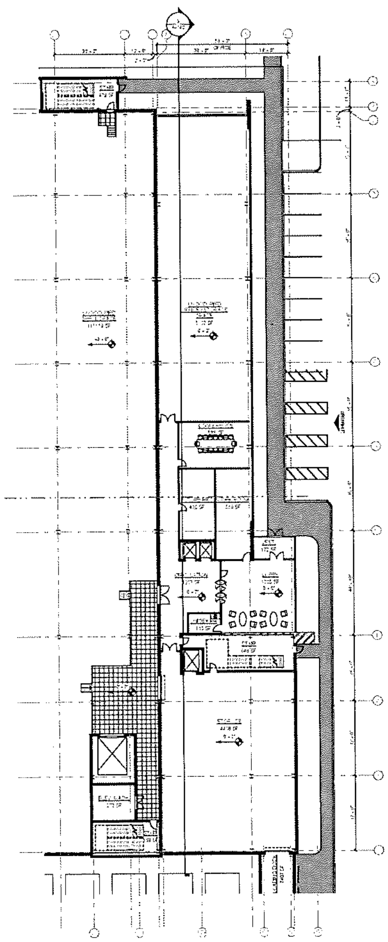
SKYBOX
CORGAN
R·G
CRITICAL
kW
REED ASSOCIATES

LEVEL 4 FLOOR PLAN

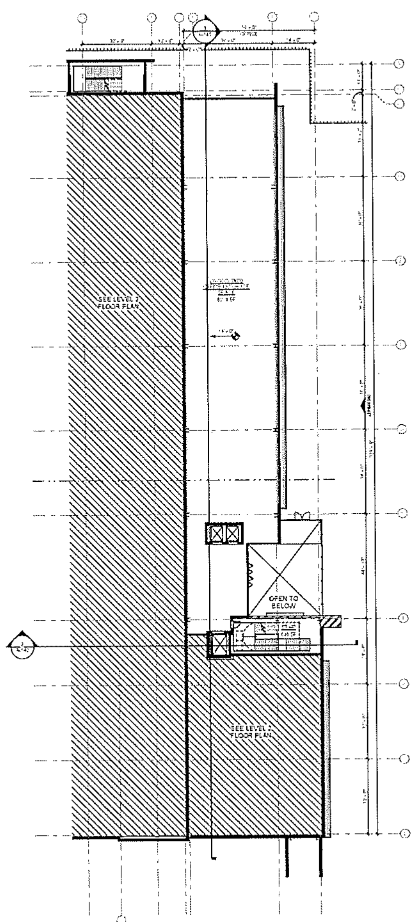
1/16" = 1'-0"
04.09.2020



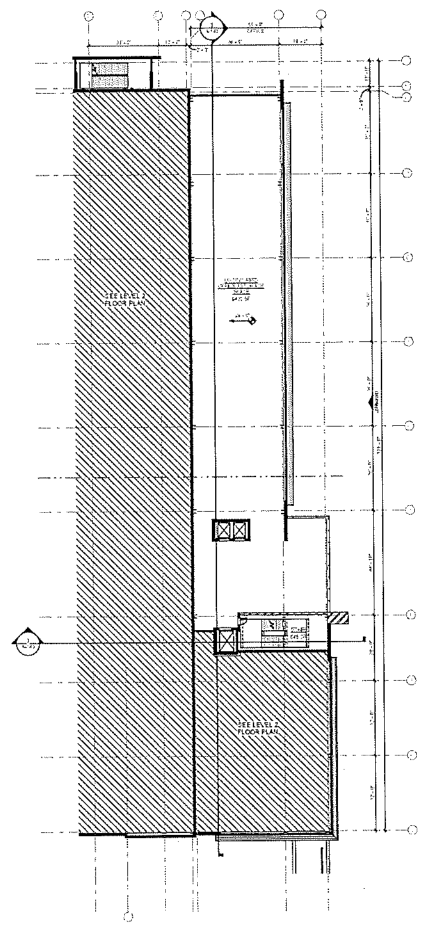
A-124



LEVEL 1 FLOOR PLAN - OFFICE
1/16" = 1'-0"



LEVEL 1.5 FLOOR PLAN - OFFICE
1/16" = 1'-0"



LEVEL 2.5 FLOOR PLAN - OFFICE
1/16" = 1'-0"

Project Number: 18110.0003

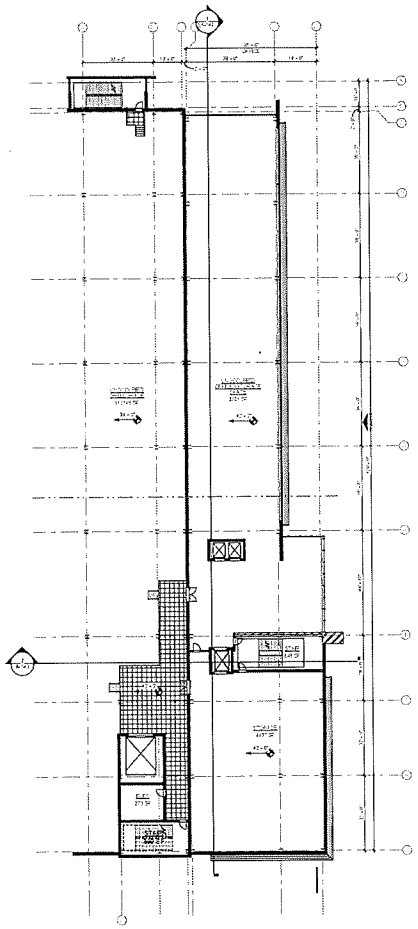
SKYBOX CORGAN R·G CRITICAL kW REED ASSOCIATES

OFFICE LEVEL - FLOOR PLANS

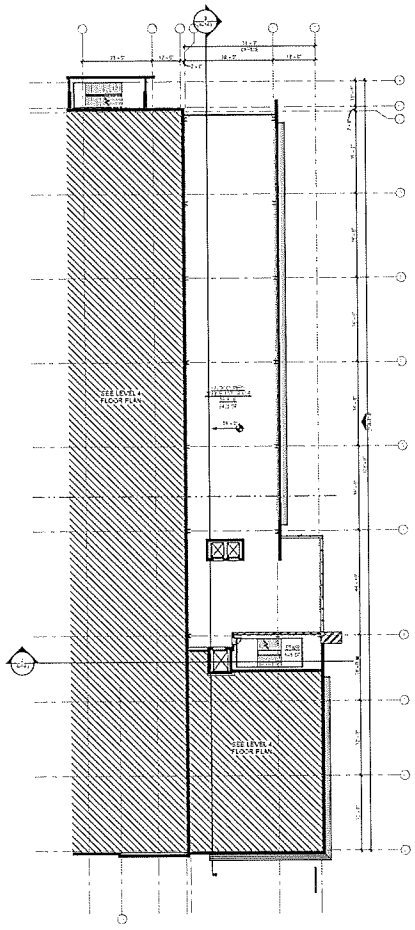
1/16" = 1'-0"
04.03.2020

DATA HALL

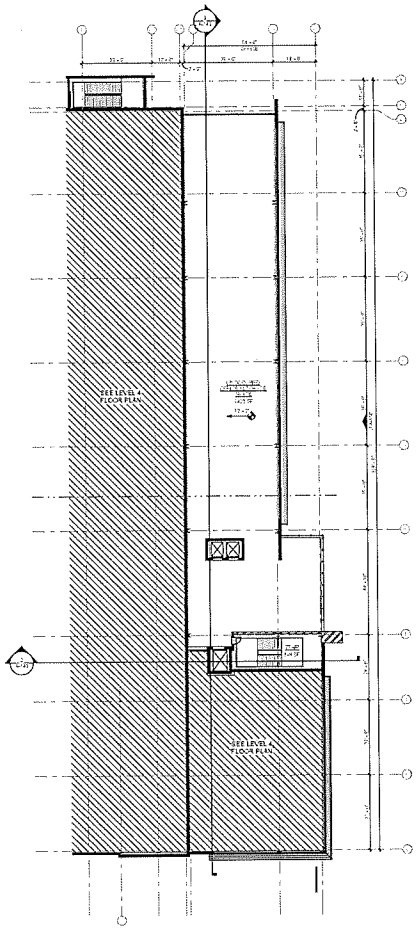
A-125



1 LEVEL 3 FLOOR PLAN - OFFICE
1/16" = 1'-0"



2 LEVEL 3.5 FLOOR PLAN - OFFICE
1/16" = 1'-0"



3 LEVEL 4.5 - FLOOR PLAN OFFICE
1/16" = 1'-0"

Project Number: 19110.0003

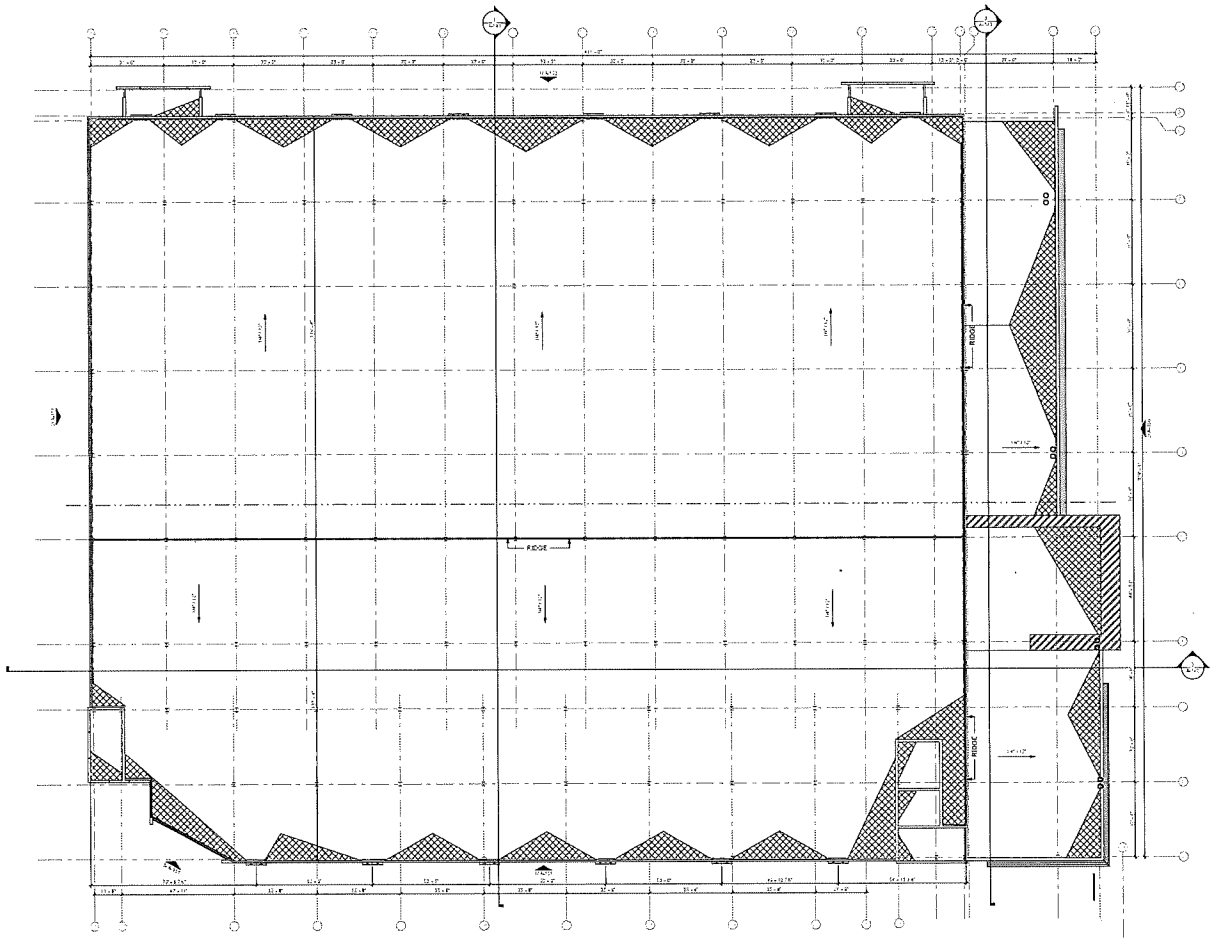
SKYBOX CORGAN R·G CRITICAL kw REED ASSOCIATES

OFFICE LEVEL - FLOOR PLANS

1/16" = 1'-0"
04.09.2020

DATA HALL

A-126



PROPOSED

LOT SIZE - 466,638± SF - 5.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE II - 4 STORIES @ 118,230± SF GROSS - 472,920 SF±
PARAPET - 87'0" MID SLOPE OF ROOF - 83' 6"
BUILDING 2 - STORAGE II - 4 STORIES @ 14,555± SF GROSS - 87,320 SF±
PARAPET - 87'0" MID SLOPE OF ROOF - 83' 6"

FAR - 1.45
LOT COVERAGE - 143,305± SF - 35%
OUTDOOR EQUIP STORAGE - 22,300± SF - 6%

GROSS BUILDING - 560,440± SF
PROD. DATA HALL - 7 @ 19,793 SF = 118,600 SF
DEV. DATA HALL - 1 @ 19,793 SF = 118,600 SF
MECH GALLERY - 24 @ 3,536 SF = 84,869 SF
UPS - 53 @ 2,275 SF = 63,353 SF
OPEN OFFICE - 5,105 SF + 9,200 SF + 4 @ 9,435 SF = 51,000 SF
MISC. - 118,973 SF

Project Number: 19110.0003

SKYBOX CORGAN RG REED ASSOCIATES CRITICAL KW

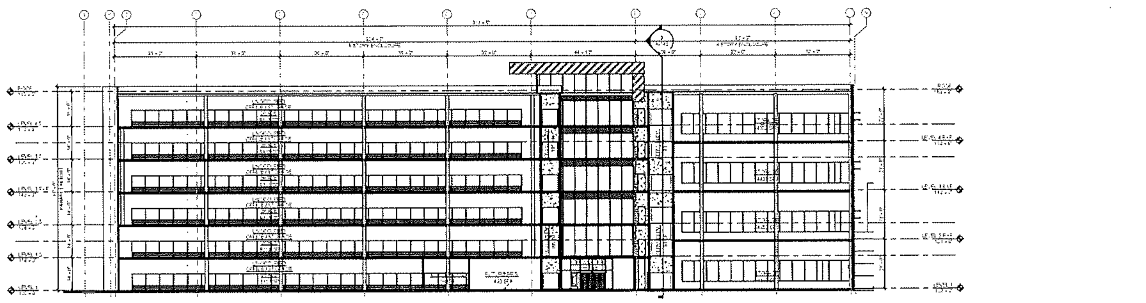
ROOF PLAN

1/16" = 1'-0"
04.09.2020

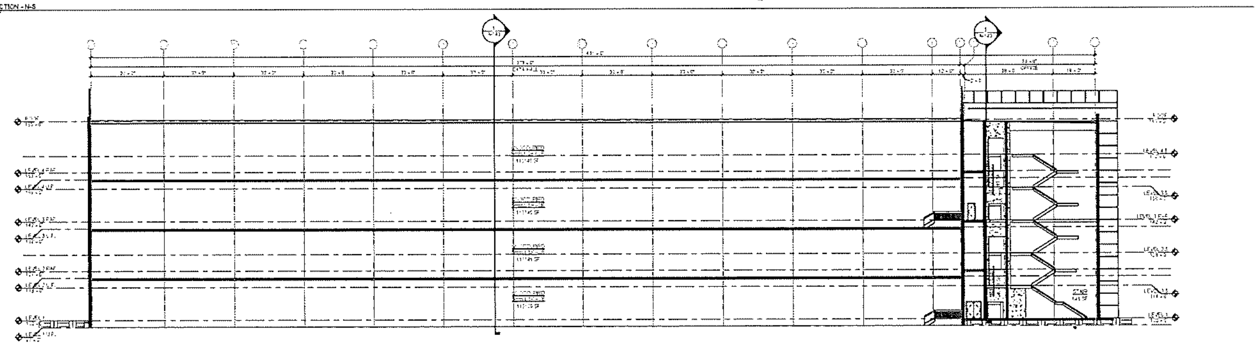
4/9/2020

DATA HALL CORGAN

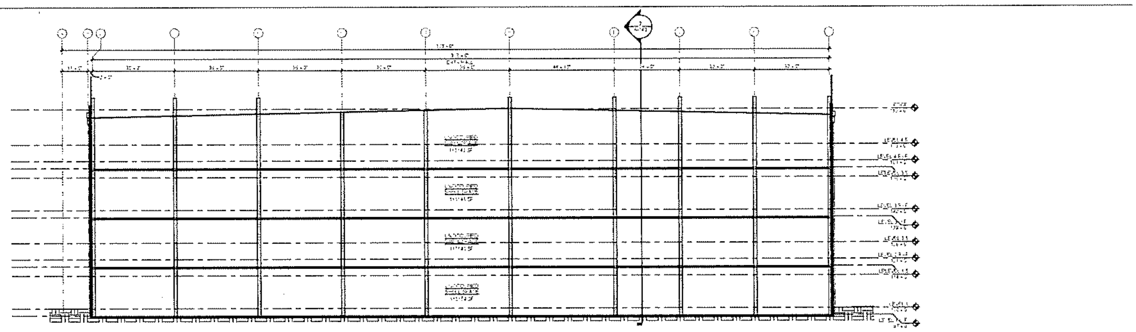
A-130



3 OFFICE SECTION - N-S
1/16" = 1'-0"



2 BUILDING SECTION E-W
1/16" = 1'-0"



1 DATA HALL SECTION N-S
N.T.S.

Project Number: 19110.0000

SKYBOX · CORGAN · R·G RUTER AND GORMAN, INC. · CRITICAL · kW · REED ASSOCIATES

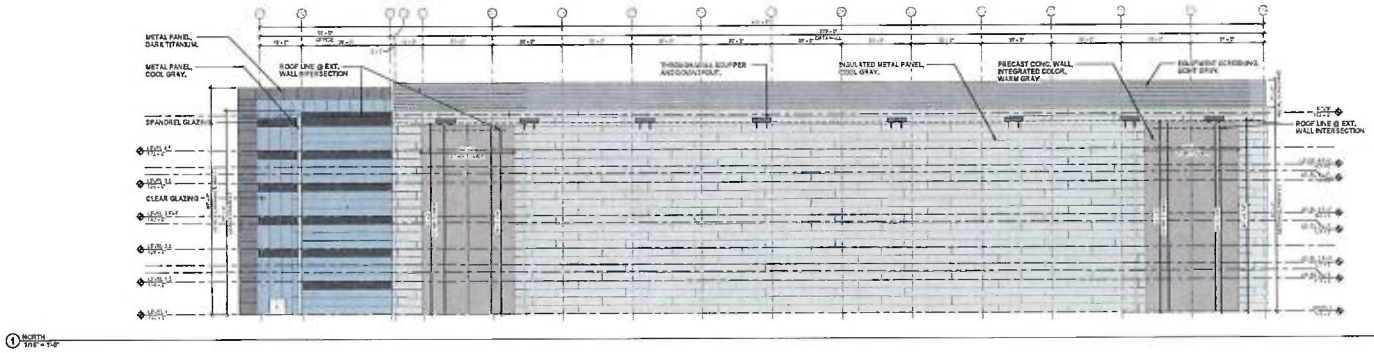
BUILDING SECTION

1/16" = 1'-0"

04.09.2020

DATA HALL

A-140



1 NORTH
3/16" = 1'-0"

2 EAST
3/16" = 1'-0"

Project Number 19110.0000

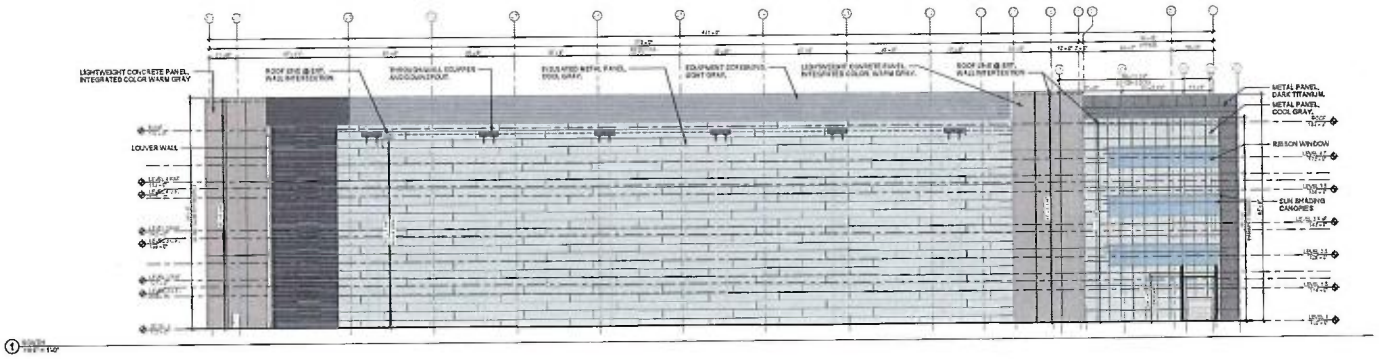
SKYBOX | CORGAN | R·G | CRITICAL | kw | REED ASSOCIATES

ELEVATIONS

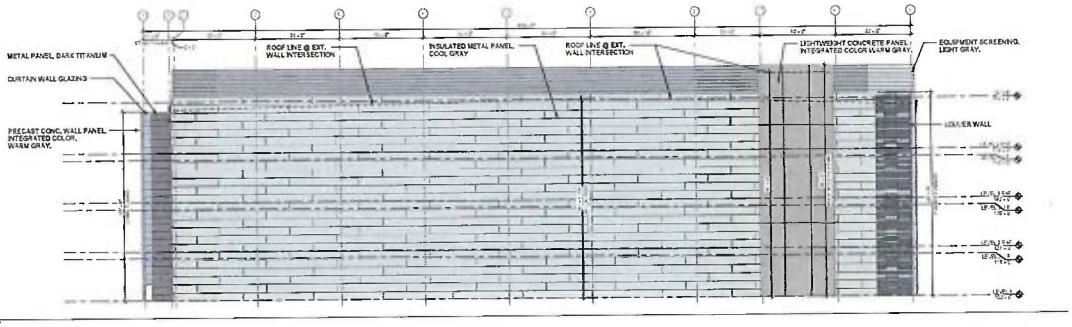
1/16" = 1'-0"
04.09.2020

BATTALION CONCEPTS

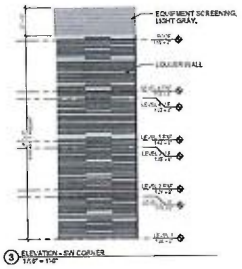
A-150



1 EAST 1/16" = 1'-0"



2 WEST 1/16" = 1'-0"



3 ELEVATION - SW CORNER 1/16" = 1'-0"

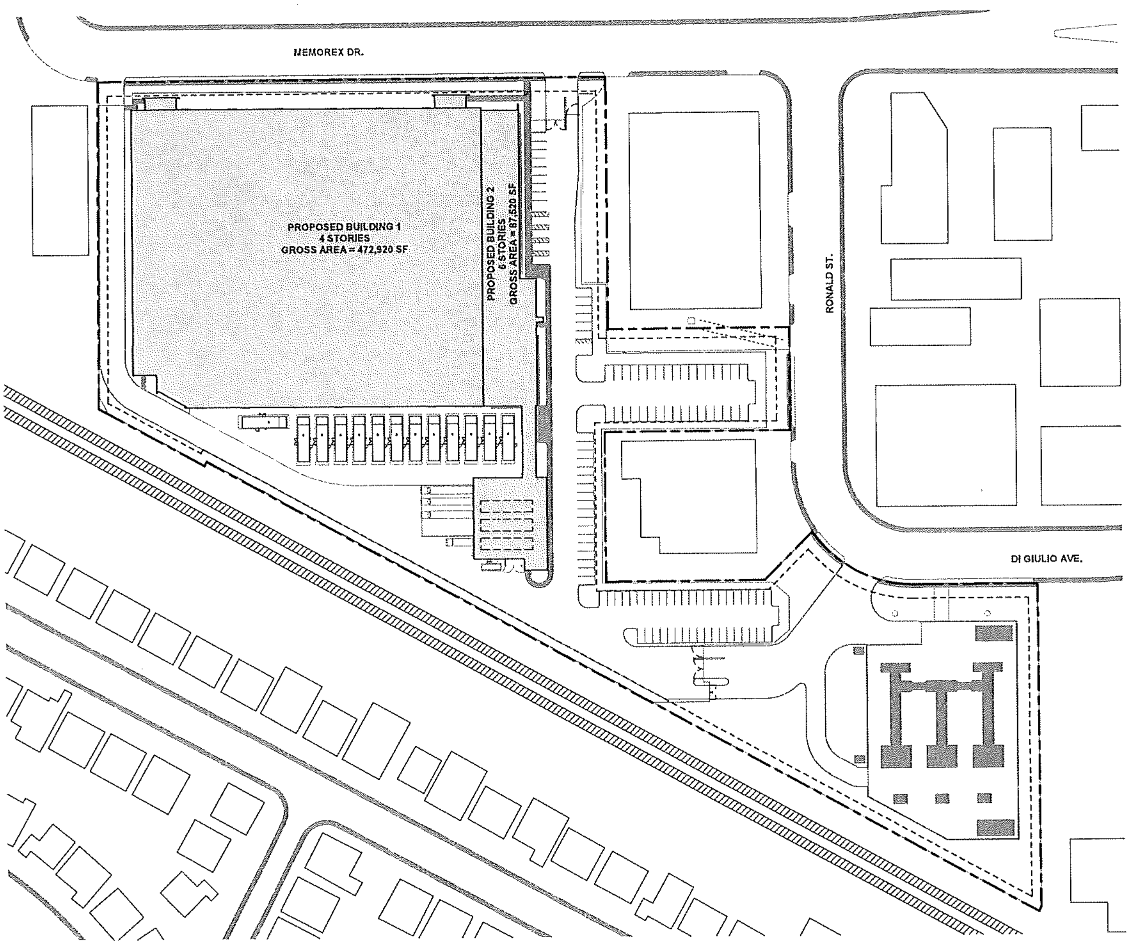
Project Number 19118.000

SKYBOX CORGAN R·G CRITICAL kW

ELEVATIONS

1/16" = 1'-0"
04.09.2020

A-151



EXISTING

LOT SIZE - 400,638± SF - 9.18 ACRES

3 EXISTING BUILDINGS - TO BE DEMOLISHED

BUILDING 1 - FACTORY - 3 STORIES @ 116,674± SF BUILDING FOOTPRINT
BUILDING 2 - FACTORY - 2 STORIES @ 22,995± SF BUILDING FOOTPRINT
BUILDING 3 - STORAGE - 1 STORY @ 2,944± SF BUILDING FOOTPRINT

LOT COVERAGE - 142,618± SF - 36%

PROPOSED

LOT SIZE - 400,638± SF - 9.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE II - 4 STORIES @ 118,230± SF GROSS - 472,920 SF±
PARAPET - 87'0" MID SLOPE OF ROOF - 83'6"
BUILDING 2 - STORAGE II - 6 STORIES @ 14,585± SF GROSS - 87,520 SF±
PARAPET - 87'0" MID SLOPE OF ROOF - 83'6"

FAR - 1.40
LOT COVERAGE - 143,300± SF - 36%
OUTDOOR EQUIP STORAGE - 22,300± SF - 6%

GROSS BUILDING - 560,440± SF
PROD. DATA HALL - 6 @ 19,780 SF = 118,680 SF
DEV. DATA HALL - 6 @ 19,780 SF = 118,680 SF
MECH GALLERY - 24 @ 3,536 SF = 84,900 SF
UPS - 30 @ 2,275 SF = 68,250 SF
OPEN OFFICE - 5,150 SF + 8,220 SF + 4 @ 9420 SF = 51,000 SF
MISC. - 118,973 SF

PARKING

112 REQUIRED SPACES @ 1 PER 5,000 SF
113 PARKING SPACES PROVIDED
55 PARKING SPACES
41 COMPACT PARKING SPACES (C)
11 CLEAN AIR VEHICLE PARKING SPACES (CAV)
7 FUTURE EV CHARGING SPACES (EV)
5 ADA ACCESSIBLE SPACES (ADA)

BICYCLE PARKING - 5% SHORT & LONG TERM
6 SHORT TERM SPACES (ST)
6 LONG TERM SPACES (LT)

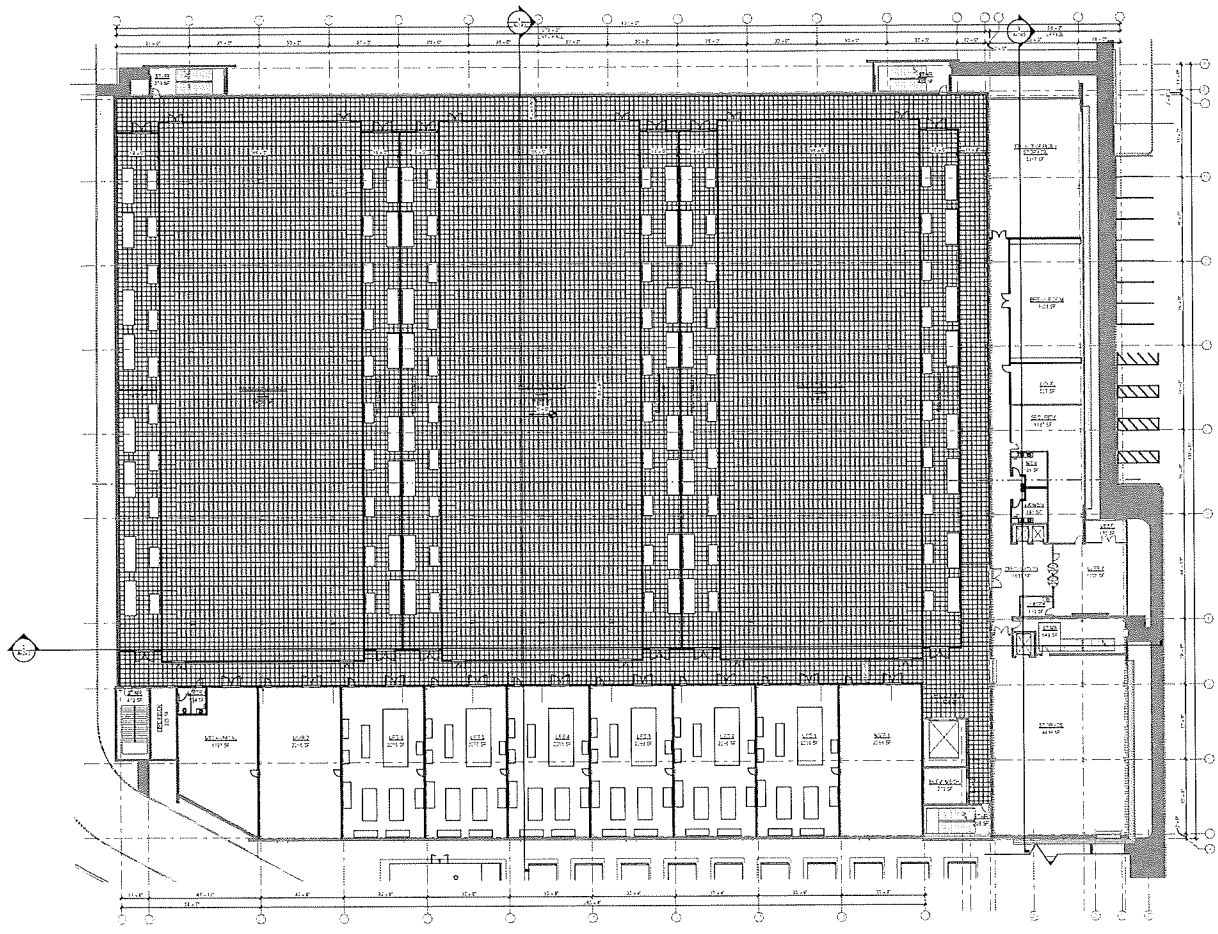
Project Number: 15110.0000

SKYBOX CORGAN R·G CRITICAL kW REED ASSOCIATES

SITE PLAN - MP

1" = 40'-0"
04.09.2020

A-210



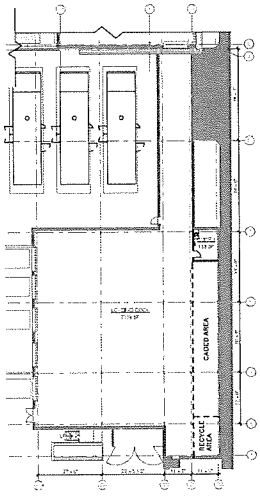
PROPOSED

LOT SIZE - 450,838± SF - 9.16 ACRES

2 PROPOSED BUILDINGS - TYPE IIB
BUILDING 1 - STORAGE B - 4 STORIES @ 118,230± SF GROSS - 472,920 SFs
PARAPET - 87'-0" MID SLOPE OF ROOF - 82'-6"
BUILDING 2 - STORAGE B - 5 STORIES @ 14,583± SF GROSS - 87,500 SFs
PARAPET - 87'-0" MID SLOPE OF ROOF - 82'-6"

FAR - 1.48
LOT COVERAGE - 143,320± SF - 34%
OUTDOOR EQUIP STORAGE - 27,320± SF - 6%

GROSS BUILDING 1 - 560,440± SF
PROD. DATA HALL - 4 @ 19,760 SF = 118,560 SF
DEV. DATA HALL - 4 @ 19,760 SF = 118,560 SF
MECH GALLERY - 24 @ 3,535 SF = 84,840 SF
UPS - 30 @ 2,273 SF = 68,250 SF
OPEN OFFICE - 5,100 SF + 8,200 SF = 4 @ 6420 SF = 51,000 SF
MISC. - 118,970 SF



Project Number: 19110.0000

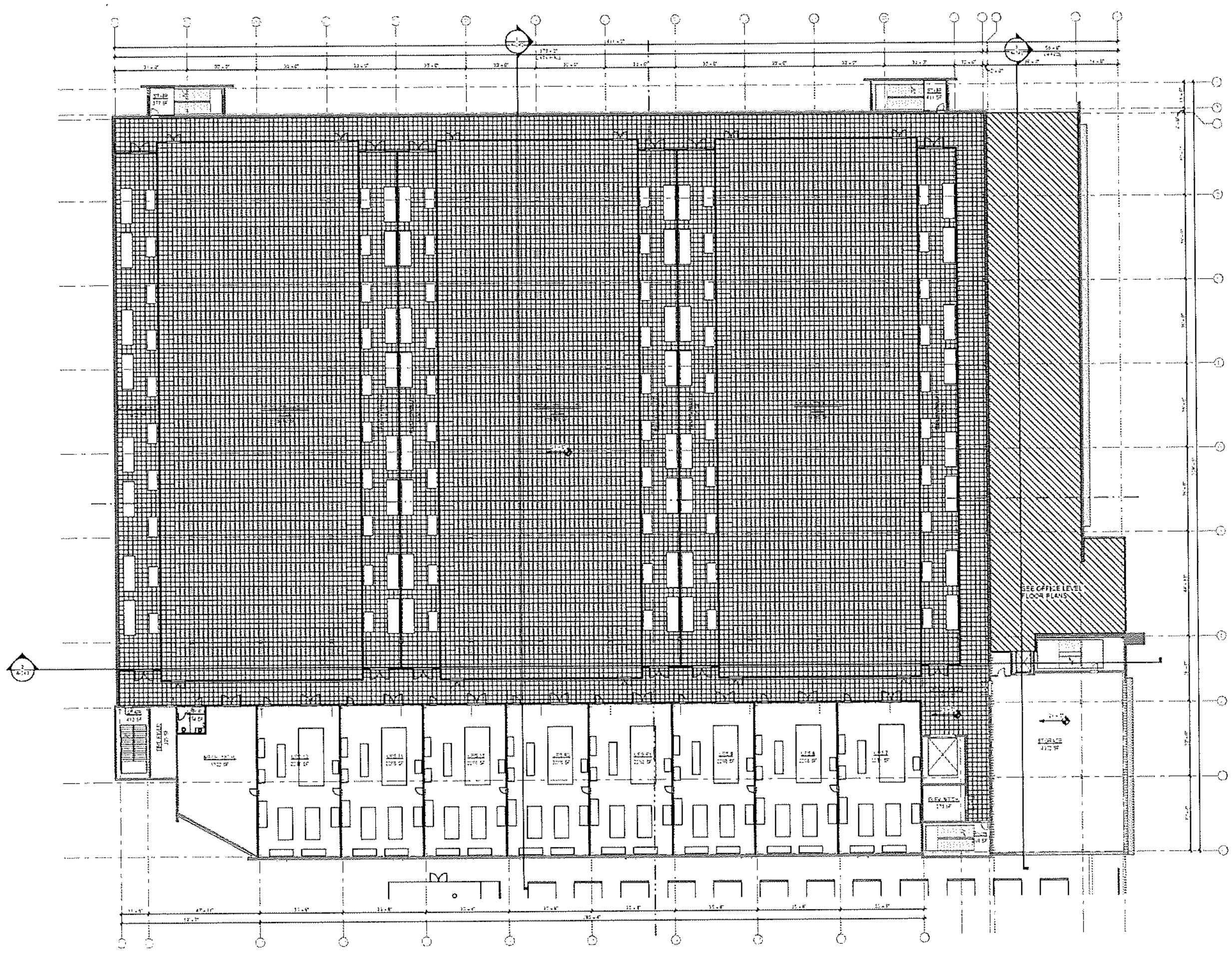
SKYBOX CORGAN R·G REED ASSOCIATES CRITICAL kw

LEVEL 1 FLOOR PLAN - MP

1/16" = 1'-0"
04.09.2020

DATA HALL

A-221



PROPOSED

LOT SIZE - 400,838± SF - 9.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE II - 4 STORIES @ 118,230± SF GROSS - 472,920 SF±
PARAFET - 87' 0" MID SLOPE OF ROOF - 83' 6"
BUILDING 2 - STORAGE II - 6 STORIES @ 14,585± SF GROSS - 87,520 SF±
PARAPET - 87' 0" MID SLOPE OF ROOF - 83' 6"

FAR - 1.40
LOT COVERAGE - 143,300± SF - 36%
OUTDOOR EQUIP STORAGE - 22,300± SF - 6%

GROSS BUILDING - 560,440± SF
PROD. DATA HALL - 6 @ 19,780 SF = 118,680 SF
DEV. DATA HALL - 6 @ 19,780 SF = 118,680 SF
MECH GALLERY - 24 @ 3,536 SF = 84,860 SF
UPS - 30 @ 2,275 SF = 68,250 SF
OPEN OFFICE - 5,100 SF + 8,220 SF + 4 @ 9420 SF = 51,000 SF
MISC. - 118,970 SF

Project Number: 19110.0000

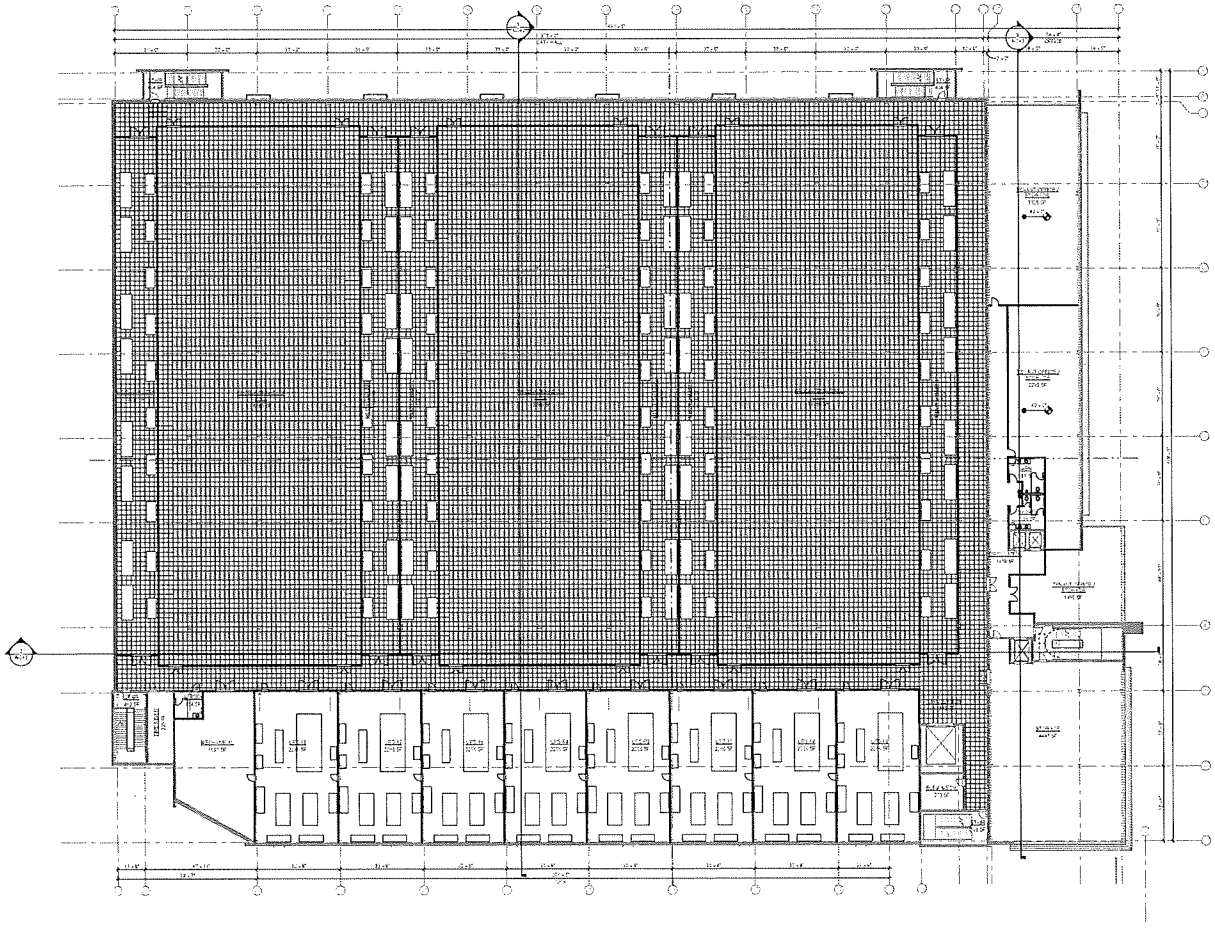
SKYBOX CORGAN R-G CRITICAL kW REED ASSOCIATES

LEVEL 2 FLOOR PLAN - MP

1/16" = 1'-0"
04.09.2020

DATA HALL

A-222



PROPOSED

LOT SIZE - 456,838 SF - 8.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE III - 4 STORIES @ 118,350± SF GROSS - 472,800 SF±
PARAPET - 97'-0" MID SLOPE OF ROOF - 83'-6"
BUILDING 2 - STORAGE III - 5 STORIES @ 14,585± SF GROSS - 87,525 SF±
PARAPET - 97'-0" MID SLOPE OF ROOF - 83'-6"

FAR = 1.43
LOT COVERAGE - 143,300± SF - 35%
OUTDOOR EQUIP STORAGE - 22,300± SF - 5%

GROSS BUILDING - 560,4406 SF
PROD. DATA HALL - 4 @ 19,700 SF = 118,800SF
DEV. DATA HALL - 2 @ 19,350 SF = 118,650 SF
MECH GALLERY - 24 @ 3,336 SF = 64,803 SF
UPS - 33 @ 2,275 SF =69,250 SF
OPEN OFFICE - 5,105 SF + 8,225 SF = 4 @ 8420 CF = 51,600 SF
MISC. - 118,970 SF

Project Number 19110.0000

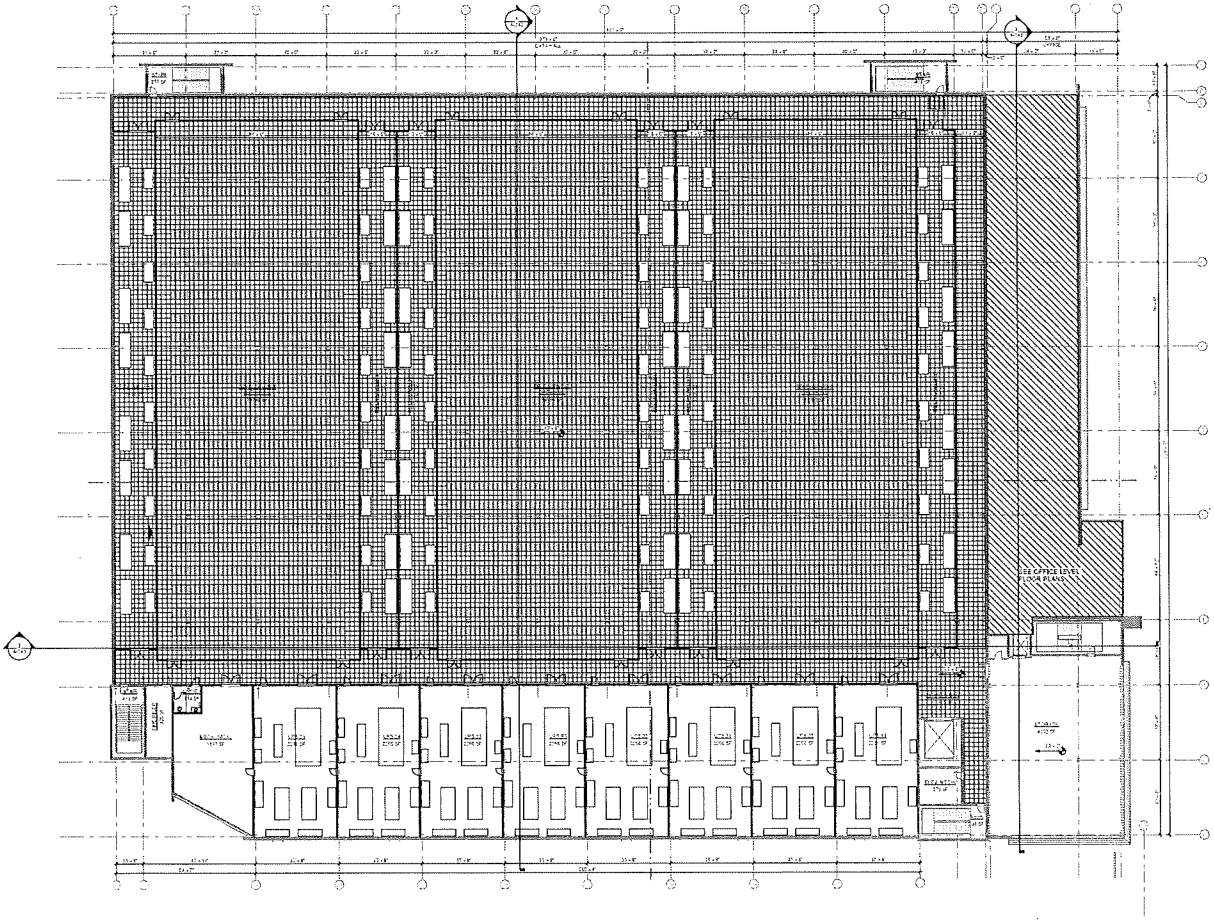
SKYBOX CORGAN R·G REED ASSOCIATES CRITICAL kw

LEVEL 3 FLOOR PLAN - MP

1/16" = 1'-0"
04.09.2020

DATA HALL OFFICE

A-223



PROPOSED

LOT SIZE - 490,5368 SF - 6.18 ACRES

2 PROPOSED BUILDINGS - TYPE IIA
BUILDING 1 - STORAGE B - 4 STORIES @ 118,3004 SF GROSS - 472,633 SFs
PARAPET - 97'-0" MID SLOPE OF ROOF - 83'-6"
BUILDING 2 - STORAGE B - 5 STORIES @ 14,555 SF GROSS - 67,820 SFs
PARAPET - 97'-0" MID SLOPE OF ROOF - 83'-6"

FAR = 1.43
LOT COVERAGE - 143,300± SF - 29%
OUTDOOR EQUIP STORAGE - 22,305± SF - 5%

GROSS BUILDING - 569,4456 SF
FROZEN DATA HALL - 6 @ 19,780 SF = 118,6835F
DEV. DATA HALL - 6 @ 19,780 SF = 118,680 SF
MECH GALLERY - 24 @ 3,536 SF = 84,803 SF
UPS - 33 @ 2,275 SF =75,250 SF
OPEN OFFICE - 5,155 SF + 8,220 SF + 4 @ 8430 SF = 51,005 SF
MISC. - 118,972 SF

Project Number: 19119.0000

SKYBOX CORGAN RG REED ASSOCIATES CRITICAL kw

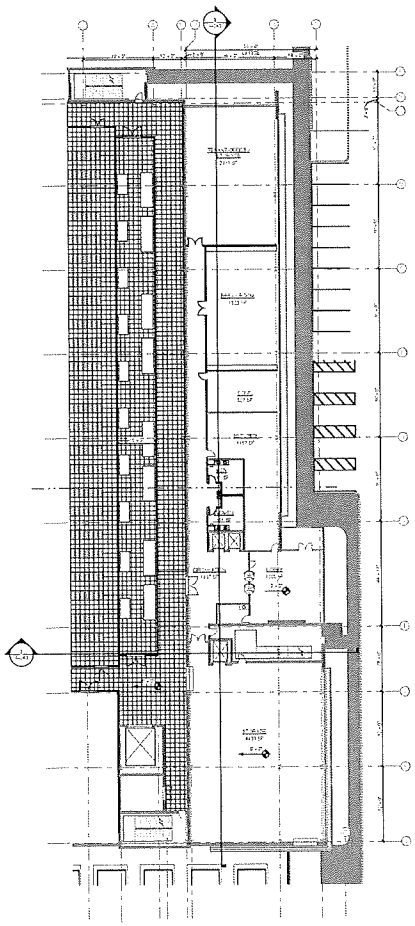
LEVEL 4 FLOOR PLAN - MP

1/16" = 1'-0"
04.09.2020

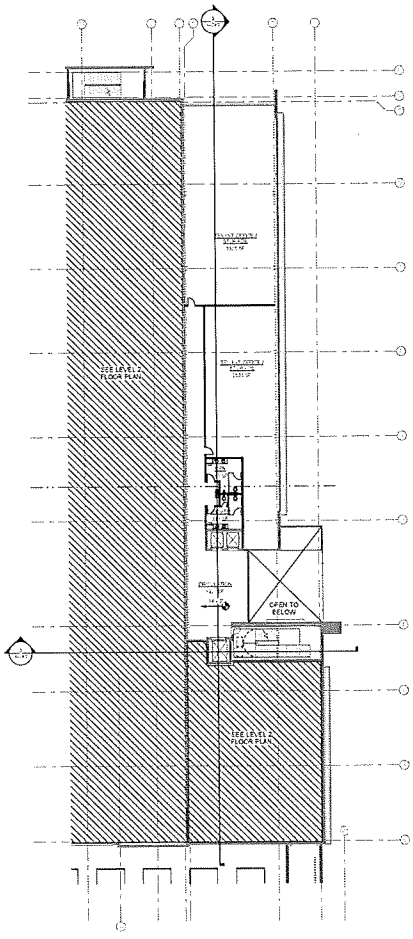
4/9/2020

GATEHALL

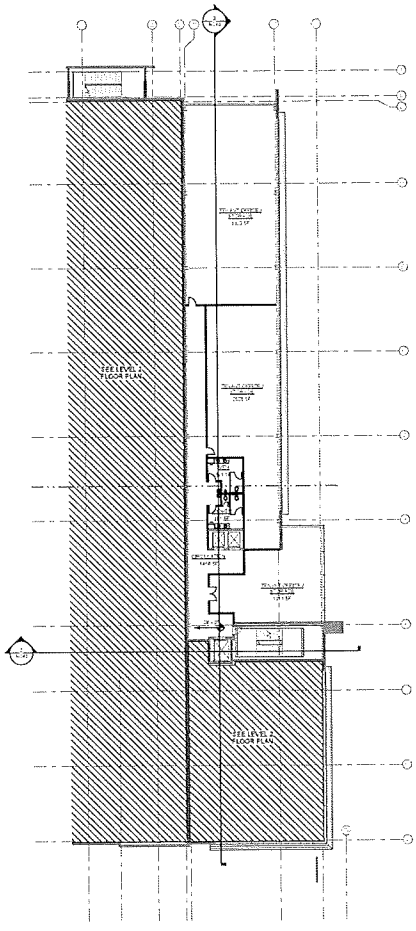
A-224



1 LEVEL 1 FLOOR PLAN - OFFICE - MP
1/16" = 1'-0"



2 LEVEL 1.5 FLOOR PLAN - OFFICE - MP
1/16" = 1'-0"



3 LEVEL 2 FLOOR PLAN - OFFICE - MP
1/16" = 1'-0"

Project Number 19113.000

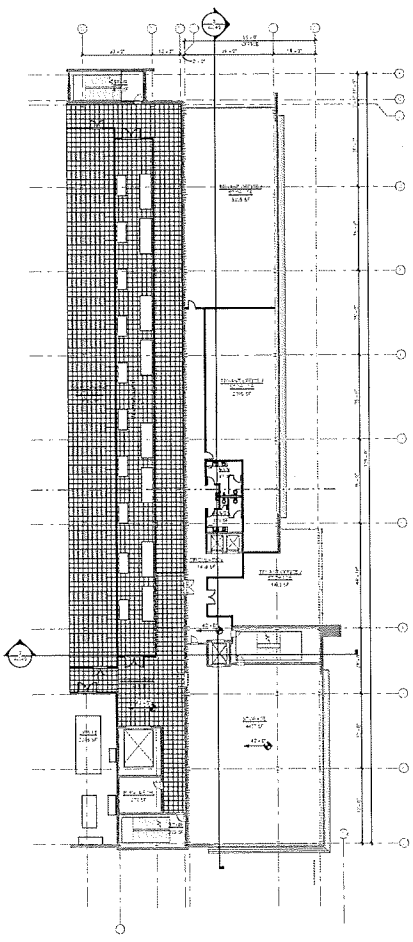
SKYBOX CORGAN RG CRITICAL kw REED ASSOCIATES

OFFICE LEVEL - FLOOR PLANS - MP

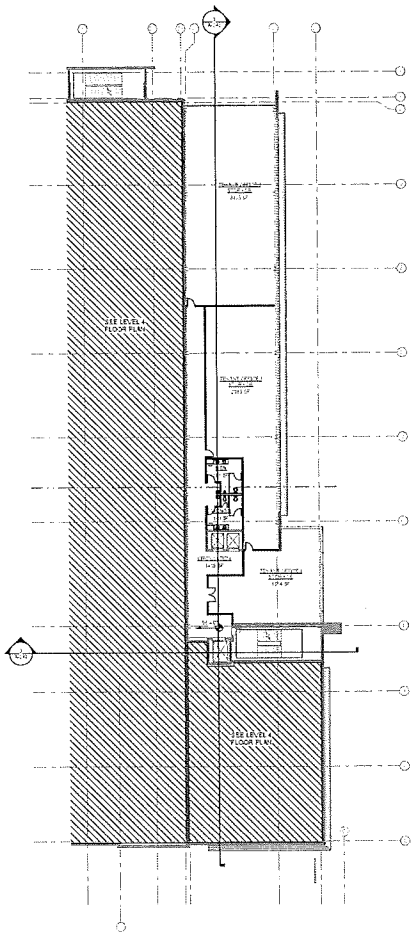
1/16" = 1'-0"
04.09.2020

DATA HALL

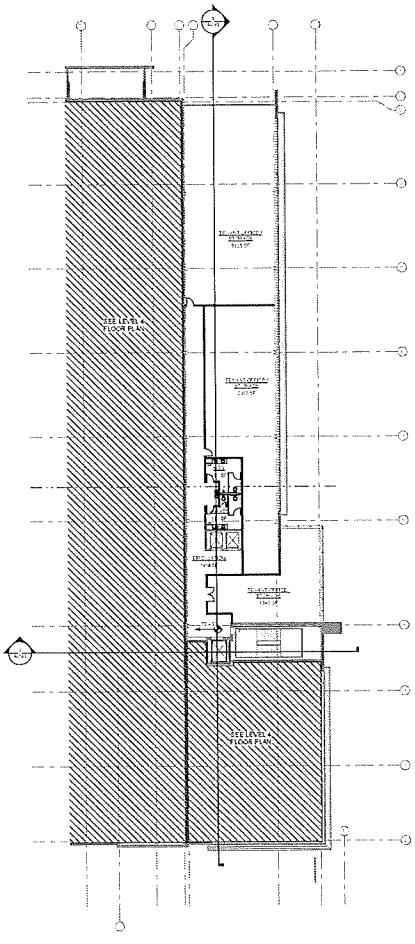
A-225



1 LEVEL 3 FLOOR PLAN - OFFICE - MP
1/16" = 1'-0"



2 LEVEL 3.5 FLOOR PLAN - OFFICE - MP
1/16" = 1'-0"



3 LEVEL 4.5 - FLOOR PLAN OFFICE - MP
1/16" = 1'-0"

Project Number: 19110.0000

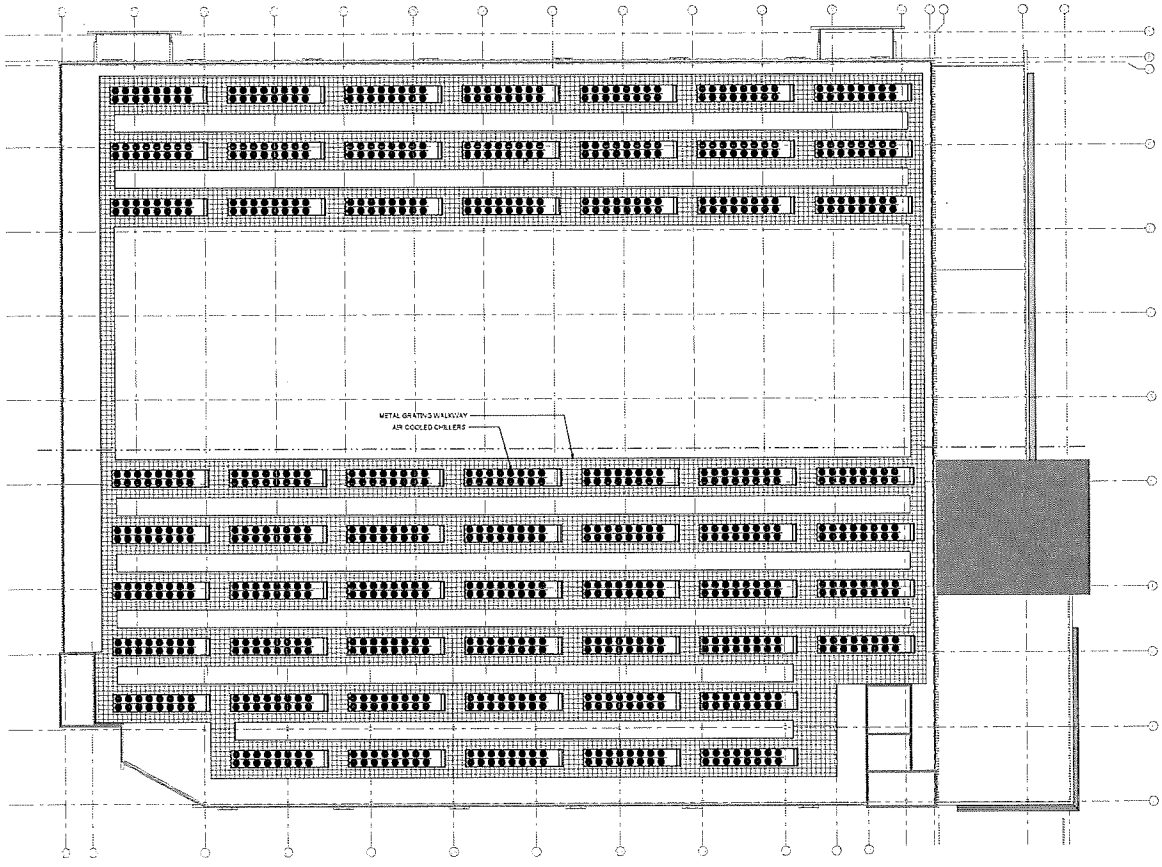
SKYBOX CORGAN R·G CRITICAL kW REED ASSOCIATES

OFFICE LEVEL - FLOOR PLANS - MP

1/16" = 1'-0"
04.03.2020

DATA HALL

A-226



Project Number 19110.000

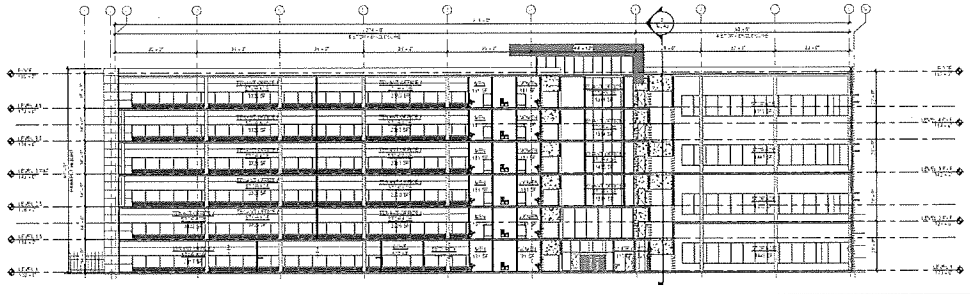
SKYBOX | CORGAN | R·G | CRITICAL | kW | REED ASSOCIATES

ROOFTOP EQUIPMENT PLAN - MP

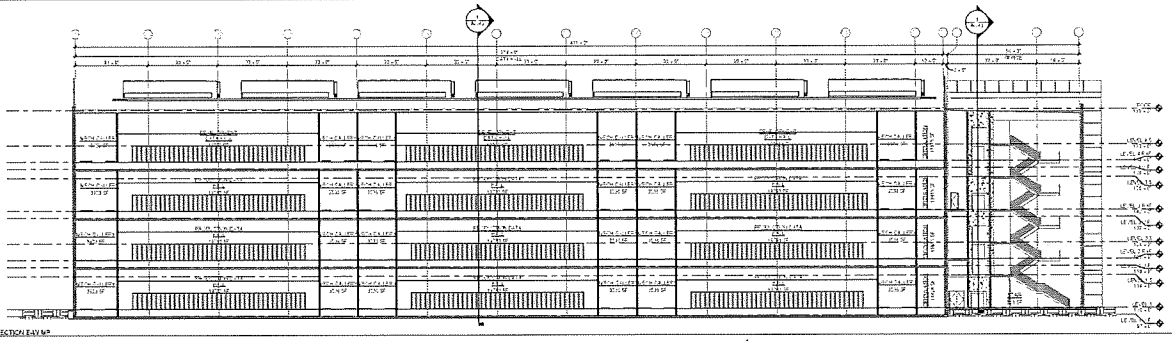
1/16" = 1'-0"
04.09.2020

DATE/MARK

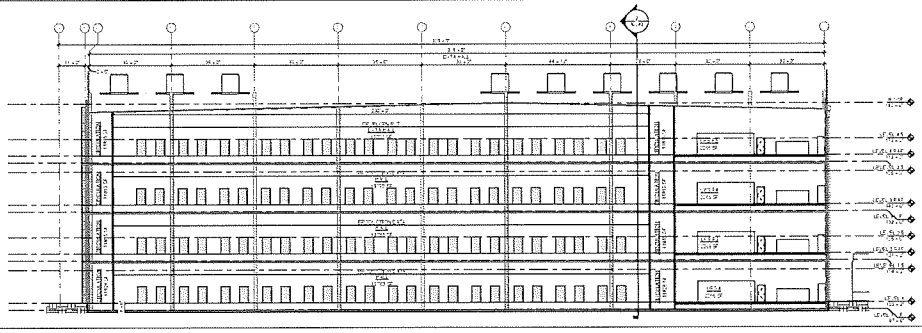
A-230



3 OFFICE SECTION - N-S MP
1/16" = 1'-0"



2 BUILDING SECTION E&W MP
1/16" = 1'-0"



1 BUILDING SECTION N-S MP
1/16" = 1'-0"

Project Number 19110.0000

SKYBOX CORGAN RG REED ASSOCIATES CRITICAL kw

BUILDING SECTION - MP

1/16" = 1'-0"
04.09.2020

DARNALL GROUP

A-240

ONE LINE

LIGHTING

POWER

FIRE ALARM

GROUNDING

LIGHTNING PROTECTION

ABBREVIATIONS

FEEDER NAMING SCHEME

LINE TYPE LEGEND

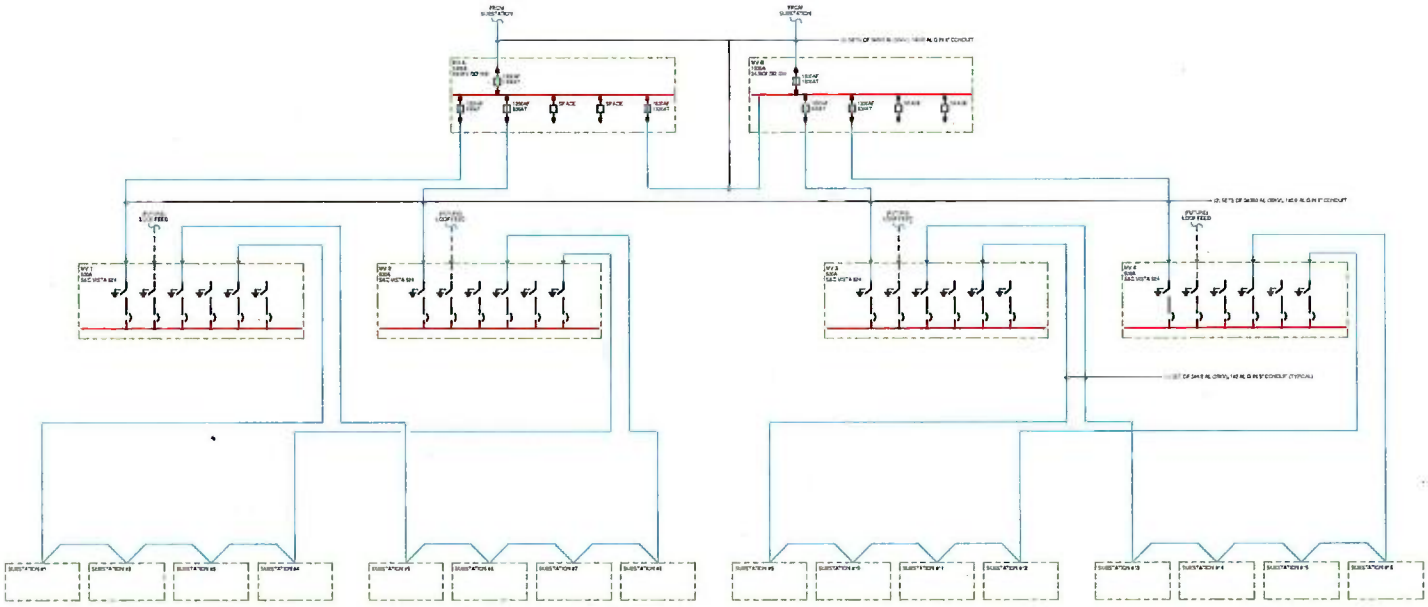
Project Number: 19161

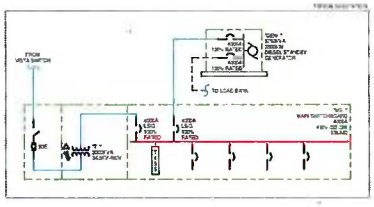
SKYBOX | CORGAN | R G | CRITICAL | kW | REED ASSOCIATES

LEGEND AND ABBREVIATIONS

As indicated
04.09.2020

E-100





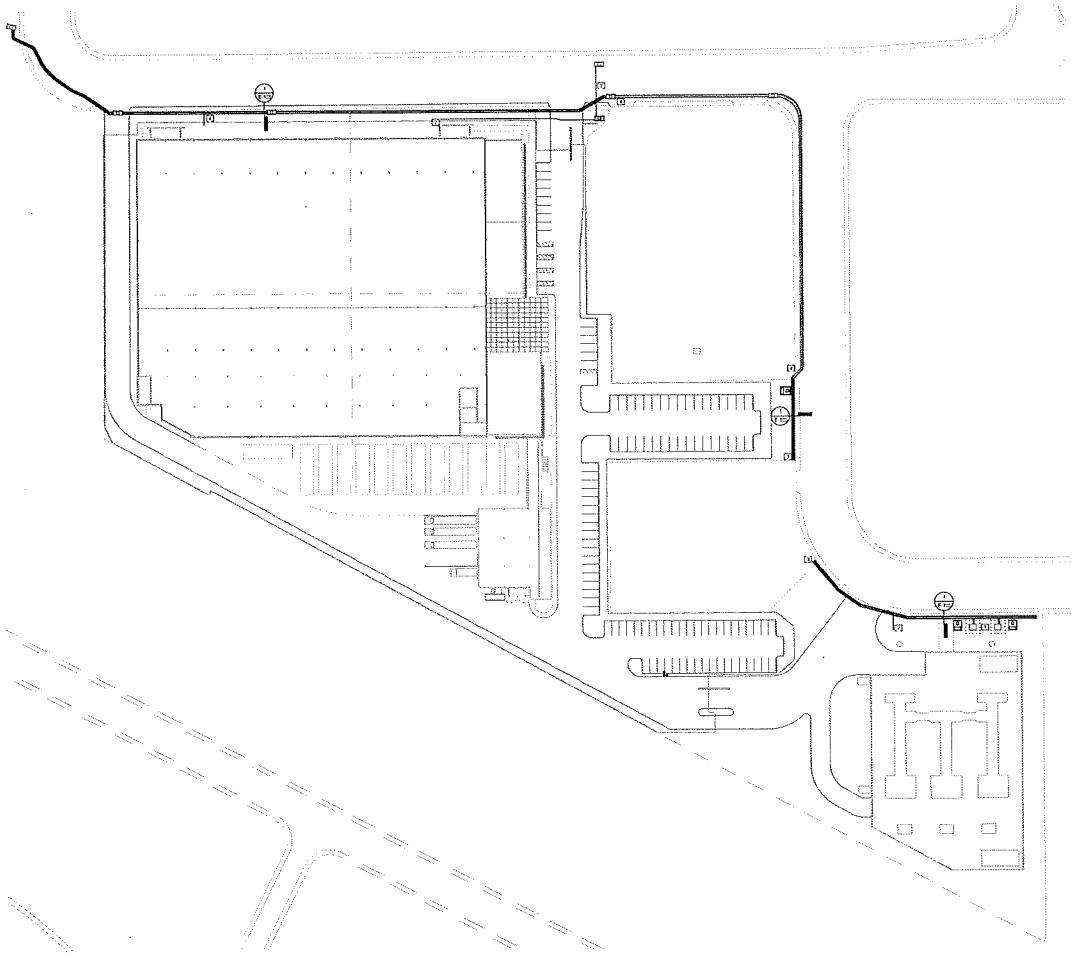
SKYBOX CORGAN R·G CRITICAL kW REED ASSOCIATES

MV ONELINE

N.T.S.

03.17.2020

E-101



KEYED NOTES

Project Number 19181

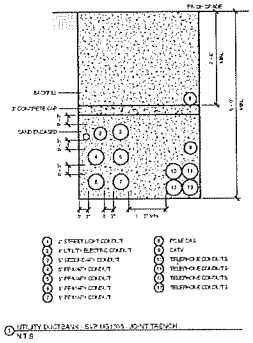
SKYBOX | CORGAN | RG | CRITICAL | kW | REED ASSOCIATES

ELECTRICAL SITE ROUTING PLAN

1" = 40'-0"
03.17.2020

CATHEDRAL

E-102



1 UTILITY DUCTBANK - ELECTRICAL/TELEPHONE JOINT TRENCH
N.T.S.

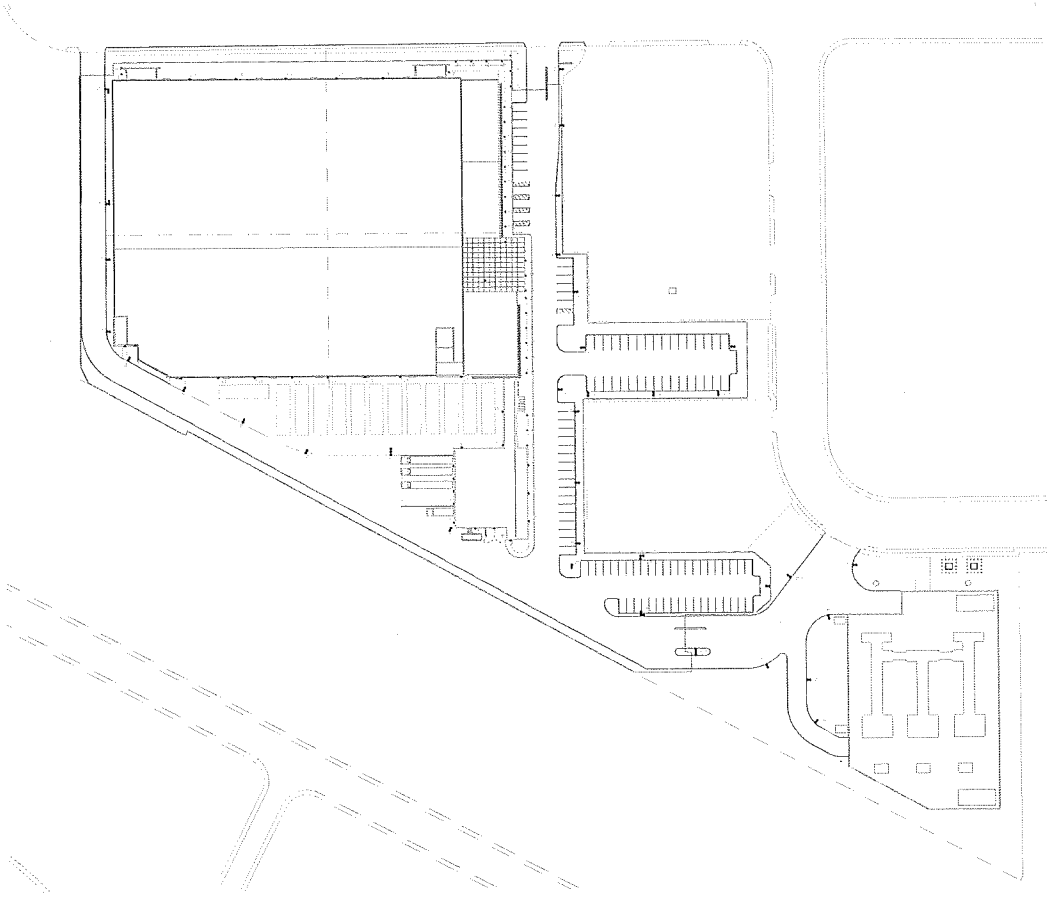
Project Number: 19161

SKYBOX CORGAN R.G. CRITICAL kW REED ASSOCIATES

ELECTRICAL SITE DETAILS

N.T.S.
03.17.2020

E-103



Project Number: 19 161

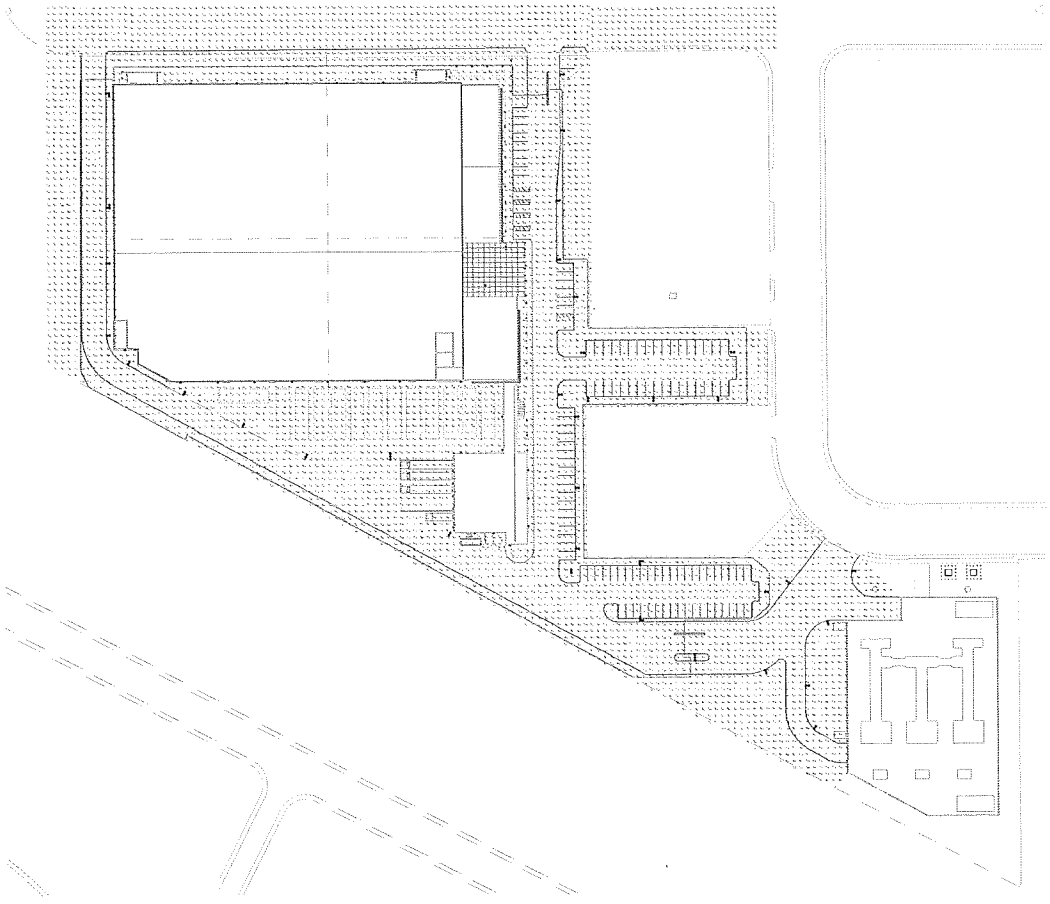
SKYBOX CORGAN RG REED ASSOCIATES CRITICAL kW

ELECTRICAL SITE LIGHTING PLAN

1" = 40'-0"
03.17.2020

DATA HALL

E-104



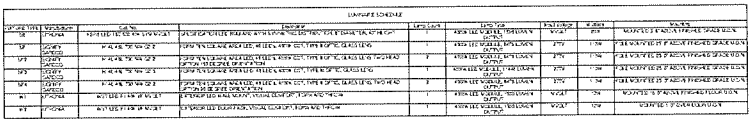
Project Number: 19.161

SKYBOX | CORGAN | R·G | CRITICAL | kW | REED ASSOCIATES

SITE LIGHTING PHOTOMETRICS

1" = 40'-0"
03.17.2020

E-105



Project Number: 19181

SKYBOX | CORGAN | R·G | CRITICAL | kW | REED ASSOCIATES

LUMINAIRE SCHEDULE

03.17.2020

E-106

MEMOREX DATA CENTER PROJECT
FINDINGS ON SIGNIFICANT ENVIRONMENTAL IMPACTS

Biological Resources

Impact: **Impact BIO-1:** Tree removal during the nesting season could impact protected raptors and/or other protected migratory birds. Any loss of fertile bird eggs, or individual nesting birds, or any activities resulting in nest abandonment during construction would constitute a significant impact.

Mitigation: **MM BIO-1.1:** Construction shall be scheduled to avoid the nesting bird season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay Area extends from February 1 through August 31.

If it is not possible to schedule construction activities between September 1 and January 31, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure no nest shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).

During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game Code shall not be disturbed during project construction.

A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to the start of grading or tree removal.

Finding: The project, with implementation of the above mitigation measure, would reduce impacts to nesting birds (if present) by avoiding construction during nesting bird season or completing pre-construction nesting bird surveys to minimize and/or avoid impacts to nesting birds. **(Less Than Significant with Mitigation Incorporated)**

Facts in Support of Finding: Implementation of Mitigation Measure MM BIO-1.1 would reduce construction impacts to nesting birds to a less than significant level by either avoiding construction activities during the nesting season or conducting preconstruction surveys during the nesting season that would provide the basis for establishing construction-free buffer zones for any active nests that are found to protect the nests from disturbance caused by construction activities. Mitigation Measure MM BIO-1.1 specifically requires that a qualified biologist conduct

such surveys and make recommendations in consultation with the CDFW, ensuring that potential impacts would be fully mitigated.

Impact: **Impact BIO-5:** Trees to be retained on-site may be injured during project construction activities including demolition and site grading. Additionally, trees adjacent to the proposed overhead transmission line may require substantial pruning to ensure clearance.

Mitigation: **MM BIO-5.1:** Barricades – Prior to initiation of construction activity, temporary barricades would be installed around all trees in the construction area. Six-foot high, chain link fences would be mounted on steel posts, driven two feet into the ground, at no more than 10-foot spacing. The fences shall enclose the entire area under the drip line of the trees or as close to the drip line area as practical. These barricades will be placed around individual trees and/or groups of trees.

MM BIO-5.2: Root Pruning (if necessary) – During and upon completion of any trenching/grading operation within a tree's drip line, should any roots greater than one inch in diameter be damaged, broken or severed, root pruning to include flush cutting and sealing of exposed roots should be accomplished under the supervision of a qualified Arborist to minimize root deterioration beyond the soil line within 24 hours.

MM BIO-5.3: Pruning – Pruning of the canopies to include removal of deadwood should be initiated prior to construction operations. Such pruning will provide any necessary construction clearance, will lessen the likelihood or potential for limb breakage, reduce 'windsail' effect and provide an environment suitable for healthy and vigorous growth.

MM BIO-5.4: Fertilization – Fertilization by means of deep root soil injection should be used for trees to be impacted during construction in the spring and summer months.

MM BIO-5.5: Mulch – Mulching with wood chips (maximum depth of three inches) within tree environments should be used to lessen moisture evaporation from soil, protect and encourage adventitious roots and minimize possible soil compaction.

Finding: With implementation of mitigation measures MM BIO-5.1 though MM BIO-5.5, the project would result in a less than significant impact to trees. **(Less Than Significant with Mitigation Incorporated)**

Facts in Support of Finding: The implementation of Mitigation Measures MM BIO-5.1 through MM BIO-5.5 would provide protection measures for existing trees to be retained during construction activities. Implementation of these measures would, therefore, help preserve existing trees.

Cultural Resources

Impact: **Impact CUL-1:** The project would demolish the existing improvements on site and therefore would have a significant and unavoidable impact on a historical resource.

Mitigation: **MM CUL-1.1:** Historic American Buildings Survey (HABS) Recordation. Prior to project implementation, the historical resource will be recorded to Historic American Buildings Survey (HABS) standards established by the National Park Service, as detailed below:[1]

- A HABS written report will be completed to document the physical history and description of the historical resource, the historic context for its construction and use, and its historic significance. The report will follow the standard outline format described in the *Historic American Buildings Survey Guidelines for Historical Reports* in effect at the time of recording. The report shall be prepared by a professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History.
- Large-format, black and white photographs of the historical resource will be taken and processed for archival permanence in accordance with Historic American Building Survey (HAB), Historic American Engineering Record (HAER), and HALS (Historic American Landscapes Survey) Photography Guidelines in effect at the time of recording. The photographs shall be taken by a professional with HABS photography experience. The number and type of views required will be determined in consultation with the local jurisdiction.
- Existing drawings, where available, will be reproduced on archival paper. If existing drawings are not available, a full set of measured drawings depicting existing conditions will be prepared. The drawings shall be prepared by a professional who meets the Secretary of the Interior's Professional Qualification Standards for Architecture or Historic Architecture.
- The HABS documentation, including the written report, large-format photographs, and drawings, shall be submitted to appropriate repositories, such as the Santa Clara County Historical & Genealogical Society (SCCHGS), Silicon Valley Historical Association, Sourisseau Academy for State and Local History at San José State University, and/or the Computer History Museum in Mountain View. The documentation shall be prepared in accordance with the archival standards outlined in the Transmittal Guideline for Preparing HABS/HAER/HALS Documentation in effect at the time of recording. A professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History shall manage production of the HABS documentation.

MM CUL-1.2: Video Documentation. Video documentation of the subject property will supplement HABS documentation by recording the exterior and interior of the industrial complex at 1200 – 1310 Memorex Drive, as it appears, prior to project implementation. Using visuals in combination with active narration, the

[1] National Park Service, "HABS Guidelines," accessed April 8, 2020, https://www.nps.gov/hdp/standards/habsguidelines.htm.

documentation shall include as much information as possible about the spatial arrangement, circulation patterns, historic use, current condition, construction methods, and material appearance of the historic resource. The documentation shall be conducted by a professional videographer, preferably one with experience recording architectural resources, and produced in conjunction with a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards.

It is recommended that the video documentation be preserved in an electronic format that is cross-platform and nonproprietary. Like HABS documentation, archival copies of the video documentation shall be submitted to appropriate repositories, such as the SCCHGS, Silicon Valley Historical Association, Sourisseau Academy for State and Local History at San José State University, and/or the Computer History Museum in Mountain View. It may also be shared online via a freely accessible platform such as YouTube.

MM CUL-1.3: Interpretive Display. Interpretive displays vary widely in size, style, construction, and information capacity. Specifications for a particular interpretive display should consider a number of factors, including but not limited to the nature of the resource, the intended audience, and the location of the display. Although typically located at the subject property, offsite interpretive displays may be appropriate in certain cases, such as when the property is not publicly accessible for security or other reasons. In all instances, interpretive displays should be conducted by an architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards, in coordination with an exhibit designer.

Both onsite and offsite interpretive displays may be appropriate mitigation measures for the demolition of the industrial complex at 1200 – 1310 Memorex Drive. Onsite displays should be located in a prominent space, such as a lobby, where they may be viewed by employees and visitors to the property. Displays should be permanent and should address the history and architectural features of the industrial complex at 1200 – 1310 Memorex Drive and its operation during the property's period of significance.

Because of the nature of the proposed replacement project, however, the subject property may not be easily accessible by the public, and an offsite interpretive display may be recommended in place of or in addition to the onsite display. An offsite interpretive display should be located in a place with a connection to the subject property or its historical context. For example, the Computer History Museum in Mountain View may be an appropriate location for an interpretive display because of the substantial, contextual connection between the museum's mission and the subject property's significance within the development of the modern computer industry. The Computer History Museum also holds hundreds of Memorex Corporation artifacts and records in its repository, which would complement an interpretive display related to the subject property.

MM CUL-1.4: Oral History Collection. Oral history is a method of gathering and preserving the memories of people and communities, including personal commentaries of historical significance. Best practices for performing oral interviews

are outlined by the Oral History Association (OHA), which was founded in 1966 and serves as the principal membership organization for those involved in the field of oral history.

The project will prepare an oral history collection that focuses on the operation of the Memorex Corporation between 1961 and 1971, when the subject property served as the company headquarters. To the extent feasible, at least one former employee of the Memorex Corporation who was employed at the subject property shall be interviewed. A list of guests at the Memorex at Fifty reunion, hosted at the Computer History Museum in Mountain View in 2011, may serve as a preliminary list of potential narrators.

Oral history audio and visual files collected as part of a mitigation effort for the 1200 – 1310 Memorex Drive will be conducted by a professional oral historian and preserved in an accessible, electronic format and submitted to appropriate repositories, such as the Santa Clara County Historical & Genealogical Society (SCCHGS), Silicon Valley Historical Association, Sourisseau Academy for State and Local History at San José State University, Oral History Center at the Bancroft Library in Berkeley, and/or the Computer History Museum, which currently houses more than one hundred oral history interviews related to the development of the modern computer industry. In the event that no appropriate narrators are identified, or in the event that all potential narrators decline to participate, a memorandum will be prepared to document the project methodology and efforts.

Finding: The project would result in a significant and unavoidable impact to the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5, even with incorporation of mitigation measures. **(Significant Unavoidable Impact with Mitigation Incorporated)**

Facts in Support of Finding: As proposed by the project, demolishing the historic resource on the site is a final act. While Mitigation Measures CUL-1.1 through CUL 1.4 would help to retain the memory of the building and its association with the City's history, the loss of the building would remain a significant unavoidable impact.

Impact: **Impact CUL-2:** The project may result in impacts to unknown subsurface cultural resources.

Mitigation: **MM CUL-2.1:** A Native American cultural resources monitor shall be on site to monitor all construction activities disturbing native soils. In the event that prehistoric or historical resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and the Native American monitor and a qualified archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. If the find is deemed significant, a Treatment Plan will be prepared by a qualified archaeologist in consultation with a Native American representative and provided to the Director of Community Development. The key elements of a Treatment Plan shall include the following:

- Identify scope of work and range of subsurface effects (include location map and development plan),
- Describe the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found),
- Develop research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information),
- Detail field strategy used to record, recover, or avoid the finds, determined in consultation with a Native American representative (photogs, drawings, written records, provenience data maps, soil profiles, excavation techniques, standard archaeological methods) and address research goals.
- Analytical methods, determined in consultation with a Native American representative (radiocarbon dating, obsidian studies, bone studies, historic artifacts studies [list categories and methods], packaging methods for artifacts, etc.).
- Report structure, including a technical and layman's report and an outline of document contents in one year of completion of development (provide a draft for review before a final report),
- Disposition of the artifacts,
- Appendices: site records, update site records, correspondence, consultation with Native Americans, etc.

Finding: Implementation of the above mitigation measures would avoid and/or reduce significant impacts to unknown buried archaeological resources to a less than significant level by monitoring for resources during demolition activities and following procedures to protect resources (if found). **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: The implementation of Mitigation Measure MM CUL-2.1 would require monitoring of all construction activities disturbing native soils by representatives of the Native American community, and the Mitigation Measure was drafted in consultation with representatives of the Tamien Nation. Mitigation Measure MM CUL-2.1 also requires the stoppage of work if buried or previously unrecognized archeological deposits are exposed during construction activities, and the intervention of a qualified archaeologist and Native American monitor to determine the appropriate course of action before resuming construction activities. The involvement of the Santa Clara County Coroner and the NAHC in the case of discovery of human remains would ensure that proper burial procedures would be followed.

Impact: **Impact CUL-3:** The project could disturb human remains, should they be encountered on the site.

Mitigation: **MM CUL-3.1:** In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an

investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

Finding: Implementation of the above mitigation measures would avoid and/or reduce significant impacts to unknown human remains (if found). **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: The implementation of Mitigation Measure MM CUL-3.1 would require the stoppage of work if human remains are discovered during excavation and/or grading activities. The involvement of the Santa Clara County Coroner and the NAHC in the case of discovery of human remains would ensure that proper burial procedures would be followed.

Geology and Soils

Impact: **Impact GEO-6:** Paleontological resources could be encountered during construction.

Mitigation: **MM GEO-6.1:** In the event paleontological resources are discovered all work shall be halted within 50 feet of the find and a Paleontological Resource Mitigation Plan shall be prepared by a qualified paleontologist to address assessment and recovery of the resource. A final report documenting any found resources, their recovery, and disposition shall be prepared in consultation with the Community Development Director and filed with the City and local repository.

Finding: With implementation of the mitigation measure described above, the project would result in a less than significant impact on paleontological resources. **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: The implementation of Mitigation Measure MM GEO-6.1 would require work to be halted within 50 feet of any unknown paleontological resource discovered on the project site. A qualified paleontologist would determine appropriate disposition of any resources found. Therefore, impacts to such resources would be avoided.

Hazards and Hazardous Materials

Impact: **Impact HAZ-2:** Construction workers could be exposed to contaminated soil and/or groundwater during excavation, grading, and construction activities. Future users of the site could be exposed to hazardous soil vapor.

Mitigation: **MM HAZ-2.1:** For on-site construction activities, the project shall implement the approved Soil Management Plan prepared for the site under the oversight of the Regional Water Quality Control Board.

MM HAZ-2.2: For off-site construction activities associated with the underground transmission line, a qualified environmental specialist shall collect shallow soil samples within the areas of proposed construction activities and have the samples analyzed to determine if contaminated soil is present with concentrations above established construction/trench worker and residential thresholds. Once the soil sampling analysis is complete, a report of the findings will be provided to the Director of Community Development for review. The report shall indicate whether any off-site contaminated soils found during sampling are related to the known on-site contamination, or whether they are from a different off-site contamination source.

If contaminated soils are found in concentrations above established regulatory environmental screening levels, and are determined to be related to the known on-site contamination, the project shall incorporate the off-site contamination into the approved Soil Management Plan for the site. If the off-site contamination is determined to be unrelated to the known on-site contamination, the applicant shall enter into the Santa Clara County Department of Environmental Health's (SCCDEH) Voluntary Cleanup Program (VCP) to formalize regulatory oversight for remediation of contaminated soil to ensure the site is safe for construction workers and the public after development. The project applicant must remove contaminated soil in order to achieve detection levels acceptable to the SCCDEH. With approval of the SCCDEH, some of the contaminated soil may be allowed to be left in-place buried under hardscape and/or several feet of clean soil.

The project applicant shall prepare and implement a Removal Action Plan, Soil Mitigation Plan or other similar report describing the remediation process and to document the removal and/or capping of contaminated soil. All work and reports produced shall be performed under the regulatory oversight and approval of the SCCDEH.

Finding: Implementation of the above mitigation measures would ensure the project would not exacerbate existing hazardous materials contamination present on the site and would reduce impacts related to such contamination to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: Soil and groundwater contamination conditions on the site would be addressed through the implementation of Mitigation Measure MM HAZ-2.1, which requires implementation of the approved Soil Management Plan prepared for the site under the oversight of the Regional Water Quality Control Board. Mitigation Measure MM HAZ-2.2 would require investigations for the presence of hazardous materials along the alignment of the proposed underground transmission line. If contamination is found that is related to the known on-site contamination, the project shall incorporate the off-site contamination into the approved Soil Management Plan for the site (refer to MM HAZ-2.1). If the off-site contamination is determined to be unrelated to the known on-site contamination, MM HAZ-2.2 would require the project to remediate the contamination under the oversight of the SCCDEH

to ensure conditions are safe for construction workers and the public.

Noise and Vibration

Impact: **Impact NOI-1.1:** To avoid impacts related to construction noise, the project will be required to implement a construction noise control plan.

Mitigation: **MM NOI-1.1:** The project shall implement a construction noise control plan to regulate the hours of construction, reduce construction noise levels emanating from the site, and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity. The control plan would include the following controls:

- Construction activities shall be limited to hours between 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or Holidays.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment from adjacent properties. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
  Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors. Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Control noise from construction workers' radios to a point where they are not audible at existing residential uses to the north of the project site.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance

coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Finding: With implementation of identified mitigation measures, the project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project due to construction noise. **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: Construction impacts such as noise and vibration are considered temporary due to their short-term duration. Regardless, the controls listed under Mitigation Measure MM NOI-1.1 include the establishment of specific hours for construction activities, restrictions on types of construction equipment used, identification of areas for noise-generating activities on the site, construction of physical barriers, and establishment of contact information for identifying who to contact regarding excessive noise problems. Implementation of these specific measures will result in a lessening of the nuisance impact from construction noise on surrounding land uses for the duration of the construction period.

Impact: **Impact NOI-1.2:** To avoid impacts related to operation of the proposed data center, the project will be required to incorporate noise reduction measures into the project design.

Mitigation: **MM NOI-1.2:** The building shall include a rooftop screen wall reaching 14 feet in height above the roof, meeting a minimum surface weight of three pounds per square foot (such as one-inch-thick wood, ½-inch laminated glass, masonry block, concrete, or one-inch metal). The screen wall shall extend along the full length of the building's southern façade, a minimum distance of 225 feet north of the southwestern corner of the building along the western façade, and a minimum distance of 135 feet north of the southeastern corner of the building along the eastern façade.

MM NOI-1.3: Each chiller shall meet a sound power level goal of 100 dBA or less.

MM NOI-1.4: Each generator shall meet a design goal of 70 dBA or less at a lateral distance of 23 feet and a height of five feet above ground under full load. Generators shall be tested one at a time during daytime hours only.

MM NOI-1.5: Each generator shall be equipped with an exhaust silencer so that noise from the exhaust would not exceed 63 dBA at a lateral distance of 23 feet and a height of five feet above ground.

Finding: With implementation of the identified mitigation measures, noise from on-site equipment operations would not result in exceedances of criteria set in Section 9.10.040 of the City of Santa Clara City Code. **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: Implementation of Mitigation Measures MM NOI-1.2 through MM 1.5 would require the building design and mechanical equipment

selection to achieve sufficient noise reduction to ensure the project's operational noise would not exceed applicable noise limits at adjacent property lines.

Transportation

Impact: **Impact TRN-2:** The project's vehicle miles traveled (VMT) per employee would be above the relevant significance threshold.

Mitigation: **MM TRN-2.1:** The project shall implement a TDM program sufficient to demonstrate that VMT associated with the project would be reduced to 14.14 or less per employee. The TDM program may include, but is not limited to, the following measures which have been determined to be a feasible method for achieving the required VMT reduction:

- Provide commute trip reduction marketing and education for all eligible employees.
  - Implement marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT.
- Provide a subsidized or discounted transit program for all eligible employees.
  - This strategy requires the project employer to subsidize transit passes for participating employees.
- Provide a rideshare program for all eligible employees.
  - Organize a program to match individuals interested in carpooling who have similar commute patterns. Strategy encourages the use of carpooling, reducing the number of vehicle trips and thereby reducing VMT.

The TDM program shall be submitted and approved by the Director of Community Development and shall be monitored annually to gauge its effectiveness in meeting the required VMT reduction. The TDM program shall establish an appropriate estimate of initial vehicle trips generated by the occupant of the proposed project and shall conduct driveway traffic counts annually to measure peak-hour entering and exiting vehicle volumes. The volumes will be compared to trip thresholds established in the TDM program to determine whether the required reduction in vehicle trips is being met. In addition to monitoring driveway volumes, a survey will be developed as part of the TDM program to determine actual mode splits for employees. The survey will also gather information on usage of individual TDM program components. The results of the annual vehicle counts and survey will be reported in writing to the Director of Community Development.

If TDM program monitoring results show that the trip reduction targets are not being met, the TDM program shall be updated to identify replacement and/or additional

feasible TDM measures to be implemented. The updated TDM program shall be subject to the same approvals and monitoring requirements listed above.

If monitoring and reporting demonstrates that the project is non-compliant (i.e, did not fulfill the requirements of the TDM program, meet the drive-alone reduction targets, etc.), the City as the enforcing agency may impose penalties including fines and/or permit limitations.

Finding: The project's VMT would be reduced to a less than significant level with implementation of MM TRN-2.1. The project, therefore, would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact with Mitigation Incorporated)**

Facts in Support of Finding: Implementation of Mitigation Measure MM TRN-2.1 would reduce the project's VMT to a less than significant level by requiring the project to implement a TDM program sufficient to demonstrate that VMT associated with the project would be reduced to 14.14 or less per employee. Mitigation Measure MM TRN-2.1 includes examples of specific TDM measures that would achieve the necessary VMT reduction. The TDM program would be required to be submitted and approved by the Director of Community Development and shall be monitored annually to ensure its effectiveness in meeting the required VMT reduction.

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires the City to balance the benefits of the Project against its significant unavoidable environmental effects in determining whether to approve the Project. Since the EIR identifies project-level significant impacts of the Project that cannot feasibly be mitigated below a level of significance, the City must state in writing its specific reasons for approving the Project in a "statement of overriding considerations" pursuant to sections 15043 and 15093 of the CEQA Guidelines.

In making the statement of overriding considerations, "CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable'." (CEQA Guidelines, Section 15093(a).)

The City has examined a reasonable range of alternatives to the Project, as more fully documented in the EIR. Based on this examination, the City has determined that (1) there are numerous tradeoffs in impacts associated with the various alternatives, (2) the alternatives would result in varying degrees of achieving the Project goals and objectives, (3) the "No Project Alternative" is the environmentally superior alternative; and, (4) because the CEQA Guidelines Section 15126.6(e)(2) states that if the environmentally superior alternative is the "No Project Alternative", the EIR shall also identify an environmentally superior alternative among the other alternatives, the "Preservation Alternative – Retain Historical Resource" becomes the environmentally superior alternative; however, this alternative would threaten the economic viability and feasibility of the Project.

Project Goals and Objectives

The stated objectives of the Project proponent, Skybox Data Centers, are to:

1. Redevelop the 9.18-acre site with a state of the art data center capable of supporting at least 60 MW of IT power in an environmentally controlled structure with redundant subsystems (cooling, power, network links, storage, fire suppression, etc.) along with sufficient ancillary office and storage space to accommodate the needs of future tenants (estimated to require up to 472,920 square feet of data center space and 87,520 square feet of ancillary space). The data center shall be located near a reliable large power source, and emergency response access, and being located such that it can be protected, to the maximum extent feasible, from security threats, natural disasters, and similar events. The project shall include backup power generation facilities that provide sufficient generation capacity, reliability, and redundancy to meet the needs of future tenants.
2. Provide operational electric power to the proposed data center via an electric substation, and provide other utility infrastructure to serve the project, including water, storm drainage, sanitary sewer, electric, natural gas, and telecommunications. Extend a 60 kilovolt (kV) overhead transmission line to connect the substation to the existing electrical grid.
3. Meet high sustainability and green building standards by designing the data center to meet US Green Building Code LEED and Cal-Green standards for any new construction.

4. Incorporate the most reliable and flexible form of backup electric generating technology considering the following evaluation criteria
    - Commercial Availability and Feasibility. The selected backup electric generation technology must currently be in use and proven as an accepted industry standard for technology. It must be operational within a reasonable timeframe where permits and approvals are required.
    - Technical Feasibility. The selected backup electric generation technology must utilize systems that are compatible with one another.
    - Reliability. The selected backup electric generation technology must be extremely reliable in the case of an emergency loss of electricity from the utility.
    - Industry Standard. The selected backup electric generation technology must be considered industry standard or best practice.
5. Construct a high-quality data center that is marketable and produces a reasonable return on investment for the project applicant and its investors and is able to attract investment capital and construction financing.

These goals and objectives are in conformance with the City of Santa Clara's General Plan land use goals.

Environmental Impact Analysis

The EIR found that the proposed project could have a number of significant environmental impacts, but identified mitigation measures to reduce most of these impacts to less than significant levels. The EIR identified air quality, noise and vibration, geology and soils, hydrology and water quality, biological resources, hazards and hazardous materials impacts that can be reduced to a less than significant level with mitigation measures incorporated into the project. Nevertheless, despite implementing all feasible mitigation measures, the EIR also concluded that the proposed project would have the following significant unavoidable impact that cannot be mitigated to a less than significant level if the project is implemented. Based on the conclusions in the EIR, implementation of the proposed project would result in a Significant Unavoidable impact from the demolition of the existing historical resource on site.

Consistent with CEQA requirements, a reasonable range of alternatives was evaluated that could feasibly avoid or lessen any significant environmental impacts while substantially attaining the basic objectives of the proposed project. The EIR identifies three project alternatives to the proposed development that were considered but rejected. These include: a "Location Alternative" in which the project would be developed on an alternative site; an "Adaptive Reuse of the Historical Resource Alternative" in which the project would reuse the existing structures on the site through renovations that avoid demolition; and, a "Preservation Alternative – Retain Portion of Historical Resource" in which the project would retain a portion of the historical resource on the site, but not enough to avoid the significant impact. The EIR also identifies two other analyzed alternatives. These include a "No Project Alternative" in which there is no new development, with continued operation of the existing uses on the project site and a "Preservation Alternative – Retain Historical Resource" in which the project would retain the majority of the character defining features of the historical resource while demolishing other portions of the existing development not considered character defining features, allowing for the construction of a smaller data center facility without a significant impact.

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. The environmentally superior alternatives to the proposed project are the No Project Alternative and the Preservation Alternative - Retain Historical Resource Alternative.

Statement of Overriding Considerations

The City finds that each of the specific economic, legal, social, technological, environmental, and other considerations and the benefits of the Project independently outweigh the remaining significant, adverse impact and is an overriding consideration independently warranting approval. The remaining significant adverse impact identified above is acceptable in light of each of the following overriding considerations:

(i) The Project will provide a data center which is considered a beneficial land use for the City in that they help to meet a growing demand for internet use, and make a significant positive contribution to the City's revenue, while generating a low demand for services and do not exacerbate regional or local traffic congestion.

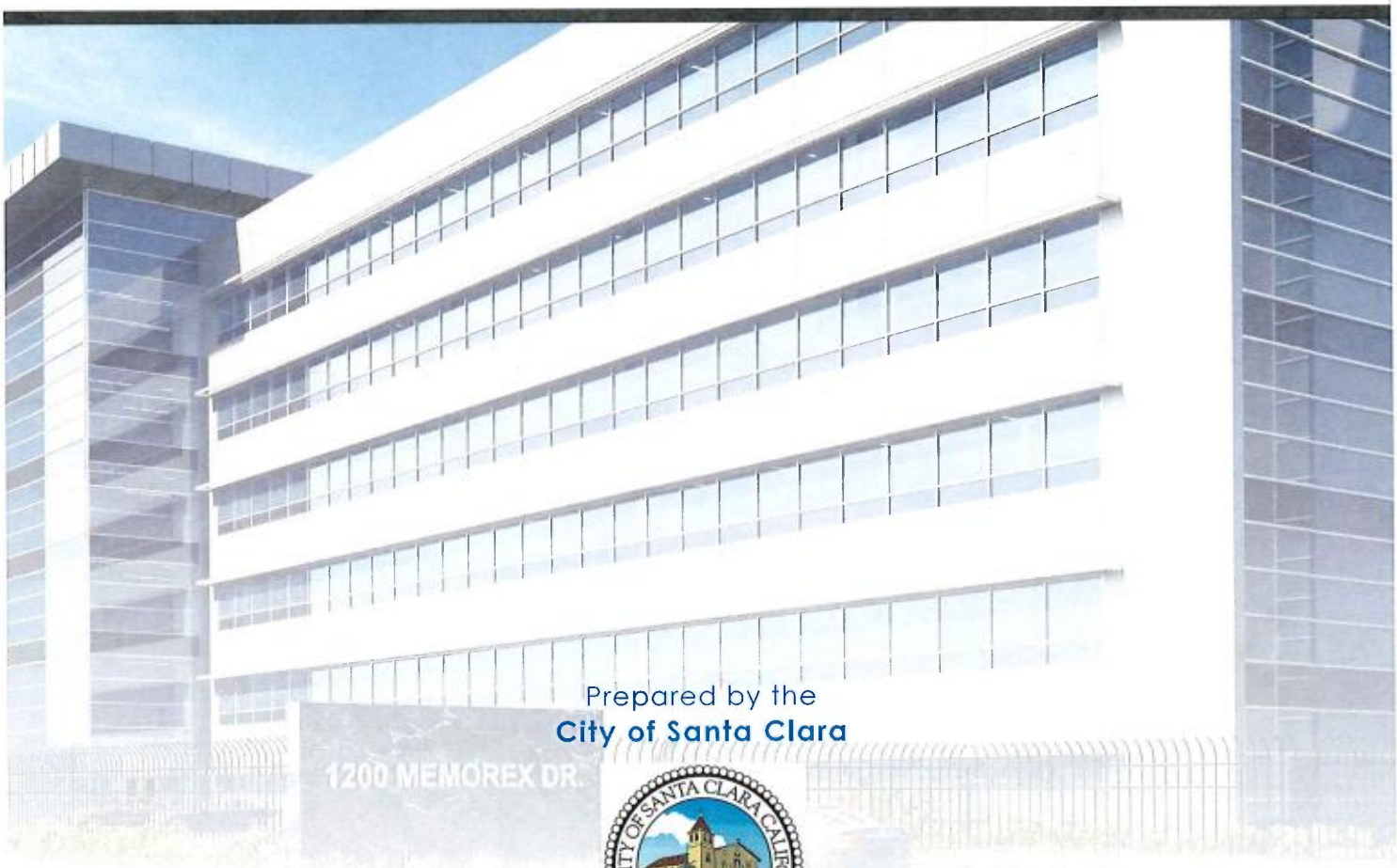
(ii) The Project will include high quality design, which will be confirmed as part of the Architectural Review process, and variation in architectural style of the structures will enhance the character of the surrounding area, and provide a visually interesting streetscape; and,

(iii) The Project will incorporate environmentally sustainable practices ("green building") in project construction, promoting energy conservation, to offset air quality and global climate change impacts as well as to serve as an example for future projects in the City.

For the foregoing reasons, the City finds that the Project's benefits would outweigh, and therefore override, any adverse environmental impacts that could potentially remain after recommended mitigation measures are implemented. In making this determination, the City incorporates by reference the Findings of Fact set forth above, as well as all of the supporting evidence cited therein and in the administrative record.

Final Environmental Impact Report

Memorex Data Center



Prepared by the
City of Santa Clara

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.

October 2021

TABLE OF CONTENTS

SECTION 1.0 INTRODUCTION

This document, together with the Draft Environmental Impact Report (Draft EIR), constitutes the Final Environmental Impact Report (Final EIR) for the Memorex Data Center project.

1.1 PURPOSE OF THE FINAL EIR

In conformance with the California Environmental Quality Act (CEQA) and CEQA Guidelines, this Final EIR provides objective information regarding the environmental consequences of the proposed project. The Final EIR also examines mitigation measures and alternatives to the project intended to reduce or eliminate significant environmental impacts. The Final EIR is intended to be used by the City and any Responsible Agencies in making decisions regarding the project.

Pursuant to CEQA Guidelines Section 15090(a), prior to approving a project, the Lead Agency shall certify that:

(1) The Final EIR has been completed in compliance with CEQA;
(2) The Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and
(3) The Final EIR reflects the Lead Agency's independent judgment and analysis.

1.2 CONTENTS OF THE FINAL EIR

CEQA Guidelines Section 15132 specify that the Final EIR shall consist of:

a) The Draft EIR or a revision of the Draft EIR;
b) Comments and recommendations received on the Draft EIR either verbatim or in summary;
c) A list of persons, organizations, and public agencies commenting on the Draft EIR;
d) The Lead Agency's responses to significant environmental points raised in the review and consultation process; and
e) Any other information added by the Lead Agency.

1.3 PUBLIC REVIEW

In accordance with CEQA and the CEQA Guidelines, the City shall provide a written response to a public agency on comments made by that public agency at least 10 days prior to certifying the EIR. The Final EIR and all documents referenced in the Final EIR are available for public review at the Planning Division office in City Hall at 1500 Warburton Avenue on weekdays during normal business hours. The Final EIR is also available for review on the City's website: https://www.santaclaraca.gov/Home/Components/BusinessDirectory/BusinessDirectory/372/3649

SECTION 2.0 DRAFT EIR PUBLIC REVIEW SUMMARY

The Draft EIR for the Memorex Data Center project, dated June 2021, was circulated to affected public agencies and interested parties for a 45-day review period from June 17th, 2021 through August 2nd, 2021. The City of Santa Clara undertook the following actions to inform the public of the availability of the Draft EIR:

- A Notice of Availability of Draft EIR was published on the City's website (https://www.santaclaraca.gov/Home/Components/BusinessDirectory/BusinessDirectory/372/3649);
- Notification of the availability of the Draft EIR was mailed to project-area residents and other members of the public who had indicated interest in the project;
- The Draft EIR was sent electronically to the State Clearinghouse on June 15th, 2021, as well as sent to various governmental agencies, organizations, businesses, and individuals (see *Section 3.0* for a list of agencies, organizations, businesses, and individuals that received the Draft EIR); and
- The Draft EIR was made available on the City's website (https://www.santaclaraca.gov/Home/Components/BusinessDirectory/BusinessDirectory/372/3649).

SECTION 3.0 DRAFT EIR RECIPIENTS

CEQA Guidelines Section 15086 requires that a local Lead Agency consult with and request comments on the Draft EIR prepared for a project of this type from Responsible Agencies (government agencies that must approve or permit some aspect of the project), trustee agencies for resources affected by the project, adjacent cities and counties, and transportation planning agencies.

The Notice of Availability (NOA) for the Draft EIR was sent to owners and occupants adjacent to the project site and to adjacent jurisdictions. The following agencies received a copy of the Draft EIR from the City or via the State Clearinghouse:

- California Air Resources Board
- Native American Heritage Commission
- Office of Historic Preservation

Copies of the Draft EIR or NOA for the Draft EIR were sent to the following organizations, businesses, and individuals by the City:

- Adams Broadwell Joseph & Cardozo

SECTION 4.0 RESPONSES TO DRAFT EIR COMMENTS

In accordance with CEQA Guidelines Section 15088, this document includes written responses to comments received by the City of Santa Clara on the Draft EIR.

Comments are organized under headings containing the source of the letter and its date. The specific comments from each of the letters and/or emails are presented with each response to that specific comment directly following. Copies of the actual letters and emails received by the City of Santa Clara are included in their entirety in Appendix A of this document. Comments received on the Draft EIR are listed below.

Comment Letter and Commenter **Page of Response**

Comment letters were received from one public agency. CEQA Guidelines Section 15086(c) require that:

> A Responsible Agency or other public agency shall only make substantive comments regarding those activities involved in the project that are within an area of expertise of the agency or which are required to be carried out or approved by the Responsible Agency. Those comments shall be supported by specific documentation.

Regarding mitigation measures identified by commenting public agencies, the CEQA Guidelines Section 15086(d) state that:

> Prior to the close of the public review period, a Responsible Agency or trustee agency which has identified what the agency considers to be significant environmental effects shall advise the Lead Agency of those effects. As to those effects relevant to its decisions, if any, on the project, the responsible or trustee agency shall either submit to the Lead Agency complete and detailed performance objectives for mitigation measures addressing those effects or refer the Lead Agency to appropriate, readily available guidelines or reference documents concerning mitigation measures. If the responsible or trustee agency is not aware of mitigation measures that address identified effects, the responsible or trustee agency shall so state.

REGIONAL AND LOCAL AGENCIES

A. Responses to Comment Letter A from the Bay Area Air Quality Management District (dated August 2, 2021).

Comment A.1: Bay Area Air Quality Management District (Air District) staff has reviewed the Draft Environmental Impact Report (DEIR) for the Memorex Data Center (Project). The Project applicant proposes to demolish the existing buildings on the 9.18-acre site at 1200 Memorex Drive in Santa Clara to construct a four-story, 472,920 square foot data center building with an attached six-story, 87,520 square foot ancillary use office and storage component. To provide an uninterrupted power supply, the Project would include 24 three-megawatt (MW) diesel-fueled generators for the data center, of which 16 generators would be providing 48 MW of backup power generation capacity and eight generators would be providing redundancy, and one 500-kilowatt (kW) diesel-fueled generator for the ancillary use portion of the building.

Since the data center includes backup diesel generators, the Project will require Air District approval of an Authority to Construct and Permit to Operate for the backup diesel generators, and, as such, the Project will be required to comply with all applicable Air District regulations, including, but not limited to, the achieved-in- practice Best Available Control Technology for large emergency backup engines requiring that engines meet U.S. EPA Tier 4 emissions standards. Because diesel combustion produces greenhouse gases (GHGs) and toxic air contaminants (TACs), the Air District encourages the City to go beyond current regulatory requirements and require the project applicant to use cleaner, non-diesel technologies.

Additionally, staff are providing the following recommendations for how the City could enhance its CEQA analysis and minimize emissions from the Project and future proposed data centers.

Consistency with Long-Term State Climate Goals

The DEIR states that "the project would not conflict with plans, policies or regulations adopted for the purpose of reducing the emissions of GHG." However, the DEIR does not evaluate, disclose, nor discuss the Project's consistency with State policies requiring long-term (i.e., 2045 and 2050) reductions in emissions of GHGs. See Cleveland Nat'l Forest Foundation v. San Diego Ass'n of Governments (2017) 3 Cal.5th 497, 516 (CEQA analysis should "compare the [project's] projected greenhouse gas emissions ... from 2020 through 2050 with the Executive Order's goal of reducing emissions to 80 percent below 1990 levels by 2050."). Air District staff recommends that the GHG analysis be augmented to include an evaluation, disclosure, and discussion of whether the Project will be consistent with the State's policies beyond 2030. Regardless of whether upon further evaluation the City deems that deployment of 25 diesel backup generators is consistent with the State's carbon neutrality target, the Air District recommends that the City compel the project applicant to adopt alternative zero emitting technologies, procure renewable fuel, commit to otherwise mitigate GHG emissions, or a combination of the three.

Response A.1: Evaluating the project's emissions in 2050 with any specificity would be highly speculative due to uncertainties in the future regulatory environment and the rapidly evolving nature of data center equipment and operations. Neither the State's CEQA Guidelines nor the Bay Area Air Quality Management District's (BAAQMD) CEQA Guidelines require that a project's emissions be compared to 2050 statewide targets, or that a

project show at the time of approval it will meet those targets nearly 30 years into the future. As stated in the May 2017 BAAQMD CEQA Guidelines (Page D-4), "...the 2020 timeframe is examined in this threshold evaluation because doing so for the 2050 timeframe (with respect to population, employment, and GHG emissions projections) would be too speculative. Advances in technology and policy decisions at the state level will be needed to meet the aggressive 2050 goals. It is beyond the scope of the analysis tools available at this time to examine reasonable emissions reductions that can be achieved through CEQA analysis in the year 2050." Instead of evaluating the project's emissions in 2050, it is more appropriate to qualitatively discuss the project's consistency with existing local, regional, and statewide efforts to meet interim GHG targets as part of an overall strategy to achieve the 2050 reduction goal along a trajectory of continual emissions reduction. The project's consistency with relevant plans and policies adopted as part of an overall effort to meet the State's long term goals is included on pages 88-92 of the Draft EIR.

Further, BAAQMD adopted its most recent Clean Air Plan in 2017. As stated in the Clean Air Plan (Page D-24), "Consistent with the GHG reduction targets adopted by the state of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050." In other words, the Clean Air Plan is intended to outline BAAQMD's strategy for conforming with the State's long-term GHG reduction policies. The project's consistency with the Clean Air Plan is discussed on pages 35-36 and 90 of the Draft EIR. By evaluating the project's consistency with the Clean Air Plan, the project's consistency with the State's long-term GHG emission goals was also analyzed, since the Clean Air Plan represents BAAQMD's own plan for conformance with those goals.

Additionally, as discussed throughout the Draft EIR, Silicon Valley Power (SVP) would be required to adhere to SB 100, which requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by 2045. As shown on page 87 of the Draft EIR, greater than 95% of the project's GHG emissions are related to consumption of electricity provided by Silicon Valley Power. As a result, by 2045 the project's GHG emissions would be less than 5% of the currently estimated emissions upon project approval, putting the project on track to meet the State's long-term goals discussed in the comment.

It should also be noted that the decision in the court case cited in the comment (Cleveland Nat'l Forest Foundation v. San Diego Ass'n of Governments (2017) 3 Cal.5th 497, 516) does not directly state that a project "should" compare the project's projected greenhouse gas emissions from 2020 through 2050 with the Executive Order's goal of reducing emissions to 80 percent below 1990 levels by 2050, as implied by the comment. The text from the decision reads "(h)ere, however, it was not difficult for the public, reading the EIR, to compare the upward trajectory of projected greenhouse gas emissions under the Plan from 2020 through 2050 with the Executive Order's goal of reducing emissions to 80 percent below 1990 levels by 2050." The court case pertains to a long-term regional development plan for the San Diego area that was intended to guide the area's transportation infrastructure from 2010 to 2050. As such, a plan-level, programmatic CEQA analysis was completed that evaluated the project's impacts through the horizon year of 2050. Included in this analysis was an estimate of GHG emissions through the 2050 horizon year, which is a common

methodology when evaluating plan-level projects where individual components of the plan will be constructed throughout the planning horizon and therefore require a comparison to future thresholds that may be in place at the time those components are constructed and become operational. The BAAQMD CEQA Guidelines acknowledge that analysis of GHG impacts for plan-level projects should differ from near-term development projects and include separate methodologies for each. The decision in the court case cited in the comment, therefore, is not directly applicable to the proposed project, which is a near-term development project that would be constructed and fully operational shortly after project approval. As stated previously in this response, for a near-term development project such as the proposed project, it is more appropriate to discuss the project's consistency with existing local, regional, and statewide efforts to meet interim GHG targets as part of an overall strategy to achieve the 2050 reduction goal along a trajectory of continual emissions reduction. As previously noted, the project's consistency with relevant plans and policies adopted as part of an overall effort to meet the State's long term goals is included on pages 88-92 of the Draft EIR.

The Air District's recommendation that the City compel the project applicant to adopt alternative zero emitting technologies, procure renewable fuel, commit to otherwise mitigate GHG emissions, or a combination of the three, is acknowledged and will be taken into consideration. However, since the project would not result in significant GHG impacts and no mitigation is needed to reduce GHG emissions, there would be no CEQA nexus to require these measures.

Comment A.2: Non-Testing/Non-Maintenance Operations

The DEIR should include various scenarios of backup power generation operations beyond routine testing and maintenance. Air District staff has reviewed data regarding backup generator usage during non-testing/non-maintenance operations at several Bay Area data centers. Between September 1, 2019, and September 30, 2020, nearly half of the identified data centers in Santa Clara, San Jose, and Sunnyvale operated backup diesel generators for reasons other than routine testing and maintenance. Many of the data centers operated diesel generators during multiple non-testing/non-maintenance events over the course of this period; operation approached 50 hours for one generator for one event; it appears 40 or more generators operated concurrently at two facilities; and one facility ran diesel generators for approximately 400 hours. Please see Attachment 1 for details of the preliminary information on non-testing/non-maintenance operations that the Air District has received from data centers, which demonstrates the need to evaluate these operations. Air District staff recommends that the DEIR include GHG, criteria pollutant, and TAC impacts due to the non-testing/non-maintenance operations of backup power generators. Various scenarios should be considered for non-testing/non-maintenance operations, including non-zero hours of operation and concurrent generator operations.

Response A.2: As described on page 38 of the Draft EIR, during normal facility operation the proposed generators would not be operated other than for periodic testing and maintenance requirements. CEQA does not require evaluation of emergency conditions, as that involves substantial speculation. The Draft EIR appropriately focused on the reasonably foreseeable operations of the proposed facility, and CEQA does not require lead agencies to attempt to evaluate conditions under future emergency situations, including power outages. As described on page 38 of the Draft EIR, the project proposes a weekly testing schedule that

would result in roughly 18 hours of operation per generator per year, all at zero percent load, with the exception of an annual load bank test that would reach up to 100 percent load. However, for purposes of estimating emissions and potential air quality impacts from the engines, it was assumed that each engine could be operated for 50 hours per year (maximum operation hours allowed by the State's Air Toxic Control Measure and BAAQMD for testing and maintenance) at a maximum load of 100 percent. Only emissions from routine testing and maintenance, not emissions from potential emergency operations, were considered in the analysis. This procedure is in accordance with BAAQMD Regulation 2, Rule 5, and the number of non-emergency operation hours per year is limited to 50 hours per the Airborne Toxic Control Measure for Stationary Toxic Compression Ignition Engines (Section 93115, Title 17 CCR). The Air District's procedure for permitting emergency generators is to consider operation of the generators for up to 50 hours per year. By evaluating emissions of the maximum allowed 50 hours of operation per year instead of the 18 hours per year proposed by the project, the Draft EIR overestimates the project's emissions. This represents a conservative maximum impact scenario based on the allowed operation per California Air Resources Board (CARB) and BAAQMD permit conditions.

The data submitted by BAAQMD as Attachment 1 to the comment letter, which describes generator usage at select data center facilities in the Bay Area between September 1, 2019 and September 30, 2020, was evaluated by the California Energy Commission (CEC).[1] The CEC found that of all the engines at all facilities in the BAAQMD's review, the average engine ran no more than 36.5 hours over the 13-month reporting period. The CEC also found that no single engine ran for more than 50 hours overall for "non-testing/non-maintenance" purposes. As noted previously, the Draft EIR conservatively evaluated the project's emissions assuming 50 hours per year of operation per generator. Further, according to the CEC, California experienced different types of emergency situations within the 13-month period of BAAQMD's review. This period included the expansion of PG&E's Public Safety Power Shutoff (PSPS) program, severe wildfires, several California Independent System Operator (CAISO)-declared emergencies, and winter storms. From August 14 to 19, 2020, California experienced excessive heat. On August 16, 2020, Governor Newsom declared a State of Emergency because of the extreme heat wave in California and surrounding western states. This was a 1 in 30 year weather event that resulted in the first system-wide power outages California had seen in 20 years. In addition to the extreme heat wave in mid-August, high temperatures and high electricity demand occurred over the 2020 Labor Day weekend, especially on Sunday, September 6 and Monday, September 7, 2020. Thus, the data set provided by BAAQMD is not necessarily representative of an average 13-month period from which one could extrapolate average backup generator use into the future.

Based on Silicon Valley Power (SVP) data, only two outages from 2009 to 2019 affected data centers in the SVP service territory. One approximately 7.5-hour outage on May 28, 2016, which was the result of two contingencies (a balloon and a breaker failure), affected

[1] California Energy Commission. Great Oaks South Backup Generating Facility Final Environmental Impact Report. July 28, 2021. Available at: https://efiling.energy.ca.gov/GetDocument.aspx?tn=239063&DocumentContentId=72499

two data centers. Another 12-minute outage on December 2, 2016 affected four data centers. SVP's root cause analysis of this outage resulted in changes in maintenance procedures to ensure that breakers are reset before power is restored to a portion of the system that was down for maintenance. Outages have been extremely rare, and the consequences or effects on data centers, almost negligible. The data provided by BAAQMD confirms that these types of events remain infrequent, irregular, and unlikely and the resulting emissions are not easily predictable or quantifiable, nor can they be modeled in an informative or meaningful way. According to the data provided by BAAQMD, the generator engines under review were collectively available for over 2.74 million engine-hours during the 13-month period (288 engines * 9,504 hours), and they were used for emergency operations for 1,877 engine-hours, meaning that at those facilities where operation occurred, the engines entered into emergency operations during 0.07 percent of their available time (1,877 / 2.74 million). It is important to note that this calculation only takes into consideration those engines that the BAAQMD found to run during this time period; a more comprehensive review would also include the availability of the 25 facilities that had zero hours of engine run time and also conceivably the 21 facilities that were not surveyed at all. If these facilities without engine runs were included, the estimated probability that any given engine would be likely to run would be lower.

In summary, the Draft EIR appropriately evaluated the project's impacts under normal operating conditions and not emergency operations. The Draft EIR even overestimated the project's emissions by conservatively assuming more generator operation than is proposed. The data provided by BAAQMD emphasizes the fact that emergency operation of generators at data centers is extremely rare, and CEQA does not require lead agencies to attempt to evaluate conditions under future emergency situations, any analysis of which would be highly speculative.

Comment A.3: Recommendations for Achieving Additional Emissions Reductions

To the extent that further analysis concludes the Project's emissions would be cumulatively considerable or inconsistent with the State's climate goals, the Project may need to incorporate mitigation measures to reduce emissions. Even if the revised analysis does not conclude the Project's emissions will be cumulatively considerable, the Air District encourages the City to compel the applicant to incorporate additional emission reduction measures as a condition of approval of the Project. These recommended measures will help ensure the Project's emissions impacts are reduced by the maximum extent possible to achieve the most health protective air quality for Bay Area residents and to achieve climate protection goals established by the State.

Response A.3: As described in Responses A.1 and A.2, the analysis of air quality and GHG impacts in the Draft EIR is appropriate and adequate under CEQA, and no additional analysis is needed. The Draft EIR determined that no mitigation measures are necessary to reduce air quality and GHG impacts to less than significant levels. The Air District's recommendation to compel the applicant to adopt additional emission reduction measures is noted and will be taken into consideration; however, there would be no CEQA nexus to require additional measures.

Comment A.4: The DEIR identifies the predominant source of the Project's GHG emissions as electricity use (75,354 MTCO2e per year), which would be provided by the city-operated, publicly-owned utility, Silicon Valley Power (SVP). Although the DEIR states that SVP is on track to meet the 2030 GHG emissions reduction target, the Project could significantly reduce GHG emissions by purchasing all its electricity from renewable sources. Specifically, Air District staff recommends that the Project join SVP's Santa Clara Green Power program and thus commit to purchase 100 percent renewable electricity, or otherwise negotiate an electricity contract with SVP for 100 percent renewables.

> **Response A.4:** The Air District's recommendation for the project to join SVP's Santa Clara Green Power program is noted and will be taken into consideration. As described on page 88 of the Draft EIR, the project's emissions associated with electricity consumption are considered indirect emissions since they occur at a source other than the project site and have already been accounted for at the emission source. For example, emissions associated with the project's electricity consumption occur at power production facilities within the SVP (and outside suppliers') system. These emissions are accounted for and reported by SVP pursuant to State GHG reporting regulations. Attributing these emissions to the proposed project is, therefore, a form of double counting. Nevertheless, to be conservative, the project's indirect emissions are included in the analysis of the project's GHG impacts in the Draft EIR. The Draft EIR determined that the project would result in a less than significant GHG impact utilizing the standard SVP power mix.

Comment A.5: The Project, as proposed, would use diesel fuel to power the 25 backup generators. To meet State and regional climate goals, the Air District encourages projects to go above and beyond Air District New Source Review permitting requirements. In September 2018, the Air District launched a Diesel Free by '33 campaign to eliminate diesel emissions. Mayor Lisa Gillmor of the City of Santa Clara signed Diesel Free by '33 to pledge the City's commitment to cut diesel use to zero by the end of 2033. To this end, the Air District recommends the City compel the Project applicant to use the cleanest available technologies such as solar battery power, fuel cells, other non-diesel alternatives, or renewable fuels.

> **Response A.5:** As described in the Draft EIR, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The project's consistency with relevant plans and policies adopted as part of an overall effort to meet the State's long term goals is included on pages 88-92 of the Draft EIR. The Diesel Free by '33 campaign is a BAAQMD-sponsored initiative, and is not an applicable plan, policy or regulation. The Air District's recommendation to compel the applicant to use non-diesel alternatives is noted and will be taken into consideration; however, because the project would not result in significant air quality or GHG emissions, there would be no CEQA nexus to require this measure.

Comment A.6: Lastly, Air District staff strongly recommends that the City work with SVP, the Air District, State agencies, and the Project proponents for this and similar proposed data center projects to explore alternative options to reduce GHG emissions. For example, the Air District awarded a Climate Protection Grant of $300,000 to the City of Santa Clara to conduct a pilot project to demonstrate the viability of replacing data center backup diesel generators with electric energy

storage systems, and the California Energy Commission has previously provided Electric Program Investment Charge (EPIC) awards for data center microgrids.

We encourage the City to contact Air District staff with any questions and/or to request assistance during the environmental review process. If you have any questions or would like to discuss Air District recommendations further, please contact Josephine Fong, Environmental Planner, at (415) 749-8637 or jfong@baaqmd.gov, or Jakub Zielkiewicz, Advanced Projects Advisor, at (415) 749-8429 or jzielkiewicz@baaqmd.gov.

Response A.6: As described in previous responses, the project would not result in significant GHG emissions and, therefore, no additional emissions reductions are required under CEQA. The Air District's recommendation for the City to explore additional GHG emissions reductions options is noted and will be taken into consideration.

SECTION 5.0 DRAFT EIR TEXT REVISIONS

This section contains revisions to the text of the Memorex Data Center Draft EIR dated June 2021. Revised or new language is underlined. All deletions are shown with a ~~line through the text~~.

Text Revisions

Pages 61-62 Section 3.5.2.1, Mitigation Measure MM CUL-2.1 will be **REVISED** as follows:

MM CUL-2.1: A Native American cultural resources monitor shall be on site to monitor all construction activities disturbing native soils. In the event that prehistoric or historical resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and the Native American monitor and a qualified archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. If the find is deemed significant, a Treatment Plan will be prepared by a qualified archaeologist in consultation with a Native American representative and provided to the Director of Community Development. The key elements of a Treatment Plan shall include the following:

- Identify scope of work and range of subsurface effects (include location map and development plan),
- Describe the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found),
- Develop research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information),
- Detail field strategy used to record, recover, or avoid the finds, determined in consultation with a Native American representative (photogs, drawings, written records, provenience data maps, soil profiles, excavation techniques, standard archaeological methods) and address research goals.
- Analytical methods, determined in consultation with a Native American representative (radiocarbon dating, obsidian studies, ~~bone studies,~~ historic artifacts studies [list categories and methods], packaging methods for artifacts, etc.).
- Report structure, including a technical and layman's report and an outline of document contents in one year of

completion of development (provide a draft for review before a final report),

- Disposition of the artifacts,
- Appendices: site records, update site records, correspondence, consultation with Native Americans, etc.

Page 159 Section 3.18.2.1, the text on the page will be **REVISED** as follows:

~~No tribes have requested consultation for projects in the area under AB 52. and~~ ŧThere are no known TCRs on-site. A record search of the NAHC Sacred Lands File was completed for the site and the results were negative.[2] While there is the potential for unknown Native American resources or human remains to be present in the project area, impacts would be less than significant with implementation of the City's General Plan policies and Standard Permit Conditions related to discovery of archaeological resources or human remains as well as implementation of mitigation incorporated into the project (described in detail in Section 3.5 Cultural Resources).

On December 5, 2019, letters were sent to the following Native American tribes based on the recommendation of the Native American Heritage Commission (NAHC): Amah Mutsun Tribal Band, the Ohlone Indian Tribe, Amah Mutsun Tribal Band of Mission San Juan Bautista, Indian Canyon Mutsun Band of Costanoan, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, and North Valley Yokuts Tribe. The letters contained information about the project; an inquiry for any unrecorded Native American cultural resources or other areas of concern within or adjacent to the project site; and a solicitation of comments, questions, or concerns with regard to the project. To date, one response was received from the Ohlone Indian Tribe requesting access to a "Phase I Literature Search and/or a Foot Survey" if they had been completed for the project. It is unclear whether the request is referring to a Phase I Environmental Site Assessment, which assesses potential hazardous materials conditions on the site and surrounding area, or a Cultural Resources Literature Search, which assesses potential archaeological resources on the site and surrounding area. Regardless, Appendices L and M include summaries of previous Phase I Environmental Site Assessments completed for the site, and Appendix D includes a Cultural Resources Literature Search completed for the site.

During the public circulation period of the Draft EIR, the Tamien Nation tribe, which was not on the list of tribes provided by the NAHC, formally requested tribal consultation for the proposed project under AB 52. The City met with a representative of the tribe on August 18, 2021. During the meeting, the tribal representative requested that mitigation measure MM CUL-2.1 be modified to

[2] Nancy Gonzalez-Lopez, NAHC. Personal Communication. December 2, 2019.

include a requirement for a Native American monitor to be present during construction activities disturbing native soils on the site, Native American involvement in the assessment of any cultural resource finds, and Native American involvement in the formulation of a Treatment Plan, should one be necessary. The tribal representative did not indicate that any known TCRs are present on the site or in the project area.

Because the record search of the NAHC Sacred Lands File did not identify the presence of TCRs on the site or surrounding area, and because no tribes ~~responded to outreach letters indicating~~ have provided information indicating that TCRs are present on the site, the project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

Appendix A: Draft EIR Comment Letters

August 2, 2021

Tiffany Vien, Assistant Planner
Community Development Department
City of Santa Clara
1500 Warburton Avenue
Santa Clara, CA 95050

RE: Memorex Data Center – Draft Environmental Impact Report

Dear Ms. Vien,

Bay Area Air Quality Management District (Air District) staff has reviewed the Draft Environmental Impact Report (DEIR) for the Memorex Data Center (Project). The Project applicant proposes to demolish the existing buildings on the 9.18-acre site at 1200 Memorex Drive in Santa Clara to construct a four-story, 472,920 square foot data center building with an attached six-story, 87,520 square foot ancillary use office and storage component. To provide an uninterrupted power supply, the Project would include 24 three-megawatt (MW) diesel-fueled generators for the data center, of which 16 generators would be providing 48 MW of backup power generation capacity and eight generators would be providing redundancy, and one 500-kilowatt (kW) diesel-fueled generator for the ancillary use portion of the building.

Since the data center includes backup diesel generators, the Project will require Air District approval of an Authority to Construct and Permit to Operate for the backup diesel generators, and, as such, the Project will be required to comply with all applicable Air District regulations, including, but not limited to, the achieved-in-practice Best Available Control Technology for large emergency backup engines requiring that engines meet U.S. EPA Tier 4 emissions standards. Because diesel combustion produces greenhouse gases (GHGs) and toxic air contaminants (TACs), the Air District encourages the City to go beyond current regulatory requirements and require the project applicant to use cleaner, non-diesel technologies.

Additionally, staff are providing the following recommendations for how the City could enhance its CEQA analysis and minimize emissions from the Project and future proposed data centers.

Consistency with Long-Term State Climate Goals

The DEIR states that "the project would not conflict with plans, policies or regulations adopted for the purpose of reducing the emissions of GHG." However, the DEIR does not evaluate, disclose, nor discuss the Project's consistency with State policies requiring long-term (i.e., 2045 and 2050) reductions in emissions of GHGs. See *Cleveland Nat'l Forest Foundation v. San Diego Ass'n of Governments* (2017) 3 Cal.5th 497, 516 (CEQA analysis should "compare the [project's] projected greenhouse gas emissions ... from 2020 through 2050 with the Executive Order's goal of reducing emissions to 80 percent below 1990 levels by 2050."). Air District staff recommends that the GHG analysis be augmented to include an evaluation, disclosure, and discussion of whether the Project will be consistent with the State's policies beyond 2030. Regardless of whether upon further evaluation the City deems that deployment of 25 diesel backup generators is consistent with the State's carbon neutrality target, the Air District recommends that the City compel the project applicant to adopt alternative zero emitting technologies, procure renewable fuel, commit to otherwise mitigate GHG emissions, or a combination of the three.

Non-Testing/Non-Maintenance Operations

The DEIR should include various scenarios of backup power generation operations beyond routine testing and maintenance. Air District staff has reviewed data regarding backup generator usage during non-testing/non-maintenance operations at several Bay Area data centers. Between September 1, 2019, and September 30, 2020, nearly half of the identified data centers in Santa Clara, San Jose, and Sunnyvale operated backup diesel generators for reasons other than routine testing and maintenance. Many of the data centers operated diesel generators during multiple non-testing/non-maintenance events over the course of this period; operation approached 50 hours for one generator for one event; it appears 40 or more generators operated concurrently at two facilities; and one facility ran diesel generators for approximately 400 hours. Please see Attachment 1 for details of the preliminary information on non-testing/non-maintenance operations that the Air District has received from data centers, which demonstrates the need to evaluate these operations. Air District staff recommends that the DEIR include GHG, criteria pollutant, and TAC impacts due to the non-testing/non-maintenance operations of backup power generators. Various scenarios should be considered for non-testing/non-maintenance operations, including non-zero hours of operation and concurrent generator operations.

Recommendations for Achieving Additional Emissions Reductions

To the extent that further analysis concludes the Project's emissions would be cumulatively considerable or inconsistent with the State's climate goals, the Project may need to incorporate mitigation measures to reduce emissions. Even if the revised analysis does not conclude the Project's emissions will be cumulatively considerable, the Air District encourages the City to compel the applicant to incorporate additional emission reduction measures as a condition of approval of the Project. These recommended measures will help ensure the Project's emissions impacts are reduced by the maximum extent possible to achieve the most health protective air quality for Bay Area residents and to achieve climate protection goals established by the State.

The DEIR identifies the predominant source of the Project's GHG emissions as electricity use (75,354 $MTCO_2e$ per year), which would be provided by the city-operated, publicly-owned utility, Silicon Valley Power (SVP). Although the DEIR states that SVP is on track to meet the 2030 GHG emissions reduction target, the Project could significantly reduce GHG emissions by purchasing all its electricity from renewable sources. Specifically, Air District staff recommends that the Project join SVP's Santa Clara Green Power program and thus commit to purchase 100 percent renewable electricity, or otherwise negotiate an electricity contract with SVP for 100 percent renewables.

The Project, as proposed, would use diesel fuel to power the 25 backup generators. To meet State and regional climate goals, the Air District encourages projects to go above and beyond Air District New Source Review permitting requirements. In September 2018, the Air District launched a Diesel Free by '33 campaign to eliminate diesel emissions. Mayor Lisa Gillmor of the City of Santa Clara signed Diesel Free by '33 to pledge the City's commitment to cut diesel use to zero by the end of 2033. To this end, the Air District recommends the City compel the Project applicant to use the cleanest available technologies such as solar battery power, fuel cells, other non-diesel alternatives, or renewable fuels.

Lastly, Air District staff strongly recommends that the City work with SVP, the Air District, State agencies, and the Project proponents for this and similar proposed data center projects to explore alternative options to reduce GHG emissions. For example, the Air District awarded a Climate Protection Grant of $300,000 to the City of Santa Clara to conduct a pilot project to demonstrate the viability of replacing data center backup diesel generators with electric energy storage systems, and the California Energy Commission has previously provided Electric Program Investment Charge (EPIC) awards for data center microgrids.

We encourage the City to contact Air District staff with any questions and/or to request assistance during the environmental review process. If you have any questions or would like to discuss Air District recommendations further, please contact Josephine Fong, Environmental Planner, at (415) 749-8637 or jfong@baaqmd.gov, or Jakub Zielkiewicz, Advanced Projects Advisor, at (415) 749-8429 or jzielkiewicz@baaqmd.gov.

Sincerely,

Greg Nudd
Deputy Air Pollution Control Officer

Attachment 1: Preliminary Back-Up Diesel Engine Operations (Non-Testing/Non-Maintenance)

cc: BAAQMD Director Margaret Abe-Koga
BAAQMD Chair Cindy Chavez
BAAQMD Director Rich Constantine
BAAQMD Director Rob Rennie

Attachment 1: Preliminary Back-Up Diesel Engine Operations (Non-Testing/Non-Maintenance)

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
1	1	Santa Clara	2	9	5%	90	8/17/20-8/18/20	State Emergency Load Shedding
1	2	Santa Clara	2	8.8	6%	240	8/17/20-8/18/20	State Emergency Load Shedding
1	2	Santa Clara	2	1.2	5%	29	8/17/20-8/18/20	Human error event
1	3	Santa Clara	2	1	1%	5	8/17/20-8/18/20	Human error event
1	4	Santa Clara	2	8.5	25%	390	8/17/20-8/18/20	State Emergency Load Shedding
1	4	Santa Clara	2	1	26%	58	8/17/20-8/18/20	Human error event
1	5	Santa Clara	2	9.1	31%	400	8/17/20-8/18/20	State Emergency Load Shedding
1	6	Santa Clara	2	8.9	21%	300	8/17/20-8/18/20	State Emergency Load Shedding
1	7	Santa Clara	2	8.8	24%	350	8/17/20-8/18/20	State Emergency Load Shedding
1	8	Santa Clara	2	8.8	25%	350	8/17/20-8/18/20	State Emergency Load Shedding
1	9	Santa Clara	2	8.6	22%	325	8/17/20-8/18/20	State Emergency Load Shedding
1	10	Santa Clara	2	9	19%	300	8/17/20-8/18/20	State Emergency Load Shedding
2	1	Sunnyvale	2	12.6	34%	682	Various	Utility inflicted disturbance
2	2	Sunnyvale	2	14.7	41%	795	Various	Utility inflicted disturbance
2	3	Sunnyvale	2	15.3	30%	828	Various	Utility inflicted disturbance
2	4	Sunnyvale	2	13.8	32%	747	Various	Utility inflicted disturbance
2	5	Sunnyvale	2	20.2	26%	1093	Various	Utility inflicted disturbance
3	1	Santa Clara	2	0.5	1%		8/17/20-8/18/20	State Emergency Load Shedding
3	2	Santa Clara	2	1.4	2%		8/17/20-8/18/20	State Emergency Load Shedding
3	3	Santa Clara	2	36.7	40%		8/17/20-8/18/20	State Emergency Load Shedding
3	4	Santa Clara	2.25	0.2	1%		8/17/20-8/18/20	State Emergency Load Shedding
3	5	Santa Clara	2.25	31.7	36%		8/17/20-8/18/20	State Emergency Load Shedding
3	6	Santa Clara	2.25	37.3	36%		8/17/20-8/18/20	State Emergency Load Shedding
4	1	Santa Clara	2.25	0.4	33%	25	8/16/2020	Lightning strikes to transmission line
4	2	Santa Clara	2.25	0.4	33%	25	8/16/2020	Lightning strikes to transmission line
4	3	Santa Clara	2.25	0.4	33%	25	8/16/2020	Lightning strikes to transmission line
4	4	Santa Clara	2.25	0.4	33%	25	8/16/2020	Lightning strikes to transmission line
4	5	Santa Clara	2.25	0.4	33%	25	8/16/2020	Lightning strikes to transmission line
4	6	Santa Clara	2.25	0.5	33%	32	8/16/2020	Lightning strikes to transmission line
4	7	Santa Clara	2.25	0.5	33%	32	8/16/2020	Lightning strikes to transmission line
4	8	Santa Clara	2.25	0.5	33%	32	8/16/2020	Lightning strikes to transmission line
4	9	Santa Clara	2.25	0.5	33%	32	8/16/2020	Lightning strikes to transmission line
4	10	Santa Clara	2.25	0.5	33%	32	8/16/2020	Lightning strikes to transmission line
4	11	Santa Clara	2.25	0.5	33%	32	8/16/2020	Lightning strikes to transmission line
4	12	Santa Clara	2.25	0.6	33%	38	8/16/2020	Lightning strikes to transmission line

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
4	13	Santa Clara	2.25	0.6	33%	38	8/16/2020	Lightning strikes to transmission line
4	14	Santa Clara	2.25	0.6	33%	38	8/16/2020	Lightning strikes to transmission line
4	15	Santa Clara	2.25	0.6	33%	38	8/16/2020	Lightning strikes to transmission line
4	16	Santa Clara	2.25	0.6	33%	38	8/16/2020	Lightning strikes to transmission line
4	17	Santa Clara	2.25	0.4	43%	33	8/16/2020	Lightning strikes to transmission line
4	18	Santa Clara	2.25	0.4	43%	33	8/16/2020	Lightning strikes to transmission line
4	19	Santa Clara	2.25	0.4	43%	33	8/16/2020	Lightning strikes to transmission line
4	20	Santa Clara	2.25	0.4	43%	33	8/16/2020	Lightning strikes to transmission line
4	21	Santa Clara	2.25	0.4	43%	33	8/16/2020	Lightning strikes to transmission line
4	22	Santa Clara	2.25	0.5	43%	41	8/16/2020	Lightning strikes to transmission line
4	23	Santa Clara	2.25	0.5	43%	41	8/16/2020	Lightning strikes to transmission line
4	24	Santa Clara	2.25	0.5	43%	41	8/16/2020	Lightning strikes to transmission line
4	25	Santa Clara	2.25	0.5	43%	41	8/16/2020	Lightning strikes to transmission line
4	26	Santa Clara	2.25	0.5	43%	41	8/16/2020	Lightning strikes to transmission line
4	27	Santa Clara	2.25	0.5	43%	41	8/16/2020	Lightning strikes to transmission line
4	28	Santa Clara	2.25	0.6	43%	49	8/16/2020	Lightning strikes to transmission line
4	29	Santa Clara	2.25	0.6	43%	49	8/16/2020	Lightning strikes to transmission line
4	30	Santa Clara	2.25	0.6	43%	49	8/16/2020	Lightning strikes to transmission line
4	31	Santa Clara	2.25	0.6	43%	49	8/16/2020	Lightning strikes to transmission line
4	32	Santa Clara	2.25	0.6	43%	49	8/16/2020	Lightning strikes to transmission line
4	33	Santa Clara	2.25	0.4	52%	34	8/16/2020	Lightning strikes to transmission line
4	34	Santa Clara	2.25	0.4	52%	34	8/16/2020	Lightning strikes to transmission line
4	35	Santa Clara	2.25	0.4	52%	34	8/16/2020	Lightning strikes to transmission line
4	36	Santa Clara	2.25	0.4	52%	34	8/16/2020	Lightning strikes to transmission line
4	37	Santa Clara	2.25	0.4	52%	34	8/16/2020	Lightning strikes to transmission line
4	38	Santa Clara	2.25	0.5	52%	43	8/16/2020	Lightning strikes to transmission line
4	39	Santa Clara	2.25	0.5	52%	43	8/16/2020	Lightning strikes to transmission line
4	40	Santa Clara	2.25	0.5	52%	43	8/16/2020	Lightning strikes to transmission line
4	41	Santa Clara	2.25	0.5	52%	43	8/16/2020	Lightning strikes to transmission line
4	42	Santa Clara	2.25	0.5	52%	43	8/16/2020	Lightning strikes to transmission line
4	43	Santa Clara	2.25	0.5	52%	43	8/16/2020	Lightning strikes to transmission line
4	44	Santa Clara	2.25	0.6	52%	51	8/16/2020	Lightning strikes to transmission line
5	1	Santa Clara	2	5	46%	325	8/17/20-8/18/20	State Emergency Load Shedding
5	2	Santa Clara	2	6	58%	400	8/17/20-8/18/20	State Emergency Load Shedding
6	1	Santa Clara	2	41.9	30%	200	8/17/20-8/18/20	utility outage

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
6	2	Santa Clara	2	47.7	22%	180	8/17/20-8/18/20	utility outage
6	3	Santa Clara	2	13	2%	20	8/17/20-8/18/20	utility outage
6	4	Santa Clara	2	37.2	54%	500	8/17/20-8/18/20	utility outage
6	5	Santa Clara	2	37.3	38%	250	8/17/20-8/18/20	utility outage
6	6	Santa Clara	2	41.7	0%	20	8/17/20-8/18/20	utility outage
7	1	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	1	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	1	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	2	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	2	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	2	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	3	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	3	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	3	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	4	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	4	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	4	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	5	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	5	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	5	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	6	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	6	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	6	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	7	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	7	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	7	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	8	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	8	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	8	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	9	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	9	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	9	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	10	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	10	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	10	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
7	11	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	11	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	11	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	12	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	12	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	12	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	13	Santa Clara	2.5	3.5	48%	600	8/18/2020	Power outage
7	13	Santa Clara	2.5	3.5	48%	600	9/6/2020	Power outage
7	13	Santa Clara	2.5	2.5	48%	480	8/14/2020	Power outage
7	14	Santa Clara	2	3.7	45%	220	8/17-8/18	Power outage
7	14	Santa Clara	2	4.9	55%	370	9/6/2020	Power outage
7	15	Santa Clara	2	3.7	45%	210	8/17-8/18	Power outage
7	15	Santa Clara	2	0.4	50%	390	9/6/2020	Power outage
7	16	Santa Clara	2	3.7	45%	220	8/17-8/18	Power outage
7	16	Santa Clara	2	4.9	5%	1.5	9/6/2020	Power outage
7	17	Santa Clara	2	0.2	5%	1.4	8/17-8/18	Power outage
7	17	Santa Clara	2	0.2	5%	0.2	9/6/2020	Power outage
7	18	Santa Clara	2	3.7	40%	210	8/17-8/18	Power outage
7	18	Santa Clara	2	4.9	55%	400	9/6/2020	Power outage
7	19	Santa Clara	2	5.5	50%	360	8/17-8/18	Power outage
7	19	Santa Clara	2	4.9	60%	410	9/6/2020	Power outage
7	20	Santa Clara	2	5.5	50%	370	8/17-8/18	Power outage
7	20	Santa Clara	2	4.9	60%	410	9/6/2020	Power outage
7	21	Santa Clara	2	5.5	50%	370	8/17-8/18	Power outage
7	21	Santa Clara	2	4.9	60%	410	9/6/2020	Power outage
7	22	Santa Clara	2	5.5	50%	370	8/17-8/18	Power outage
7	22	Santa Clara	2	4.9	60%	410	9/6/2020	Power outage
7	23	Santa Clara	2	5.5	20%	150	8/17-8/18	Power outage
7	23	Santa Clara	2	0.7	15%	14	9/6/2020	Power outage
7	24	Santa Clara	2	0.2	5%	1	8/17-8/18	Power outage
7	24	Santa Clara	2	0.1	5%	1	9/6/2020	Power outage
8	1	Santa Clara	2	0.3	5%	2	11/27/2019	System-wide power quality event
8	1	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	2	Santa Clara	2	0.3	5%	2	11/27/2019	System-wide power quality event
8	2	Santa Clara	2	0.3	5%	2	2/15/2020	System-wide power quality event

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
8	3	Santa Clara	2	0.3	6%	2	11/27/2019	System-wide power quality event
8	3	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	4	Santa Clara	2	0.3	7%	2	2/15/2020	System-wide power quality event
8	4	Santa Clara	2	0.2	8%	2	11/27/2019	System-wide power quality event
8	5	Santa Clara	2	0.2	10%	2	11/27/2019	System-wide power quality event
8	5	Santa Clara	2	0.2	8%	2	2/15/2020	System-wide power quality event
8	6	Santa Clara	2	0.2	9%	2	11/27/2019	System-wide power quality event
8	6	Santa Clara	2	0.2	7%	2	2/15/2020	System-wide power quality event
8	7	Santa Clara	2	0.2	15%	2	11/27/2019	System-wide power quality event
8	7	Santa Clara	2	0.2	8%	2	2/15/2020	System-wide power quality event
8	8	Santa Clara	2	0.2	13%	2	11/27/2019	System-wide power quality event
8	8	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	9	Santa Clara	2	0.2	9%	2	11/27/2019	System-wide power quality event
8	9	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	10	Santa Clara	2	0.2	12%	2	11/27/2019	System-wide power quality event
8	10	Santa Clara	2	0.2	7%	2	2/15/2020	System-wide power quality event
8	11	Santa Clara	2	0.2	5%	2	11/27/2019	System-wide power quality event
8	11	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	12	Santa Clara	2	0.2	5%	2	11/27/2019	System-wide power quality event
8	12	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	13	Santa Clara	2	0.2	6%	2	11/27/2019	System-wide power quality event
8	13	Santa Clara	2	0.2	7%	2	2/15/2020	System-wide power quality event
8	14	Santa Clara	2	0.2	6%	2	11/27/2019	System-wide power quality event
8	14	Santa Clara	2	0.2	7%	2	2/15/2020	System-wide power quality event
8	15	Santa Clara	2	0.2	12%	2	11/27/2019	System-wide power quality event
8	15	Santa Clara	2	0.2	11%	2	2/15/2020	System-wide power quality event
8	16	Santa Clara	2	0.3	10%	2	11/27/2019	System-wide power quality event
8	16	Santa Clara	2	0.2	9%	2	2/15/2020	System-wide power quality event
8	17	Santa Clara	2	0.3	9%	2	11/27/2019	System-wide power quality event
8	17	Santa Clara	2	0.2	9%	2	2/15/2020	System-wide power quality event
8	18	Santa Clara	2	0.2	7%	2	11/27/2019	System-wide power quality event
8	18	Santa Clara	2	0.2	6%	2	2/15/2020	System-wide power quality event
8	19	Santa Clara	2	0.2	10%	2	11/27/2019	System-wide power quality event
8	19	Santa Clara	2	0.2	8%	2	2/15/2020	System-wide power quality event
8	20	Santa Clara	2	0.2	9%	2	11/27/2019	System-wide power quality event

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
8	20	Santa Clara	2	0.2	7%	2	2/15/2020	System-wide power quality event
8	21	Santa Clara	2	0.2	17%	2	11/27/2019	System-wide power quality event
8	21	Santa Clara	2	0.2	12%	2	2/15/2020	System-wide power quality event
8	22	Santa Clara	2	0.2	8%	2	11/27/2019	System-wide power quality event
8	22	Santa Clara	2	0.2	8%	2	2/15/2020	System-wide power quality event
8	23	Santa Clara	2	0.2	6%	2	11/27/2019	System-wide power quality event
8	23	Santa Clara	2	0.2	5%	2	2/15/2020	System-wide power quality event
8	24	Santa Clara	2	0.2	6%	2	11/27/2019	System-wide power quality event
8	24	Santa Clara	2	0.2	5%	2	2/15/2020	System-wide power quality event
9	1	Santa Clara	2	8.4	65%	524	8/17/20-8/18/20	State Emergency Load Shedding
9	2	Santa Clara	2	5.6	60%	400	8/17/20-8/18/20	State Emergency Load Shedding
9	3	Santa Clara	2	2.6	50%	300	8/17/20-8/18/20	Equipment failure
9	4	Santa Clara	2	2.9	1%	20	8/17/20-8/18/20	State Emergency Load Shedding
9	5	Santa Clara	0.23	6.5	7%	10	8/17/20-8/18/20	State Emergency Load Shedding
10	1	Santa Clara	2	9	50%	256	8/17/20-8/18/20	State Emergency Load Shedding
10	2	Santa Clara	2	9	50%	256	8/17/20-8/18/20	State Emergency Load Shedding
10	3	Santa Clara	2	9	50%	256	8/17/20-8/18/20	State Emergency Load Shedding
10	4	Santa Clara	2.06	4	60%	296	8/17/20-8/18/20	State Emergency Load Shedding
10	5	Santa Clara	2.06	4	60%	296	8/17/20-8/18/20	State Emergency Load Shedding
10	6	Santa Clara	2.06	4	60%	296	8/17/20-8/18/20	State Emergency Load Shedding
10	7	Santa Clara	3	7	40%	1280	8/17/20-8/18/20	State Emergency Load Shedding
10	7	Santa Clara	3	4	40%	731.5	8/17/20-8/18/20	State Emergency Load Shedding
10	8	Santa Clara	3	7	40%	1280	8/17/20-8/18/20	State Emergency Load Shedding
10	8	Santa Clara	3	4	40%	731.5	8/17/20-8/18/20	State Emergency Load Shedding
10	9	Santa Clara	3	7	40%	1280	8/17/20-8/18/20	State Emergency Load Shedding
10	9	Santa Clara	3	4	40%	731.5	8/17/20-8/18/20	State Emergency Load Shedding
10	10	Santa Clara	3	7	40%	1280	8/17/20-8/18/20	State Emergency Load Shedding
10	10	Santa Clara	3	4	40%	731.5	8/17/20-8/18/20	State Emergency Load Shedding
10	11	Santa Clara	3	5	50%	780	8/17/20-8/18/20	State Emergency Load Shedding
10	12	Santa Clara	3	5	50%	780	8/17/20-8/18/20	State Emergency Load Shedding
10	13	Santa Clara	3	5.5	50%	930	8/17/20-8/18/20	State Emergency Load Shedding
10	14	Santa Clara	3	5	50%	780	8/17/20-8/18/20	State Emergency Load Shedding
10	15	Santa Clara	3	5.5	50%	930	8/17/20-8/18/20	State Emergency Load Shedding
10	16	Santa Clara	3	5.5	50%	930	8/17/20-8/18/20	State Emergency Load Shedding
10	17	Santa Clara	2.75	9	70%	625	8/17/20-8/18/20	State Emergency Load Shedding

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
10	18	Santa Clara	2.75	8.2	70%	525	8/17/20-8/18/20	State Emergency Load Shedding
10	19	Santa Clara	2.75	8.9	70%	615	8/17/20-8/18/20	State Emergency Load Shedding
10	20	Santa Clara	2.75	11.3	70%	975	8/17/20-8/18/20	State Emergency Load Shedding
10	21	Santa Clara	2	4	60%	238	8/17/20-8/18/20	State Emergency Load Shedding
10	22	Santa Clara	3	5.5	50%	930	8/17/20-8/18/20	State Emergency Load Shedding
10	23	Santa Clara	3	5.5	50%	930	8/17/20-8/18/20	State Emergency Load Shedding
10	24	Santa Clara	3	5.5	50%	930	8/17/20-8/18/20	State Emergency Load Shedding
10	25	Santa Clara	2.75	8.3	70%	530	8/17/20-8/18/20	State Emergency Load Shedding
10	26	Santa Clara	2.75	8.3	70%	530	8/17/20-8/18/20	State Emergency Load Shedding
10	27	Santa Clara	2.75	8.3	70%	530	8/17/20-8/18/20	State Emergency Load Shedding
10	28	Santa Clara	2.75	8.3	70%	530	8/17/20-8/18/20	State Emergency Load Shedding
10	29	Santa Clara	3	11.6	60%	1786		Power bump
10	29	Santa Clara	3	4	60%	616		Power bump
10	29	Santa Clara	3	3.5	60%	539	8/17/20-8/18/20	State Emergency Load Shedding
10	29	Santa Clara	3	3	60%	462		Power bump
10	29	Santa Clara	3	2.7	60%	416		Power bump
10	29	Santa Clara	3	1	60%	154		Power bump
10	29	Santa Clara	3	1	60%	154		Utility outage
10	30	Santa Clara	3	10.1	60%	1555		Utility outage
10	30	Santa Clara	3	5.5	60%	847		Power bump
10	30	Santa Clara	3	4	60%	616		Utility outage
10	30	Santa Clara	3	3.7	60%	569.8	8/17/20-8/18/20	State Emergency Load Shedding
10	30	Santa Clara	3	2.8	60%	431		Power bump
10	30	Santa Clara	3	1	60%	154		Utility outage
10	30	Santa Clara	3	1	60%	154		Utility outage
10	31	Santa Clara	3	11.5	60%	1771		Utility outage
10	31	Santa Clara	3	4	60%	616		Utility outage
10	31	Santa Clara	3	3.7	60%	569.8	8/17/20-8/18/20	State Emergency Load Shedding
10	31	Santa Clara	3	3	60%	462		Power bump
10	31	Santa Clara	3	2.7	60%	416		Power bump
10	31	Santa Clara	3	1	60%	154		Utility outage
10	31	Santa Clara	3	1	60%	154		Utility outage
10	32	Santa Clara	3	11.6	60%	1786		Utility outage
10	32	Santa Clara	3	4	60%	616		Utility outage
10	32	Santa Clara	3	3	60%	462		Power bump

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
10	32	Santa Clara	3	3	60%	462	8/17/20-8/18/20	State Emergency Load Shedding
10	32	Santa Clara	3	2.7	60%	416		Power bump
10	32	Santa Clara	3	1	60%	154		Utility outage
10	32	Santa Clara	3	1	60%	154		Utility outage
10	33	Santa Clara	3	11.6	60%	1786		Utility outage
10	33	Santa Clara	3	4	60%	616		Utility outage
10	33	Santa Clara	3	3.7	60%	569.8	8/17/20-8/18/20	State Emergency Load Shedding
10	33	Santa Clara	3	3	60%	462		Power bump
10	33	Santa Clara	3	2.8	60%	431.2		Power bump
10	33	Santa Clara	3	1	60%	154		Utility outage
10	33	Santa Clara	3	1	60%	154		Utility outage
10	34	Santa Clara	3	11.6	60%	1786		Utility outage
10	34	Santa Clara	3	4	60%	616		Utility outage
10	34	Santa Clara	3	3.7	60%	569.8	8/17/20-8/18/20	State Emergency Load Shedding
10	34	Santa Clara	3	3	60%	462		Power bump
10	34	Santa Clara	3	2.9	60%	447		Power bump
10	34	Santa Clara	3	1	60%	154		Utility outage
10	34	Santa Clara	3	1	60%	154		Utility outage
10	35	Santa Clara	3	6	40%	450	8/17/20-8/18/20	State Emergency Load Shedding
10	36	Santa Clara	3	2	40%	150	8/17/20-8/18/20	State Emergency Load Shedding
10	37	Santa Clara	3	5.5	40%	412	8/17/20-8/18/20	State Emergency Load Shedding
10	38	Santa Clara	3	5.5	40%	412	8/17/20-8/18/20	State Emergency Load Shedding
10	39	Santa Clara	3	5.5	40%	412	8/17/20-8/18/20	State Emergency Load Shedding
10	40	Santa Clara	2.75	8.3	70%	530	8/17/20-8/18/20	State Emergency Load Shedding
11	1	Santa Clara	2	5.8	25%	390	8/17/20-8/18/20	Power supplier request
11	1	Santa Clara	2	4.1	25%	390	8/17/20-8/18/20	Power supplier request
11	2	Santa Clara	2	4.7	31%	280	8/17/20-8/18/20	Power supplier request
11	2	Santa Clara	2	3.9	31%	280	8/17/20-8/18/20	Power supplier request
11	3	Santa Clara	2	5.6	28%	380	8/17/20-8/18/20	Power supplier request
11	3	Santa Clara	2	4.3	28%	380	8/17/20-8/18/20	Power supplier request
11	4	Santa Clara	2	5.4	43%	605	8/17/20-8/18/20	Power supplier request
11	4	Santa Clara	2	3.5	43%	605	8/17/20-8/18/20	Power supplier request
11	5	Santa Clara	0.23	6	17%	27	8/17/20-8/18/20	Power supplier request
11	5	Santa Clara	0.23	3.5	17%	27	8/17/20-8/18/20	Power supplier request
11	6	Santa Clara	2	4.5	17%	75	8/17/20-8/18/20	Power supplier request

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
11	7	Santa Clara	2	4.7	8%	75	8/17/20-8/18/20	Power supplier request
11	8	Santa Clara	2	4.7	8%	100	8/17/20-8/18/20	Power supplier request
11	9	Santa Clara	2	4.7	9%	100	8/17/20-8/18/20	Power supplier request
11	10	Santa Clara	2	4.8	11%	100	8/17/20-8/18/20	Power supplier request
11	11	Santa Clara	0.23	4.8	7%	30	8/17/20-8/18/20	Power supplier request
12	1	Santa Clara	0.23	2.9	14%	87	8/17/20-8/18/20	Utility outage
12	2	Santa Clara	2	43	8%	160	8/17/20-8/18/20	Utility outage
12	3	Santa Clara	2	42.8	6%	160	8/17/20-8/18/20	Utility outage
12	4	Santa Clara	2	38	15%	420	8/17/20-8/18/20	Utility outage
12	5	Santa Clara	2	24	55%	500	8/17/20-8/18/20	Utility outage
12	6	Santa Clara	2	10	6%	160	8/17/20-8/18/20	Utility outage
12	7	Santa Clara	2	10.4	7%	160	8/17/20-8/18/20	Utility outage
12	8	Santa Clara	2	42.1	30%	250	8/17/20-8/18/20	Utility outage
12	9	Santa Clara	2	41.8	30%	250	8/17/20-8/18/20	Utility outage
12	10	Santa Clara	2	10.3	1%	50	8/17/20-8/18/20	Utility outage
12	11	Santa Clara	2	10	7%	160	8/17/20-8/18/20	Utility outage
13	1	Santa Clara	2	19.8	37%	80.3	Various	Utility power outages; power blips, UPS/board repair
13	2	Santa Clara	2	20.4	37%	82.5	Various	Utility power outages; power blips, UPS/board repair
13	3	Santa Clara	1.25	14.96	43%	527	Various	Utility power outages; power blips, UPS/board repair
13	4	Santa Clara	1.25	14.94	42%	525	Various	Utility power outages; power blips, UPS/board repair
13	5	Santa Clara	1.25	14.92	43%	523	Various	Utility power outages; power blips, UPS/board repair
14	1	Santa Clara	2.7	1.9	22%	90	11/27/2019	Utiilty sag event
14	2	Santa Clara	2.7	1.9	32%	95	11/27/2019	Utiilty sag event
14	3	Santa Clara	2.7	1.9	1%	57	11/27/2019	Utiilty sag event
14	4	Santa Clara	2.7	1.9	34%	99.75	11/27/2019	Utiilty sag event
14	5	Santa Clara	2.7	4.4	41%	422	8/18/2020	Mandatory load transfer
14	6	Santa Clara	2.7	6.3	32%	445	8/18/2020	Mandatory load transfer
14	7	Santa Clara	2.7	4.7	2%	139	8/18/2020	Mandatory load transfer
14	8	Santa Clara	2.7	4.5	48%	123	8/18/2020	Mandatory load transfer
15	1	Santa Clara	2	14	65%	693		
15	2	Santa Clara	2	14	65%	693		
15	3	Santa Clara	2	14	65%	693		
15	4	Santa Clara	2	14				
15	5	Santa Clara	2	14				
15	6	Santa Clara	2.5	14	19%	486		

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
15	7	Santa Clara	2.5	14				
16	1	Santa Clara	2	2.4	2%	45.6	7/31/2020	Utility power outage
16	2	Santa Clara	2	2.4	18%	48	7/31/2020	Utility power outage
16	3	Santa Clara	1.5	2.4	30%	40.8	7/31/2020	Utility power outage
16	4	Santa Clara	1.5	2.4	25%	38.4	7/31/2020	Utility power outage
17	1	San Jose	2	2	14%	80	11/26/2019	Commercial power outage
17	2	San Jose	2	2	14%	80	11/26/2019	Commercial power outage
18	1	San Jose	2	1.5	30%	150	8/16/2020	Utility power outage
18	1	San Jose	2	1.5	30%	150	8/25/2020	Utility power outage
18	2	San Jose	2	1.5	30%	150	8/16/2020	Utility power outage
18	2	San Jose	2	1.5	30%	150	8/25/2020	Utility power outage
18	3	San Jose	2	1.5	30%	150	8/16/2020	Utility power outage
18	3	San Jose	2	1.5	30%	150	8/25/2020	Utility power outage
18	4	San Jose	2	1.5	30%	150	8/16/2020	Utility power outage
18	4	San Jose	2	1.5	30%	150	8/25/2020	Utility power outage
18	5	San Jose	2	1.5	30%	150	8/16/2020	Utility power outage
18	5	San Jose	2	1.5	30%	150	8/25/2020	Utility power outage
18	6	San Jose	2	1.5	30%	150	8/16/2020	Utility power outage
18	6	San Jose	2	1.5	30%	150	8/25/2020	Utility power outage
19	1	San Jose	1.5	4	20%	200	8/19/2020	Substation transformer power equipment failure
19	2	San Jose	1.5	4	17%	190	8/19/2020	Substation transformer power equipment failure
19	3	San Jose	1.5	4	50%	290	8/19/2020	Substation transformer power equipment failure
19	4	San Jose	1.5	4	60%	310	8/19/2020	Substation transformer power equipment failure
19	5	San Jose	1.5	4	53%	300	8/19/2020	Substation transformer power equipment failure
19	6	San Jose	1.5	4	40%	280	8/19/2020	Substation transformer power equipment failure
20	1	Santa Clara	3	4.1	42%	410	8/18/2020	State Emergency Load Shedding
20	1	Santa Clara	3	3.5	42%	350	9/7/2020	State Emergency Load Shedding
20	1	Santa Clara	3	1.5	42%	150	8/17/2020	State Emergency Load Shedding
20	2	Santa Clara	3	4.1	37%	410	8/18/2020	State Emergency Load Shedding
20	2	Santa Clara	3	3.6	37%	360	9/7/2020	State Emergency Load Shedding
20	2	Santa Clara	3	2.6	37%	250	8/17/2020	State Emergency Load Shedding
20	3	Santa Clara	3	4.1	40%	410	8/18/2020	State Emergency Load Shedding
20	3	Santa Clara	3	3.6	40%	360	9/7/2020	State Emergency Load Shedding
20	3	Santa Clara	3	1.8	40%	180	8/17/2020	State Emergency Load Shedding
20	4	Santa Clara	3	4.1	38%	410	8/18/2020	State Emergency Load Shedding

Preliminary back-up diesel engine operations (non-testing/non-maintenance) for select facilities in Santa Clara, Sunnyvale, and San Jose

September 1, 2019 - September 30, 2020

Facility operator data, based on facility responses to BAAQMD's 9/25/20 data request and follow-up conversations. Data may be refined and additional information may be available during follow-up discussions.

Data Center #	Engine #	City	Engine Size (MW)	Hours of operation (non-testing/non-maintenance)	Estimated engine load percentage during each non-testing/non-maintenance operations	Estimated fuel usage during each non-testing/non-maintanence operation (gallons)	Date	Explanation of non-testing/non-maintenance operation
20	4	Santa Clara	3	3.6	38%	360	9/7/2020	State Emergency Load Shedding
20	4	Santa Clara	3	1.4	38%	150	8/17/2020	State Emergency Load Shedding
20	5	Santa Clara	3	4.2	20%	410	8/18/2020	State Emergency Load Shedding
20	5	Santa Clara	3	1.1	20%	120	8/17/2020	State Emergency Load Shedding
20	6	Santa Clara	3	4.1	17%	410	8/18/2020	State Emergency Load Shedding
20	6	Santa Clara	3	1.3	17%	130	8/17/2020	State Emergency Load Shedding
20	7	Santa Clara	3	4.1	18%	410	8/18/2020	State Emergency Load Shedding
20	7	Santa Clara	3	1.4	18%	140	8/17/2020	State Emergency Load Shedding
20	8	Santa Clara	3	4.1	19%	410	8/18/2020	State Emergency Load Shedding
20	8	Santa Clara	3	1.4	19%	140	8/17/2020	State Emergency Load Shedding
20	9	Santa Clara	3	4.2	15%	420	8/18/2020	State Emergency Load Shedding
20	9	Santa Clara	3	1.1	15%	110	8/17/2020	State Emergency Load Shedding
20	10	Santa Clara	3	4.1	29%	410	8/18/2020	State Emergency Load Shedding
20	10	Santa Clara	3	1.3	29%	130	8/17/2020	State Emergency Load Shedding
20	11	Santa Clara	3	4.3	18%	430	8/18/2020	State Emergency Load Shedding
20	11	Santa Clara	3	1.4	18%	140	8/17/2020	State Emergency Load Shedding
20	12	Santa Clara	3	4.1	19%	410	8/18/2020	State Emergency Load Shedding
20	12	Santa Clara	3	1.4	19%	140	8/17/2020	State Emergency Load Shedding
20	13	Santa Clara	3	4.1	3%	120	8/18/2020	State Emergency Load Shedding
20	13	Santa Clara	3	1.2	3%	40	8/17/2020	State Emergency Load Shedding
20	14	Santa Clara	3	4	2%	120	8/18/2020	State Emergency Load Shedding
20	14	Santa Clara	3	1.3	2%	40	8/17/2020	State Emergency Load Shedding
20	15	Santa Clara	3	4	2%	160	8/18/2020	State Emergency Load Shedding
20	15	Santa Clara	3	1.3	2%	50	8/17/2020	State Emergency Load Shedding
20	16	Santa Clara	3	2	30%	20	8/17/2020	State Emergency Load Shedding
20	16	Santa Clara	3	1.5	30%	20	8/18/2020	State Emergency Load Shedding
20	17	Santa Clara	3	0.9	10%	20	8/17/2020	State Emergency Load Shedding
20	17	Santa Clara	3	0.8	10%	20	8/18/2020	State Emergency Load Shedding

MITIGATION MONITORING OR REPORTING PROGRAM

Memorex Data Center EIR

CITY OF SANTA CLARA

October 2021

PREFACE

Section 21081 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring or Reporting Program whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring or reporting program is to ensure compliance with the mitigation measures during project implementation.

On _____, the City Council certified the Environmental Impact Report (EIR) for the Memorex Data Center project. The Final EIR concluded that the implementation of the project could result in significant effects on the environment and mitigation measures were incorporated into the proposed project or are required as a condition of project approval. This Mitigation Monitoring or Reporting Program addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the EIR concluded that mitigation measures would not be required to reduce significant impacts.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	Biological Resources			
Impact BIO-1: Tree removal during the nesting season could impact protected raptors and/or other protected migratory birds. Any loss of fertile bird eggs, or individual nesting birds, or any activities resulting in nest abandonment during construction would constitute a significant impact.	**MM BIO-1.1:** Construction shall be scheduled to avoid the nesting bird season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay Area extends from February 1 through August 31. If it is not possible to schedule construction activities between September 1 and January 31, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure no nest shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game Code shall not be disturbed during project construction. A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to the start of grading or tree removal.	Preconstruction surveys shall be conducted no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April), and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).	The project applicant.	The Director of Community Development and CDFW.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
Impact BIO-5: Trees to be retained on-site may be injured during project construction activities including demolition and site grading. Additionally, trees adjacent to the proposed overhead transmission line may require substantial pruning to ensure clearance.	**MM BIO-5.1:** Barricades – Prior to initiation of construction activity, temporary barricades would be installed around all trees in the construction area. Six-foot high, chain link fences would be mounted on steel posts, driven two feet into the ground, at no more than 10-foot spacing. The fences shall enclose the entire area under the drip line of the trees or as close to the drip line area as practical. These barricades will be placed around individual trees and/or groups of trees. **MM BIO-5.2:** Root Pruning (if necessary) – During and upon completion of any trenching/grading operation within a tree's drip line, should any roots greater than one inch in diameter be damaged, broken or severed, root pruning to include flush cutting and sealing of exposed roots should be accomplished under the supervision of a qualified Arborist to minimize root deterioration beyond the soil line within 24 hours. **MM BIO-5.3:** Pruning – Pruning of the canopies to include removal of deadwood should be initiated prior to construction operations. Such pruning will provide any necessary construction clearance, will lessen the likelihood or potential for limb breakage, reduce 'windsail' effect and provide an environment suitable for healthy and vigorous growth. **MM BIO-5.4:** Fertilization – Fertilization by means of deep root soil injection should be used for trees to be impacted during construction in the spring and summer months.	Prior to initiation of construction activity. During and upon completion of any trenching/grading operation within a tree's drip line. Prior to construction operations. During construction in the spring and summer months.	The project applicant.	The Director of Community Development.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	MM BIO-5.5: Mulch – Mulching with wood chips (maximum depth of three inches) within tree environments should be used to lessen moisture evaporation from soil, protect and encourage adventitious roots and minimize possible soil compaction.	During construction.		
	Cultural Resources			
Impact CUL-1: The project would demolish the existing improvements on site and therefore would have a significant and unavoidable impact on a historical resource.	**MM CUL-1.1:** Historic American Buildings Survey (HABS) Recordation. Prior to project implementation, the historical resource will be recorded to Historic American Buildings Survey (HABS) standards established by the National Park Service, as detailed below: • A HABS written report will be completed to document the physical history and description of the historical resource, the historic context for its construction and use, and its historic significance. The report will follow the standard outline format described in the Historic American Buildings Survey Guidelines for Historical Reports in effect at the time of recording. The report shall be prepared by a professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History. • Large-format, black and white photographs of the historical resource will be taken and processed for archival permanence in accordance with Historic American Building Survey (HAB), Historic American Engineering Record (HAER), and HALS (Historic American Landscapes Survey) Photography Guidelines in effect at the time of recording. The	Prior to project implementation.	The project applicant.	The Director of Community Development.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	photographs shall be taken by a professional with HABS photography experience. The number and type of views required will be determined in consultation with the local jurisdiction. • Existing drawings, where available, will be reproduced on archival paper. If existing drawings are not available, a full set of measured drawings depicting existing conditions will be prepared. The drawings shall be prepared by a professional who meets the Secretary of the Interior's Professional Qualification Standards for Architecture or Historic Architecture. • The HABS documentation, including the written report, large-format photographs, and drawings, shall be submitted to appropriate repositories, such as the Santa Clara County Historical & Genealogical Society (SCCHGS), Silicon Valley Historical Association, Sourisseau Academy for State and Local History at San José State University, and/or the Computer History Museum in Mountain View. The documentation shall be prepared in accordance with the archival standards outlined in the Transmittal Guideline for Preparing HABS/HAER/HALS Documentation in effect at the time of recording. A professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History shall manage production of the HABS documentation.			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	MM CUL-1.2: Video Documentation. Video documentation of the subject property will supplement HABS documentation by recording the exterior and interior of the industrial complex at 1200 – 1310 Memorex Drive, as it appears, prior to project implementation. Using visuals in combination with active narration, the documentation shall include as much information as possible about the spatial arrangement, circulation patterns, historic use, current condition, construction methods, and material appearance of the historic resource. The documentation shall be conducted by a professional videographer, preferably one with experience recording architectural resources, and produced in conjunction with a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards. It is recommended that the video documentation be preserved in an electronic format that is cross-platform and nonproprietary. Like HABS documentation, archival copies of the video documentation shall be submitted to appropriate repositories, such as the SCCHGS, Silicon Valley Historical Association, Sourisseau Academy for State and Local History at San José State University, and/or the Computer History Museum in Mountain View. It may also be shared online via a freely accessible platform such as YouTube. **MM CUL-1.3:** Interpretive Display. Interpretive displays vary widely in size, style, construction, and information capacity. Specifications for a particular interpretive display should consider a number of factors, including but not limited to the nature of the resource, the intended audience, and the			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	location of the display. Although typically located at the subject property, offsite interpretive displays may be appropriate in certain cases, such as when the property is not publicly accessible for security or other reasons. In all instances, interpretive displays should be conducted by an architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards, in coordination with an exhibit designer. Both onsite and offsite interpretive displays may be appropriate mitigation measures for the demolition of the industrial complex at 1200 – 1310 Memorex Drive. Onsite displays should be located in a prominent space, such as a lobby, where they may be viewed by employees and visitors to the property. Displays should be permanent and should address the history and architectural features of the industrial complex at 1200 – 1310 Memorex Drive and its operation during the property's period of significance. Because of the nature of the proposed replacement project, however, the subject property may not be easily accessible by the public, and an offsite interpretive display may be recommended in place of or in addition to the onsite display. An offsite interpretive display should be located in a place with a connection to the subject property or its historical context. For example, the Computer History Museum in Mountain View may be an appropriate location for an interpretive display because of the substantial, contextual connection between the museum's mission and the subject property's significance within the development of the modern computer industry. The Computer History Museum also holds hundreds of Memorex Corporation artifacts and records in its			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	repository, which would complement an interpretive display related to the subject property. **MM CUL-1.4:** Oral History Collection. Oral history is a method of gathering and preserving the memories of people and communities, including personal commentaries of historical significance. Best practices for performing oral interviews are outlined by the Oral History Association (OHA), which was founded in 1966 and serves as the principal membership organization for those involved in the field of oral history. The project will prepare an oral history collection that focuses on the operation of the Memorex Corporation between 1961 and 1971, when the subject property served as the company headquarters. To the extent feasible, at least one former employee of the Memorex Corporation who was employed at the subject property shall be interviewed. A list of guests at the Memorex at Fifty reunion, hosted at the Computer History Museum in Mountain View in 2011, may serve as a preliminary list of potential narrators. Oral history audio and visual files collected as part of a mitigation effort for the 1200 – 1310 Memorex Drive will be conducted by a professional oral historian and preserved in an accessible, electronic format and submitted to appropriate repositories, such as the Santa Clara County Historical & Genealogical Society (SCCHGS), Silicon Valley Historical Association, Sourisseau Academy for State and Local History at San José State University, Oral History Center at the Bancroft Library in Berkeley, and/or the Computer History Museum, which currently houses more than one hundred oral			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	history interviews related to the development of the modern computer industry. In the event that no appropriate narrators are identified, or in the event that all potential narrators decline to participate, a memorandum will be prepared to document the project methodology and efforts.			
Impact CUL-2: The project may result in impacts to unknown subsurface cultural resources.	**MM CUL-2.1:** A Native American cultural resources monitor shall be on site to monitor all construction activities disturbing native soils. In the event that prehistoric or historical resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped, the Director of Community Development will be notified, and the Native American monitor and a qualified archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits. If the find is deemed significant, a Treatment Plan will be prepared by a qualified archaeologist in consultation with a Native American representative and provided to the Director of Community Development. The key elements of a Treatment Plan shall include the following: • Identify scope of work and range of subsurface effects (include location map and development plan), • Describe the environmental setting (past and present) and the historic/prehistoric background of the parcel (potential range of what might be found), • Develop research questions and goals to be addressed by the investigation (what is significant vs. what is redundant information),	During construction activities disturbing native soils. In the event a discovery is made, the archaeologist will examine the find and make appropriate recommendations prior to issuance of building permits.	The project applicant.	The Director of Community Development.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	• Detail field strategy used to record, recover, or avoid the finds, determined in consultation with a Native American representative (photogs, drawings, written records, provenience data maps, soil profiles, excavation techniques, standard archaeological methods) and address research goals. • Analytical methods, determined in consultation with a Native American representative (radiocarbon dating, obsidian studies, historic artifacts studies [list categories and methods], packaging methods for artifacts, etc.). • Report structure, including a technical and layman's report and an outline of document contents in one year of completion of development (provide a draft for review before a final report), • Disposition of the artifacts, • Appendices: site records, update site records, correspondence, consultation with Native Americans, etc.			
Impact CUL-3: The project could disturb human remains, should they be encountered on the site.	**MM CUL-3.1:** In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find will be stopped. The Santa Clara County Coroner will be notified and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner will notify the Native American	At the time a discovery is made.	The project applicant.	The Director of Community Development, Santa Clara County Coroner, and NAHC.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	Heritage Commission (NAHC) immediately. Once the NAHC identifies the most likely descendants, the descendants will make recommendations regarding proper burial, which will be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.			
Geology and Soils				
Impact GEO-6: Paleontological resources could be encountered during construction.	**MM GEO-6:** In the event paleontological resources are discovered all work shall be halted within 50 feet of the find and a Paleontological Resource Mitigation Plan shall be prepared by a qualified paleontologist to address assessment and recovery of the resource. A final report documenting any found resources, their recovery, and disposition shall be prepared in consultation with the Community Development Director and filed with the City and local repository.	At the time a discovery is made.	The project applicant.	The Director of Community Development.
Hazards and Hazardous Materials				
Impact GEO-6: Construction workers could be exposed to contaminated soil and/or groundwater during excavation, grading, and construction activities. Future users of the site could be exposed to hazardous soil vapor.	**MM HAZ-2.1:** For on-site construction activities, the project shall implement the approved Soil Management Plan prepared for the site under the oversight of the Regional Water Quality Control Board. **MM HAZ-2.2:** For off-site construction activities associated with the underground transmission line, a qualified environmental specialist shall collect shallow soil samples within the areas of proposed construction activities and have the samples analyzed to determine if contaminated soil is present with concentrations above established construction/trench worker and residential thresholds. Once the soil sampling analysis is complete, a report of the findings will be provided to the Director of Community Development for review. The report shall indicate whether any off-site	During all construction activities.	The project applicant.	The Director of Community Development, Regional Water Quality Control Board, and SCCDEH.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	contaminated soils found during sampling are related to the known on-site contamination, or whether they are from a different off-site contamination source. If contaminated soils are found in concentrations above established regulatory environmental screening levels, and are determined to be related to the known on-site contamination, the project shall incorporate the off-site contamination into the approved Soil Management Plan for the site. If the off-site contamination is determined to be unrelated to the known on-site contamination, the applicant shall enter into the Santa Clara County Department of Environmental Health's (SCCDEH) Voluntary Cleanup Program (VCP) to formalize regulatory oversight for remediation of contaminated soil to ensure the site is safe for construction workers and the public after development. The project applicant must remove contaminated soil in order to achieve detection levels acceptable to the SCCDEH. With approval of the SCCDEH, some of the contaminated soil may be allowed to be left in-place buried under hardscape and/or several feet of clean soil. The project applicant shall prepare and implement a Removal Action Plan, Soil Mitigation Plan or other similar report describing the remediation process and to document the removal and/or capping of contaminated soil. All work and reports produced shall be performed under the regulatory oversight and approval of the SCCDEH.			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
Noise				
Impact NOI-1.1: The project could expose adjacent land uses to excessive noise levels during construction.	**MM NOI-1.1:** The project shall implement a construction noise control plan to regulate the hours of construction, reduce construction noise levels emanating from the site, and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity. The control plan would include the following controls: • Construction activities shall be limited to hours between 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction is permitted on Sundays or Holidays. • Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment from adjacent properties. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps. • Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Unnecessary idling of internal combustion engines should be strictly prohibited. • Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate	During all construction activities.	The project applicant.	The Director of Community Development.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors. • Utilize "quiet" air compressors and other stationary noise sources where technology exists. • Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. • Control noise from construction workers' radios to a point where they are not audible at existing residential uses to the north of the project site. • The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance. • Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem.			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.			
Impact NOI-1.2: To avoid impacts related to operation of the proposed data center, the project will be required to incorporate noise reduction measures into the project design.	**MM NOI-1.2:** The building shall include a rooftop screen wall reaching 14 feet in height above the roof, meeting a minimum surface weight of three pounds per square foot (such as one-inch-thick wood, ½-inch laminated glass, masonry block, concrete, or one-inch metal). The screen wall shall extend along the full length of the building's southern façade, a minimum distance of 225 feet north of the southwestern corner of the building along the western façade, and a minimum distance of 135 feet north of the southeastern corner of the building along the eastern façade. **MM NOI-1.3:** Each chiller shall meet a sound power level goal of 100 dBA or less. **MM NOI-1.4:** Each generator shall meet a design goal of 70 dBA or less at a lateral distance of 23 feet and a height of five feet above ground under full load. Generators shall be tested one at a time during daytime hours only. **MM NOI-1.4:** Each generator shall be equipped with an exhaust silencer so that noise from the exhaust would not exceed 63 dBA at a lateral distance of 23 feet and a height of five feet above ground.	Prior to issuance of occupancy permit.	The project applicant.	The Director of Community Development.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
Transportation				
Impact TRN-1: The project's vehicle miles traveled (VMT) per employee would be above the relevant significance threshold.	**MM TRN-2.1:** The project shall implement a TDM program sufficient to demonstrate that VMT associated with the project would be reduced to 14.14 or less per employee. The TDM program may include, but is not limited to, the following measures which have been determined to be a feasible method for achieving the required VMT reduction: • Provide commute trip reduction marketing and education for all eligible employees. o Implement marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT. • Provide a subsidized or discounted transit program for all eligible employees. o This strategy requires the project employer to subsidize transit passes for participating employees. • Provide a rideshare program for all eligible employees.	Prior to issuance of occupancy permit.	The project applicant.	The Director of Community Development.

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	○ Organize a program to match individuals interested in carpooling who have similar commute patterns. Strategy encourages the use of carpooling, reducing the number of vehicle trips and thereby reducing VMT. The TDM program shall be submitted and approved by the Director of Community Development and shall be monitored annually to gauge its effectiveness in meeting the required VMT reduction. The TDM program shall establish an appropriate estimate of initial vehicle trips generated by the occupant of the proposed project and shall conduct driveway traffic counts annually to measure peak-hour entering and exiting vehicle volumes. The volumes will be compared to trip thresholds established in the TDM program to determine whether the required reduction in vehicle trips is being met. In addition to monitoring driveway volumes, a survey will be developed as part of the TDM program to determine actual mode splits for employees. The survey will also gather information on usage of individual TDM program components. The results of the annual vehicle counts and survey will be reported in writing to the Director of Community Development. If TDM program monitoring results show that the trip reduction targets are not being met, the TDM program shall be updated to identify replacement and/or additional feasible TDM measures to be implemented. The updated TDM program shall be subject to the same approvals and monitoring requirements listed above.			

MITIGATION MONITORING OR REPORTING PROGRAM MEMOREX DATA CENTER				
Impacts	**Mitigation**	**Timeframe for Implementation**	**Responsibility for Implementation**	**Oversight of Implementation**
	If monitoring and reporting demonstrates that the project is non-compliant (i.e., did not fulfill the requirements of the TDM program, meet the drive-alone reduction targets, etc.), the City as the enforcing agency may impose penalties including fines and/or permit limitations.			

Source: City of Santa Clara. *Final Environmental Impact Report for the Memorex Data Center.* October 2021.