

OTAY WATER DISTRICT

BOARD OF DIRECTORS MEETING
DISTRICT BOARDROOM

2554 SWEETWATER SPRINGS BOULEVARD
SPRING VALLEY, CALIFORNIA

WEDNESDAY

July 3, 2013

3:30 P.M.

AGENDA

1. ROLL CALL
2. PLEDGE OF ALLEGIANCE
3. APPROVAL OF AGENDA
4. APPROVE THE MINUTES OF THE REGULAR MEETING OF JUNE 5, 2013 AND SPECIAL MEETING OF MAY 14, 2013
5. PUBLIC PARTICIPATION – OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO SPEAK TO THE BOARD ON ANY SUBJECT MATTER WITHIN THE BOARD'S JURISDICTION BUT NOT AN ITEM ON TODAY'S AGENDA

CONSENT CALENDAR

6. ITEMS TO BE ACTED UPON WITHOUT DISCUSSION, UNLESS A REQUEST IS MADE BY A MEMBER OF THE BOARD OR THE PUBLIC TO DISCUSS A PARTICULAR ITEM:
 - a) APPROVE CHANGE ORDER NO. 3 TO THE EXISTING CONTRACT WITH BASILE CONSTRUCTION, INC. IN THE AMOUNT OF \$19,289.50 FOR THE 12-INCH POTABLE WATER PIPELINE IN ORANGE AVENUE, I-805 CROSSING PROJECT
 - b) APPROVE UTILITY AGREEMENT NO. 33592 WITH CALTRANS FOR SR-11, SEQUENCE I UTILITY RELOCATIONS PROJECT
 - c) APPROVE THE WATER SUPPLY ASSESSMENT AND VERIFICATION REPORT DATED MAY 2013 FOR THE OTAY RANCH PLANNING AREA 12 FREEWAY COMMERCIAL PROJECT

- d) APPROVE LEASE AMENDMENTS WITH SPRINT PCS ASSETS, LLC, A DELAWARE LIMITED LIABILITY COMPANY (SPRINT PCS) FOR MODIFICATIONS TO SIX (6) EXISTING COMMUNICATIONS FACILITIES LOCATED THROUGHOUT THE DISTRICT
- e) ADOPT RESOLUTION NO. 4211 TO CONTINUE WATER AND SEWER AVAILABILITY CHARGES FOR DISTRICT CUSTOMERS FOR FISCAL YEAR 2013-2014 TO BE COLLECTED THROUGH PROPERTY TAX BILLS
- f) ADOPT RESOLUTION NO. 4212 TO ESTABLISH THE TAX RATE FOR IMPROVEMENT DISTRICT NO. 27 AT \$0.005 FOR FISCAL YEAR 2013-2014
- g) ADOPT RESOLUTION NO. 4215 FOR THE ELECTION OF FOUR (4) CANDIDATES FOR THE SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY'S (SDRMA) BOARD OF DIRECTORS
- h) APPROVE INFORMATION TECHNOLOGY CONTRACTS FOR PHONE SERVICES, MANAGED SERVICES FOR THE DATA CENTER AND GPS TRACKING

ACTION ITEMS

7. ENGINEERING AND WATER OPERATIONS

- a) APPROVE THE ADOPTION OF A MITIGATED NEGATIVE DECLARATION FOR THE REGULATORY SITE ACCESS ROAD IMPROVEMENTS PROJECT (COBURN-BOYD)
- b) APPROVE THE WATER SUPPLY ASSESSMENT AND VERIFICATION REPORT DATED MAY 2013 FOR THE CITY OF SAN DIEGO OTAY MESA COMMUNITY PLAN UPDATE (COBURN-BOYD)
- c) CERTIFY THE FINAL SUPPLEMENTAL PROGRAM ENVIRONMENTAL IMPACT REPORT (SPEIR) FOR THE 2013 WASTEWATER MANAGEMENT PLAN (WWMP) AND FIND THAT THE POTENTIALLY SIGNIFICANT EFFECTS OF THE DISTRICT'S WWMP WILL BE AVOIDED THROUGH THE ADOPTION OF FEASIBLE MITIGATION MEASURES SHOWN IN THE SPEIR; AND APPROVE THE 2013 WWMP AS A FINAL PLAN AND DOCUMENT (COBURN-BOYD)

8. ADMINISTRATIVE SERVICE, FINANCE AND INFORMATION TECHNOLOGY

- a) RECEIVE THE DISTRICT'S INVESTMENT POLICY (POLICY NO. 27) FOR REVIEW, AND ADOPT RESOLUTION NO. 4213 AMENDING THE

POLICY AND RE-DELEGATING AUTHORITY FOR ALL INVESTMENT RELATED ACTIVITIES TO THE CHIEF FINANCIAL OFFICER IN ACCORDANCE WITH GOVERNMENT CODE SECTION 53607 (KOEPPEN)

9. BOARD

- a) CONSIDER CASTING A VOTE TO ELECT A MEMBER TO THE CALIFORNIA SPECIAL DISTRICTS ASSOCIATION'S BOARD OF DIRECTORS (WATTON)
- b) DISCUSSION OF 2013 BOARD MEETING CALENDAR

REPORTS

10. GENERAL MANAGER'S REPORT

- a) SAN DIEGO COUNTY WATER AUTHORITY UPDATE

11. DIRECTORS' REPORTS/REQUESTS

12. PRESIDENT'S REPORT/REQUESTS

RECESS TO CLOSED SESSION

13. CLOSED SESSION

- a) CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION [GOVERNMENT CODE §54956.9]

1 CASE

RETURN TO OPEN SESSION

14. REPORT ON ANY ACTIONS TAKEN IN CLOSED SESSION. THE BOARD MAY ALSO TAKE ACTION ON ANY ITEMS POSTED IN CLOSED SESSION

15. ADJOURNMENT

**MINUTES OF THE
BOARD OF DIRECTORS MEETING OF THE
OTAY WATER DISTRICT
June 5, 2013**

1. The meeting was called to order by President Lopez at 3:34 p.m.

2. ROLL CALL

Directors Present: Croucher, Gonzalez, Lopez, Robak, and Thompson

Directors Absent: None

Staff Present: General Manager Mark Watton, Attorney Richard Romero, Chief Financial Officer Joe Beachem, Chief of Engineering Rod Posada, Chief of Information Technology Geoff Stevens, Chief of Administration Rom Sarno, Chief of Water Operations Pedro Porras and District Secretary Susan Cruz and others per attached list.

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF AGENDA

A motion was made by Director Croucher, seconded by Director Thompson and carried with the following vote:

Ayes: Directors Croucher, Gonzalez, Lopez, Robak, and Thompson

Noes: None

Abstain: None

Absent: None

to approve the agenda.

5. PRESENTATION OF TYLER TECHNOLOGIES AWARD

Customer Service Manager Alice Mendez-Schomer and Lead Business Systems Analyst Shamala Saripalli presented the award the District received from Tyler Technologies in April 2013. The Tyler Technologies Public Excellence Award recognizes the District for its successful integration of its financial applications. This is very unique in the industry and the District is very pleased to be recognized for this effort. Chief of Information Technology Geoff Stevens indicated that the District was selected from sixty (60) firms who had submitted an application from across the Country.

6. APPROVE THE MINUTES OF THE REGULAR MEETING OF MAY 1, 2013

A motion was made by Director Thompson, seconded by Director Gonzalez and carried with the following vote:

Ayes: Directors Croucher, Gonzalez, Lopez, Robak, and Thompson
Noes: None
Abstain: None
Absent: None

to approve the minutes of the regular meeting of May 1, 2013.

7. PUBLIC PARTICIPATION – OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO SPEAK TO THE BOARD ON ANY SUBJECT MATTER WITHIN THE BOARD'S JURISDICTION BUT NOT AN ITEM ON TODAY'S AGENDA

No one wished to be heard.

CONSENT CALENDAR

8. ITEMS TO BE ACTED UPON WITHOUT DISCUSSION, UNLESS A REQUEST IS MADE BY A MEMBER OF THE BOARD OR THE PUBLIC TO DISCUSS A PARTICULAR ITEM:

Director Robak pulled Items 7g, APPROVE A TWO-YEAR AGREEMENT WITH BROWNSTEIN HYATT FARBER & SCHRECK IN AN AMOUNT NOT-TO-EXCEED \$35,000 ANNUALLY (\$70,000 TOTAL ENDING JUNE 30, 2015) FOR STATE AND FEDERAL LEGISLATIVE ISSUES ADVOCACY, and 7i, APPROVE A FIVE-YEAR AGREEMENT WITH INFOSEND TO PROVIDE BILL PRINT AND ELECTRONIC BILL PRESENTMENT SERVICES IN AN AMOUNT NOT-TO-EXCEED \$1,310,000 (\$262,000 ANNUALLY); AND WITH ELECTRONIC PAYMENT EXCHANGE TO PROVIDE PAYMENT TRANSACTION PROCESSING SERVICES IN AN AMOUNT NOT-TO-EXCEED \$735,000 (\$147,000 ANNUALLY), for discussion.

Director Thompson pulled Items 7b, APPROVE THE ISSUANCE OF A BLANKET PURCHASE ORDER TO KIRK PAVING IN AN AMOUNT NOT-TO-EXCEED \$175,000 FOR AS-NEEDED ASPHALT PAVING SERVICES FROM JULY 1, 2013 THROUGH JUNE 30, 2014, and 7c, UPDATE ON THE RECYCLED WATER RETROFIT PILOT PROGRAM AND APPROVE A WAIVER OF COSTS AND EXPENSES RELATED TO THE AGREEMENT FOR RECYCLED WATER RETROFIT BETWEEN THE DISTRICT AND THE ARISTATA HOMEOWNERS ASSOCIATION, for discussion.

Upon a motion by Director Robak, seconded by Director Thompson and carried with the following vote:

Ayes: Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes: None
Abstain: None
Absent: None

to approve the following consent calendar items:

- a) APPROVE UTILITY AGREEMENTS NO. 33545, 33551, AND 33556 WITH CALTRANS FOR THE EAST PALOMAR UTILITY RELOCATIONS
- d) APPROVE CHANGE ORDER NO. 3 TO THE EXISTING CONTRACT WITH GARCIA JUAREZ CONSTRUCTION, INC. IN THE AMOUNT OF \$7,142 FOR THE CALAVO GARDENS SEWER REHABILITATION PROJECT
- e) APPROVE A FIVE-YEAR UNIFORM AGREEMENT [THREE-YEARS, WITH TWO (2) ONE-YEAR OPTIONS] WITH MISSION LINEN SUPPLY, INC. FOR UNIFORM, LAUNDRY, FLOOR MAT, AND TOWEL SERVICES IN AN AMOUNT NOT-TO-EXCEED \$165,000
- f) DECLARE IDENTIFIED VEHICLES AND EQUIPMENT AS SURPLUS TO THE DISTRICT'S NEEDS
- h) APPROVE AN AGREEMENT WITH NEW CINGULAR WIRELESS PCS, LLC, A DELAWARE LIMITED LIABILITY COMPANY FOR THE INSTALLATION OF A COMMUNICATIONS FACILITY AT THE 1296-1, 2, AND 3 RESERVOIRS SITE

President Lopez presented item 7b for discussion:

- b) APPROVE THE ISSUANCE OF A BLANKET PURCHASE ORDER TO KIRK PAVING IN AN AMOUNT NOT-TO-EXCEED \$175,000 FOR AS-NEEDED ASPHALT PAVING SERVICES FROM JULY 1, 2013 THROUGH JUNE 30, 2014

Director Thompson inquired how the weighting is determined in the scoring of the bids. Utility Services Manager Jose Martinez referenced Attachment B to staffs' report and indicated that the weighted scores are based on the frequency that the District requires a particular type of service performed (ie., Asphalt Paving 0" to 6", Satin Seal, etc.). Based on how often the District utilizes a particular service, a weighted value of 1 to 10 is assigned to the various services with 10 being the most often and 1 the least often.

Upon a motion by Director Thompson, seconded by Director Lopez and carried with the following vote:

Ayes:	Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes:	None
Abstain:	None
Absent:	None

to approve staffs' recommendation.

- c) UPDATE ON THE RECYCLED WATER RETROFIT PILOT PROGRAM AND APPROVE A WAIVER OF COSTS AND EXPENSES RELATED TO

THE AGREEMENT FOR RECYCLED WATER RETROFIT BETWEEN
THE DISTRICT AND THE ARISTATA HOMEOWNERS ASSOCIATION

Director Thompson inquired what occurred that made the District decide the Recycled Water Retrofit Program was not cost effective and the reason the District is waiving the costs associated with the program for Aristata Homeowners Association. General Manager Watton indicated that the pilot program was initiated to learn if converting multi-family dwelling units to utilize recycled water for irrigation purposes would be worthwhile. During the pilot program that the Homeowner's Association's (HOA) realized that the program was going to take a lot more money, work and effort than anticipated versus the water savings that the conversion would produce. He stated that in the middle of the pilot program, the recession hit and the members of Aristata HOA's board changed. The HOA's finances were strained because they were not receiving their monthly homeowners' fees due to vacant condo units. The HOA decided that they could no longer be part of the program due to the cost, etc. The District found through the pilot program that the cost and work to retrofit multi-family dwelling units to use recycled water for irrigation outweighed the benefits. It was indicated that due to the regulatory structure of the Health Department (annual required certifications, the shutdown tests, etc.) the 15% rate differential sometime saved the HOA a little money on water cost, but sometimes it did not. He indicated that it was found that the incentive to retrofit is not to reduce water cost, but was more to use our water resources wisely.

Director Thompson further inquired why it was more cost effective for the other HOA's in the pilot program versus the Aristata HOA. Engineering Manager Dan Martin indicated that when the District asked a couple of the remaining three (3) HOA's if they would participate again in the program, they had indicated that they were not sure that they would participate again. However, they indicated that, though, it is not cost effective, they will take their project to completion.

Upon a motion by Director Thompson, seconded by Director Croucher and carried with the following vote:

Ayes:	Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes:	None
Abstain:	None
Absent:	None

to approve staffs' recommendation.

- g) APPROVE A TWO-YEAR AGREEMENT WITH BROWNSTEIN HYATT FARBER & SCHRECK (BHFS) IN AN AMOUNT NOT-TO-EXCEED \$35,000 ANNUALLY (\$70,000 TOTAL ENDING JUNE 30, 2015) FOR STATE AND FEDERAL LEGISLATIVE ISSUES ADVOCACY

Director Robak indicated that the District has worked with BHF for many years and that the District has been pleased with the services that they have provided. He stated that in the past, the board was provided regular updates from the firm.

He indicated that he understands that it gets busy, but he would like to see a regular update from the firm as was done in the past. General Manager Watton indicated that the firm has also provided services related to the Rosarito Desalination Project, however, they have not done much related to the project as it was suspended by the developer for some time. He indicated that the contract presented is separate from the Rosarito Desalination Project and is for State legislative representation only. He also indicated that staff would have the firm provide the board regular updates as was done in the past.

Director Robak also noted that the BHFS works with CWA. He stated one of the partners of BHFS is Mr. Scott Slater. He stated that Mr. Slater is the CEO of Cadiz, Inc. and inquired if this was not a conflict. General Manager Watton indicated that, at the present, it is not believed that there is a conflict. However, CWA and Otay WD are alert to this fact and are monitoring the situation. He indicated that the way the project is currently configured, they are selling water to public agencies who have indicated interest. If it continues this way, there would not be a conflict. If they decide to start providing subsidies or issues develop with MET or some other competition for public money occurs, that may be of interest to the Otay WD and a conflict could develop. He stated, however, as long as it is a private project with voluntary buyers, then it is not seen as an issue. General Manager Watton indicated that he has discussed this issue with BHFS and at CWA and all are alert to this this issue.

Upon a motion by Director Robak, seconded by Director Gonzalez and carried with the following vote:

Ayes:	Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes:	None
Abstain:	None
Absent:	None

to approve staffs' recommendation.

President Lopez inquired how many other agencies BHFS represents. General Manager Watton indicated that they represent CWA and agencies in the Los Angeles area. He indicated that he would provide the board a list of the agencies they represent.

- i) APPROVE A FIVE-YEAR AGREEMENT WITH INFOSEND TO PROVIDE BILL PRINT AND ELECTRONIC BILL PRESENTMENT SERVICES IN AN AMOUNT NOT-TO-EXCEED \$1,310,000 (\$262,000 ANNUALLY); AND WITH ELECTRONIC PAYMENT EXCHANGE TO PROVIDE PAYMENT TRANSACTION PROCESSING SERVICES IN AN AMOUNT NOT-TO-EXCEED \$735,000 (\$147,000 ANNUALLY)

Director Robak requested a briefing on the proposed contract with Infosend. Customer Service Manager Andrea Carey indicated that staff is proposing a two year term contract with an option to renew every year for the next three (3) years. She stated this is a very important function for the District and staff would like a

two-year fixed agreement to assure the services for two (2) years. It is quite a process to change vendors and the District did not want to get into a situation where it needs to switch vendors quickly. After the two-year term, if the District finds there is better pricing or the services provided is no longer what the District is looking for, then the District has the opportunity to look for an alternate vendor.

Director Robak inquired about Infosend and their relationship with EPX and Paymentus. Customer Service Manager Carey indicated EPX and Paymentus are the two (2) payment processing providers who Infosend contracts with. The District has selected EPX to provide the payment processing services. The EPX contract is dependent upon Infosend receiving the contract with the District. She stated that Infosend provides the front end services, such as, when a customer makes a payment via the District's website and the actual processing of the payment is handled by EPX. She indicated that they are two completely separate companies. She also indicated that Infosend is bonded/insured in response to another inquiry from Director Robak.

Upon a motion by Director Robak, seconded by Director Croucher and carried with the following vote:

Ayes:	Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes:	None
Abstain:	None
Absent:	None

to approve staffs' recommendation.

ACTION ITEMS

9. BOARD

a) DISCUSSION OF 2013 BOARD MEETING CALENDAR

There were no changes to the board meeting calendar.

INFORMATIONAL ITEMS

10. THESE ITEMS ARE PROVIDED TO THE BOARD FOR INFORMATIONAL PURPOSES ONLY. NO ACTION IS REQUIRED ON THE FOLLOWING AGENDA ITEMS.

a) REPORT ON DIRECTORS' EXPENSES FOR THE 3RD QUARTER OF FISCAL YEAR 2013

The board waived presentation and recommended that the report be received and filed.

b) INFORMATIONAL REPORT ON THE 3RD QUARTER FISCAL YEAR 2013 CAPITAL IMPROVEMENT PROGRAM

Engineering Manager Dan Martin provided a report on the Third Quarter Fiscal Year 2013 Capital Improvement Program. Please reference the Committee Action notes (Attachment A) attached to staff's report for the details of his report.

President Lopez indicated that the Engineering, Operations and Water Resources Committee had commented on the 624-1 Reservoir Cover Replacement Project with regard to the additional scope of the project and the change order percentage. Engineering Manager Martin indicated that earlier in 2013, staff had identified a change to the scope of work for the existing contract as it was discovered that the reservoir's liner also required replacement. The original contract was for the replacement of the reservoir cover only. The committee felt that the change was not due to unforeseen conditions, but was due to a change in the 'scope' of the project; the adding of the replacement of the reservoir liner to the project scope. The committee felt that the additional cost should not be considered in the change order percentage.

Director Croucher indicated that as the additional work was beyond the scope of the original contract, the additional cost should not be included in the change order percentage as the cost was not due to unforeseen conditions. He stated that the original project could have been completed within budget, however, the District decided to add additional work to the project.

Director Robak inquired on the status of the Calavo Gardens Sewer Project. Engineering Manager Martin indicated that the project is substantially complete and, at this point, they are working on punch list items. It was indicated that the sewer system was originally installed in the early 1970's where it replaced septic systems. He stated that much of the rehabilitation work is to repair sags and gaps in the system and replace manholes. The general life expectancy of sewer systems is about 70 to 80 years.

REPORTS

11. GENERAL MANAGER'S REPORT

General Manager Mark Watton presented his report which included the District's Landscape Contest, Sea World's Aquatica Opening, Website Migration, Rosarito Desalination Project, water sales and District events.

General Manager Watton also provided copies of articles concerning the CWA vs. MWD lawsuit. He indicated that CWA had requested documents from MWD under the California Public Records Act (CPRA). Because MWD would not comply with the CPRA and provide copies of the documents requested, CWA filed another lawsuit against MWD requesting, through the court system, that MWD comply with the CPRA and produce copies of the documents requested. It is felt, because of the second suit filed by CWA, MWD forwarded a request for records to CWA requesting a large number of documents. CWA asked, as part of the second lawsuit, that the court not require CWA to produce the documents requested by MWD as they are clearly not relevant to the first lawsuit. The judge

has ruled in CWA's favor on both issues. General Manager Watton also noted with regard to the first lawsuit filed by CWA concerning MWD's rates, that the article indicated that:

“Under MWD's current rate scheme, water ratepayers in San Diego County will be overcharged for transportation services this year by \$57 million. By 2021, the overcharges could grow to more than \$217 million annually.”

He stated when you add these overcharges up over the years, it quickly adds up to billions of dollars. There is a great deal at stake in this lawsuit. He also noted that LADWP is starting to produce the documents requested by CWA under the CPRA and it is clear that CWA will receive a judgment for approximately \$500,000 for CWA's attorney fees to compel Los Angeles Department of Water and Power (LADWP) to produce the documents.

Director Croucher noted further that the additional documents received from LADWP through the ruling of the lawsuit were pertinent to the rate lawsuit. CWA would not have received these documents without filing the lawsuit. This the reason CWA was also awarded attorney fees.

General Manager Watton also shared that the court upheld the QSA Agreement in CWA's lawsuit regarding the QSA. The issue went to trial several years ago and the trial court found issues with some of the Environmental Documents and other matters that went to appeal. The appellate court overturned the trial court and remanded some matters back to the trial court. The trial court then upheld the QSA Agreement. CWA is receiving significant water deliveries via the Colorado River and having this water delivered at one of the highest priority is very significant. The State of California and the Federal Government having the entitlements on the river in order is very important.

Director Croucher indicated he wished to note that General Manager Watton was instrumental as a leader on the QSA lawsuit which is significant to our region. He also noted with regard to CWA's request under the CPRA that they received hundreds of documents. He stated as CWA receives rulings in their favor, it is getting very encouraging.

He also commented that in reading some of MWD's staff reports, they discuss what they will do with excess funds. Due to increase water sales, etc., they have more revenues this year than they anticipated. However, if you read further, the staff reports then discuss MWD's intent to raise rates.

He indicated that CWA launched their Watersmart Website and a special thank you was presented to the Otay WD as the District assisted with many of the videos that are on the site. CWA also discussed that their pipeline connection to the Carlsbad Desalination Project will require realignment as it will cross a bridge. This will require additional piping and will cost an additional \$6 million.

He also shared that the Grand Jury reviewed CWA's decision making process with regard to water reliability and the findings of the review indicated that CWA is adequately handling this responsibility for the County. A copy of the findings will be shared with the board.

12. DIRECTORS' REPORTS/REQUESTS

Director Robak indicated that he had a discussion with General Manager Watton and Chief Financial Officer Beachem regarding the proposed rate increases. He stated once he took a look at the details, he had confidence that staff is doing all they can to keep rates as reasonable as possible. He stated he is happy to see how the District's rates compare to other local agencies.

13. PRESIDENT'S REPORT

President Lopez reported on meetings he attended during the month of May 2013 (a list of meetings he attended is attached).

14. ADJOURNMENT

With no further business to come before the Board, President Lopez adjourned the meeting at 4:50 p.m.

President

ATTEST:

District Secretary

President's Report
June 5, 2013 Board Meeting

A) Meetings attended during the Month of May 2013:

1) **May 1: Attended the District's Regular Board Meeting**

2) **May 2: Attended a Special Meeting of the Metro Commission**

i. Orientation training and a tour of the Point Loma Treatment Plant was provided to members and alternates of the Commission (see attached copies of agendas).

3) **May 3: Attended the Abondigas Monthly Meeting sponsored by the Mendez Group.** General Manager Mark Watton was the guest speaker. Attendees: Director Thompson and Communications Officer Buelna.

4) **May 8: Attended Focus Group Meetings.** Discussed the Rosarito Desalination Project with District constituents to receive their comments and feedback on the project. Attendees: Director Thompson, General Manager Watton and Communications Officer Buelna.

5) **May 9: Met with City of Chula Councilmember Bensoussan.** Updated her on the Rosarito Desalination Project and other Otay matters. Attendees: Director Mitch Thompson, General Manager Mark Watton and Communications Officer Armando Buelna.

6) **May 10: Committee Agenda Briefing.** Met with General Manager Watton to review items that will be presented at the May Committee meetings.

7) **May 14: Attended the District's Special Board Meeting.** The Board discussed and approved the District's Fiscal Year 2014 Budget.

8) **May 15: Attended the District's Finance, Administration and Communications Committee.** Reviewed, discussed, and made recommendation on items that will be presented at the May Committee Meetings.

9) **May 16: Attended CSDA's Quarterly Meeting.** CSDA held their Annual Educational Grant Program where their Grant Recipients presented on their project and how it increased awareness of the role of Special Districts in local government. Attendees: Director Gonzalez and Communications Officer Buelna.

- 10) **May 17: At the invite of Mexico Congressman and former Otay Director, Jaime Bonilla, attended Mexico's Northern Border Committee meeting held in Tijuana, Mexico.**
Discussed the Rosarito Beach Desalination Project.
Attendees: Director Thompson, General Manager Watton and Attorney Richard Romero.
- 11) **May 29: Attended the Metro Commission Finance Committee Meeting.** Discussed the Commission's FY 2014 O&M and CIP Budget and various staff contracts. (See attached copy of agenda.)
- 12) **May 31: Board Agenda Briefing.** Met with General Manager Watton and General Counsel Dan Shinoff to review items that will be presented at the June Board Meeting.

AGENDA ITEM 4

**MINUTES OF THE
SPECIAL MEETING OF THE
BOARD OF DIRECTORS
OTAY WATER DISTRICT
May 14, 2013**

1. The meeting was called to order by President Lopez at 3:12 p.m.

2. ROLL CALL

Directors Present: Croucher, Gonzalez, Lopez, Robak and Thompson

Directors Absent: None

Staff Present: General Manager Mark Watton, Attorney Richard Romero, Chief of Information Technology Geoff Stevens, Chief Financial Officer Joe Beachem, Chief of Engineering Rod Posada, Chief of Administration Rom Sarno, Chief of Operations Pedro Porras, District Secretary Susan Cruz and others per attached list.

3. PLEDGE OF ALLEGIANCE

4. APPROVAL OF AGENDA

A motion was made by Director Thompson, seconded by Director Croucher and carried with the following vote:

Ayes:	Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes:	None
Abstain:	None
Absent:	None

to approve the agenda.

5. PUBLIC PARTICIPATION – OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO SPEAK TO THE BOARD ON ANY SUBJECT MATTER WITHIN THE BOARD'S JURISDICTION BUT NOT AN ITEM ON TODAY'S AGENDA

No one wished to be heard.

WORKSHOP

6. ADOPT RESOLUTION NO. 4210 TO APPROVE THE FISCAL YEAR 2013-2014 OPERATING AND CAPITAL BUDGET; APPROVE FUND TRANSFERS FOR POTABLE, RECYCLED, AND SEWER; APPROVE TEMPORARY REDUCTION IN THE RESERVE LEVEL OF REPLACEMENT FUNDS; ADOPT THE SALARY SCHEDULE; OBTAIN APPROVAL OF THE DRAFT PROPOSITION 218 RATE INCREASE NOTICES AND DIRECT STAFF TO MAIL THE NOTICES

Chief Financial Officer Beachem reviewed the objectives of the workshop which included:

- Review the FY 2014 Strategic Plan
- Present for approval an \$86.1 million Operating Budget
- Present for approval a \$13.8 million CIP Budget
- Request approval to include in the budget, rate increases beginning with the January 2014 billing
 - Water: 7.5%
 - Sewer: 7.9%
- Obtain direction to prepare and send 5-year Proposition 218 notices of water and sewer rate increases
- Request approval of the annual fund transfers
- Approve a temporary reduction in the potable replacement fund (setting balance below target budget, but above minimum) to avoid short term external borrowing

Chief Financial Officer Beachem indicated that staff has also looked at another alternative for rates which is presented as “Option B” in staffs’ report. Also included with the materials is a presentation for Option B along with Proposition 218 notices for both Option A and Option B. Staff will be presenting Option A and at the end of the presentation will discuss Option B.

Chief of Information Technology Geoff Stevens provided a presentation on the District’s Strategic Plan and what has been accomplished over the last 10 years. He stated that the District developed the first version of the District’s Strategic Plan in 2002. Since that time, 350 objectives have been identified in the plan and over 250 have been completed which has included the implementation of the Automated Meter Reading (AMR) program, the EDEN financial and billing system, a comprehensive Cathodic Protection program, etc. The strategic planning process is repeated in three (3) year increments and follows the same process:

1. Develop a three (3) year Strategic Plan based on the District’s vision, mission and strategies
2. Execution/implementation of the plan
3. Determining the success through measuring performance

4. Communicate findings of the performance measures
5. Based on performance, take corrective action if required

He reviewed new objectives that will be included in the Fiscal Year 2014 Strategic Plan:

- Define expenditures or projects that would require a cost/benefit analysis (identify projects that the District will place focus on)
- Replace the SCADA and Work Order systems over the next 12 to 24 months
- Enhance security processes and planning
- Implement the recommendation within the Integrated Water Resources Plan
- Complete the Waste Water Management Plan
- Improve measurement of project performance

He stated that the approval of the budget will allow staff to execute the Strategic Plan and initiate the planning for the Fiscal Year 2015 to 2017 Strategic Plan.

Director Robak inquired, with regard to the improvement of process performance, what process the District utilizes to assess the success of the implementation of new hardware/software. Chief of Information Technology Stevens indicated that when an objective is identified, staff also must identify a measurement plan that specifies exactly what is to be accomplished and when it is to be accomplished. By having specificity in the measurement, the District can measure the success of an objective.

Chief Financial Officer Beachem reviewed the process to develop the District's budget. He stated the Strategic Plan is where the process begins and it is what drives where the District will be focusing its efforts. With Strategic Plan as a guide, all items are input into the 6-year rate model which includes the 6-year CIP Budget, Operating budget, MWD and CWA rates, beginning year balances, the various assumptions for interest rates, inflation, growth and sales, and the District's targets for debt coverage and reserve levels. From the input, the District generates an Operating and CIP Budget and the water and sewer rates to support the budgets.

As the rate model is developed, staff assures that District objectives are met. Some of the objectives include:

- Increasing the debt coverage ratio to the 150% target level
- Funding the \$86.1 million Operating Budget
- Funding the \$13.8 million Capital Budget
- Maintaining all reserves at target level
- Assuring that all are accomplished in accordance with the District's Reserve Policy
- Keep District's rates as low as possible

He stated that staff is also requesting approval of the proposed fund transfers:

- Potable:
 - Replacement to Designated Betterment - \$540,000
 - Replacement to Designated Expansion - \$357,000
- Sewer:
 - General Fund to Designated Betterment - \$774,000
- Potable to Sewer:
 - Potable Replacement to Designated Sewer Expansion - \$40,000
 - Potable Replacement to Designated Sewer Betterment - \$221,000
 - Potable Replacement to Sewer Replacement - \$267,000

From the Operating Budget, staff is proposing transfers to the following reserve funds:

- From Potable (\$3,418,000) and Recycled (\$10,000) transferring a total of \$3,428,000 to the Expansion Reserve
- From Recycled transferring \$125,000 to the Betterment Reserve
- From Recycled transferring \$4,230,000 to the Replacement Reserve
- From Potable transferring \$152,800 to the Sewer General Fund
- From Potable (\$1,913,100), Recycled (\$66,900) and Sewer (\$61,400) transferring a total of \$1,242,900 to the OPEB Trust Fund
- From Potable transferring \$1,913,100 to the Potable General Fund

Chief Financial Officer Beachem indicated that staff had projected in last Fiscal Year's (FY) six-year budget projections, water rate increases that are pretty close to this year's projection for FY's 2014 and 2015. However, the increases projected for FY's 2016 through 2017 is about 10% higher from last FY's projections; 2.9% versus today's projection of 7.5% in 2016 and 2.8% versus today's projection of 7.5% in 2017. This is mainly due to the estimated increase of water cost from CWA for supplies from the Carlsbad desalination project starting in 2016. Staff is proposing a smooth rate increase of 7.5% in FY's 2014 through 2017. This will also allow the District to meet its debt coverage ratio target in 2017 of 150% and above.

He indicated with sewer, the projected six-year budget projections for sewer last FY is the same as projected for this FY. The projected rate increases for sewer from FY 2014 through 2019 is 7.9%. In response to an inquiry from Director Robak, Chief Financial Officer Beachem indicated that the rate increase is due to a rate increase from the City of San Diego's Metro Commission and the District's needs for operating expenses. He stated that last year the District projected where it needed to be to assure reserves are on target to fund the sewer CIP and this year there is nothing different in staffs' projections. Thus, staff is proposing a 7.9% increase this FY as projected last FY.

The District's Debt Coverage Ratio in FY 2013 is projected to be 138%. This is a fairly low number. Standards & Poor's is reviewing the District's rating for the refinancing of the 2004 Certificates of Participation and had reaffirmed the District's "AA" rating. However, they moved the District from the "Strong" category to the "Good" category and placed the District on their negative watch list. If the District's rates do not support a debt coverage that is higher, they will likely downgrade the District's rating as Fitch had done a year ago (AA-).

Chief Financial Officer Beachem indicated that the lower debt coverage ratio is a result of 30% decrease in water sales. He stated that the District's water sales have leveled off and it is expected that the District's debt coverage ratio will increase to the 150% target level. He noted that the District's debt coverage ratio without growth (capacity fees paid by development) is the ratio that staff wishes to keep above 150%. When the District matures, it will need to be able to support a strong financial position without growth revenues.

Director Thompson inquired when the District would need to issue debt again. Chief Financial Officer Beachem indicated that it is likely a few years beyond 2020. It depends on growth. If growth is as strong as projected six years from now, it may be many years from then that the District would need to issue debt. The District's rate model does not go out that far, but it is projected that the District will be in a strong position in six years.

Chief Financial Officer Beachem indicated that 95% of the District's proposed rate increase is a result of the District's suppliers (CWA, MWD, City and County of San Diego and SDG&E) rate increases. Five percent of the increase is due to the District's internal needs to increase the District's debt coverage ratio and maintain its reserve funds.

He reviewed items that are helping to keep rates down:

- Salary and benefit costs net of \$180,700 due to:
 - Reduction in staffing levels (5 positions) saving \$519,900
- Materials and Maintenance decrease of \$264,100
- Reduction in 6-year CIP of \$9.3 million (projects have been delayed due to a slowdown/decrease in development)
- No new water debt issuances in 6-year timeframe

He indicated the following items are putting an upward pressure on rates:

- Water cost increase of \$3,262,700 million
- Carlsbad Desalination increases the rate from 7.3% to 7.5% in FY 2014 (with more significant increases in future years)
- Administrative costs increase of \$277,700

Chief Financial Officer Beachem indicated that staff had presented to the board in March 2013 the findings of the Rate Study for water and sewer. The board had directed staff to incorporate the water and sewer rate structure changes into the budget based on the Cost of Service Study, Best Management Practices and Industry Standards. The changes have been incorporated into the proposed budget for FY 2014.

He stated that with the proposed water rate increase for FY 2014, the District would rank as the eighth (8th) lowest cost water provider with an average residential bill of \$77.84 for customers utilizing an average of 14 units of water a month. The District's goal is to remain under the mid-point among the local water agencies.

He indicated with regard to the proposed sewer rate increase of 7.9% in each of the next six (6) years, the typical residential customer will see a \$6.20 increase per month where \$3.34 of the increase is due to the findings of the Cost of Service Study and \$2.86 is due to the 7.9% rate increase. With the proposed increases in FY 2014, the District will be the sixth (6th) lowest cost sewer service provider with an average residential bill of \$42.35 for customers who use an average of 14 units of water a month. Again, the District's goal is to remain under the mid-point among the local sewer providers.

He stated in 2015, it is projected that the District will need to borrow to fund the sewer CIP. It is proposed that the District borrow the needed \$10.2 million from the State Revolving Funds. This is a low cost and low interest rate (1.7% for 20 years) debt with no issuance cost other than internal costs (staff time). The sewer budget will be reimbursed in FY 2014 for funds borrowed by the potable budget last FY and reserves are all on target.

Chief Financial Officer Beachem introduced Mr. Alan Nevin of the London Group who had worked with staff to develop the growth projections for the development of the District's budget. He stated that Mr. Nevin will be presenting an economic overview for San Diego County. Mr. Nevin indicated that this year he included a demographic profile for the County. He stated that demography sets the path, in terms of utility usage, for future years. He indicated that the United States has changed pretty dramatically in the last 50 years. The birth rate has dropped by half and the average age of the population is moving upward. The composition of households is changing. Households are getting smaller, the population is getting married later (from an average of 23 to 24 years old to 28 years old) and having less children (from two [2] to three [3] children to having only one [1] child). He stated that only one (1) in every seven (7) households in the County is composed of a mother, father and two (2) children. Twenty-five percent of all the households in the County are only one (1) person. He stated that SANDAG projects that household size will average 3.3 persons. He stated all these changes are indicative of the demography of the County.

In the mid-2000's the County was producing 9,000 single-family homes a year with very little Townhomes. Today, we are producing 2,000 single-family homes a year (a drop of approximately 80%) and the production of condominium units is virtually non-existent. He stated that the District's service area is dramatically different from the rest of San Diego County. He stated that the majority of the County is built out and much of the County's construction in the northern area is mainly high density (30 to 50 units an acre; 3 to 4 story buildings) and the supply of single family homes is very meager. He stated the preponderance of available land for development is within the District's service area. There will be a rapid change in 2015 when Villages 8 and 9 in Otay Ranch and Millenium's 3,000 units are constructed. There will be, however, a large difference between today and the mid-2000's. In the mid-2000's the majority of residential construction was single family homes. Today, 25 to 30 units are being constructed per acre. He stated in the next decade there will be very little single family homes being constructed, thus, there will be reduced water use in the new developments as there will be a decline in homes with landscaping. There will also be a decline in commercial development in the District's service area. Water needs will be declining on a per unit basis, however, three will be more units to service. Thus, there will be a balance.

Director Robak inquired on Mr. Niven's thoughts with regard to SANDAG's projection that the size of households will drop to 3.3 persons; if this was the realistic household size. Mr. Niven indicated that he felt that there would likely be 2.9 to 3 persons per household.

Director Thompson asked if there has been any analysis of how immigration reform would impact the County's population. Mr. Niven indicated in the last 30 years, the size of the population for persons who were not born in the United States has doubled from 12% to 25%. However, the birth rates for the Hispanic and Asian populations have dropped dramatically in the last 30 years. The birth rates are now almost the same as non-Hispanic/White population. He indicated that the Asian birth rates have even dropped to below the non-Hispanic/White population. He stated that he did not see any changes to these profiles in the future.

The board thanked Mr. Niven for his presentation and insights.

Chief of Engineering Rod Posada presented the District's projected six (6) year CIP from 2014 to 2019. He stated that staff utilized Mr. Nevin's and the developers' projections to develop the District's growth projections which is presented in slide number 27 of staffs' report (see attached copy of presentation). He indicated that Single-Family homes (200 units), condominiums (200 units) and apartment units (900) are the majority of the developments projected in FY 2014. There will also be approximately \$46 million in commercial development mainly in the Otay Mesa area with some in the City of Chula Vista. He indicated that growth, thus, will remain relatively flat in FY 2014.

He stated that in the development of the six-year CIP budget last year, staff had projected that the CIP Budget requirements for FY 2014 was \$19.2 million. In the development of the CIP budget for FY 2014 this year, staff reprioritized projects based on recent requests for water availability letters, Water Supply Assessment reports, and the District's Water Resource Master Plan, and projects that the CIP Budget requirement for FY 2014 is \$13.8 million. The six-year CIP Budget total for FY's 2014 to 2019 is \$107.1 million. Of the \$107.1 million, \$63.4 million is designated for Capital Facilities Projects, \$32.73 million for Replacement/Renewal Projects and approximately \$11 million for Developer Reimbursements and Capital Purchases. He presented the high profile CIP projects which included:

- Potable Water Projects:
 - Otay Mesa Desalination Conveyance and Disinfection System, \$28.4 million
 - 870-2 Pump Station Replacement, \$12 million
 - Reservoir Improvement, \$7 million

- Sewer Projects:
 - Sewer System Rehabilitation, \$5.7 million
 - Campo Road Sewer Replacement, \$5.5 million

Accounting Manager Rita Bell presented the details of the FY 2014 Operating Budget. She indicated the District's water sales projections for FY 2014 are based on the prior year sales (April 2012 through March 2013) which have been affected by price elasticity, conservation, economy and weather patterns. She stated that from FY 2009 to FY 2010, the District had a large decline in water sales which is attributed to the historically large rate increase implemented in FY 2009. The rate increase was a pass-through from the increases implemented by the District's water suppliers. She stated that since FY 2009, water sales have leveled off.

She reviewed the Cost of Service Study recommendations for water that have been incorporated into the FY 2014 budget by board direction:

- Adjust the monthly fixed fee due to the updated meter equivalencies to match AWWA Standards
- Adjust tier and break points based on current usage patterns for Commercial and Recycled customers
- Create a Recycled Commercial Rate
 - The District does not yet have a customer under this category, however, such a customer is anticipated in the next five (5) years
 - The rate is set at 85% of the Commercial Rate
- Updated the Fire Service Fee to reflect the true Cost of Service

She stated the District's potable sales have increased by \$5.3 million. A large portion of the increase in revenue is due to last year's rate increase and a change in the sales volume and \$2.1 million is due to the proposed FY 2014 rate increase. It

was indicated that the potable water volume is expected to increase 0.2% based on growth projections. She stated when the District sets its rates, no more than 30% of the water revenue will be collected through fixed fees to comply with Best Management Practice 1.4. This is an industry standard.

She indicated that recycled sales revenues will increase \$637,700 or 8.3%. She shared that the increase in revenues is due to the rate increase implemented last fiscal year and the resetting of the meter equivalency fee. She stated that recycled customers tend to have larger meters and, thus, they need to contribute more towards the maintenance of the system for the water capacity they require. A smaller portion of the recycled revenue increase is due to the increase in the recycled water sales volume of 23,600 units or 1.3% and the remaining \$173,000 is due to the proposed rate increase that is built into the FY 2014 budget.

Accounting Manager Bell reviewed the Cost of Service of Study recommendations for sewer that have been incorporated into the budget as the board's direction:

- Adjust monthly fixed fees based on meter equivalency to match AWWA for all customer types
 - This will make water and sewer consistent as the water meter is utilized to measure sewer use
- Single-Family Residential:
 - Same monthly fixed fee for ¾" and 1" meters as the same volume is flowing through to the sewer
 - Phase-in the Cost of Service increase:
 - Year 1 – Implement Usage Fee increase
 - Year 2 – Implement Fixed Fee increase
 - Year 3 – Implement repayment of the phase-in increase (repayment of the first year delay)
- Multi-Residential: Charge system fee based on meter size instead of per dwelling unit
- Commercial:
 - Eliminate ASU calculation and instead base fixed fee on meter size
 - Update the strength factors to State Water Resources Control Board (SWRCB) standards
- Churches and Schools: Change the methodology to match commercial customers

She indicated that the overall sewer revenue increase based on the proposed rate increase of 7.9% and the implementation of the recommended changes of the Cost of Service Study, sewer revenues will increase \$146,400 or 5.7%. The increase is not for the full 7.9% in the first year as the Fixed Fee increase will not be implemented until year two (2).

The District also receives revenues from other sources which includes:

- Capacity Fee Revenues will increase \$136,600 due to an increase in projects funded by capacity fees
- Betterment Fee Revenues will increase \$60,800 due to an increase in projects funded by betterment fees
- The Grant Revenue of \$20,000 will be eliminated, but will be offset by decreases in the Conservation budget
- There will be no significant change in Property Tax revenues
- Miscellaneous Revenues will decrease \$68,000 due to the completion of the AMR meter replacement project. When the project is complete, the District will no longer have scrap metal to sell.

She stated that the District's water cost is increasing \$3,262,700 or 7.8%. She reviewed the reasons for the water cost increases which included:

- Variable Cost Increase:
 - Potable costs increase of \$2,476,700 or 8.1% due to the District's water suppliers (CWA and MWD) increasing their rates
 - Recycle costs increase of \$95,500 or 6.3% due to the "Take or Pay Contractual" agreement with City of San Diego and the volume increase of recycled water use (there is no recycled rate increase from the City this fiscal year)
- Fixed Cost Increase:
 - Potable costs increase of \$690,500 or 7.1% due to a rate increase from the District's water suppliers (CWA and MWD)
 - There is no change in the recycled water costs

She indicated that sewer costs will increase \$49,100 or 3.9% in FY 2014. The primary reasons for the increase is the City of San Diego's Metro Commission will increase their cost to the District \$13,700 and the Spring Valley Sanitation District's will increase their cost \$35,400 to the District.

Accounting Manager Bell indicated the one of the largest increase in FY 2014 is power cost. Power cost from SDG&E is estimated to increase \$325,300 or 13.7%. The reasons for the increase include:

- Water demand increase of 0.2% for potable and 1.4% for recycled
- SDG&E is anticipating up to four (4) separate 2.5% rate increases due to their rate case, increase in natural gas prices, shutdown of San Onofre, and transmission rate increases

To offset the energy cost increases, the District has implemented energy savings programs which have been successful. The District will continue to operate at non-peak and semi-peak rates.

Director Robak inquired, as the District's customers are buying less water, is it also causing sewer revenues to decrease because sewer is based on water use. Chief Financial Officer Beachem indicated that that was correct.

In response to another inquiry from Director Robak, General Manager Watton indicated that part of the issue with regulated utilities, in this case SDG&E, their rate of return is approximately 11% on invested capital. If you try to find an investment with the same return, it would be very hard to find and is the reason SDG&E is getting a lot of criticism.

Chief of Engineering Posada indicated that meter sales projections are based on discussions with developers and the information provided is compare to the plans that developers have submitted for new developments. Staff also references Mr. Allen Nevins economic forecasts.

Chief of Administration Rom Sarno reviewed the staffing changes. He indicated that each year the Senior Team members conduct an analysis of staff workload requirements and existing vacancies. Based on the review, five (5) vacant positions were deleted reducing the fulltime equivalent (FTE)/headcount from 148 to 143 in FY 2014. He stated that the District has reduced the number of staff members from 174.75 in 2007 to 143 in 2014; a reduction of 31.75 employees or 18.2%. The cumulative cost savings from the reduction in staffing is approximately \$14,181,300 from 2007 to 2014. From an efficiency standpoint, the customer to employee ratio has increased from 301 customers serviced per employee in 2007 to 380 customers serviced per employee in 2014 or an increase of 26.1%.

He indicated that salaries and benefits have decreased \$180,700 or 1%. The items increasing salary and benefits include:

- Increase in in-range adjustments per the MOU of \$129,300 (no COLA increase)
- Increase in Operating budget caused by a decrease in CIP charges of \$445,200
- Increase in health insurance costs of \$121,500

Offsetting the increases in salaries and benefits are a:

- Decrease in the staffing level of (\$519,900)
- Decrease in Vacation/Sick/Holiday, Social Security and other labor related costs due to the elimination of staffing of (\$190,600)
- Decrease in Pay for Performance of (\$105,000)
- Decrease in Overtime of (\$58,800)

Staff is also requesting that the board approve the salary schedule which is attached as Exhibit 2 to staffs' report.

In response to an inquiry from Director Croucher, Accounting Manager Bell indicated that cost savings realized by outsourcing workload is netted against the cost saved by eliminating positions. She stated that the numbers presented do reflect this net savings.

Director Thompson inquired what is the percentage change to total compensation cost per employee in comparison to total labor cost. Staff indicated that they would bring this figure back to the board. Director Thompson observed that at some point the District will have more retirees in the system versus active employees and inquired how this impacts the District's total labor cost with regard to pension cost. General Manager Watton indicated that the PERS cost is an actuarial calculation that is done periodically. The largest impact is how PERS is calculating their return. Staff will review these numbers and provide the board the information. He stated that the advice the District receives from PERS is pretty reliable and the District's pension is pretty well funded.

Chief of Operations Pedro Porras reviewed changes in the District's materials and maintenance costs and indicated that the District has decreased its materials and maintenance cost \$264,100 or 10.6%. He stated the decrease is due to:

- Decrease in infrastructure equipment and supplies of \$87,500 or 14.9%
- Decrease in fuel and oil of \$72,100 or 19.6%
 - The decrease has been consistent since 2006 and is attributable to the use of SR-125 and the District's use of more fuel efficient vehicles.
- Decrease in meter and materials of \$53,100 or 28.2%
 - With the completion of the AMR retrofit project, the District will not need to purchase additional meters. However, in three (3) to five (5) years the District will need to start replacing the batteries of the automated meters.
- Decrease in chemicals of \$47,900 or 10.1%
 - Due to the improvements to the District's treatment plant, the treatment process requires less chemicals. A lesser amount of chemicals are also being utilized on the recycled system.
- Offset by increase in District-wide contracted services of \$24,100 or 5.5%
 - The District no longer employs an in-house welder. The District instead hires a welder on a case-by-case basis when the services are required which has increased contracted services costs.

Accounting Manager Bell indicated that the overall administrative expenses increased \$277,700 or 5.8%. She reviewed the reasons for the increase:

- Increase in services of \$180,000. These increases, however, are all one-time increases and include:
 - Increase of \$100,000 is related to a Water Conservation Program
 - Increase of \$60,000 is related to the cost to prepare a Water and Sewer Capacity Fee Study

- Increase of \$35,000 is related to the cost to prepare a Condition Assessment Study for the Otay river Potable Water Trestle
- Increase in bank fees of \$73,700 related to customer credit card payments. As the cost of water increases, the fees to process larger bill payments also increases. It was noted by accepting credit card bill payments, the District has reduced its bad debt expense as more customers are paying on time.
- Increase in Property Liability Insurance of \$35,200 related to the increase in the number of facilities and property to be insured.
- Increase in General Office Expense primarily due to postage for Proposition 218 noticing of \$24,600.

Director Robak inquired what the \$100,000 increase for a water conservation program is related to. General Manager Watton indicated that at this point it is a place holder as the District develops other options/programs to encourage water conservation.

Director Thompson inquired with regard to customers utilizing credit cards to pay their bills if the District has not considered charging customers the credit card processing fee. Chief Financial Officer Beachem indicated that the District receives a discount if the District's customers do not pay the credit card payment fee. There is also a cost/benefit to providing the additional payment option as the District also avoids the cost to process check payments. Staff will review the cost/benefit to receiving bill payment through credit card payments and provide the information to the board.

Director Croucher inquired with regard to the increase in services of \$180,300 that the items noted which are contributing to increased costs do not add up to \$180,300. Accounting Manager Bell indicated that staff has only presented those items which have the largest impact to Administrative costs. She stated that there is a large list of items impacting Administrative costs which net to \$180,300.

Director Croucher also inquired if the Proposition 218 notices could be included with the mailing of customer bills. Chief Financial Officer Beachem indicated that the notices could be included with customer bills. However, because of the size of the notices, it would increase postage. There is also a timing issue as bills are mailed in various batches over a month based on when the customers' meters are read. It was noted that a notice must be mailed physically to customers and staff had also considered mailing a postcard advising customers that the rate notice is available on the District's website or to contact the District for a copy. It was indicated that Helix Water District had forwarded postcards and found that it was more costly and time consuming as a large number of their customers asked that the notice be forwarded to them.

Accounting Manager Bell reviewed those items which are reducing Administrative costs which included:

- Decrease of \$54,300 in Regulatory Agency Fees
 - Decrease in Election Fees for the Registrar of Voters of \$36,000 as there will be no elections for a director in FY 2014.
 - Decrease in Department of Public Health fees of \$21,000 as they are reducing the number of required site visits which reduces their fees.
- Decrease in conservation incentives for MF/HOA cash for water smart plants and residential smart landscape of \$21,000.
- Decrease in technology hardware and software of \$26,100.
- Decrease in Bad Debt Expense of \$23,300 as customers have more options to pay their water bills, such as by credit card.

Accounting Manager Bell indicated that the proposed FY 2014 Operation Budget is \$86.1 million which includes both water and sewer. Staff is also proposing the consolidation of Improvement Districts (IDs) which will be included in the Proposition 218 Notices. Staff is recommending that ID 25 be consolidated into ID 20 and ID 19 into ID 22.

She stated in compliance with Proposition 218, staff is proposing a five-year rate increase notice and public hearing and is requesting:

- Authorization to pass-through rate increases from the District's wholesale providers; CWA, MWD, City and County of San Diego and SDG&E.
- That the board authorizes a 10% maximum increase for internal operational requirements.

Accounting Manager Bell also presented the approximate number of notices to be mailed to each customer type (reference slide number 65 in attached presentation) and noted that the notices will be mailed to both tenants and owners of properties. Thus, more notices will be mailed than the number of District accounts.

She stated in conclusion, staff is presenting a balanced budget which supports the District's Strategic Plan and the water and sewer needs of its customers. Staff is proposing two options (Option A and B) for the proposed water rate increase and a 7.9% sewer rate increase to support the FY 2014 budget. She indicated that Chief Financial Officer Beachem will review, at the close of staff's presentation, proposed Option B. Staff is also proposing that the board approve the detachment and annexation of the two ID's as presented earlier.

Chief Financial Officer Beachem presented the two water rate increase options. He indicated that Option A provides for a rate increase of 7.5% for four (4) years (FY's 2014 through 2017) and Option B provides for a rate increase of 6.4% for two (2) years (FY's 2014 through 2015) and 10.6% in FY 2016 and 5.3% in FY 2017. He stated that Option B does not avoid a spike in rates that is caused by the Carlsbad Desalination Project. He indicated that the delay in the revenue stream of Option B also results in short term external borrowing of \$2.6 million for about 2.5 years. This is required to avoid the District Replacement Fund Reserve from going below its

minimum target level as identified by the District's Reserve Policy. Also, at the end of the Rate Model six-year time period, the District will have slightly less reserves of approximately \$3.1 million and a resulting delay in the return of the Replacement Reserve to target of approximately 1.5 years. He indicated that the debt coverage ratio is slightly lower under Option B compared to Option A.

Chief Financial Officer Beachem indicated that he does want to emphasize that both options are financially responsible. He stated, because of his fiscal conservative nature, he believes Option A places the District in a slightly better position to address any rate spikes. If the District's wholesalers were to miss their estimated rate increases, the District would be in a slightly better position to address the higher increase.

He reviewed the benefits and drawbacks of both options. He indicated with regard to:

Option A:

- Benefits:
 - Smooth rate without a rate spike
 - Financially better position to respond to CWA's Carlsbad Desalination Project cost
 - Strengthens the District's financial position more rapidly
- Drawbacks:
 - Slightly higher rate increases than Option B in the years other than the year of the rate spike (10.6% in 2016)

Option B:

- Benefits:
 - Slightly lower rate increases in the years surrounding the rate spike
- Drawbacks:
 - Requires short term external borrowing
 - More vulnerable to unknown factors regarding Carlsbad Desalination costs
 - Slightly lower financial strength, lower reserves and debt coverage ratio, and a delay in returning to the target level for the replacement reserve

Staff is requesting that the board adopt Resolution No. 4210 to approve the:

- FY 2014 Operating and CIP Budget
- Listing of Job Classifications and Salary Schedule
- Approve the fund transfers
- Approve a temporary reduction of the potable replacement fund level below target, but above the minimum
- Direct staff to prepare and send Proposition 218 notices of public hearing with proposed rate changes to customers

In response to an inquiry from Director Croucher, Chief Financial Officer Beachem indicated that that would fall under a pass-through. If the City of San Diego Metro Commission were to have a significant rate increase, it would not impact the District because the Proposition 218 Notices that staff is proposing to mail to customers indicate that the District would pass through rate increases or decreases imposed from its suppliers. Director Croucher noted that there are other issues beyond the District's control such as the Bay Delta pumping issues and the secondary conveyance of water from the southeast. Chief Financial Officer Beachem agreed that there are a number of unknowns which also include the City of San Diego's reclaimed water rate, CWA's allocation of the cost of the Carlsbad Desalination Project, etc. He stated that the cost increases would be a pass-through as per the proposed Proposition 218 Notices. They are certainly big unknowns and may cause the District to have higher rates.

Director Croucher requested a list of possible issues that could have a large impact to the District's cost, such as, the CWA vs. MWD lawsuit, Colorado River Water and Bay Delta, etc. This would be helpful to Directors to make them aware of possible issues. Chief Financial Officer Beachem indicated that in the official statement of the bond documents, staff highlighted areas that can be of risk to the District. He stated that staff might include that information in the budget documents. Director Croucher thanked staff for the good work on the budget.

Director Robak inquired when staff felt the District will start seeing the costs from the Carlsbad Desalination Project. Chief Financial Officer Beachem indicated that the costs are estimated to hit in 2016 or 2017. It was discussed that Option A includes the anticipated costs from the Carlsbad Desalination Project, Option B, does not. Staff believes the rate setting for the Carlsbad Desalination Plant will be set likely next year. Director Robak inquired what the cost differential was between the proposed FY 2014 rate increase of 7.5% in Option A and the 6.4% increase in Option B. Chief Financial Officer Beachem indicated that he did not have the dollar value, but the overall difference is about 10%. He referenced the presentation for Option B (attachment M to staffs' report) and indicated that it provides the difference in total revenue collected between Option A and B in FY 2014. Staff could provide the overall difference in revenue following today's meeting.

Director Robak indicated that he felt that Option A was the prudent option. He indicated that the District needs to make it clear to its customers the reasons for the increases and the implications of the Carlsbad Desalination Project and that Option A puts the District in a stronger financial position and avoids a rate spike.

Director Thompson indicated that he believes that the District should implement Option A because of the reasons indicated by staff. He stated that he would like to see a hybrid between Option A and B as in FY's 2018 and 2019 the projected rate increase is 2.3% (both years) in Option A and 3.3% (both years) in Option B. He stated that he would like to see more of a blend over the six years as in the last two

years of the model the increase is very small versus 7.5% in Option A in FYs 2014 through 2017. He stated he really doesn't like double digit increases and that he would like to see a blending of the increases. Chief Financial Officer Beachem indicated in the third year of the six years, the Carlsbad Desalination Project costs will be hitting fully. To maintain the District's operational debt ratio, 7.5% increases are needed in FY's 2014 through 2017. This will assure that the ratio does not drop below the District's target level of 150%. Chief Financial Officer Beachem referenced slide number 17 of staffs' presentation which graphically presents the District's ratio from 2014 to 2017 with the 7.5% rate increases incorporated (see attached copy of presentation). He noted that double digit increases would be required in Option B if the District wished to avoid borrowing. In response to an inquiry from Director Gonzalez, Chief Financial Officer Beachem indicated that in Option B the District would borrow in FY 2017.

General Manager Watton responded to another inquiry from Director Thompson and indicated that there are no changes to the Capital Program which would put any infrastructure at risk or delay maintenance. Staff reviewed the projects and determined which projects need to be constructed or could be delayed based upon need. Director Thompson further inquired what percentage of the District's assets has utilized replacement reserves and do we ever determine on an annual basis how much we need to maintain all the District's infrastructure long term. Chief of Engineering Posada indicated that staff does a cathodic protection evaluation every year and based on the evaluation, determines which pipelines and reservoirs need to be replaced or require maintenance. General Manager Watton further indicated that the District does not have one comprehensive plan, however, staff will be completing its Asset Management System which will maintain such information for the District's assets/infrastructure.

The board complimented staff on their work on the budget and indicated that they were very pleased with the knowledge and experience of the District's staff. Director Robak noted with regard to the "Notice of Public Hearing" that it should include information indicating that a portion of the increase is due to the cost of CWA's Carlsbad Desalination Project. He stated that he felt that information provided on the sewer rate increase was very helpful and that the increase is due to rate increases from the City of San Diego's Metro Commission, the District's sewer processing service supplier. He also suggested that the District include information on what customers can do to help conserve water and provide information about the District's programs and website, and the Water Conservation Garden.

Director Robak inquired when the hearing will be held. Chief Financial Officer Beachem indicated that the Notices are scheduled to be forwarded in approximately two (2) months and the hearing will be held at the September board meeting.

A motion was made by Director Robak, seconded by Director Croucher and carried with the following vote:

Ayes: Directors Croucher, Gonzalez, Lopez, Robak and Thompson
Noes: None
Abstain: None
Absent: None

to approve the FY 2014 Operating and Capital Budget utilizing Option A; approve the fund transfers for potable, recycled and sewer; approve temporary reduction in the reserve level of replacement funds; adopt the salary schedule; approve the draft Proposition 218 Rate Increase Notices and direct staff to mail the notices.

7. ADJOURNMENT

With no further business to come before the Board, President Lopez adjourned the meeting at 5:55 p.m.

President

ATTEST:

District Secretary

AGENDA ITEM 6a



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	July 3, 2013		
SUBMITTED BY:	Dan Martin Engineering Manager	PROJECT:	P2513-001103	DIV. NO.	3
APPROVED BY:	<input checked="" type="checkbox"/> Rod Posada, Chief, Engineering <input checked="" type="checkbox"/> German Alvarez, Assistant General Manager <input checked="" type="checkbox"/> Mark Watton, General Manager				
SUBJECT:	Approve Change Order No. 3 to the Contract with Basile Construction, Inc. for the 12-Inch Potable Water Pipeline in Orange Avenue, I-805 Crossing Project				

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) approve Change Order No. 3 to the existing contract with Basile Construction, Inc. (Basile) in the amount of \$19,289.50 for the 12-Inch Potable Water Pipeline in Orange Avenue, I-805 Crossing Project (see Exhibit A for Project location).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to execute Change Order No. 3 in the amount of \$19,289.50 to the contract with Basile for the 12-Inch Potable Water Pipeline in Orange Avenue, I-805 Crossing Project.

ANALYSIS:

At the January 8, 2013 Board Meeting, the Board awarded a construction contract in an amount of \$872,000 to Basile to construct a new 12-Inch Potable Water Pipeline in Orange Avenue, for the I-805 Crossing Project. The Project consists of the installation of

approximately 1,900 linear feet of 12-inch water line in Orange Avenue between Melrose Avenue and Oleander Avenue in the City of Chula Vista. The construction of this new water facility will meet the projected demands and maintain a redundancy in the water system that serves this area as Caltrans completes the transportation infrastructure construction of express lanes and a Direct Access Ramp structure at the I-805/East Palomar Overpass.

Since the award of the construction contract by the District to Basile, two contract change orders have been approved for potholing and redesigning tie-in connections for the water line due to utility conflicts. These change orders utilized bid item allowances provided for in the contract approved by the Board and resulted in no change to the overall contract value.

Change Order No. 3 (Exhibit B), which serves as a close-out change order for the contract, consists of a variety of items including:

- A differing site condition associated with the alignment of the existing utility openings located within the I-805/Orange Avenue bridge that impacted the planned water line installation.
- Working around and repairing damage to electrical utilities within the Caltrans right-of-way not shown in the plans or as part of the USA Mark-out for construction.
- Removal and reconstruction of an 18-inch reinforced concrete pipe (RCP) storm drain not shown in the plans or as part of the USA Mark-out for construction.
- Restoration of pavement at locations that were potholed during the design phase of the Project.
- Reconciliation and reallocation of unused contract allowances associated with Allowance Bid Items 13-15, and 19 to support the Change Order work.

Lastly, this Change Order provides for acceleration of the work being performed by District's contractor, Basile, as requested by Caltrans. The Caltrans work to demolish the adjacent I-805/East Palomar bridge and take the existing water main within that bridge out of service is dependent on putting the new water line constructed by this Project in service. The work associated with the differing site condition of the existing utility openings located within the I-805/Orange Avenue bridge delayed the overall completion of the Project by 42 days. The Project acceleration included in this change will mitigate Caltrans impacts associated with the revised completion date of the Orange Avenue water line work by reducing this time impact by 15 days. Caltrans has requested that the District accelerate the work and has initiated Utility Agreement 33601 (Exhibit C) to compensate the District for 100 percent of the costs associated with the Project

acceleration. The agreement will be executed in substantially the same form as attached to this report.

The following table summarizes the items in Change Order No. 3 and accounts for reallocation of unused allowances and the application of original allowances included in the contract to arrive at the net increase to the contract.

Description	Amount
Utility Opening differing site condition (Bridge Realignment)	\$38,000.00
Additional Electrical Utilities, Removal, and Reconstruction of 18" RCP, Pavement Restoration	\$23,039.00
Reconciliation and reallocation of unused contract allowances to support Change Order work	<\$20,142.50>
Application of original contract allowances for contract Bid Items 17 and 19	<\$31,313.00>
Project Acceleration as requested by Caltrans	\$9,706.00
Total	\$19,289.50

A complete breakdown of the costs associated with each item and the associated method of compensation is included in Change Order No. 3 (Exhibit B).

Change Order No. 3 also addresses contract time as a result of the items included in the Change Order. An assessment of the time impacts associated with each change is provided in Exhibit B including the addition of 42 days associated with the utility opening differing site condition and the reduction of 15 days associated with the Project acceleration. In total, 27 days will be added to the contract which will result in a revised total contract duration of 212 calendar days as a result of this Change Order.

In summary, the net increase to the Project for Change Order No. 3 is \$19,289.50 and 27 calendar days. As mentioned above, Caltrans will reimburse the District \$9,706.00, which reduces the actual value of Change Order No. 3 to \$9,583.50.

Basile is nearing completion of the water line construction in Orange Avenue. The remaining work consists of water line testing, construction of the tie-ins, final paving, and punch list items.

FISCAL IMPACT: Joe Beachem, Chief Financial Officer

Funding for the overall Project comes from CIP P2513. The total budget for CIP P2513, as approved for FY 2014, is \$1,350,000. Total expenditures, plus outstanding commitments and forecast, are \$1,279,858.00. See Attachment B for budget detail.

Based on a review of the financial budget, the Project Manager anticipates that the budget for CIP P2513 will be sufficient to support the Project.

Finance has determined that 100% of the funding is available from the Replacement Fund.

STRATEGIC GOAL:

This Project supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District in a professional, effective, and efficient manner" and the General Manager's Vision, "A District that is at the forefront in innovations to provide water services at affordable rates, with a reputation for outstanding customer service."

LEGAL IMPACT:

None.

DM:jf

P:\WORKING\CIP P2513 East Orange Ave I-805 Overcrossing\Staff Reports\BD 07-03-2013, Staff Report, Change Order No. 3\BD 07-03-2013, Staff Report, Change Order No 3 to Basile Construction, (DM).docx

Attachments: Attachment A - Committee Action
Attachment B - P2513 Budget Detail
Exhibit A - Location Map
Exhibit B - Change Order No. 3
Exhibit C - Utility Agreement No. 33601



ATTACHMENT A

SUBJECT/PROJECT: P2513-001103	Approve Change Order No. 3 to the Contract with Basile Construction, Inc. for the 12-Inch Potable Water Pipeline in Orange Avenue, I-805 Crossing Project
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COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a meeting held on June 19, 2013 and the following comments were made:

- Staff requested that the Board approve Change Order No. 3 to the existing contract with Basile Construction, Inc. (Basile) in the amount of \$19,289.50 for the 12-Inch Potable Water Pipeline in Orange Avenue, I-805 Crossing Project.
- Staff provided a background of the Project that was awarded to Basile on January 8, 2013, in a contracted amount of \$872,000.00. It was indicated that since the award of the contract by the District to Basile, two (2) contract change orders have been approved for potholing and redesigning tie-in connections for the water line due to utility conflicts.
- Staff stated that Change Order No. 3 serves as a close-out change order for the contract and is for a variety of items (See Exhibit B for details). The table shown on page 3 of the staff report summarizes the items and also accounts for the reallocation of unused allowances and the application of original allowances.
- It was noted that Change Order No. 3 also addresses contract time as a result of the items included in the Change Order. An assessment of the time impacts associated with each change is provided in Exhibit B including the addition of 42 days associated with the utility opening differing site condition and the reduction of 15 days associated with the Project acceleration. In total, 27 days will be added to the contract.
- Change Order No. 3 results in a net increase to the contract in the amount of \$19,289.50 as shown on the summary table on page 3 of the staff report. Caltrans has initiated Utility Agreement 33601 (Exhibit C) to compensate the District for 100 percent of the costs associated with the Project acceleration which total \$9,706.00. It

was noted that this reduces the actual value of Change Order No. 3 to \$9,583.50.

- Staff shared that Basile is nearing completion of the water line construction in Orange Avenue. The remaining work consists of water line testing, construction of the tie-ins, final paving, and punch list items.
- The Committee inquired about the difference between contract allowances and budgeted amount. Staff stated that the reallocation of contract allowances fund a majority of the items included in Change Order No. 3. The remaining funds needed to support Change Order No. 3 are available from the overall project budget.
- It was noted that the major item included in Change Order No. 3 is the Utility Opening Differing site condition (Bridge Realignment) that totaled \$38,000.

Upon completion of the discussion, the Committee supported presentation to the full Board as a consent item.



ATTACHMENT B – Budget Detail

SUBJECT/PROJECT: P2513-001103	Approve Change Order No. 3 to the Contract with Basile Construction, Inc. for the 12-Inch Potable Water Pipeline in Orange Avenue, I-805 Crossing Project
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Otay Water District					Date Updated: 5/29/2013
p2513-East Orange Avenue Bridge Crossing					
Budget	Committed	Expenditures	Outstanding Commitment & Forecast	Projected Final Cost	Vendor/Comments
1,350,000					
Planning					
Standard Salaries	956	956	-	956	
Total Planning	956	956	-	956	
Design					
Construction Contracts	5,517	5,120	397	5,517	ADCO UNDERGROUND SERVICES LLC
Consultant Contracts	2,193	2,193	-	2,193	ALTA LAND SURVEYING INC
	35,620	35,620	-	35,620	DARNELL & ASSOCIATES INC
	79,412	79,412	-	79,412	LEE & RO INC
	11,508	11,508	-	11,508	MTGL INC
	4,578	4,578	-	4,578	UNITED STORM WATER INC
	1,755	1,755	-	1,755	V & A CONSULTING ENGINEERS
Professional Legal Fees	950	950	-	950	STUTZ ARTIANO SHINOFF
Service Contracts	3,000	3,000	-	3,000	CITY OF CHULA VISTA
	5,333	3,343	1,990	5,333	MAYER REPROGRAPHICS INC
	3,450	3,450	-	3,450	PHOTO GEODETIC CORPORATION
	81	81	-	81	SAN DIEGO DAILY TRANSCRIPT
	474	474	-	474	US BANK CORPORATE PAYMENT
Standard Salaries	97,144	97,144	-	97,144	
Total Design	251,013	248,627	2,387	251,013	
Construction					
Construction Contracts	872,000	501,286	370,714	872,000	BASILE CONSTRUCTION INC
	19,290	-	19,290	19,290	CO 3 BASILE CONSTRUCTION INC
Consultant Contracts	56,220	35,550	20,670	56,220	VALLEY CONSTRUCTION MANAGEMENT
	9,781	9,781	-	9,781	LEE & RO INC
Professional Legal Fees	304	304	-	304	STUTZ ARTIANO SHINOFF
Regulatory Agency Fees	6,501	6,501	-	6,501	CITY OF CHULA VISTA
	5,000	-	5,000	5,000	OUTSIDE AGENCY FEE
Construction Reimbursement	(9,706)	-	(9,706)	(9,706)	UTILITY AGREEMENT #33601
Standard Salaries	68,500	19,843	48,657	68,500	OWD STAFF
Total Construction	1,027,889	573,265	454,625	1,027,889	
Grand Total	1,279,858	822,847	457,011	1,279,858	

EXHIBIT B

OTAY WATER DISTRICT

2554 SWEETWATER SPRINGS BLVD., SPRING VALLEY, CA. 91978, (619) 670-2222

CONTRACT/P.O. CHANGE ORDER No. 3

PROJECT/ITEM: 12-Inch Potable Water Pipeline In Orange Avenue, I-805 Crossing

CONTRACTOR/VENDOR: Basile Construction

APPROVED BY: REF. P.O. No: 716890 REF.CIP No.: P2513

Board

DATE: 5/28/13

DESCRIPTION:

There are twelve (12) items as part of this change order as follows:

- Item 1: Decrease Allowance Bid Item No. 13 by \$375.00
- Item 2: Decrease Allowance Bid Item No. 14 by \$4,080.50
- Item 3: Decrease Allowance Bid Item No. 15 by \$10,000.00
- Item 4: Decrease Allowance Bid Item No 19 by \$5,687.00
- Item 5: Increase Allowance Bid Item No 16 by \$2,436.50
- Item 6: Increase Allowance Bid Item No. 17 by \$17,706.00
- Item 7: Bridge Realignment (PCO #4). \$38,000.00, Increase of 42 Calendar Days
- Item 8: Caltrans Acceleration (PCO #8). \$9,706.00, Decrease of 15 Calendar Days
- Item 9: Unmarked utilities Sta. 16+05 (PCO #5). \$8,680.00
- Item 10: Unmarked Utilities Sta. 21+86/21+50 (PCO #6). \$3,800.00
- Item 11: Unmarked Utility Sta. 29+05 (PCO #7). \$9,246.00
- Item 12: Additional Paving for City of Chula Vista (PCO #9) \$1,313.00

REASON:

- Item 1: Bid Item No. 13 is an allowance item for rock removal, which will not be used on this project. The remaining excavation is located in a known fill area where rock is not present. This item results in a net decrease of \$375.00 (to be added to Bid Item #17).
- Item 2: Bid Item No. 14 is an allowance item for unsuitable soils, which will not be used on this project. The remaining excavation is located in a known fill area where unsuitable soils are not present. This item results in a net decrease of \$4,080.50 (to be added to Bid Item #17)
- Item 3: Bid Item No. 15 is an allowance item for regulated waste disposal, which will not be used on this project. The remaining excavation is located in a known fill area where regulated waste is not present. This item results in a net decrease of \$10,000.00 (to be added to Bid Item #17)
- Item 4: Bid Item No. 19 is an allowance item for additional paving requirements, which have been addressed and the remaining amount will not be used. This item results in a net decrease of \$5,687.00. (\$2,436.50 will be added to Bid Item #16 and \$3,250.50 will be added to Bid Item #17 (see items 5 and 6 below))
- Item 5: Bid Item No. 16 is an allowance item unknown work unmarked utilities. An increase in this allowance by \$2,436.50 is required to partially compensate the contractor for the work outlined in Item 8 below.
- Item 6: Bid Item No. 17 is an allowance item unknown work required by Caltrans. An increase in this allowance by \$17,706.00 is required to compensate the contractor for the work outlined in Item 7 and 8 below.
- Item 7: During construction, it was discovered that the center opening in the bridge did not line up with the abutment casings as was shown on plans. This required a new alignment for the pipe through the bridge and additional work. This item results in a net cost of \$38,000.00. The District authorizes the contractor to bill against Bid Item No. 17 for the complete cost of this work. Additionally, this item impacted the project critical path and results in an increase of 42 days to the contract.
- Item 8: To mitigate delay costs incurred by Caltrans for the start of the Palomar Bridge demolition project due to the completion date of this project, the District has agreed to accelerate the completion of this project and will be reimbursed by Caltrans for the cost of the acceleration. This item results in a net cost of \$9,706.00. The District authorized the contractor to bill against Bid Item No. 17 for the complete cost of this work. Additionally, the project acceleration provided for by this item results in a decrease of 15 days to the contract.
- Item 9: Two (2) electrical utilities were discovered at Sta. 16+05 that were not shown on plans or marked out by USA Dig Alert. Working around and repairing the damage to these utilities resulted in additional costs to the Contract that were tracked on a time and material basis. This item results in a net cost of \$8,680.00.

EXHIBIT B

contractor is authorized to bill against Bid Item #16 for \$2,436.50 of the work. The remaining \$6,243.50 to be billed as change order work.

Item 10: Two (2) electrical utilities were discovered at Sta. 21+86 and 21+50 that were not shown on plans or marked out by USA Dig Alert. Working around and repairing the damage to these utilities resulted in additional costs to the Contract that were tracked on a time and material basis. This item results in a net cost of \$3,800.00

Item 11: An 18" RCP Storm Drain was discovered at Sta. 29+05 that was not shown on plans or marked out by USA Dig Alert. Working around this utility including removal and reconstruction resulted in additional costs to the Contract that were tracked on a time and material basis and agreed price. This item results in a net cost of \$9,246.00.

Item 12: During potholing for the design phase of the project, several pothole locations were temporarily restored until construction was complete. These locations require repaving to comply with the City of Chula street standards. The cost to the District for this work is \$1,313.00. The District authorizes the contractor to bill against Allowance Bid Item #19 for the complete cost of this work.

Summary: This change order reflects twelve (12) items resulting in a \$19,289.50 increase to the contract and the addition of 27 days to the contract time.

The costs included in this change order include all mobilization, demobilization, supervision, overhead, profit, tax, bonding, insurance, and additional costs for down time or lost opportunities.

CHANGE P.O. TO READ:

Revise Contract to add \$19,289.50 and add 27 days time for a total Contract amount of \$891,289.50 with a Contract duration of 212 Calendar Days.

ORIGINAL CONTRACT/P.O. AMOUNT:	\$	872,000.00
ADJUSTED AMOUNT FROM PREVIOUS CHANGE:	\$	0.00
TOTAL COST OF THIS CHANGE ORDER:	\$	19,289.50
NEW CONTRACT/P.O. AMOUNT IS:	\$	891,289.50
CONTRACT/P.O. TIME AFFECTED BY THIS CHANGE:		27 Days
ORIGINAL CONTRACT COMPLETION DATE:		7/24/13
REVISED CONTRACT COMPLETION DATE		8/25/13

IT IS UNDERSTOOD WITH THE FOLLOWING APPROVALS, THAT THE CONTRACTOR/VENDOR IS AUTHORIZED AND DIRECTED TO MAKE THE HEREIN DESCRIBED CHANGES. IT IS ALSO AGREED THAT THE TOTAL COST FOR THIS CHANGE ORDER CONSTITUTES FULL AND COMPLETE COMPENSATION FOR OBLIGATIONS REQUIRED BY THE CONTRACT/P.O. ALL OTHER PROVISIONS AND REQUIREMENTS OF THE CONTRACT/P.O. REMAIN IN FULL FORCE AND EFFECT.

CONTRACTOR/VENDOR:

SIGNATURE: 
 PRINTED NAME: DAN MASON
 TITLE: PROJECT MANAGER DATE: 5/29/13
 ADDRESS: 752 ARMOUR ST
SAN DIEGO, CA 92111

STAFF APPROVALS:

PROJ. MGR. _____ DATE: _____
 DIV. MGR: _____ DATE: _____
 CHIEF: _____ DATE: _____
 ASST. GEN. MANAGER: _____ DATE: _____

DISTRICT APPROVAL:

GEN. MANAGER: _____ DATE: _____

COPIES: FILE (Orig.) CONTRACTOR/VENDOR CHIEF-ENGR CHIEF-FINANCE AGM/ENG-OPS
 ENGR. MGR. INSPECTION PROJ MGR ENGR. SECRETARY PURCHASING ACCTS PAYABLE

CHANGE ORDER LOG

CIP Title - 12" Potable Water Pipeline in Orange Avenue, I-805 Crossing

Project: P2513

Consultant/Contractor: Basile Construction

Subproject: 004000

		APPROVED			
C.O.	AMOUNT	BY	DATE	DESCRIPTION	TYPE C.O.
1	\$0.00	Div. Mgr.	3/5/2013	Pothole Utilities - Bid Item No. 16 Allowance (Value of CO \$9,797). Add 5 Days	Owner
2	\$0.00	GM	5/8/2013	New Tie-In location at Melrose and Orange due to unforeseen AT&T Utility conflict (Value of CO \$45,000)	Owner
3	\$19,289.50			Differing Site Condition at I/805/Orange Ave Bridge, Electrical Utilities, 18" Storm Drain, Additional Paving, Reallocate Unused Bid Allowances, Project Acceleration as requested by Caltrans (Value of CO \$70,745)	Owner
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					

Total C.O.'s To Date: \$19,289.50 2.2%

Original Contract Amount: \$872,000.00

Current Contract Amount: \$891,289.50

Change Order Breakdown for the Month:

Month	Net C.O.\$	Limit	Authorization	C.O. %
5/13	\$19,289.50	\$1,000	Insp	0.0%
		\$2,000	PM/Supervisor	0.0%
		\$5,000	Manager	0.0%
		\$10,000	Chief	0.0%
		\$10,000	AGM	0.0%
		\$10,000	GM	0.0%
		>\$10,000	Board	2.2%
			\$19,289.50	

UTILITY AGREEMENT

RW 13-5 (REV 12/2012)

DISTRICT 11	COUNTY SD	ROUTE 805	POST MILE 4.7-5.6	PROJECT ID 1100020051	EA 2T1821
FEDERAL PARTICIPATION N/A			OWNER'S FILE NUMBER CIP# 2513		
FEDERAL PARTICIPATION On the Project <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			On the Utilities <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

Owner Payee Data No. VC0000020910 or Form STD 204 is attached **UTILITY AGREEMENT NO** 33601**DATE** _____

The State of California, acting by and through the Department of Transportation, hereinafter called "STATE," proposes to replace structure and construct DAR on I -805, in San Diego County in Chula Vista, from 0.4 mile south of east Palomar Street overcrossing to 0.1 mile north of Naples Street undercrossing

And

NAME: Otay Water DistrictADDRESS: 2554 Sweetwater Springs Blvd. Spring Valley, CA 91978

hereinafter called "OWNER," owns and maintains a 10" and 12" potable water line running in Palomar Street within the limits of STATE's project which requires a water line to be kept in service for the length of the project therefore, a new water line will be installed through Orange Ave Bridge while construction takes place on the Palomar Street bridge to accommodate STATE's project.

It is hereby mutually agreed that:

I. WORK TO BE DONE

In accordance with Notice to Owner No. 33601 dated 05/16/2013, OWNER shall expedite installation of new water line in Orange Ave Bridge to accommodate demolition of the Palomar Street Bridge. All work shall be performed substantially in accordance with OWNER's Plan No. CIP# 2153 dated 11/05/2012 consisting of 25 sheets, a copy of which is on file in the District office of the Department of Transportation at 4050 Taylor Street, San Diego, CA 92110. Deviations from the OWNER's plan described above initiated by either the STATE or the OWNER, shall be agreed upon by both parties hereto under a Revised Notice to Owner. Such Revised Notices to Owner, approved by the STATE and agreed to/acknowledged by the OWNER, will constitute an approved revision of the OWNER's plan described above and are hereby made a part hereof. No work under said deviation shall commence prior to written execution by the OWNER of the Revised Notice to Owner. Changes in the scope of the work will require an amendment to this Agreement in addition to the revised Notice to Owner.

II. LIABILITY FOR WORK

This is a subsequent request to expedite relocation of facilities; therefore, relocation is at STATE expense.

III. PERFORMANCE OF WORK

OWNER agrees to perform the herein described work with its own forces or to cause the herein described work to be performed by the OWNER's contractor, employed by written contract on a continuing basis to perform work of this type, and to provide and furnish all necessary labor, materials, tools, and equipment required therefore, and to prosecute said work diligently to completion.

PERFORMANCE OF WORK (CONTINUED)

Pursuant to Public Works Case No. 2001-059 determination by the California Department of Industrial Relations dated October 25, 2002, work performed by OWNER's contractor is a public work under the definition of Labor Code Section 1720(a) and is therefore subject to prevailing wage requirements. OWNER shall verify compliance with this requirement in the administration of its contracts referenced above."

Use of out-of-state personnel (or personnel requiring lodging and meal per diem expenses) will not be allowed without prior written authorization by state's representative. Requests for such authorization must be contained in OWNER's estimate of actual and necessary relocation costs. Accounting Form FA 1301 is to be completed and submitted for all non-State personnel travel per diem.

OWNER shall include an explanation why local employee or contract labor is not considered adequate for the relocation work proposed. Per diem expenses shall not exceed the per diem expense amounts allowed under the State's Department of Personnel Administration travel expense guidelines.

IV. PAYMENT FOR WORK

The STATE shall pay its share of the actual and necessary cost of the herein described work within 45 days after receipt of five (5) copies of OWNER'S itemized bill, signed by a responsible official of OWNER'S organization and prepared on OWNER'S letterhead, compiled on the basis of the actual and necessary cost and expense. The OWNER shall maintain records of the actual costs incurred and charged or allocated to the project in accordance with recognized accounting principles. The OWNER'S billing cost to the state is \$9,706.08.

It is understood and agreed that the STATE will not pay for any betterment or increase in capacity of OWNER's facilities in the new location and that OWNER shall give credit to the STATE for the "used life" or accumulated depreciation of the replaced facilities and for the salvage value of any materials or parts salvaged and retained or sold by OWNER.

Not more frequently than once a month, but at least quarterly, OWNER will prepare and submit progress bills for costs incurred not to exceed OWNER's recorded costs as of the billing date less estimated credits applicable to completed work. Payment of progress bills not to exceed the amount of this Agreement may be made under the terms of this Agreement. Payment of progress bills which exceed the amount of this Agreement may be made after receipt and approval by STATE of documentation supporting the cost increase and after an Amendment to this Agreement has been executed by the parties to this Agreement.

The OWNER shall submit a final bill to the STATE within 360 days after the completion of the work described in Section I above. If the STATE has not received a final bill within 360 days after notification of completion of Owner's work described in Section I of this Agreement, and STATE has delivered to OWNER fully executed Director's Deeds, Consents to Common Use or Joint Use Agreements, if required for OWNER's facilities, STATE will provide written notification to OWNER of its intent to close its file within 30 days and OWNER hereby acknowledges, to the extent allowed by law, that all remaining costs will be deemed to have been abandoned. If the STATE processes a final bill for payment more than 360 days after notification of completion of OWNER's work, payment of the late bill may be subject to allocation and/or approval by the California Transportation Commission.

The final billing shall be in the form of an itemized statement of the total costs charged to the project, less the credits provided for in this Agreement, and less any amounts covered by progress billings. However, the STATE shall not pay final bills which exceed the estimated cost of this Agreement without documentation of the reason for the increase of said cost from the OWNER and approval of documentation by STATE. Except, if the final bill exceeds the OWNER's estimated costs solely as the result of a revised Notice to Owner as provided for in Section I, a copy of said revised Notice to Owner shall suffice as documentation. In either case, payment of the amount over the estimated cost of this Agreement may be subject to allocation and/or approval by the California Transportation Commission.

In any event if the final bill exceeds 125% of the estimated cost of this Agreement, an Amended Agreement shall be executed by the parties to this Agreement prior to the payment of the OWNER's final bill. Any and all increases in costs that are the direct result of deviations from the work described in Section I of this Agreement, shall have the prior concurrence of STATE.

Detailed records from which the billing is compiled shall be retained by the OWNER for a period of three years from the date of the final payment and will be available for audit by State and or Federal auditors. OWNER agrees to comply with Contract Cost

Principles and procedures as set forth in 48 CFR, Chapter 1, Part 31, et seq., 23 CFR, Chapter 1, Part 645 and/or 18 CFR, Chapter 1, Part 101, 201, et al. If a subsequent State and/or Federal audit determines payments to be unallowable, OWNER agrees to reimburse STATE upon receipt of STATE billing.

V. GENERAL CONDITIONS

All costs accrued by OWNER as a result of STATE's request of May 16, 2011 to review, study and/or prepare relocation plans and estimates for the project associated with this Agreement may be billed pursuant to the terms and conditions of this Agreement.

If STATE's project which precipitated this Agreement is canceled or modified so as to eliminate the necessity of work by OWNER, STATE will notify OWNER in writing and STATE reserves the right to terminate this Agreement by Amendment. The Amendment shall provide mutually acceptable terms and conditions for terminating the Agreement.

It is understood that said highway is a Federal aid highway and accordingly, 23 CFR, Chapter 1, Part 645 and 23 U.S.C., section 313 as applicable, is hereby incorporated into this Agreement.

The Buy America requirements are further specified in Moving Ahead for progress in the 21st Century (MAP-21), section 1518.

Owner hereby certifies that all manufacturing processed for these steel and iron material, including the application of coating (unless granted a waiver pursuant to 23 CFR 635.410), have occurred in the United States.

OWNER shall submit a Notice of Completion to the STATE within 30 days of the completion of the work described herein

All obligations of STATE under the terms of this Agreement are subject to the passage of the annual Budget Act by the State Legislature and the allocation of those funds by the California Transportation Commission.

It is understood that said highway is a Federal aid highway and accordingly, 23 CFR, Chapter 1, Part 645 and 23 USC, section 313 as applicable, is hereby incorporated into this Agreement by reference; provided, however, that the provisions of any agreements entered into between the STATE and the OWNER pursuant to State law for apportioning the obligations and costs to be borne by each, or the use of accounting procedures prescribed by the applicable Federal or State regulatory body and approved by the Federal Highway Administration, shall govern in lieu of the requirements of said 23 CFR 645.

UTILITY AGREEMENT NO. 33601

IN WITNESS WHEREOF, the above parties have executed this Agreement the day and year above written.

STATE: DEPARTMENT OF TRANSPORTATION

OWNER: OTAY WATER DISTRICT

By *Greg Gutierrez*
 Name GREG GUTIERREZ, CHIEF
 Title Utility Relocation Branch
 Right of Way Division

5/21/13
 Date

By _____
 Name _____
 Title _____
 Date _____

APPROVAL RECOMMENDED:

By *Carol Vu*
 Name Carol Vu
 Title Utility Coordinator
 Right of Way

5-16-2013
 Date

By _____
 Name _____
 Title _____
 Date _____

THIS AGREEMENT SHALL NOT BE EXECUTED BY THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION UNTIL FUNDS ARE CERTIFIED.

DO NOT WRITE BELOW - FOR ACCOUNTING PURPOSES ONLY

PLANNING AND MANAGEMENT TO COMPLETE UNSHADED FIELDS:

UTILITY COMPLETES:

T CODE	DOCUMENT NUMBER	SUF FIX	DIST	UNIT	CHG DIST	PROJECT ID	PHASE	SPECIAL DESIGNATION	FFY	FA	OBJ CODE	DOLLAR AMOUNT
	UA038601		11	2839	11	4100020051	9	938601	13		0542	\$9,706.08
	UA											

PROJECT ID FUNDING VERIFIED:

Sign: *Joyce Wiggs* 6-3-13
 Print: Joyce Wiggs
 R/W Planning and Management Date

REVIEW/REQUEST FUNDING:

Sign: *Carol Vu* 5-16-2013
 Print: Carol Vu
 Utility Coordinator Date

THE ESTIMATED COST TO STATE FOR ITS SHARE OF THE ABOVE DESCRIBED WORK IS \$ 9,706.08.

CERTIFICATION OF FUNDS				
I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure shown here.				
<u><i>Joyce Wiggs</i></u>				<u>6-3-13</u>
Planning and Management				Date
ITEM	CHAP	STAT	FY	AMOUNT
2660.302.0042 20-20	21	2012	12/13	9,706.08

FUND TYPE	PROJECT ID	AMOUNT
Design Funds		\$
Construction Funds		\$
RW Funds	2T1829	\$ 9,706.08

Vendor/Customer:	VC0000020910
Address ID:	AD001

Distribution: 2 originals to R/W Accounting
 1 original to Utility Owner
 1 original to Utility File



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	July 3, 2013
SUBMITTED BY:	Jeff Marchioro Senior Civil Engineer	PROJECT:	P2453- DIV. NO. 2 001102
	Bob Kennedy Engineering Manager		
APPROVED BY:	<input checked="" type="checkbox"/> Rod Posada, Chief, Engineering <input checked="" type="checkbox"/> German Alvarez, Assistant General Manager <input checked="" type="checkbox"/> Mark Watton, General Manager		
SUBJECT:	Approve Utility Agreement No. 33592 with Caltrans for SR-11, Sequence I Utility Relocations Project		

GENERAL MANAGER'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorize the General Manager to execute Utility Agreement No. 33592 with Caltrans for SR-11, Sequence I Utility Relocations Project (see attached Exhibits A and B for Project location, and Exhibit C for Utility Agreement).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board authorization for the General Manager to execute Utility Agreement No. 33592 with Caltrans for relocation of District facilities in conflict with SR-11, Sequence I Utility Relocations Project.

ANALYSIS:

Caltrans is currently in the process of completing land acquisition and design for the SR-11 freeway in Otay Mesa. The first phase of the freeway (Sequence I) starts at the SR 905 freeway and ends at Enrico Fermi Drive. Part of this process is to relocate existing utilities that conflict with this work. The District's existing pipelines in Sanyo Avenue or utility easements will need to be relocated to accommodate the new freeway.

Responding to a request from Caltrans, staff submitted claim letters dated April 10, 2012 and March 7, 2013 for utility conflicts. The District has prior and superior rights at each crossing. The District received a Notice to Owner directing the District to relocate conflicting utilities on March 5, 2013.

The scope of work for the attached Utility Agreement includes the following work:

- Relocate approximately 760 linear feet of existing 10-inch ACP potable water distribution main currently located within a District permanent easement on private property between Sanyo Avenue and Dornoch Court. The relocation is necessary since the existing pipeline runs parallel with and directly underneath the future freeway. The existing pipeline will be replaced by approximately 585 linear feet of 10-inch PVC distribution main located in a future utility easement on private property immediately north of the future SR-11 right-of-way between Dornoch Court and existing 18-inch steel-cylinder-rod-wrapped (SCRW) potable water transmission main east of Dornoch Court.
- Lower approximately 355 linear feet of existing 18-inch SCRW potable water transmission main currently located within a District owned utility easement on private property east of Dornoch Court. The relocation is necessary to lower the existing transmission main under the future freeway retaining wall footings. The existing pipeline will be replaced by 355 linear feet of 18-inch CML&C steel pipe within the identical horizontal alignment, but at a lower location. The replaced transmission main will be installed inside a 32-inch steel casing running perpendicular to the future SR-11 right-of-way.

- Remove and replace approximately 40 linear feet of existing 12-inch ACP potable water distribution main located in Sanyo Avenue. Removal and replacement of the water main is necessary to accommodate Caltrans' future open trench construction of a large diameter (84-inch) storm drain crossing Sanyo Avenue. The existing pipeline will be replaced by approximately 40 linear feet of 12-inch PVC distribution main running perpendicular to the future SR-11 right-of-way.

The installation of the pipelines, including the tie-ins, will not adversely affect any District customers. Staff will coordinate the necessary short-term shutdowns to minimize the impact on system operations.

The calculated depreciation cost for all existing pipelines and appurtenances is \$38,479 (\$27,198 for the 10-inch ACP, plus \$7,201 for the 18-inch SCRW, plus \$4,080 for the 12-inch ACP, respectively). The estimated construction cost for the new pipelines and appurtenances is \$707,500. Additionally, the total planning, design, inspection, and closeout costs incurred by the District for this relocation are estimated to be \$292,500. The total cost that Caltrans will reimburse the District at completion of the construction work is estimated at \$961,521. Consistent with the conditions of all other utility agreements between the District and Caltrans, actual costs may not exceed 125 percent of the estimated cost in the agreement without a revised amendment being executed.

The District's relocations will be constructed through a construction contract administered by the District separately from Caltrans freeway construction project.

Staff anticipates that the above-described relocations will be advertised for bid and awarded for construction in approximately the fourth quarter of Fiscal Year 2014. The District's As-Needed Engineering Design Consultant (Atkins) designed the bid documents, which Caltrans approved on February 25, 2013.

A future Utility Agreement will be presented to the Board for SR-11, Sequence II which will continue future SR-11 alignment from Enrico Fermi Drive to a future Port of Entry facility and the U.S. border with Mexico.

FISCAL IMPACT:

Joe Beachem, Chief Financial Officer

The total budget for CIP P2453, as approved in the FY 2014 budget, is \$2,250,000. Total expenditures, plus outstanding commitments and forecast, including this agreement, are \$38,479. See Attachment B for budget detail.

Based on a review of the financial budget, the Project Manager anticipates that the budget for CIP P2453 is sufficient to support the Project.

Finance has determined that 100% of the funding is available from the Replacement Fund for CIP P2453.

STRATEGIC GOAL:

This Project supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District in a professional, effective, and efficient manner" and the General Manager's Vision, "A District that is at the forefront in innovations to provide water services at affordable rates, with a reputation for outstanding customer service."

LEGAL IMPACT:

None.

JM/BK:jf

P:\WORKING\CIP P2453 SR-11 Utility Relocations\Staff Reports\BD 07-03-13, Staff Report, SR-11 Utility Agreement No. 33592 with Caltrans for SR-11, Sequence I Utility Relocations Project.docx

- Attachments: Attachment A - Committee Action
- Attachment B - Budget Detail
- Exhibit A - Location Map
- Exhibit B - Location Detail Map
- Exhibit C - Caltrans signed Utility Agreement



ATTACHMENT A

SUBJECT/PROJECT: P2453-001102	Approve Utility Agreement No. 33592 with Caltrans for SR-11, Sequence I Utility Relocations Project
---	---

COMMITTEE ACTION:

The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a meeting held on June 19, 2013 and the following comments were made:

- Staff is requesting that the Board authorize the General Manager to execute Utility Agreement No. 33592 with Caltrans for SR-11, Sequence I Utility Relocations Project (Project).
- Staff provided a background of the Project that is scheduled to commence summer 2014. Caltrans' contractor will start by installing deep storm drain and sewer utilities, then the District will relocate its waterlines, then Caltrans will build the freeway. It was noted that the District's relocations will be constructed through a construction contract administered by the District separately from Caltrans freeway construction project. District relocations are scheduled for winter 2014.
- It was noted that Sequence II, starting at Enrico Fermi to the border, is tentatively scheduled for construction in the 2015 timeframe. A future Utility Agreement will be presented to the Board for Sequence II improvements.
- Staff provided the Project's scope of work, which is outlined on pages 2 and 3 of the staff report.
- Staff indicated that the hydraulic analysis concluded that fire flow requirement will be met during construction.
- It was noted that Caltrans will pay for all relocations minus depreciation. The total project cost of all relocations is \$1M, and the depreciation was estimated at \$38,479 which is equivalent to the net dollar amount shown on Attachment B of the staff report.
- In response to a question by the Committee, staff stated that whenever other agencies are performing construction work that may

impact the District's pipelines, it is a requirement of the District to inspect its pipelines to ensure that they have not been damaged and are embedded properly. The inspection requirement also helps maintain as built information of areas that have been disturbed by construction work from other agencies.

- The following table was provided after the Committee meeting in response to the Committee's inquiry about the age of existing District pipelines that will be affected by Caltrans' project.

Pipeline to be relocated:	Installation Year
10-inch and 12-inch ACP potable water distribution mains	1986
18-inch SCRW potable water transmission main	1963

Upon completion of the discussion, the Committee supported presentation to the full Board as a consent item.

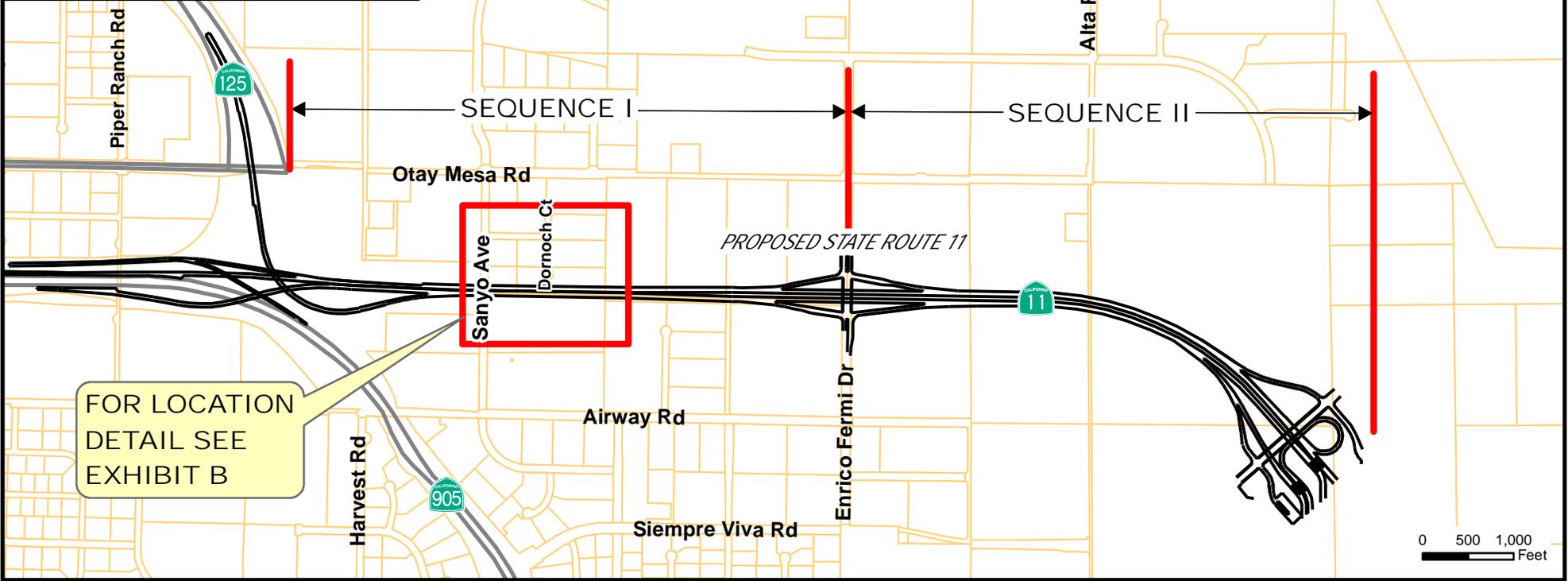
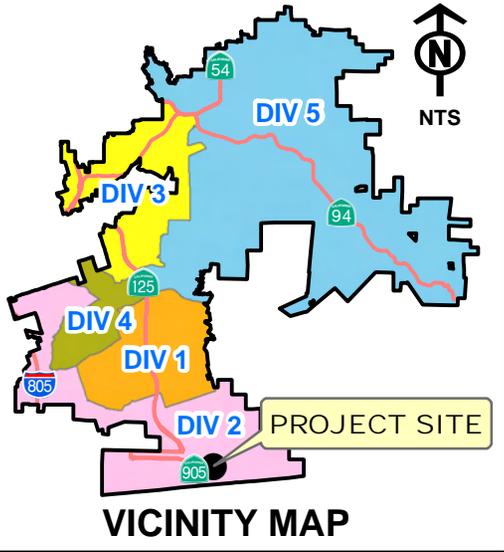


ATTACHMENT B – Budget Detail

SUBJECT/PROJECT: P2453-001102	Approve Utility Agreement No. 33592 with Caltrans for SR-11, Sequence I Utility Relocations Project
---	---

Otay Water District					Date Updated: 5/21/2013
p2453-SR-11 Utility Relocations					
<i>Budget</i>	<i>Committed</i>	<i>Expenditures</i>	<i>Outstanding Commitment & Forecast</i>	<i>Projected Final Cost</i>	<i>Vendor/Comments</i>
2,250,000					
Planning					
Standard Salaries	10,205	10,205	-	10,205	STAFF LABOR
Total Planning	10,205	10,205	-	10,205	
Design					
Standard Salaries	70,449	60,449	10,000	70,449	STAFF LABOR
Consultant Contracts	75,450	56,226	19,224	75,450	ATKINS
	2,763	2,763	-	2,763	V & A CONSULTING ENGINEERS
	970	970	-	970	ALTA LAND SURVEYING INC
	3,697	3,697	-	3,697	NARASIMHAN CONSULTING SERVICES
	2,561	2,561	-	2,561	CPM PARTNERS INC
Service Contracts	2,765	-	2,765	2,765	UNDERGROUND SOLUTIONS INC
	1,382	1,382	-	1,382	US BANK
	1,382	1,382	-	1,382	US BANK CORPORATE PAYMENT
	10,000	-	10,000	10,000	BIDDING AND DOCUMENT DISTRIBUTION
Total Design	171,419	129,430	41,988	171,419	
Construction					
Standard Salaries	81,814	11,814	70,000	81,814	STAFF LABOR
Consultant Contracts	5,000	-	5,000	5,000	ATKINS CONSTRUCTION SUPPORT
	707,500	-	707,500	707,500	CONSTRUCTION COST EST
	24,063	-	24,063	24,063	CLOSEOUT
	(961,521)	-	(961,521)	(961,521)	CALTRANS REIMBURSEMENT
Total Construction	(143,144)	11,814	(154,958)	(143,144)	
Grand Total	38,479	151,449	(112,970)	38,479	

P:\WORKING\CIP P2453 SR-11 Utility Relocations\Graphics\Exhibits-Figures\Exhibit A_Location Map.mxd



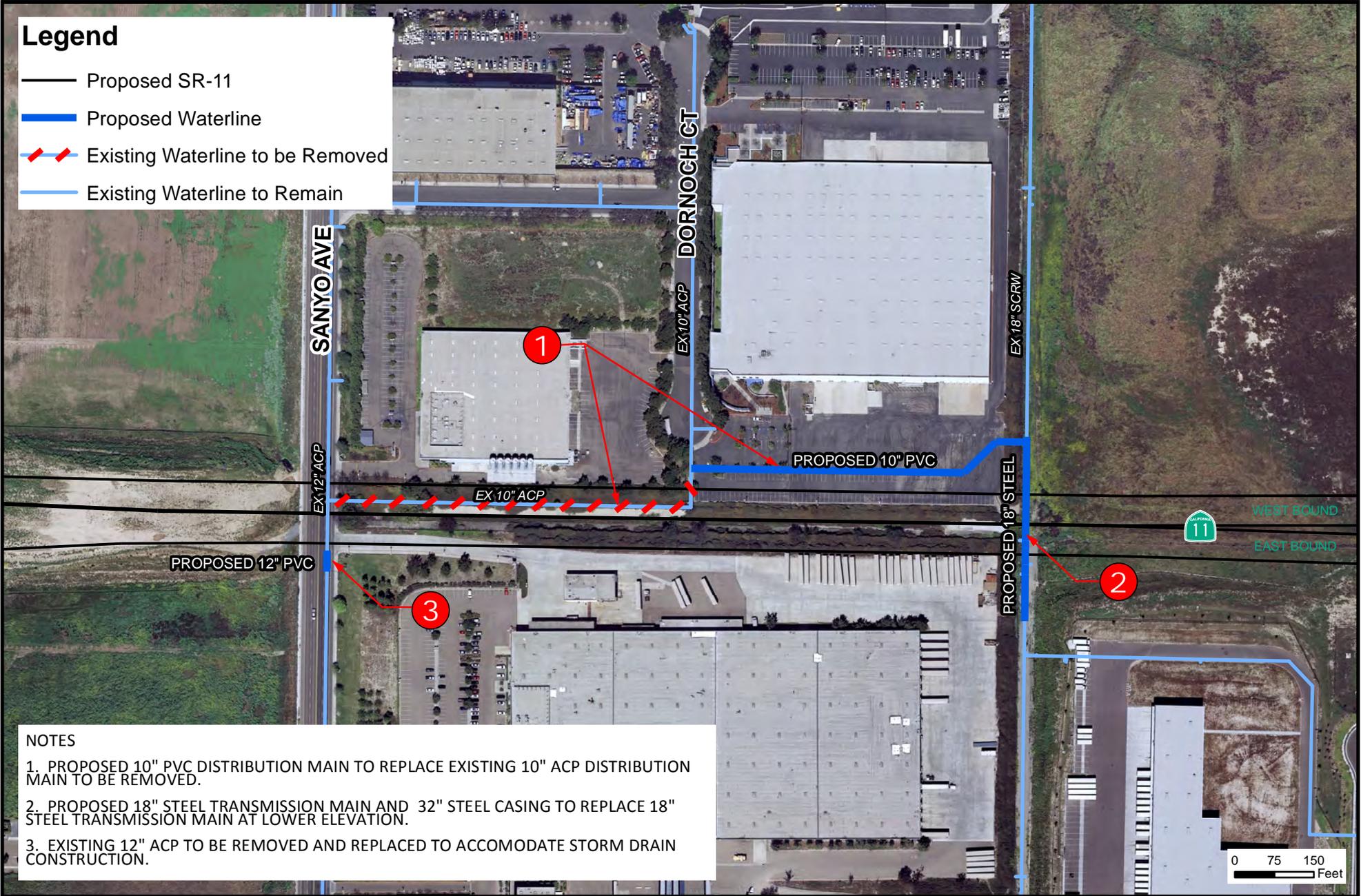
OTAY WATER DISTRICT
 SR-11 UTILITY RELOCATIONS
 LOCATION MAP



EXHIBIT A

Legend

-  Proposed SR-11
-  Proposed Waterline
-  Existing Waterline to be Removed
-  Existing Waterline to Remain



NOTES

1. PROPOSED 10" PVC DISTRIBUTION MAIN TO REPLACE EXISTING 10" ACP DISTRIBUTION MAIN TO BE REMOVED.
2. PROPOSED 18" STEEL TRANSMISSION MAIN AND 32" STEEL CASING TO REPLACE 18" STEEL TRANSMISSION MAIN AT LOWER ELEVATION.
3. EXISTING 12" ACP TO BE REMOVED AND REPLACED TO ACCOMODATE STORM DRAIN CONSTRUCTION.



OTAY WATER DISTRICT

SR-11 UTILITY RELOCATIONS - SEQUENCE 1 LOCATION DETAIL MAP



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EXHIBIT B

Exhibit C

ISTRICIT 11	COUNTY SD	ROUTE 11	POST MILE 0.00-001.6	PROJECT ID 1100020519	EA 056321
FEDERAL PARTICIPATION P011(004)			OWNER'S FILE NUMBER CIP-NO P2453		
FEDERAL PARTICIPATION On the Project <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No On the Utilities <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					

Owner Payee Data No. VC0000020910 or Form STD 204 is attached

UTILITY AGREEMENT NO 33592

DATE _____

The State of California, acting by and through the Department of Transportation, hereinafter called "STATE," proposes to Construct freeway to freeway connectors on State Route 11 from Route 11/905 separation to Enrico Fermi and on SR 905 from 0.1 mile east of La Media Road undercrossing to 0.2 mile west of Airway Road undercrossing

And

NAME: Otay Water District
ADDRESS: 2554 Sweetwater Springs Blvd. Spring Valley, CA 91978

hereinafter called "OWNER," owns and maintains a 10-inch waterline east of Sanyo Ave. A 12-inch waterline running in Sanyo Ave and a 18-inch waterline crossing at Sta. 52+10 (A line) within the limits of STATE's project which requires the water lines to be relocated to accommodate STATE's project.

It is hereby mutually agreed that:

I. WORK TO BE DONE

In accordance with Notice to Owner No. 33592 dated 03/05/13, OWNER shall relocate water facilities. All work shall be performed substantially in accordance with OWNER's Plan No. CIP 2453 dated January 2013 consisting of eleven sheets, a copy of which is on file in the District Office of the Department of Transportation at 4050 Taylor Street, San Diego, CA 92110. Deviations from the OWNER's plan described above initiated by either the STATE or the OWNER, shall be agreed upon by both parties hereto under a Revised Notice to Owner. Such Revised Notices to Owner, approved by the STATE and agreed to/acknowledged by the OWNER, will constitute an approved revision of the OWNER's plan described above and are hereby made a part hereof. No work under said deviation shall commence prior to written execution by the OWNER of the Revised Notice to Owner. Changes in the scope of the work will require an amendment to this Agreement in addition to the Revised Notice to Owner.

II. LIABILITY FOR WORK

Existing facilities are located in their present position pursuant to rights superior to those of the STATE and will be relocated at STATE expense.

III. PERFORMANCE OF WORK

Owner agrees to perform the herein-described work with its own forces or to cause the herein-described work to be performed by the OWNER's contractor, employed by written contract on a continuing basis to perform work of this type, and to provide and furnish all necessary labor, materials, tools and equipment required therefore, and to prosecute said work diligently to completion.

Exhibit CUTILITY AGREEMENT NO.
33592**PERFORMANCE OF WORK (Continued)**

Pursuant to Public Works Case No. 2001-059 determination by the California Department of Industrial Relations dated October 25, 2002, work performed by OWNER's contractor is a public work under the definition of Labor Code section 1720(a) and is therefore subject to prevailing wage requirements. OWNER shall verify compliance with this requirement in the administration of its contracts reference above.

Use of out-of-state personnel (or personnel requiring lodging and meal per diem expenses) will not be allowed without prior written authorization by state's representative. Requests for such authorization must be contained in OWNER's estimate of actual and necessary relocation costs. Accounting Form FA 1301 is to be completed and submitted for all non-State personnel travel per diem.

OWNER shall include an explanation why local employee or contract labor is not considered adequate for the relocation work proposed. Per diem expenses shall not exceed the per diem expense amounts allowed under the State's Department of Personnel Administration travel expense guidelines.

IV. PAYMENT FOR WORK

The STATE shall pay its share of the actual and necessary cost of the herein described work within 45 days after receipt of five (5) copies of OWNER'S itemized bill, signed by a responsible official of OWNER'S organization and prepared on OWNER'S letterhead, compiled on the basis of the actual and necessary cost and expense. The OWNER shall maintain records of the actual costs incurred and charged or allocated to the project in accordance with recognized accounting principles. The OWNER'S billing cost to the state is \$961,521.00.

It is understood and agreed that the STATE will not pay for any betterment or increase in capacity of OWNER's facilities in the new location and that OWNER shall give credit to the STATE for the "used life" or accumulated depreciation of the replaced facilities and for the salvage value of any materials or parts salvaged and retained or sold by OWNER.

The OWNER shall submit a final bill to the STATE within 360 days after the completion of the work described in Section I above. If the STATE has not received a final bill within 360 days after notification of completion of Owner's work described in Section I of this Agreement, and STATE has delivered to OWNER fully executed Director's Deeds, Consents to Common Use or Joint Use Agreements, if required for OWNER's facilities, STATE will provide written notification to OWNER of its intent to close its file within 30 days and OWNER hereby acknowledges, to the extent allowed by law, that all remaining costs will be deemed to have been abandoned. If the STATE processes a final bill for payment more than 360 days after notification of completion of OWNER's work, payment of the late bill may be subject to allocation and/or approval by the California Transportation Commission.

The final billing shall be in the form of an itemized statement of the total costs charged to the project, less the credits provided for in this Agreement, and less any amounts covered by progress billings. However, the STATE shall not pay final bills which exceed the estimated cost of this Agreement without documentation of the reason for the increase of said cost from the OWNER and approval of documentation by STATE. Except, if the final bill exceeds the OWNER's estimated costs solely as the result of a revised Notice to Owner as provided for in Section I, a copy of said revised Notice to Owner shall suffice as documentation. In either case, payment of the amount over the estimated cost of this Agreement may be subject to allocation and/or approval by the California Transportation Commission.

In any event if the final bill exceeds 125% of the estimated cost of this Agreement, an Amended Agreement shall be executed by the parties to this Agreement prior to the payment of the OWNER's final bill. Any and all increases in costs that are the direct result of deviations from the work described in Section I of this Agreement, shall have the prior concurrence of STATE.

Detailed records from which the billing is compiled shall be retained by the OWNER for a period of three years from the date of the final payment and will be available for audit by State and or Federal auditors. OWNER agrees to comply with Contract Cost Principles and procedures as set forth in 48 CFR, Chapter 1, Part 31, et seq., 23 CFR, Chapter 1, Part 645. If a subsequent State and/or Federal audit determines payments to be unallowable, OWNER agrees to reimburse STATE upon receipt of STATE billing.

Exhibit C

UTILITY AGREEMENT NO. 33592

V. GENERAL CONDITIONS

All costs accrued by OWNER as a result of STATE's request of February 3, 2012 to review, study and/or prepare relocation plans and estimates for the project associated with this Agreement may be billed pursuant to the terms and conditions of this Agreement.

If STATE's project which precipitated this Agreement is canceled or modified so as to eliminate the necessity of work by OWNER, STATE will notify OWNER in writing and STATE reserves the right to terminate this Agreement by Amendment. The Amendment shall provide mutually acceptable terms and conditions for terminating the Agreement.

It is understood that said highway is a Federal aid highway and accordingly, 23 CFR, Chapter 1, Part 645 and 23 U.S.C., section 313 as applicable, is hereby incorporated into this Agreement.

The Buy America requirements are further specified in Moving Ahead for progress in the 21st Century (MAP-21), section 1518.

Owner hereby certifies that all manufacturing processed for these steel and iron material, including the application of coating (unless granted a waiver pursuant to 23 CFR 635.410), have occurred in the United States.

STATE will acquire new rights of way in the name of either the STATE or OWNER through negotiation or condemnation and when acquired in STATE's name, shall convey same to OWNER by Director's Easement Deed. STATE's liability for such rights of way will be at the proration shown for relocation work involved under this Agreement.

Where OWNER has prior rights in areas which will be within the highway right of way and where OWNER's facilities will remain on or be relocated on STATE highway right of way, a Joint Use Agreement or Consent to Common Use Agreement shall be executed by the parties.

OWNER shall submit a Notice of Completion to the STATE within 30 days of the completion of the work described herein.

All obligations of STATE under the terms of this Agreement are subject to the passage of the annual Budget Act by the State Legislature and the allocation of those funds by the California Transportation Commission.

Exhibit C

UTILITY AGREEMENT NO.
33592

IN WITNESS WHEREOF, the above parties have executed this Agreement the day and year above written.

STATE: DEPARTMENT OF TRANSPORTATION

OWNER: OTAY WATER DISTRICT

By
 Name GREG GUTIERREZ, CHIEF
 Title Utility Relocation Branch
 Right of Way Division

4-5-13
 Date

By _____
 Name _____
 Title _____
 Date _____

APPROVAL RECOMMENDED:

By
 Name Carol Vu
 Title Utility Coordinator
 Right of Way

4-5-13
 Date

By _____
 Name _____
 Title _____
 Date _____

THIS AGREEMENT SHALL NOT BE EXECUTED BY THE STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION UNTIL FUNDS ARE CERTIFIED.

DO NOT WRITE BELOW - FOR ACCOUNTING PURPOSES ONLY

PLANNING AND MANAGEMENT TO COMPLETE UNSHADED FIELDS:

UTILITY COMPLETES:

T CODE	DOCUMENT NUMBER	SUF FIX	DIST	UNIT	CHG DIST	PROJECT ID	PHASE	SPECIAL DESIGNATION	FFY	FA	OBJ CODE	DOLLAR AMOUNT
113	UA033592		11	2839	11	1100020519	9	933592	13	6	054	\$961,521.00
	UA											

PROJECT ID FUNDING VERIFIED:

Sign:
 Print: Joey York
 R/W Planning and Management

Date: 4/10/13

REVIEW/REQUEST FUNDING:

Sign:
 Print: Carol Vu
 Utility Coordinator

Date: 4-5-13

THE ESTIMATED COST TO STATE FOR ITS SHARE OF THE ABOVE DESCRIBED WORK IS \$ 961,521.00.

CERTIFICATION OF FUNDS

I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure shown here.

Date: 4/10/13

Planning and Management				Date
ITEM	CHAP	STAT	FY	AMOUNT
2600-304-0042 20.20	21	2012	12/13	961,521.00

FUND TYPE	PROJECT ID	AMOUNT
Design Funds		\$
Construction Funds		\$
RW Funds	056329	\$ 961,521.00

Vendor/Customer: VC0000020910
 Address ID: AD001

Distribution: 2 originals to R/W Accounting
 1 original to Utility Owner
 1 original to Utility File



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	July 3, 2013
SUBMITTED BY:	Lisa Coburn-Boyd Environmental Specialist Bob Kennedy Engineering Manager	CIP./G.F. NO:	D0894- DIV. NO. 1 090152
APPROVED BY:	<input checked="" type="checkbox"/> Rod Posada, Chief, Engineering <input checked="" type="checkbox"/> German Alvarez, Assistant General Manager <input checked="" type="checkbox"/> Mark Watton, General Manager		
SUBJECT:	Approval of Water Supply Assessment and Verification Report (May 2013) for the Otay Ranch Planning Area 12 Freeway Commercial Project		

GENERAL MANAGER' S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) approve the Water Supply Assessment Report (WSA&V Report) dated May 2013 for the Otay Ranch Planning Area 12 Freeway Commercial Project, as required by Senate Bills 610 and 221 (see Exhibit A for Project location).

COMMITTEE ACTION:

Please see Attachment A.

PURPOSE:

To obtain Board approval of the May 2013 WSA&V Report for the Otay Ranch Planning Area 12 Freeway Commercial Project, as required by Senate Bill 610 and Senate Bill 221 (SB 610 and SB 221).

ANALYSIS:

The City of Chula Vista submitted a request for a WSA&V report to the District pursuant to SB 610 and SB 221. SB 610 and SB 221 require that, upon the request of the City or County, a water purveyor, such as the District, prepare a water supply assessment and verification report to be included in the California Environmental Quality Act (CEQA) environmental

documentation. This request was received by the District on May 31, 2013.

SB 610 requires a city or county to evaluate whether water supplies will be sufficient to meet the projected water demand for certain "projects" that are otherwise subject to the requirement of the CEQA. SB 610 provides its own definition of "project" in Water Code Section 10912.

SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are planned to be available for certain residential subdivisions of property. The requirements of SB 610 and SB 221 are addressed by the May 2013 WSA&V Report for this Project. The WSA&V Report was prepared by the District in consultation with Dexter Wilson Engineering, Inc., the San Diego County Water Authority (Water Authority), and the City of Chula Vista (City).

Prior to transmittal to the City, the WSA&V Report must be approved by the Board of Directors. An additional explanation of the intent of SB 610 and SB 221 is provided in Exhibit C, Otay Ranch Planning Area 12 Freeway Commercial Project WSA&V Report is provided as Exhibit D.

For the Otay Ranch Planning Area 12 Freeway Commercial Project, the City is the responsible land use agency that requested the SB 610 and SB 221 water supply assessment and verification report from the District. The request for the WSA&V Reports, in compliance with SB 610 and SB 221 requirements, was made by the City because the Project meets or exceeds one or both of the following SB 610 and SB 221 criteria:

- A proposed residential development of more than 500 dwelling units.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A mixed-use project that includes one or more of the land uses specified in SB 610.
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Otay Ranch Planning Area 12 Freeway Commercial Project is located along the southern boundary of Olympic Parkway and includes development on both sides of Town Center Drive. Baldwin and Sons development concept for the approximately 34.5 acre site includes multi-family residential, hotel, commercial, and a park site. The Project site is planned for 448 residential units, 257 hotel rooms, and up to 115,000 square feet of commercial development. The current entitlement on the property was for the entire 34.5 acres to be commercial with up to 347,000 square feet of building space.

The expected potable water demands for the Planning Area 12 Freeway Commercial Project are 0.167 million gallons per day (MGD) or about 187 acre feet per year (AFY). This is 127 AFY higher than the demand estimate in the District's 2010 Water Resources Master Plan Update and the District's 2010 UWMP. The projected recycled water demand for the proposed Project is approximately 0.025 MGD or about 28.5 AFY, representing about 13% of total Project water demand.

The 127 AFY increase is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP. As documented in the Water Authority's 2010 UWMP, the Water Authority is planning to meet future and existing demands which include the demand increment associated with the accelerated forecasted growth. The Water Authority will assist its member agencies in tracking the environmental documents provided by the agencies that include water supply assessments and verifications reports that utilize the accelerated forecasted growth demand increment to demonstrate supplies for the development. In addition, the next update of the demand forecast for the Water Authority's 2015 UWMP will be based on SANDAG's most recently updated forecast, which will include the Project. Therefore, based on the findings from the District's 2010 UWMP and the Water Authority's 2010 UWMP, this Project will result in no unanticipated demands.

The request for compliance with SB 221 requirements was made by the City because the Project will exceed the SB 221 criteria of a proposed residential development subdivision of more than 500 dwelling units.

Pursuant to SB 610 and SB 221, the WSA&V Report incorporates by reference the current Urban Water Management Plans and other water resources planning documents of the District, the Water Authority, and the Metropolitan Water District of Southern California (Metropolitan). The District prepared the WSA&V

Report in consultation with Dexter Wilson Engineering, Inc., the Water Authority, and the City, which demonstrates and documents that sufficient water supplies are planned for and are intended to be made available over a 20-year planning horizon under normal supply conditions, in single and multiple-dry years to meet the projected demand of the Otay Ranch Planning Area 12 Freeway Commercial Project and other planned development projects within the District.

FISCAL IMPACT: Joe Beachem, Chief Financial Officer

The District has been reimbursed \$8,000 for all costs associated with the preparation of the Otay Ranch Planning Area 12 Freeway Commercial Project WSA&V Report. The reimbursement was accomplished via an \$8,000 deposit the Project proponents placed with the District on March 13, 2013.

STRATEGIC GOAL:

The preparation and approval of the WSA&V Report for the Otay Ranch Planning Area 12 Freeway Commercial Project supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District in a professional, effective, and efficient manner" and the District's Strategic Goal 3.1.1, "Actively manage water supply and demand."

LEGAL IMPACT:

Approval of a WSA&V Report for the Otay Ranch Planning Area 12 Freeway Commercial Project in form and content satisfactory to the Board of Directors would allow the District to comply with the requirements of Senate Bills 610 and 221.

LC-B/BK:jf

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- Attachments:
- Attachment A - Committee Action
 - Exhibit A - Location Map
 - Exhibit B - Explanation of the Intent of SB 610 & SB 221
 - Exhibit C - Otay Ranch Planning Area 12 Freeway Commercial Project WSA&V Report
 - Exhibit D - Presentation



ATTACHMENT A

SUBJECT/PROJECT: D0894-090152	Approval of Water Supply Assessment and Verification Report (May 2013) for the Otay Ranch Planning Area 12 Freeway Commercial Project
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COMMITTEE ACTION:

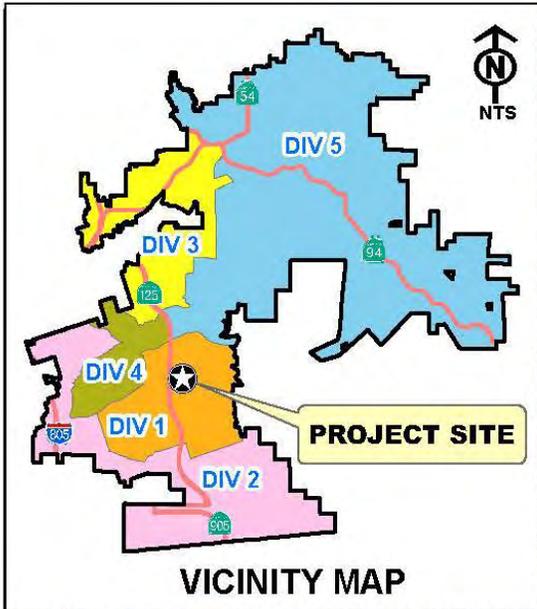
The Engineering, Operations, and Water Resources Committee (Committee) reviewed this item at a meeting held on June 19, 2013 and the following comments were made:

- Staff requested that the Board approve the Water Supply Assessment Report (WSA&V Report) dated May 2013 for the Otay Ranch Planning Area 12 Freeway Commercial Project, as required by Senate Bills 610 and 221.
- Staff indicated that on May 31, 2013, the District received a request from the City of San Diego to prepare the WSA and Verification Report for the Otay Ranch Planning Area 12 Freeway Commercial Project. SB 610 requires that the District honor the City's request, and that board approval for the submittal of the WSA&V Report to the City of San Diego is required. Exhibit A provides the location of the project site.
- Plans for the Project are provided on page 3 of the staff report. Staff indicated that the water demand for the Project is approximately 187 AFY for potable water and 28.5 AFY for recycled water.
- It was noted that the demand is 127 AFY higher than the demand estimate in the District's 2010 Urban Water Management Plan (UWMP). However, the increase is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP. Based on the findings from the District's and the Water Authority's 2010 UWMPs, this Project will result in no unanticipated demands.

- A PowerPoint presentation was provided to the Committee that included the following:
 - Background of Senate Bills 610 and 221, which became effective on January 1, 2002, and its intent and how it relates to the WSA&V Report
 - Land use plan and description for the Otay Ranch PA12 Freeway Commercial Project
 - Potable demand estimates for the Otay Ranch PA12 Freeway Commercial Project
 - Otay Water District's, San Diego County Water Authority's, and Metropolitan Water District's Urban Water Management Plan
- It was noted that the Otay Ranch PA12 Freeway Commercial Project's WSA&V Report includes (4) four other Otay Water District Planned Local Water Supply Projects:
 - Rancho Del Rey Groundwater Well (500 AFY)
 - Rosarito Ocean Desalination Project (20,000-50,000 AFY)
 - Otay Mesa Lot 7 Groundwater Well (300 AFY)
 - Otay Mesa Recycled Water Supply Link Project (800 AFY)
- A slide was presented that showed the Water Authority Supplies, which included IID Water Transfer, ACC and CC Lining, and the Carlsbad Desalination project.
- Staff indicated that the status of the current water supply situation is documented in the WSA&V Report with the intent that the water agencies plan to develop sufficient water supplies to meet demands. Staff believes that the Board has met the intent of SB 610 and 221 statutes in that Land use agencies and water suppliers have demonstrated strong linkage. The Otay Ranch PA12 Freeway Commercial Project WSA&V Report clearly documents the current water supply situation. Staff believes that based on existing documentation, the WSA&V Report demonstrates and documents that sufficient water supplies are planned for and are intended to be acquired and also identifies the actions necessary to develop the supplies for a 20-year planning horizon.

- The Committee commented that the Rancho Del Rey Groundwater Well Project is on hold and inquired if it should be included in the Otay Water District's Planned Local Water Supply Projects report. Staff stated yes because the Project is a resource that is available if needed.
- In response to a question by the Committee, staff stated that the Millenia Annexation Project is near the vicinity of the Otay Ranch Planning Area 12 Freeway Commercial Project.

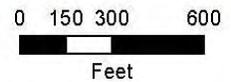
Following the discussion, the Committee supported staffs' recommendation and presentation to the full board as a consent item.



P:\WORKING\0894\Star Reports\Exhibit A



OTAY WATER DISTRICT
PA-12 FREEWAY COMMERCIAL
LOCATION MAP



CIP D0894-090152

EXHIBIT A

EXHIBIT B

Background Information

The Otay Water District (District) prepared the May 2013 Water Supply Assessment and Verification (WSA&V) Report for the Otay Ranch Planning Area 12 Freeway Commercial Project at the request of the City of Chula Vista (City). The City's WSA&V request letter dated May 31, 2013 was received by the District on May 31, 2013 so the 90-day deadline for the District to provide the Board an approved WSA&V Report to the City ends August 19, 2013.

The Otay Ranch Planning Area 12 Freeway Commercial Project is located within the jurisdictions of the District, the San Diego County Water Authority (Water Authority), and the Metropolitan Water District of Southern California (MWD). See Exhibit A for Project location. To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the District, Water Authority, and MWD.

The May 2013 WSA&V Report for the Otay Ranch Planning Area 12 Freeway Commercial Project has been prepared by the District in consultation with Dexter Wilson Engineering, Inc., the Water Authority, and the City, pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915 referred to as Senate Bill (SB) 610 and Government Code Sections 65867.5, 66455.3, and 66473.7 referred to as SB 221. SB 610 and SB 221 amended state law, effective January 1, 2002, intending to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the California Environmental Quality Act (CEQA) environmental documentation and approval process of certain proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are to be available for certain residential subdivision of property. The requirements of SB 610 and SB 221 are addressed in the May 2013 WSA&V Report for the Otay Ranch Planning Area 12 Freeway Commercial Project.

The expected potable water demands for the Planning Area 12 Freeway Commercial Project are 0.167 million gallons per day (mgd) or about 187 acre feet per year (AFY). This is 127 AFY higher than the demand estimate in the District's 2010 Water Resources Master Plan Update and District's 2010 UWMP. The projected recycled water demand for the proposed Project is approximately 0.025 mgd or about 28.5 AFY, representing about 13% of total Project water demand.

The 127 AFY increase in demand is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP. As documented in the Water Authority's 2010 UWMP, the Water Authority is planning to meet future and

existing demands which include the demand increment associated with the accelerated forecasted growth. The Water Authority will assist its member agencies in tracking the environmental documents provided by the agencies that include water supply assessments and verifications reports that utilize the accelerated forecasted growth demand increment to demonstrate supplies for the development. In addition, the next update of the demand forecast for the Water Authority's 2015 UWMP will be based on SANDAG's most recently updated forecast, which will include the Project. Therefore, based on the findings from the Otay WD's 2010 UWMP and the Water Authority's 2010 UWMP, this Project will result in no unanticipated demands.

The District currently depends on the Water Authority and the MWD for all of its potable water supplies and regional water resource planning. The District's 2010 Urban Water Management Plan (UWMP) relies heavily on the UWMP's and Integrated Water Resources Plans (IRPs) of the Water Authority and MWD for documentation of supplies available to meet projected demands. These plans are developed to manage the uncertainties and variability of multiple supply sources and demands over the long-term through preferred water resources strategy adoption and resource development target approvals for implementation.

MWD in October 2010 approved the update of their Integrated Water Resources Plan (IRP). The 2010 IRP Update describes an adaptive management approach to mitigate against future water supply uncertainty. The new uncertainties that are significantly affecting California's water resources include:

- The Federal Court ruling on previous operational limits on Sacramento-San Joaquin Delta to protect the Delta species. Water agencies are still trying to determine what effect the ruling will have on State Water Project (SWP) deliveries. Actual supply curtailments for MWD are contingent upon fish distribution, behavioral patterns, weather, Delta flow conditions, and how water supply reductions are divided between state and federal projects.
- Periodic extended drought conditions.

These uncertainties have rightly caused concern among Southern California water supply agencies regarding the validity of the current water supply documentation.

MWD is currently involved in several proceedings concerning Delta operations to evaluate and address environmental concerns. In addition, at the State level, the Delta Vision and Bay-Delta Conservation Plan processes are defining long-term solutions for the Delta.

The SWP represents approximately 9% of MWD's 2025 Dry Resources Mix with the supply buffer included. A 22% cutback in SWP supply represents an overall 2% (22% of 9% is 2%) cutback in MWD supplies in 2025. Neither the Water Authority nor MWD has stated that there is insufficient water for future planning in Southern California. Each agency is in the process of reassessing and reallocating their water resources.

Under preferential rights, MWD can allocate water without regard to historic water purchases or dependence on MWD. Therefore, the Water Authority and its member agencies are taking measures to reduce dependence on MWD through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation.

As calculated by MWD (December 11, 2012), the Water Authority's current preferential right is 17.22% of MWD's supply, while the Water Authority accounted for approximately 25% of MWD's total revenue. So MWD could theoretically cut back the Water Authority's supply and theoretically, the Water Authority should have alternative water supply sources to make up for the difference. In the Water Authority's 2010 UWMP, they had already planned to reduce reliance on MWD supplies. This reduction is planned to be achieved through diversification of their water supply portfolio.

The Water Authority's Drought Management Plan (May 2006) provides the Water Authority and its member agencies with a series of potential actions to engage when faced with a shortage of imported water supplies due to prolonged drought conditions. Such actions help avoid or minimize impacts of shortages and ensure an equitable allocation of supplies throughout the San Diego County region.

The Otay Water District Board of Directors could acknowledge the ever-present challenge of balancing water supply with demand and the inherent need to possess a flexible and adaptable water supply implementation strategy that can be relied upon during normal and dry weather conditions. The responsible regional water supply agencies have and will continue to adapt their resource plans and strategies to meet climatological, environmental, and legal challenges so that they may continue to provide water supplies to their service areas. The regional water suppliers (i.e., the Water Authority and MWD), along with the District, fully intend to maintain sufficient reliable supplies through the 20-year planning horizon under normal, single, and multiple dry year conditions to meet projected demand of the Otay Ranch Planning Area 12 Freeway Commercial Project, along with existing and other planned development projects within the District's service area.

If the regional water suppliers determine additional water supplies will be required, or in this case, that water supply portfolios need to be reassessed and redistributed with the intent to serve the existing and future water needs throughout Southern California, the agencies must indicate the status or stage of development of actions identified in the plans they provide. MWD's 2010 IRP update will then cause the Water Authority to update its IRP, which will then provide the District with the necessary water supply documentation. Identification of a potential future action in such plans does not by itself indicate that a decision to approve or to proceed with the action has been made. The District's Board approval of the Otay Ranch Planning Area 12 Freeway Commercial Project WSA&V Report does not in any way guarantee water supply to the Project.

Alternatively, if the WSA&V Report is written to state that water supply is or will be unavailable; the District must include, in the assessment, a plan to acquire additional water supplies. At this time, the District should not state there is insufficient water supply.

So the best the District can do right now is to state the current water supply situation clearly, indicating intent to provide supply through reassessment and reallocation by the regional, as well as, the local water suppliers. In doing so, it is believed that the Board has met the intent of the SB 610 statute, that the land use agencies and the water agencies are coordinating their efforts in planning water supplies for new development.

With District Board approval of the Otay Ranch Planning Area 12 Freeway Commercial Project WSA&V Report, the Otay Ranch Planning Area 12 Freeway Commercial Project proponents can proceed with the draft environmental documentation required for the CEQA review process. The water supply issues will be addressed in these environmental documents, consistent with the WSA&V Report.

The District, as well as others, can comment on the draft EIR with recommendations that water conservation measures and actions be employed on the Otay Ranch Planning Area 12 Freeway Commercial Project.

Some recent actions regarding water supply assessments and verification reports by Otay Water District are as follows:

- The Otay Water District Board approved in July 2007 the Eastern Urban Center Water Supply and Assessment Report.
- The Board approved the Judd Company Otay Crossings Commerce Park water supply assessment report on December 5, 2007.
- The Board approved the Otay Ranch L.P. Otay Ranch Preserve and Resort Project Water Supply Assessment and Verification Report on February 4, 2009.
- The Board approved water supply assessment and verification reports for the City of Chula Vista Village 8 West Sectional Plan Area and Village 9 Sectional Plan Area on January 5, 2011.
- The Board approved the water supply assessment report for the San Diego-Tijuana Cross Border Facility on February 2, 2011.
- The Board approved the water supply assessment for the County of San Diego Rabago Technology Park on April 6, 2011.
- The Board approved the water supply assessment report for the Pio Pico Energy Center Project on October 5, 2011.

- The Board approved the water supply assessment report for the Hawano Project on March 7, 2012.
- The Board approved the water supply assessment reports for the Sunroad Otay Plaza and Otay Tech Center Projects on March 6, 2013.

Water supplies necessary to serve the demands of the proposed Otay Ranch Planning Area 12 Freeway Commercial Project, along with existing and other projected future users, as well as the actions necessary to develop these supplies, have been identified in the water supply planning documents of the District, the Water Authority, and MWD.

The WSA&V Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, or agreements relevant to the identified water supply needs for the proposed Otay Ranch Planning Area 12 Freeway Commercial Project. The WSA&V Report demonstrates and documents that sufficient water supplies are planned and are intended to be available over a 20-year planning horizon, under normal conditions and in single and multiple dry years, to meet the projected demand of the proposed Otay Ranch Planning Area 12 Freeway Commercial Project and the existing and other planned development projects within the District.

Accordingly, after approval of a WSA&V Report for the Otay Ranch Planning Area 12 Freeway Commercial Project by the District's Board of Directors, the WSA&V Report may be used to comply with the requirements of the legislation enacted by Senate Bills 610 and 221 as follows:

Senate Bill (SB) 610 Water Supply Assessment: The District's Board of Directors approved WSA&V Report may be incorporated into the California Environmental Quality Act (CEQA) compliance process for the Otay Ranch Planning Area 12 Freeway Commercial Project as a water supply assessment report consistent with the requirements of the legislation enacted by SB 610. The City of Chula Vista, as lead agency under the CEQA for the Otay Ranch Planning Area 12 Freeway Commercial Project environmental documentation, may cite the approved WSA&V Report as evidence that a sufficient water supply is planned and intended to be available to serve the Otay Ranch Planning Area 12 Freeway Commercial Project.

Senate Bill (SB) 221 Water Supply Verification: The District's Board of Directors approved WSA&V Report may be incorporated into the Otay Ranch Planning Area 12 Freeway Commercial Project as a water supply verification report, consistent with the requirements of the legislation enacted by SB 221. The City, within their process of approving the Otay Ranch Planning Area 12 Freeway Commercial Project, may cite the approved WSA&V Report as verification of intended sufficient water supply to serve the Project.



OTAY WATER DISTRICT

WATER SUPPLY ASSESSMENT AND VERIFICATION REPORT

Otay Ranch Planning Area 12 Freeway Commercial

D0894-090152

Prepared by:

**Robert Kennedy, P.E.
Engineering Manager
Otay Water District
in consultation with
Dexter Wilson Engineering, Inc.
and
San Diego County Water Authority**

May 2013

Otay Water District Water Supply Assessment and Verification Report May 2013

Otay Ranch Planning Area 12 Freeway Commercial

Table of Contents

Executive Summary	1
Section 1 - Purpose.....	6
Section 2 - Findings.....	7
Section 3 - Project Description	10
Section 4 – Otay Water District.....	11
4.1 Urban Water Management Plan.....	13
Section 5 – Historical and Projected Water Demands	14
5.1 Demand Management (Water Conservation).....	19
Section 6 - Existing and Projected Supplies	22
6.1 Metropolitan Water District of Southern California 2005 Regional Urban Water Management Plan	23
6.2 San Diego County Water Authority Regional Water Supplies.....	24
6.3 Otay Water District.....	41
6.3.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies	42
6.3.1.1 Imported and Regional Supplies.....	43
6.3.1.2 Recycled Water Supplies.....	45
Section 7 – Conclusion: Availability of Sufficient Supplies	53
<i>Source Documents</i>	59
Appendix A: Otay Ranch PA 12 Freeway Commercial Regional Location Map	
Appendix B: Otay Ranch PA 12 Freeway Commercial Proposed Development Plan	

Otay Water District Water Supply Assessment and Verification Report May 2013

Otay Ranch Planning Area 12 Freeway Commercial

Executive Summary

The Otay Water District (Otay WD) prepared this Water Supply Assessment and Verification Report (WSA&V Report) at the request of the City of Chula Vista (City) for the Otay Ranch Planning Area 12 Freeway Commercial project. Baldwin and Sons submitted a Specific Planning Area (SPA) Amendment to the City for the development of the Planning Area 12 Freeway Commercial project.

Otay Ranch Planning Area 12 Freeway Commercial Project Overview and Water Use

The Planning Area 12 Freeway Commercial project is included within a land use planning document known as the Otay Ranch General Development Plan/Sub-regional Plan (Otay Ranch GDP). The County of San Diego and City of Chula Vista jointly prepared and adopted the Otay Ranch GDP. The Planning Area 12 Freeway Commercial project is located within a portion of the Otay Ranch GDP. The project is a part of the designated 14 villages and five planning areas within the Otay Ranch GDP area. The Chula Vista City Council and the San Diego County Board of Supervisors adopted the Otay Ranch GDP on October 28, 1993, which was accompanied by a Program Environmental Impact Report EIR-90-01 (SCH #89010154). As the Otay Ranch area has developed over time, the Otay Ranch GDP has been periodically amended to address land use and circulation element issues specific to individual Villages.

The Planning Area 12 Freeway Commercial project is located along the southern boundary of Olympic Parkway and includes development on both sides of Town Center Drive. Baldwin and Sons development concept for the approximately 34.5 acre site includes multi-family residential, hotel, commercial, and a park site. The project site is planned for 448 residential units, 257 hotel rooms, and up to 115,000 square feet of commercial development. The current entitlement on the property was for the entire 34.5 acres to be commercial with up to 347,000 square feet of building space.

The expected potable water demands for the Planning Area 12 Freeway Commercial Project are 0.167 million gallons per day (mgd) or about 187 acre feet per year (AFY). This is 127 AFY higher than the demand estimate in the District's 2010 Water Resources Master Plan Update and District's 2010 UWMP. The projected recycled water demand for the proposed

project is approximately 0.025 mgd or about 28.5 AFY, representing about 13% of total project water demand.

The 127 AFY increase in demand is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP. As documented in the Water Authority's 2010 UWMP, the Water Authority is planning to meet future and existing demands which include the demand increment associated with the accelerated forecasted growth. The Water Authority will assist its member agencies in tracking the environmental documents provided by the agencies that include water supply assessments and verifications reports that utilize the accelerated forecasted growth demand increment to demonstrate supplies for the development. In addition, the next update of the demand forecast for the Water Authority's 2015 UWMP will be based on SANDAG's most recently updated forecast, which will include the Project. Therefore, based on the findings from the Otay WD's 2010 UWMP and the Water Authority's 2010 UWMP, this project will result in no unanticipated demands.

The Water Authority's 2010 Urban Water Management Plan (UWMP) provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasted development as part of its municipal and industrial sector demand projections. These housing and commercial units were identified by the San Diego Association of Government (SANDAG) in the course of its regional housing needs assessment, but are not yet included in existing general land use plans of local jurisdictions. The demand associated with accelerated forecasted residential development is intended to account for SANDAG's land-use development currently projected to occur between 2035 and 2050, but has the likely potential to occur on an accelerated schedule. SANDAG estimates that this accelerated forecasted residential and commercial development forecasted could occur within the planning horizon (2015 to 2035) of the 2010 UWMP. This land-use is not included in local jurisdictions' general plans, so their projected demands are incorporated at a regional level. When necessary, this additional demand increment, termed Accelerated Forecasted Growth, can be used by member agencies to meet the demands of development projects not identified in the general land use plans.

Planned Imported Water Supplies

The Water Authority and MWD have an established process that ensures supplies are being planned to meet future growth. Any annexations and revisions to established land use plans are captured in the SANDAG updated forecasts for land use planning, demographics, and economic projections. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information. The Water Authority and MWD update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their UWMP's. Prior to the next forecast update, local jurisdictions may require water supply assessment and/or verification reports for proposed land developments that are not within the Otay WD, Water

Authority, nor MWD jurisdictions (i.e. pending or proposed annexations) or that have revised land use plans than what is reflected in the existing growth forecasts. Proposed land areas with pending or proposed annexations or revised land use plans typically result in the creation of higher demand and supply requirements than anticipated. The Otay WD, Water Authority, and MWD next demand forecast and supply requirements and associated planning documents would then capture any increase or decrease in demands and required supplies as a result of annexations or revised land use planning decisions.

The California Urban Water Management Planning Act (Act), which is included in the California Water Code, requires all urban water suppliers within the state to prepare an UWMP and update it every five years. The purpose and importance of the UWMP has evolved since it was first required 25 years ago. State agencies and the public frequently use the document to determine if agencies are planning adequately to reliably meet future demands. As such, UWMPs serve as an important element in documenting supply availability for the purpose of compliance with state laws, Senate Bills 610 and 221, linking water supply sufficiency to large land-use development approval. Agencies must also have a UWMP prepared, pursuant to the Act, in order to be eligible for state funding and drought assistance.

MWD's Integrated Resource Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The MWD's 2010 update to the IRP (2010 IRP Update) includes a planning buffer supply intended to mitigate against the risks associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. As part of implementation of the planning buffer, MWD periodically evaluates supply development to ensure that the region is not under or over developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate water supplies to meet future demands.

Water supply agencies throughout California continue to face climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta issues and the recent drought impacting the western states. These challenges and others will essentially always be present. The regional water supply agencies, the Water Authority and MWD, along with Otay WD nevertheless fully intend to have sufficient, reliable supplies to serve demands.

In Section ES-5 of MWD's 2010 Regional Urban Water Management Plan (2010 RUWMP), MWD states that MWD has supply capacities that would be sufficient to meet expected demands from 2015 through 2035. MWD has plans for supply implementation and continued development of a diversified resource mix including programs in the Colorado River Aqueduct, State Water Project, Central Valley Transfers, local resource projects, and in-

region storage that enables the region to meet its water supply needs. MWD's 2010 RUWMP identifies potential reserve supplies in the supply capability analysis (Tables 2-9, 2-10, and 2-11), which could be available to meet the unanticipated demands such as those related to the Planning Area 12 Freeway Commercial Project.

The County Water Authority Act, Section 5 subdivision 11, states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

As part of preparation of a written water supply assessment report, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 11 of the Water Authority's 2010 UWMP contains a detailed shortage contingency analysis that addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan, Emergency Storage Project, and Drought Management Plan (DMP) are taking actions to prepare for and appropriately handle an interruption of water supplies. The DMP, adopted in May 2006, provides the Water Authority and its member agencies with a series of potential actions to take when faced with a shortage of imported water supplies from MWD due to prolonged drought or other supply shortfall conditions. The actions will help the region avoid or minimize the impacts of shortages and ensure an equitable allocation of supplies.

Otay Water District Water Supply Development Program

In evaluating the availability of sufficient water supply, the Planning Area 12 Freeway Commercial project proponents are required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay Water district Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and MWD UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues. These new additional water supply projects are not currently developed and are in various stages of the planning process. A few examples of these alternative water supply projects include the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and MWD next forecast and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

Findings

The WSA&V Report identifies and describes the processes by which water demand projections for the proposed Planning Area 12 Freeway Commercial project will be fully included in the water demand and supply forecasts of the Urban Water Management Plans

and other water resources planning documents of the Water Authority and MWD. Water supplies necessary to serve the demands of the proposed project, along with existing and other projected future users, as well as the actions necessary and status to develop these supplies, have been identified in the Planning Area 12 Freeway Commercial project WSA&V Report and will be included in the future water supply planning documents of the Water Authority and MWD.

This WSA&V Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, water supply projects, or agreements relevant to the identified water supply needs for the proposed Planning Area 12 Freeway Commercial project. The WSA&V Report demonstrates and documents that sufficient water supplies are planned for and are intended to be available over a 20-year planning horizon, under normal conditions and in single and multiple dry years to meet the projected demand of the proposed Planning Area 12 Freeway Commercial project and the existing and other planned development projects to be served by the Otay WD.

Accordingly, after approval of a WSA&V Report for the Planning Area 12 Freeway Commercial project by the Otay WD Board of Directors (Board), the WSA&V Report may be used to comply with the requirements of the legislation enacted by Senate Bills 610 and 221 as follows:

1. Senate Bill 610 Water Supply Assessment: The Otay WD Board approved WSA&V Report may be incorporated into the California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) compliance process for the Planning Area 12 Freeway Commercial project as a water supply assessment report consistent with the requirements of the legislation enacted by SB 610. The City as lead agency under CEQA for the Planning Area 12 Freeway Commercial project EIR amendment may cite the approved WSA&V Report as evidence that a sufficient water supply is planned for and is intended to be made available to serve the Planning Area 12 Freeway Commercial project.
2. Senate Bill 221 Water Supply Verification: The Otay WD Board approved WSA&V Report may be incorporated into the City's Tentative Map approval process for the Planning Area 12 Freeway Commercial project as a water supply verification report, consistent with the requirements of the legislation enacted by SB 221. The City, within their process of approving the Planning Area 12 Freeway Commercial project's Tentative Map, may cite the approved WSA&V Report as verification of intended sufficient water supply to serve the Planning Area 12 Freeway Commercial project.

Section 1 - Purpose

The Planning Area 12 project is located in the Otay Ranch Freeway Commercial core area. The northern portion of Planning Area 12 is identified as FC-2 in the August 2004 approved SPA plan and allows for up to 347,000 square feet of commercial development on 34.5 acres. Baldwin and Sons submitted a SPA amendment to the City of Chula Vista (City) for the development of the Otay Ranch Planning Area 12 Freeway Commercial project. The City requested that Otay WD prepare a WSA&V Report for the Planning Area 12 Freeway Commercial project. The current Planning Area 12 Freeway Commercial project description is provided in Section 3 of this WSA&V Report.

This WSA&V Report for the Planning Area 12 Freeway Commercial project has been prepared by the Otay WD in consultation with Dexter Wilson Engineering, Inc., the Water Authority, and the City pursuant to Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10910, 10911, 10912, and 10915 referred to as Senate Bill (SB) 610 and Business and Professions Code Section 11010 and Government Code Sections 65867.5, 66455.3, and 66473.7 referred to as SB 221. SB 610 and SB 221 amended state law, effective January 1, 2002, intending to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the California Environmental Quality Act (CEQA) environmental documentation and approval process of certain proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are to be available for certain residential subdivisions of property prior to approval of a tentative map. The requirements of SB 610 and SB 221 are being addressed by this WSA&V Report.

The City also requested, since the requirements of SB 610 and SB 221 are substantially similar, that Otay WD prepare both the water supply assessment and verification concurrently.

This WSA&V Report evaluates water supplies that are planned to be available during normal, single dry year, and multiple dry water years during a 20-year planning horizon to meet existing demands, expected demands of the Planning Area 12 Freeway Commercial project, and reasonably foreseeable planned future water demands served by Otay WD. The Otay WD Board of Directors approved WSA&V Report is planned to be used by the City in its evaluation of the Planning Area 12 Freeway Commercial project under the CEQA and Tentative Map approval processes.

Section 2 - Findings

The Otay WD prepared this WSA&V Report at the request of the City for the Otay Ranch Planning Area 12 Freeway Commercial project. Baldwin and Sons submitted a SPA amendment application to the City for the revised development plan of the Planning Area 12 Freeway Commercial project.

The Planning Area 12 Freeway Commercial Project is located within the jurisdictions of the Otay WD, the Water Authority, and the MWD Water District of Southern California (MWD). To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the Otay WD, Water Authority, and MWD to utilize imported water supply.

The expected potable water demands for the Planning Area 12 Freeway Commercial Project are 0.167 million gallons per day (mgd) or about 187 acre feet per year (AFY). This is 127 AFY higher than the demand estimate in the District's 2010 Water Resources Master Plan Update and District's 2010 UWMP. The projected recycled water demand for the proposed project is approximately 0.025 mgd or about 28.5 AFY, representing about 13% of total project water demand.

The 127 AFY increase in demand is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP. As documented in the Water Authority's 2010 UWMP, the Water Authority is planning to meet future and existing demands which include the demand increment associated with the accelerated forecasted growth. The Water Authority will assist its member agencies in tracking the environmental documents provided by the agencies that include water supply assessments and verifications reports that utilize the accelerated forecasted growth demand increment to demonstrate supplies for the development. In addition, the next update of the demand forecast for the Water Authority's 2015 UWMP will be based on SANDAG's most recently updated forecast, which will include the Project. Therefore, based on the findings from the Otay WD's 2010 UWMP and the Water Authority's 2010 UWMP, this project will result in no unanticipated demands.

The Planning Area 12 Freeway Commercial Project development proponents are required to use recycled water for irrigation and other appropriate uses. The primary benefit of using recycled water is that it will offset the potable water demands by an estimated 28.5 AFY. The WRMP Update and the 2010 Urban Water Management Plan (UWMP) anticipated that the land area to be utilized for the Planning Area 12 Freeway Commercial Project would use both potable and recycled water.

The Water Authority's 2010 UWMP provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasted development as part of its municipal and industrial sector demand projections. These housing and commercial units were identified by the SANDAG in the course of its regional housing needs assessment,

but are not yet included in existing general land use plans of local jurisdictions. The demand associated with accelerated forecasted residential development is intended to account for SANDAG's land-use development currently projected to occur between 2035 and 2050, but has the likely potential to occur on an accelerated schedule. SANDAG estimates that this accelerated forecasted residential and commercial development forecasted could occur within the planning horizon (2015 to 2035) of the Water Authority's 2010 UWMP. This land-use is not included in local jurisdictions' general plans, so their projected demands are incorporated at a regional level. When necessary, this additional demand increment, termed Accelerated Forecasted Growth, can be used by member agencies to meet the demands of development projects not identified in the general land use plans.

The Water Authority and MWD have an established process that ensures supplies are being planned to meet future growth. Any annexations and revisions to established land use plans are captured in the SANDAG updated forecasts for land use planning, demographics, and economic projections. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information. The Water Authority and MWD update their demand forecasts and supply needs based on the most recent SANDAG forecast approximately every five years to coincide with preparation of their urban water management plans. Prior to the next forecast update, local jurisdictions may require water supply assessment and/or verification reports for proposed land developments that are not within the Otay WD, Water Authority, nor MWD jurisdictions (i.e. pending or proposed annexations) or that have revised land use plans than reflected in the existing growth forecasts. Proposed land areas with pending or proposed annexations or revised land use plans typically result in creating higher demand and supply requirements than anticipated. The Otay WD, the Water Authority, and MWD next demand forecast and supply requirements and associated planning documents would then capture any increase or decrease in demands and required supplies as a result of annexations or revised land use planning decisions.

This process is utilized by the Water Authority and MWD to document the water supplies necessary to serve the demands of the proposed Planning Area 12 Freeway Commercial project, along with existing and other projected future users, as well as the actions necessary to develop these supplies. Through this process the necessary demand and supply information is thus assured to be identified and incorporated within the water supply planning documents of the Water Authority and MWD.

The Otay Water District 2010 UWMP included a water conservation component to comply with Senate Bill 7 of the Seventh Extraordinary Session (SBX 7-7), which became effective February 3, 2010. This new law was the water conservation component to the Delta legislation package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. Specifically, SBX 7-7 from this Extraordinary Session requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent reduction goal by 2020 (20x2020), and an interim water reduction target by 2015.

Otay WD has adopted Method 1 to set its 2015 interim and 2020 water use targets. Method 1 requires setting the 2020 water use target to 80 percent of baseline per capita water use target as provided in the State's Draft 20x2020 Water Conservation Plan. The Otay WD 2015 target is 171 gallons per capita per day (gpcd) and the 2020 gpcd target at 80 percent of baseline is 152 gpcd.

The Otay WD's recent per capita water use has been declining to the point where current water use already meets the 2020 target for Method 1. This recent decline in per capita water use is largely due to drought water use restrictions, increased water costs, and economic conditions. However, Otay WD's effective water use awareness campaign and enhanced conservation mentality of its customers will likely result in some long-term carryover of these reduced consumption rates.

In evaluating the availability of sufficient water supply, the Planning Area 12 Freeway Commercial project proponents are required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay Water District Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and MWD UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues related to the Sacramento-San Joaquin Delta and the current ongoing western states drought conditions. These new additional water supply projects are not currently developed and are in various stages of the planning process. A few examples of these alternative water supply projects include the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and MWD next forecast and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

Water supplies necessary to serve the demands of the proposed Planning Area 12 Freeway Commercial project, along with existing and other reasonably foreseeable projected future users, as well as the actions necessary and status to develop these supplies, will be identified and included within the water supply planning documents of the Water Authority and MWD. This WSA&V Report demonstrates and verifies that with development of the resources currently identified and those that may be additional acquired, that there is sufficient water supplies being planned for and is intended to be developed over the next 20-year planning horizon to meet the projected demand of the proposed Planning Area 12 Freeway Commercial project and the existing and other reasonably foreseeable planned development projects within the Otay WD.

This WSA&V Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, proposed water supply projects, or agreements relevant to the identified water supply needs for the proposed Planning Area 12 Freeway Commercial project. This WSA&V Report incorporates by reference the current

Urban Water Management Plans and other water resources planning documents of the Otay WD, the Water Authority, and MWD. The Otay WD prepared this WSA&V to verify and document that sufficient water supplies are being planned for and are intended to be acquired to meet projected water demands of the Planning Area 12 Freeway Commercial project and the existing and other reasonably foreseeable planned development projects within the Otay WD for a 20-year planning horizon, in normal supply years, and in single dry and multiple dry years.

Based on a normal water supply year, the five-year increments for a 20-year projection indicate projected potable and recycled water supply is being planned for and is intended to be acquired to meet the estimated water demand targets of the Otay WD (44,883 acre-feet (AF) in 2015 to 56,614 AF in 2035 per the Otay Water District 2010 UWMP). Based on dry year forecasts, the estimated water supply is also being planned for and is intended to be acquired to meet the projected water demand, during single dry and multiple dry year scenarios. On average, the dry-year demands are about 6.4 percent higher than the normal year demands. The Otay WD recycled water supply is assumed to be drought-proof and not subject to reduction during dry periods.

Together, these findings demonstrate and verify that sufficient water supplies are being planned for and are intended to be acquired, as well as the actions necessary and status to develop these supplies are and will be further documented, to serve the proposed Planning Area 12 Freeway Commercial project and the existing and other reasonably foreseeable planned projects within the Otay WD in both normal and single and multiple dry year forecasts for a 20-year planning horizon.

Section 3 - Project Description

The Otay Ranch Planning Area 12 Freeway Commercial project is located within the City of Chula Vista, California. Refer to Appendix A for a regional location map of the proposed project.

The Planning Area 12 Freeway Commercial project is included within a land use planning document known as the Otay Ranch General Development Plan/Sub-regional Plan (Otay Ranch GDP). The County of San Diego and City of Chula Vista jointly prepared and adopted the Otay Ranch GDP. The project is a part of the designated 14 villages and five planning areas within the Otay Ranch GDP area. The Otay Ranch Freeway Commercial Project current development plan approval is dependent on the City's eventual adoption of their Sectional Planning Area Plan (SPA) amendment.

The Chula Vista City Council and the San Diego County Board of Supervisors adopted the Otay Ranch GDP on October 28, 1993, which was accompanied by a Program Environmental Impact Report EIR-90-01 (SCH #89010154).

The approximately 23,000 acre Otay Ranch is a master-planned community that includes a broad range of residential, commercial, retail, and industrial development interwoven with civic and community uses, such as libraries, parks, and schools, together with an open space preserve system consisting of approximately 11,375 acres.

The Baldwin and Sons proposed development concept for the approximately 34.5 acre Planning Area 12 Freeway Commercial project is planned as a combination of land uses as shown in Table 1.

Table 1
Otay Ranch PA 12 Freeway Commercial Proposed Land Uses

Location	Land Use Description	Area	Dwelling Units
PA 12 Freeway Commercial	Multi-Family Residential	---	448 units
PA 12 Freeway Commercial	Hotel	---	237 rooms
PA 12 Freeway Commercial	Commercial	14.5 acres	---
PA 12 Freeway Commercial	Park	1.0 acres	---

The proposed development within Planning Area 12 Freeway Commercial consists of 448 multi-family residential units, 237 hotel rooms, commercial, and a park. The project is located along the southerly edge of Olympic Parkway on both sides of Town Center Drive. Refer to Appendix B for the proposed development plan of the Planning Area 12 Freeway Commercial project.

The City has identified discretionary actions and/or permit approval requirements for the Planning Area 12 Freeway Commercial project. The projected potable and recycled water demands and resulting water supply requirements associated with the Planning Area 12 Freeway Commercial project have considered the discretionary actions and/or permit approvals and are incorporated into and used in this WSA&V Report. The water demands for the proposed Planning Area 12 Freeway Commercial project are provided in Section 5 – Historical and Projected Water Demands.

Section 4 – Otay Water District

The Otay WD is a municipal water district formed in 1956 pursuant to the Municipal Water District Act of 1911 (Water Code §§ 71000 et seq.). The Otay WD joined the Water Authority as a member agency in 1956 to acquire the right to purchase and distribute imported water throughout its service area. The Water Authority is an agency responsible for the wholesale supply of water to its 24 public agency members in San Diego County.

The Otay WD currently relies on the Water Authority for 100 percent of its treated potable water supply. The Water Authority is the agency responsible for the supply of imported water into San Diego County through its membership in MWD. The Water Authority currently obtains the vast majority of its imported supply from MWD, but is in the process of diversifying its available supplies.

The Otay WD provides water service to residential, commercial, industrial, and agricultural customers, and for environmental and fire protection uses. In addition to providing water throughout its service area, Otay WD also provides sewage collection and treatment services to a portion of its service area known as the Jamacha Basin. The Otay WD also owns and operates the Ralph W. Chapman Water Reclamation Facility (RWCWRF) which has an effective treatment capacity of 1.2 mgd or about 1,300 AFY to produce recycled water. On May 18, 2007 an additional source of recycled water supply, at least 6 mgd or about 6,720 AFY, became available to Otay WD from the City of San Diego's South Bay Water Reclamation Plant (SBWRP).

The Otay WD jurisdictional area is generally located within the south central portion of San Diego County and includes approximately 125 square miles. The Otay WD serves portions of the unincorporated communities of southern El Cajon, La Mesa, Rancho San Diego, Jamul, Spring Valley, Bonita, and Otay Mesa, the eastern portion of the City of Chula Vista and a portion of the City of San Diego on Otay Mesa. The Otay WD jurisdiction boundaries are roughly bounded on the north by the Padre Dam Municipal Water District, on the northwest by the Helix Water District, and on the west by the South Bay Irrigation District (Sweetwater Authority) and the City of San Diego. The southern boundary of Otay WD is the international border with Mexico.

The planning area addressed in the Otay WD 2010 WRMP Update and the Otay WD 2010 UWMP includes the land within the jurisdictional boundary of the Otay WD and those areas outside of the present Otay WD boundaries considered to be in the Area of Influence of the Otay WD. Figure 2-1 contained within the Otay WD 2010 WRMP Update shows the jurisdictional boundary of the Otay WD and the Area of Influence. The planning area is approximately 143 square miles, of which approximately 125 square miles are within the Otay WD current boundaries and approximately 18 square miles are in the Area of Influence. The area east of Otay WD is rural and currently not within any water purveyor jurisdiction and potentially could be served by the Otay WD in the future if the need for imported water becomes necessary, as is the case for the Area of Influence.

The City of Chula Vista, the City of San Diego, and the County of San Diego are the three land use planning agencies within the Otay WD jurisdiction. Data on forecasts for land use planning, demographics, economic projections, population, and the future rate of growth within Otay WD were obtained from the SANDAG. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information through the year 2050. Population growth within the Otay WD service area is expected to increase from the 2010 figure of approximately 198,616 to an estimated 284,997 by 2035. Land use

information used to develop water demand projections are based upon Specific or Sectional Planning Areas, the Otay Ranch General Development Plan/Sub-regional Plan, East Otay Mesa Specific Plan Area, San Diego County Community Plans, and City of San Diego Otay Mesa Community Plan, City of Chula Vista, and County of San Diego General Plans.

The Otay WD long-term historic growth rate has been approximately 4 percent. The growth rate has significantly slowed due to the current economic conditions and it is expected to slow as the inventory of developable land is diminished.

Climatic conditions within the Otay WD service area are characteristically Mediterranean near the coast, with mild temperatures year round. Inland areas are both hotter in summer and cooler in winter, with summer temperatures often exceeding 90 degrees and winter temperatures occasionally dipping to below freezing. Most of the region's rainfall occurs during the months of December through March. Average annual rainfall is approximately 12.17 inches per year.

Historic climate data were obtained from the Western Regional Climate Center for Station 042706 (El Cajon). This station was selected because its annual temperature variation is representative of most of the Otay WD service area. While there is a station in the City of Chula Vista, the temperature variation at the City of Chula Vista station is more typical of a coastal environment than the conditions in most of the Otay WD service area.

4.1 Urban Water Management Plan

In accordance with the California Urban Water Management Planning Act and recent legislation, the Otay WD Board of Directors adopted an UWMP in June 2011 and subsequently submitted the plan to the California Department of Water Resources (DWR). The Otay WD 2010 UWMP is currently being reviewed by DWR. As required by law, the Otay WD 2010 UWMP includes projected water supplies required to meet future demands through 2035. In accordance with Water Code Section 10910 (c)(2) and Government Code Section 66473.7 (c)(3), information from the Otay Water District 2010 UWMP along with supplemental information from the Otay WD WRMP Update have been utilized to prepare this WSA&V Report and are incorporated herein by reference.

The state Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session (SBX 7-7) on November 10, 2009, which became effective February 3, 2010. This new law was the water conservation component to the Delta legislation package and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. Specifically, SBX 7-7 from this Extraordinary Session requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent reduction goal by 2020 (20x2020), and an interim water reduction target by 2015.

The SBX 7-7 target setting process includes the following: (1) baseline daily per capita water use; (2) urban water use target; (3) interim water use target; (4) compliance daily per capita

water use, including technical bases and supporting data for those determinations. In order for an agency to meet its 2020 water use target, each agency can increase its use of recycled water to offset potable water use and also step up its water conservation measures. The required water use targets for 2020 and an interim target for 2015 are determined using one of four target methods – each method has numerous methodologies. The 2020 urban water use target may be updated in a supplier’s 2015 UWMP.

In 2015, urban retail water suppliers will be required to report interim compliance followed by actual compliance in 2020. Interim compliance is halfway between the baseline water use and 2020 target. Baseline, target, and compliance-year water use estimates are required to be reported in gallons per capita per day (gpcd).

Failure to meet adopted targets will result in the ineligibility of a water supplier to receive grants or loans administered by the State unless one (1) of two (2) exceptions is met. Exception one (1) states a water supplier may be eligible if they have submitted a schedule, financing plan, and budget to DWR for approval to achieve the per capita water use reductions. Exception two (2) states a water supplier may be eligible if an entire water service area qualifies as a disadvantaged community.

Otay WD has adopted Method 1 to set its 2015 interim and 2020 water use targets. Method 1 requires setting the 2020 water use target to 80 percent of baseline per capita water use target as provided in the State’s Draft 20x2020 Water Conservation Plan. The Otay WD 2015 target is 171 gpcd and the 2020 gpcd target at 80 percent of baseline is 152 gpcd.

The Otay WD’s recent per capita water use has been declining to the point where current water use already meets the 2020 target for Method 1. This recent decline in per capita water use is largely due to drought water use restrictions, increased water costs, and poor economic conditions. However, Otay WD’s effective water use awareness campaign and enhanced conservation mentality of its customers will likely result in some long-term carryover of these reduced consumption rates beyond the current drought period.

Section 5 – Historical and Projected Water Demands

The projected demands for Otay WD are based on Specific or Sectional Planning Areas, the Otay Ranch General Development Plan/Sub-regional Plan, the East Otay Mesa Specific Plan Area, San Diego County Community Plans, and City of San Diego Otay Mesa Community Plan, City of Chula Vista and County of San Diego General Plans. This land use information is also used by SANDAG as the basis for its most recent forecast data. This land use information is utilized in the preparation of the Otay WD 2010 WRMP, and Otay WD 2010 UWMP to develop the forecasted demands and supply requirements.

In 1994, the Water Authority selected the Institute for Water Resources-Municipal and Industrial Needs (MAIN) computer model to forecast municipal and industrial water use for the San Diego region. The MAIN model uses demographic and economic data to project sector-level water demands (i.e. residential and non-residential demands). This econometric model has over a quarter of a century of practical application and is used by many cities and water agencies throughout the United States. The Water Authority's version of the MAIN model was modified to reflect the San Diego region's unique parameters and is known as CWA-MAIN.

The foundation of the water demand forecast is the underlying demographic and economic projections. This was a primary reason, why, in 1992 the Water Authority and SANDAG entered into a Memorandum of Agreement (MOA), in which the Water Authority agreed to use the SANDAG current regional growth forecast for water supply planning purposes. In addition, the MOA recognizes that water supply reliability must be a component of San Diego County's regional growth management strategy required by Proposition C, as passed by the San Diego County voters in 1988. The MOA ensures a strong linkage between local general plan land use forecasts and water demand projections and resulting supply needs for the San Diego region.

Consistent with the previous CWA-MAIN modeling efforts, on February 26, 2010, the SANDAG Board of Directors accepted the Series 12: 2050 Regional Growth Forecast. The 2050 Regional Growth Forecast will be used by SANDAG as the foundation for the next Regional Comprehensive Plan update. SANDAG forecasts also are used by local governments for planning, including the Water Authority's 2010 UWMP update.

The municipal and industrial forecast also included an updated accounting of projected conservation savings based on projected regional implementation of the California Urban Water Conservation Council (CUWCC) Best Management Practices and SANDAG demographic information for the period 2010 through 2035. These savings estimates were then factored into the baseline municipal and industrial demand forecast.

A separate agricultural model, also used in prior modeling efforts, was used to forecast agricultural water demands within the Water Authority service area. This model estimates agricultural demand to be met by the Water Authority's member agencies based on agricultural acreage projections provided by SANDAG, crop distribution data derived from the Department of Water Resources and the California Avocado Commission, and average crop-type watering requirements based on California Irrigation Management Information System data.

The Water Authority and MWD update their water demand and supply projections within their jurisdictions utilizing the SANDAG most recent growth forecast to project future water demands. This provides for the important strong link between demand and supply projections to the land use plans of the cities and the county. This provides for consistency between the retail and wholesale agencies water demand projections, thereby ensuring that adequate

supplies are and will be planned for the Otay WD existing and future water users. Existing land use plans, any revisions to land use plans, and annexations are captured in the SANDAG updated forecasts. The Water Authority and MWD will update their demand forecasts based on the SANDAG most recent forecast approximately every five years to coincide with preparation of their urban water management plans. Prior to the next forecast update, local jurisdictions may require water supply assessment and/or verification reports consistent with Senate Bills 610 and 221 for proposed land use developments that either have pending or proposed annexations into the Otay WD, Water Authority, and MWD or that have revised land use plans than originally anticipated. The Water Authority and MWD next forecast and supply planning documents would then capture any increase or decrease in demands caused by annexations or revised land use plans.

In evaluating the availability of sufficient water supply, the Planning Area 12 Freeway Commercial project proponents are required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay WD Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and MWD UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues related to climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the current ongoing western states drought conditions. These new additional water supply projects are not currently developed and are in various stages of the planning process. A few examples of these alternative water supply projects include the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Rosarito Ocean Desalination Facility project, and the Rancho del Rey Groundwater Well project. The Water Authority and MWD next forecast and supply planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

In addition, MWD's 2010 Regional Urban Water Management Plan identified potential reserve supplies in the supply capability analysis (Tables 2-9, 2-10, and 2-11), which could be available to meet any unanticipated demands. The Water Authority and MWD's next forecast and supply planning documents would capture any increase in necessary supply resources resulting from any new water supply resources.

The Otay WD water demand projection methodology utilizes a component land use approach. This is done by applying representative values of water use to the acreage of each land use type and then aggregating these individual land use demand projections into an overall total demand for the Otay WD. This is called the water duty method, and the water duty is the amount of water used in acre-feet per acre per year. This approach is used for all the land use types except residential development where a demand per dwelling unit was applied. In addition, commercial and industrial water use categories are further subdivided by type including separate categories for golf courses, schools, jails, prisons, hospitals, etc. where specific water demands are established.

To determine water duties for the various types of land use, the entire water meter database of the Otay WD is utilized and sorted by the appropriate land use types. The metered consumption records are then examined for each of the land uses, and water duties are determined for the various types of residential, commercial, industrial, and institutional land uses. For example the water duty factors for commercial and industrial land uses are estimated using 1,785 and 893 gallons per day per acre, respectively. Residential water demand is established based on the same data but computed on a per-dwelling unit basis. The focus is to ensure that for each of the residential land use categories (very low, low, medium, and high densities), the demand criteria used is adequately represented based upon actual data. This method is used because residential land uses constitute a substantial percentage of the total developable planning area of the Otay WD.

The WRMP Update calculates potable water demand by taking the gross acreage of a site and applying a potable water reduction factor (PWRF), which is intended to represent the percentage of acreage to be served by potable water and that not served by recycled water for irrigation. For industrial land use, as an example, the PWRF is 0.95 (i.e., 95% of the site is assumed to be served by potable water, 5% of the site is assumed to be irrigated with recycled water). The potable net acreage is then multiplied by the unit demand factor corresponding to its respective land use. This approach is used in the WRMP Update for all the land use types except residential development where a demand per dwelling unit is applied. In addition, commercial and industrial water use categories are further subdivided by type including separate categories for golf courses, schools, jails, prisons, hospitals, etc. where specific water demands are allocated.

By applying the established water duties to the proposed land uses, the projected water demand for the entire Otay WD planning area at ultimate development is determined. Projected water demands for the intervening years were determined using growth rate projections consistent with data obtained from SANDAG and the experience of the Otay WD.

The historical and projected potable water demands for Otay WD are shown in Table 2.

Table 2
Historical and Projected Potable Water Fiscal Year Demands (AF)

Water Use Sectors	2005	2010	2015	2020	2025	2030	2035
Single Family	21,233	17,165	23,633	28,312	33,600	37,211	40,635
Multi-Family	3,095	3,605	3,444	4,126	4,897	5,423	5,922
Commercial &	1,657	2,243	1,844	2,209	2,622	2,904	3,171
Institutional &	2,262	1,867	2,518	3,017	3,580	3,965	4,330
Landscape	6,458	3,732	10,134	12,141	14,408	15,957	17,425
Other	2,426	584	2,700	3,235	3,839	4,252	4,643
Unaccounted for	547	23	608	729	865	958	1,046
Totals	37,668	29,270	44,883	53,768	63,811	70,669	77,171

Source: Otay Water District 2010 UWMP.

The historical and projected recycled water demands for Otay WD are shown in Table 3.

Table 3
Historical and Projected Recycled Water Fiscal Year Demands (AF)

Water Use Sector	2005	2010	2015	2020	2025	2030	2035
Landscape	4,090	4,000	4,400	5,000	5,800	6,800	8,000
Totals	4,090	4,000	4,400	5,000	5,800	6,800	8,000

Source: Otay Water District 2010 UWMP, Table 10.

Using the land use demand projection criteria as established in the WRMP Update, the current projected potable water demand for the proposed Planning Area 12 Freeway Commercial project is shown in Table 4, which totals approximately 0.167 mgd or about 187 AFY. The existing land use plan for the project resulted in a projected water use of 60 AFY based on land use assumptions in the WRMP Update. Thus, projected water demands for the property would be increased by 127 AFY as a result of the proposed land use change.

Table 4

Planning Area 12 Freeway Commercial Projected Potable Water Annual Average Demands

Location (Land Use)	Quantity	Potable Water Factor	Net Potable Acreage/Units	Unit Rate	Average Demand
Multi-Family Residential	448 units	85%		255 gpd/unit	114,240
Commercial	14.5 ac	90%	13.05	1,785 gpd/ac	23,294
Hotel	257 rooms			115 gpd/room	29,555
Park	1.0 ac	0	0	2,155 gpd/ac	0
Total					167,089 gpd (0.167 mgd)

The current projected recycled water demand for the proposed Planning Area 12 Freeway Commercial project is provided in Table 5, which totals approximately 0.025 mgd or about 28.5 AFY, representing about 13% of total Planning Area 12 Freeway Commercial project demand.

Table 5
Planning Area 12 Freeway Commercial Projected Recycled Water Average Demands

Location (Land Use)	Quantity	Recycled Water Factor	Net Recycled Acreage	Unit Rate	Average Demand
Multi-Family Residential	448 units	15%		45 gpd/unit	20,160
Commercial	14.5 ac	10%	1.45	2,155 gpd/ac	3,125
Park	1.0	100%	1.0	2,155 gpd/ac	2,155
Total					25,440 gpd

5.1 Demand Management (Water Conservation)

Demand management, or water conservation is a critical part of the Otay WD 2010 UWMP and its long term strategy for meeting water supply needs of the Otay WD customers. Water

conservation, is frequently the lowest cost resource available to any water agency. The goals of the Otay WD water conservation programs are to:

- Reduce the demand for more expensive, imported water.
- Demonstrate continued commitment to the Best Management Practices (BMP).
- Ensure a reliable water supply.

The Otay WD is signatory to the Memorandum of Understanding (MOU) Regarding Urban Water Conservation in California, which created the California Urban Water Conservation Council (CUWCC) in 1991 in an effort to reduce California's long-term water demands. Water conservation programs are developed and implemented on the premise that water conservation increases the water supply by reducing the demand on available supply, which is vital to the optimal utilization of a region's water supply resources. The Otay WD participates in many water conservation programs designed and typically operated on a shared cost participation program basis among the Water Authority, MWD, and their member agencies. The demands shown in Tables 2 and 3 take into account implementation of water conservation measures within Otay WD.

As one of the first signatories to the MOU Regarding Urban Water Conservation in California, the Otay WD has made BMP implementation for water conservation the cornerstone of its conservation programs and a key element in its water resource management strategy. As a member of the Water Authority, Otay WD also benefits from regional programs performed on behalf of its member agencies. The BMP programs implemented by Otay WD and regional BMP programs implemented by the Water Authority that benefit all their member agencies are addressed in the Otay WD 2010 UWMP. In partnership with the Water Authority, the County of San Diego, City of San Diego, City of Chula Vista, and developers, the Otay WD water conservation efforts are expected to grow and expand. The resulting savings directly relate to additional available water in the San Diego County region for beneficial use within the Water Authority service area, including the Otay WD.

Additional conservation or water use efficiency measures or programs practiced by the Otay WD include the following:

- Supervisory Control and Data Acquisition System

The Otay WD implemented and has operated for many years a Supervisor Control and Data Acquisition (SCADA) system to control, monitor, and collect data regarding the operation of the water system. The major facilities that have SCADA capabilities are the water flow control supply sources, transmission network, pumping stations, and water storage reservoirs. The SCADA system allows for many and varied useful functions. Some of these functions provide for operating personnel to monitor the water supply source flow rates, reservoir levels, turn on or off pumping units, etc. The SCADA system aids in the prevention of water reservoir overflow events and increases energy efficiency.

- Water Conservation Ordinance

California Water Code Sections 375 et seq. permit public entities which supply water at retail to adopt and enforce a water conservation program to reduce the quantity of water used by the people therein for the purpose of conserving water supplies of such public entity. The Otay WD Board of Directors established a comprehensive water conservation program pursuant to California Water Code Sections 375 et seq., based upon the need to conserve water supplies and to avoid or minimize the effects of any future shortage. A water shortage could exist based upon the occurrence of one or more of the following conditions:

1. A general water supply shortage due to increased demand or limited supplies.
2. Distribution or storage facilities of the Water Authority or other agencies become inadequate.
3. A major failure of the supply, storage, and distribution facilities of MWD, Water Authority, and/or Otay WD.

The Otay WD water conservation ordinance finds and determines that the conditions prevailing in the San Diego County area require that the available water resources be put to maximum beneficial use to the extent to which they are capable, and that the waste or unreasonable use, or unreasonable method of use, of water be prevented and that the conservation of such water be encouraged with a view to the maximum reasonable and beneficial use thereof in the interests of the people of the Otay WD and for the public welfare.

Otay WD is currently engaged in a number of conservation and water use efficiency activities. Listed below are the current programs that are either on-going or were recently concluded:

- Residential Water Surveys: 1,349 completed since 1994
- Large Landscape Surveys: 194 completed since 1990
- Cash for Water Smart Plants Landscape Retrofit Program: over 217,600 square feet of turf grass replaced with water wise plants since 2003
- Rotating Nozzles Rebated: 3,170
- Residential Weather-Based Irrigation Controller (WBIC) Incentive Program: 231 distributed or rebated since 2004
- Residential High Efficiency Clothes Washers: 7,187 rebates since 1994
- Residential ULFT/HET Rebate Program: 22,376 rebates provided between 1991-2010
- Outreach Efforts to Otay WD Customers - the Otay WD promotes its conservation programs through staffing outreach events, bill inserts, articles in the Otay WD's quarterly customer Pipeline newsletter, direct mailings to Otay WD customers, the Otay WD's webpage and through the Water Authority's marketing efforts.
- School Education Programs- the Otay WD funds school tours of the Water Conservation Garden, co-funds Splash Labs, provides classroom water themed kits,

maintains a library of school age appropriate water themed books, DVDs, and videos, and runs both a school poster contest and a water themed photo contest.

- Water efficiency in new construction through Cal Green and the Model Water Efficient Landscape Ordinance
- Focus on Commercial/Institutional/Industrial through Promoting MWD's Save a Buck (Commercial) Program in conjunction with the Otay WD's own Commercial Process Improvement Program

As a signatory to the MOU Regarding Urban Water Conservation in California, the Otay WD is required to submit biannual reports that detail the implementation of current water conservation practices. The Otay WD voluntarily agreed to implement the fourteen water conservation BMP's beginning in 1992. The Otay WD submits its report to the CUWCC every two years. The Otay WD BMP Reports for 2005 to 2010, as well as the BMP Coverage Report for 1999-2010, are included in the Otay WD 2010 UWMP.

The Planning Area 12 Freeway Commercial project will implement the CUWCC Best Management Practices for water conservation such as installation of ultra low flow toilets, development of a water conservation plan, and potential beneficial use of recycled water, all of which are typical requirements of development projects within the City of Chula Vista.

Section 6 - Existing and Projected Supplies

The Otay WD currently does not have an independent raw or potable water supply source. The Otay WD is a member public agency of the Water Authority. The Water Authority is a member public agency of MWD. The statutory relationships between the Water Authority and its member agencies, and MWD and its member agencies, respectively, establish the scope of the Otay WD entitlement to water from these two agencies.

The Water Authority currently supplies Otay WD with 100 percent of its potable water, through two delivery pipelines, referred to as Pipeline No. 4 and the Helix Flume. The Water Authority in turn, currently purchases the majority of its water from MWD. Due to the Otay WD reliance on these two agencies, this WSA&V Report includes referenced documents that contain information on the existing and projected supplies, supply programs, and related projects of the Water Authority and MWD. The Otay WD, Water Authority, and MWD are actively pursuing programs and projects to diversify their water supply resources.

The description of local recycled water supplies available to the Otay WD is also discussed below.

6.1 Metropolitan Water District of Southern California 2005 Regional Urban Water Management Plan

In November 2010, MWD adopted its 2010 Regional Urban Water Management Plan (RUWMP). The 2010 RUWMP provides MWD's member agencies, retail water utilities, cities, and counties within its service area with, among other things, a detailed evaluation of the supplies necessary to meet future demands, and an evaluation of reasonable and practical efficient water uses, recycling, and conservation activities. During the preparation of the 2010 RUWMP, MWD also utilized the current SANDAG regional growth forecast in calculating regional water demands for the Water Authority service area.

6.1.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

MWD is a wholesale supplier of water to its member public agencies and obtains its supplies from two primary sources: the Colorado River, via the Colorado River Aqueduct (CRA), which it owns and operates, and Northern California, via the State Water Project (SWP). The 2010 RUWMP documents the availability of these existing supplies and additional supplies necessary to meet future demands.

6.1.1.1 MWD Supplies

MWD's Integrated Resources Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The 2010 update to the IRP (2010 IRP Update) includes a planning buffer supply intended to mitigate against the risks associated with implementation of local and imported supply programs. The planning buffer identifies an additional increment of water that could potentially be developed if other supplies are not implemented as planned. As part of implementation of the planning buffer, MWD periodically evaluates supply development to ensure that the region is not under or over-developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate supplies to meet future demands.

In November 2010, MWD adopted its 2010 RUWMP in accordance with state law. The resource targets included in the preceding 2010 IRP Update serve as the foundation for the planning assumptions used in the 2010 RUWMP. MWD's 2010 RUWMP contains a water supply reliability assessment that includes a detailed evaluation of the supplies necessary to meet demands over a 25-year period in average, single dry year, and multiple dry year periods. As part of this process, MWD also uses the current SANDAG regional growth forecast in calculating regional water demands for the Water Authority's service area.

As stated in MWD's 2010 RUWMP, that plan may be used as a source document for meeting the requirements of SB 610 and SB 221 until the next scheduled update is completed in 2015. The 2005 RUWMP includes a "Justifications for Supply Projections" in Appendix A.3, that provides detailed documentation of the planning, legal, financial, and regulatory basis for including each source of supply in the plan. A copy of MWD's 2010 RUWMP can be found on the World Wide Web at the following site address:

http://www.mwdh2o.com/mwdh2o/pages/yourwater/RUWMP/RUWMP_2010.pdf

Water supply agencies throughout California continue to face climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the current western states drought conditions. Challenges such as these essentially always will be present. The regional water supply agencies, the Water Authority and MWD, along with Otay WD nevertheless fully intend to have sufficient, reliable supplies to serve demands.

6.1.2 Metropolitan Capital Investment Plan

As part of MWD's annual budget approval process, a Capital Investment Plan is prepared. The cost, purpose, justification, status, progress, etc. of MWD's infrastructure projects to deliver existing and future supplies are documented in the Capital Investment Plan. The financing of these projects is addressed as part of the annual budget approval process.

MWD's Capital Investment Plan includes a series of projects identified from MWD studies of projected water needs, which, when considered along with operational demands on aging facilities and new water quality regulations, identify the capital projects needed to maintain infrastructure reliability and water quality standards, improve efficiency, and provide future cost savings. All projects within the Capital Investment Plan are evaluated against an objective set of criteria to ensure they are aligned with the MWD's goals of supply reliability and quality.

6.2 San Diego County Water Authority Regional Water Supplies

The Water Authority has adopted plans and is taking specific actions to develop adequate water supplies to help meet existing and future water demands within the San Diego region. This section contains details on the supplies being developed by the Water Authority. A summary of recent actions pertaining to development of these supplies includes:

- In accordance with the Urban Water Management Planning Act, the Water Authority adopted their 2010 UWMP in June 2011. The updated Water Authority 2010 UWMP identifies a diverse mix of local and imported water supplies to meet future demands. A copy of the updated Water Authority 2010 UWMP can be found on the internet at <http://www.sdcwa.org/2010-urban-water-management-plan>

- Deliveries of conserved agricultural water from the Imperial Irrigation District (IID) to San Diego County have increased annually since 2003, with 70,000 ac-ft of deliveries in Fiscal Year (FY) 2010. These quantities will increase annually to 200,000 ac-ft/yr by 2021, and then remain fixed for the duration of the transfer agreement.
- As part of the October 2003 Quantification Settlement Agreement (QSA), the Water Authority was assigned MWD's rights to 77,700 ac-ft/yr of conserved water from the All-American Canal (AAC) and Coachella Canal (CC) lining projects. Deliveries of this conserved water from the CC reached the region in 2007 and deliveries from the AAC reached the region in 2010. Expected supplies from the canal lining projects are considered verifiable Water Authority supplies.

Through implementation of the Water Authority and member agency planned supply projects, along with reliable imported water supplies from MWD, the region anticipates having adequate supplies to meet existing and future water demands.

To ensure sufficient supplies to meet projected growth in the San Diego region, the Water Authority uses the SANDAG most recent regional growth forecast in calculating regional water demands. The SANDAG regional growth forecast is based on the plans and policies of the land-use jurisdictions with San Diego County. The existing and future demands of the member agencies are included in the Water Authority's projections.

6.2.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

The Water Authority currently obtains imported supplies from MWD, conserved water from the AAC and CC lining projects, and an increasing amount of conserved agricultural water from IID. Of the twenty-seven member agencies that purchase water supplies from MWD, the Water Authority is MWD's largest customer.

Section 135 of MWD's Act defines the preferential right to water for each of its member agencies. As calculated by MWD, the Water Authority's preferential right as of December 11, 2012 is 17.22 percent of MWD's supply, while the Water Authority accounted for approximately 25 percent of MWD's total revenue. Under preferential rights, MWD could allocate water without regard to historic water purchases or dependence on MWD. The Water Authority and its member agencies are taking measures to reduce dependence on MWD through development of additional supplies and a water supply portfolio that would not be jeopardized by a preferential rights allocation. MWD has stated, consistent with Section 4202 of its Administrative Code that it is prepared to provide the Water Authority's service area with adequate supplies of water to meet expanding and increasing needs in the years ahead. When and as additional water resources are required to meet increasing needs, MWD stated it will be prepared to deliver such supplies. In Section ES-5 of their 2010 RUWMP, MWD

states that MWD has supply capacities that would be sufficient to meet expected demands from 2015 through 2035. MWD has plans for supply implementation and continued development of a diversified resource mix including programs in the Colorado River Aqueduct, State Water Project, Central Valley Transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs.

The Water Authority has made large investments in MWD’s facilities and will continue to include imported supplies from MWD in the future resource mix. As discussed in the Water Authority’s 2010 UWMP, the Water Authority and its member agencies are planning to diversify the San Diego regions supply portfolio and reduce purchases from MWD.

As part of the Water Authority’s diversification efforts, the Water Authority is now taking delivery of conserved agricultural water from IID and water saved from the AAC and CC lining projects. The CC lining project is complete and the Water Authority has essentially completed construction of the AAC lining project. Table 6 summarizes the Water Authority’s supply sources with detailed information included in the sections to follow. Deliveries from MWD are also included in Table 6, which is further discussed in Section 6.1 above. The Water Authority’s member agencies provided the verifiable local supply targets for groundwater, groundwater recovery, recycled water, and surface water, which are discussed in more detail in Section 5 of the Water Authority’s 2010 UWMP.

Table 6
Projected Verifiable Water Supplies – Water Authority Service Area
 Normal Year (AF)

Water Supply Sources	2015	2020	2025	2030	2035
Water Authority Supplies (2)					
MWD Supplies	358,189	230,601	259,694	293,239	323,838
Water Authority/IID Transfer	100,000	190,000	200,000	200,000	200,000
AAC and CC Lining Projects	80,200	80,200	80,200	80,200	80,200
Proposed Regional Seawater Desalination (1)	0	56,000	56,000	56,000	56,000
Member Agency Supplies					
Surface Water	48,206	47,940	47,878	47,542	47,289
Water Recycling	38,660	43,728	46,603	48,278	49,998
Groundwater	11,710	11,100	12,100	12,840	12,840
Groundwater Recovery	10,320	15,520	15,520	15,520	15,520
Total Projected Supplies	647,285	675,089	717,995	753,619	785,685

Source: Water Authority 2010 Urban Water Management Plan – Table 9-1.

Note 1: On November 29, 2012, the Water Authority approved a water purchase agreement with Poseidon for 48,000 AFY with the right to purchase up to 56,000 AFY

Note 2: The Water Authority’s 2010 WWMP includes water use associated with accelerated forecasted development including the Planning Area 12 Freeway Commercial and the 127 AFY additional demand.

Section 5 of the Water Authority's 2010 UWMP also includes a discussion on the local supply target for seawater desalination. Seawater desalination supplies represent a significant future local resource in the Water Authority's service area.

The Carlsbad Desalination Project (Project) is a fully-permitted seawater desalination plant and conveyance pipeline designed to provide a highly reliable local supply of up to 56,000 AF per year for the region. In 2020, the Project would account for approximately 8% of the total projected regional supply and 30% of all locally generated water in San Diego County. If the project becomes operational in 2016, it will more than double the amount of local supplies developed in the region since 1991. The desalination plant itself will be fully financed, built, and operated by Poseidon. The Water Authority will purchase water from the plant under a water purchase agreement. The new pipeline connecting the desalination plant with the Water Authority's Second Aqueduct will be owned and operated by the Water Authority, but responsibility for design and construction will reside with Poseidon through a separate Design-Build Agreement. The Water Authority will be responsible for aqueduct improvements, including the relining and rehabilitation of Pipeline 3 to accept desalinated water under higher operating pressures, modifications to the San Marcos Vent that allows the flow of water between Pipelines 3 and 4, and improvements at the Twin Oaks Valley Water Treatment Plant necessary to integrate desalinated water into the Water Authority's system for optimal distribution to member agencies.

On July 22, 2010, the Board approved a Term Sheet between the Water Authority and Poseidon Resources that outlined the key terms and conditions that would be detailed and incorporated in a comprehensive Water Purchase Agreement (WPA). Beginning in October 2011 and under the direction of the Board's Carlsbad Desalination Project Advisory Group, staff began developing and negotiating with Poseidon a WPA consistent with the July 22, 2010 Board approved Term Sheet. The July 2010 Term Sheet also identified specific conditions precedent to Board consideration of the WPA. On November 29, 2012, the Water Authority Board adopted a resolution approving the Water Purchase Agreement (WPA).

The Water Authority's existing and planned supplies from the IID transfer and canal lining projects are considered "drought-proof" supplies and should be available at the yields shown in Table 6 in normal water year supply and demand assessment. Single dry year and multiple dry year scenarios are discussed in more detail in Section 9 of the Water Authority's 2010 UWMP.

As part of preparation of a written water supply assessment and/or verification report, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 11 of the Water Authority's 2010 UWMP contains a detailed shortage contingency analysis that addresses a regional catastrophic shortage situation and drought management. The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan, Emergency Storage Project, and Drought Management Plan (DMP) are taking actions to prepare for and appropriately handle an interruption of water supplies. The DMP, adopted in May 2006, provides the Water Authority

and its member agencies with a series of potential actions to take when faced with a shortage of imported water supplies from MWD due to prolonged drought or other supply shortfall conditions. The actions will help the region avoid or minimize the impacts of shortages and ensure an equitable allocation of supplies throughout the San Diego region.

6.2.1.1 Water Authority-Imperial Irrigation District Water Conservation and Transfer Agreement

The QSA was signed in October 2003, and resolves long-standing disputes regarding priority and use of Colorado River water and creates a baseline for implementing water transfers. With approval of the QSA, the Water Authority and IID were able to implement their Water Conservation and Transfer Agreement. This agreement not only provides reliability for the San Diego region, but also assists California in reducing its use of Colorado River water to its legal allocation.

On April 29, 1998, the Water Authority signed a historic agreement with IID for the long-term transfer of conserved Colorado River water to San Diego County. The Water Authority-IID Water Conservation and Transfer Agreement (Transfer Agreement) is the largest agriculture-to-urban water transfer in United States history. Colorado River water will be conserved by Imperial Valley farmers who voluntarily participate in the program and then transferred to the Water Authority for use in San Diego County.

Implementation Status

On October 10, 2003, the Water Authority and IID executed an amendment to the original 1998 Transfer Agreement. This amendment modified certain aspects of the 1998 Agreement to be consistent with the terms and conditions of the QSA and related agreements. It also modified other aspects of the agreement to lessen the environmental impacts of the transfer of conserved water. The amendment was expressly contingent on the approval and implementation of the QSA, which was also executed on October 10, 2003.

On November 5, 2003, IID filed a complaint in Imperial County Superior Court seeking validation of 13 contracts associated with the Transfer Agreement and the QSA. Imperial County and various private parties filed additional suits in Superior Court, alleging violations of the California Environmental Quality Act (CEQA), the California Water Code, and other laws related to the approval of the QSA, the water transfer, and related agreements. The lawsuits were coordinated for trial. The IID, Coachella Valley Water District, MWD, the Water Authority, and state are defending these suits and coordinating to seek validation of the contracts. In January 2010, a California Superior Court judge ruled that the QSA and 11 related agreements were invalid, because one of the agreements created an open-ended financial obligation for the state, in violation of California's constitution. The QSA parties appealed this decision and are continuing to seek validation of the contracts. The appeal is currently pending in the Third District Court of Appeal. A stay of the trial court judgment has been issued during the appeal. Implementation of the transfer provisions is proceeding during litigation.

Expected Supply

Deliveries into San Diego County from the transfer began in 2003 with an initial transfer of 10,000 AFY. The Water Authority received increasing amounts of transfer water each year, according to a water delivery schedule contained in the transfer agreement. In 2012, the Water Authority will receive 90,000 AFY. The quantities will increase annually to 200,000 AFY by 2021 then remain fixed for the duration of the transfer agreement. The initial term of the Transfer Agreement is 45 years, with a provision that either agency may extend the agreement for an additional 30-year term.

During dry years, when water availability is low, the conserved water will be transferred under the IID Colorado River rights, which are among the most senior in the Lower Colorado River Basin. Without the protection of these rights, the Water Authority could suffer delivery cutbacks. In recognition for the value of such reliability, the 1998 contract required the Water Authority to pay a premium on transfer water under defined regional shortage circumstances. The shortage premium period duration is the period of consecutive days during which any of the following exist: 1) a Water Authority shortage; 2) a shortage condition for the Lower Colorado River as declared by the Secretary; and 3) a Critical Year. Under terms of the October 2003 amendment, the shortage premium will not be included in the cost formula until Agreement Year 16.

Transportation

The Water Authority entered into a water exchange agreement with MWD on October 10, 2003, to transport the Water Authority-IID transfer water from the Colorado River to San Diego County. Under the exchange agreement, MWD will take delivery of the transfer water through its Colorado River Aqueduct. In exchange, MWD will deliver to the Water Authority a like quantity and quality of water. The Water Authority will pay MWD's applicable wheeling rate for each acre-foot of exchange water delivered. According to the water exchange agreement, MWD will make delivery of the transfer water for 35 years, unless the Water Authority elects to extend the agreement another 10 years for a total of 45 years.

Cost/Financing

The costs associated with the transfer are financed through the Water Authority's rates and charges. In the agreement between the Water Authority and IID, the price for the transfer water started at \$258 per acre-foot and increased by a set amount for the first seven years. In December 2009, the Water Authority and IID executed a fifth amendment to the water transfer agreement that sets the price per acre-foot for transfer water for calendar years 2010 through 2015, beginning at \$405 per acre-foot in 2010 and increasing to \$624 per acre-foot in 2015. For calendar years 2016 through 2034, the unit price will be adjusted using an agreed-upon index. The amendment also required the Water Authority to pay IID \$6 million at the end of calendar year 2009 and another \$50 million on or before October 1, 2010, provided that a transfer

stoppage is not in effect as a result of a court order in the QSA coordinated cases. Beginning in 2035, either the Water Authority or IID can, if certain criteria are met, elect a market rate price through a formula described in the water transfer agreement.

The October 2003 exchange agreement between MWD and the Water Authority set the initial cost to transport the conserved water at \$253 per acre-foot. Thereafter, the price is set to be equal to the charge or charges set by MWD's Board of Directors pursuant to applicable laws and regulation, and generally applicable to the conveyance of water by MWD on behalf of its member agencies. The transportation charge in 2010 was \$314 per acre-foot.

The Water Authority is providing \$10 million to help offset potential socioeconomic impacts associated with temporary land fallowing. IID will credit the Water Authority for these funds during years 16 through 45. In 2007, the Water Authority prepaid IID an additional \$10 million for future deliveries of water. IID will credit the Water Authority for this up-front payment during years 16 through 30.

As part of implementation of the QSA and water transfer, the Water Authority also entered into an environmental cost sharing agreement. Under this agreement the Water Authority is contributing a total of \$64 million to fund environmental mitigation projects and the Salton Sea Restoration Fund.

Written Contracts or Other Proof

The supply and costs associated with the transfer are based primarily on the following documents:

Agreement for Transfer of Conserved Water by and between IID and the Water Authority (April 29, 1998). This Agreement provides for a market-based transaction in which the Water Authority would pay IID a unit price for agricultural water conserved by IID and transferred to the Water Authority.

Revised Fourth Amendment to Agreement between IID and the Water Authority for Transfer of Conserved Water (October 10, 2003). Consistent with the executed Quantification Settlement Agreement (QSA) and related agreements, the amendments restructure the agreement and modify it to minimize the environmental impacts of the transfer of conserved water to the Water Authority.

Amended and Restated Agreement between MWD and Water Authority for the Exchange of Water (October 10, 2003). This agreement was executed pursuant to the QSA and provides for delivery of the transfer water to the Water Authority.

Environmental Cost Sharing, Funding, and Habitat Conservation Plan Development Agreement among IID, Coachella Valley Water District (CVWD), and Water Authority (October 10, 2003). This Agreement provides for the specified allocation of QSA-related

environmental review, mitigation, and litigation costs for the term of the QSA, and for development of a Habitat Conservation Plan.

Quantification Settlement Agreement Joint Powers Authority Creation and Funding Agreement (October 10, 2003). The purpose of this agreement is to create and fund the QSA Joint Powers Authority and to establish the limits of the funding obligation of CVWD, IID, and Water Authority for environmental mitigation and Salton Sea restoration pursuant to SB 654 (Machado).

Fifth Amendment to Agreement Between Imperial Irrigation District and San Diego County Water Authority for Transfer of Conserved Water (December 21, 2009). This agreement implements a settlement between the Water Authority and IID regarding the base contract price of transferred water.

Federal, State, and Local Permits/Approvals

Federal Endangered Species Act Permit. The U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion on January 12, 2001, that provides incidental take authorization and certain measures required to offset species impacts on the Colorado River regarding such actions.

State Water Resources Control Board (SWRCB) Petition. SWRCB adopted Water Rights Order 2002-0016 concerning IID and Water Authority's amended joint petition for approval of a long-term transfer of conserved water from IID to the Water Authority and to change the point of diversion, place of use, and purpose of use under Permit 7643.

Environmental Impact Report (EIR) for Conservation and Transfer Agreement. As lead agency, IID certified the Final EIR for the Conservation and Transfer Agreement on June 28, 2002.

U. S. Fish and Wildlife Service Draft Biological Opinion and Incidental Take Statement on the Bureau of Reclamation's Voluntary Fish and Wildlife Conservation Measures and Associated Conservation Agreements with the California Water Agencies (12/18/02). The U. S. Fish and Wildlife Service issued the biological opinion/incidental take statement for water transfer activities involving the Bureau of Reclamation and associated with IID/other California water agencies' actions on listed species in the Imperial Valley and Salton Sea (per the June 28, 2002 EIR).

Addendum to EIR for Conservation and Transfer Agreement. IID as lead agency and Water Authority as responsible agency approved addendum to EIR in October 2003.

Environmental Impact Statement (EIS) for Conservation and Transfer Agreement. Bureau of Reclamation issued a Record of Decision on the EIS in October 2003.

CA Department of Fish and Game California Endangered Species Act Incidental Take Permit #2081-2003-024-006). The California Department of Fish and Game issued this permit

(10/22/04) for potential take effects on state-listed/fully protected species associated with IID/other California water agencies' actions on listed species in the Imperial Valley and Salton Sea (per the June 28, 2002 EIR).

California Endangered Species Act (CESA) Permit. A CESA permit was issued by California Department of Fish and Game (CDFG) on April 4, 2005, providing incidental take authorization for potential species impacts on the Colorado River.

6.2.1.2 All-American Canal and Coachella Canal Lining Projects

As part of the QSA and related contracts, the Water Authority was assigned MWD's rights to 77,700 ac-ft/yr of conserved water from projects that will line the All-American Canal (AAC) and Coachella Canal (CC). The projects will reduce the loss of water that currently occurs through seepage, and the conserved water will be delivered to the Water Authority. This conserved water will provide the San Diego region with an additional 8.5 million acre-feet over the 110-year life of the agreement.

Implementation Status

The CC lining project began in November 2004 and was completed in 2006. Deliveries of conserved water to the Water Authority began in 2007. The project constructed a 37-mile parallel canal adjacent to the CC. The AAC lining project was begun in 2005 and was completed in 2010. The lining project constructed a concrete-lined canal parallel to 24 miles of the existing AAC from Pilot Knob to Drop 3.

In July 2005, a lawsuit (*CDEM v United States*, Case No. CV-S-05-0870-KJD-PAL) was filed in the U. S. District Court for the District of Nevada on behalf of U.S. and Mexican groups challenging the lining of the AAC. The lawsuit, which names the Secretary of the Interior as a defendant, claims that seepage water from the canal belongs to water users in Mexico. California water agencies note that the seepage water is actually part of California's Colorado River allocation and not part of Mexico's allocation. The plaintiffs also allege a failure by the United States to comply with environmental laws. Federal officials have stated that they intend to vigorously defend the case.

Expected Supply

The AAC lining project makes 67,700 AF of Colorado River water per year available for allocation to the Water Authority and San Luis Rey Indian water rights settlement parties. The CC lining project makes 26,000 AF of Colorado River water each year available for allocation. The 2003 Allocation Agreement provides for 16,000 AFY of conserved canal lining water to be allocated to the San Luis Rey Indian Water Rights Settlement Parties. The remaining amount, 77,700 AFY, is to be available to the Water Authority, with up to an additional 4,850 AFY available to the Water Authority depending on environmental requirements from the CC lining project. For planning purposes, the Water Authority

assumes that 2,500 AF of the 4,850 AF will be available each year for delivery, for a total of 80,200 AFY of that supply. According to the Allocation Agreement, IID has call rights to a portion (5,000 AFY) of the conserved water upon termination of the QSA for the remainder of the 110 years of the Allocation Agreement and upon satisfying certain conditions. The term of the QSA is for up to 75 years.

Transportation

The October 10, 2003, Exchange Agreement between the Water Authority and MWD also provides for the delivery of the conserved water from the canal lining projects. The Water Authority will pay MWD's applicable wheeling rate for each acre-foot of exchange water delivered. In the Agreement, MWD will deliver the canal lining water for the term of the Allocation Agreement (110 years).

Cost/Financing

Under California Water Code Section 12560 et seq., the Water Authority received \$200 million in state funds for construction of the canal lining projects. In addition, \$20 million was made available from Proposition 50 and \$36 million from Proposition 84. The Water Authority was responsible for additional expenses above the funds provided by the state.

The rate to be paid to transport the canal lining water will be equal to the charge or charges set by MWD's Board of Directors pursuant to applicable law and regulation and generally applicable to the conveyance of water by MWD on behalf of its member agencies.

In accordance with the Allocation Agreement, the Water Authority will also be responsible for a portion of the net additional Operation, Maintenance, and Repair (OM&R) costs for the lined canals. Any costs associated with the lining projects as proposed, are to be financed through the Water Authority's rates and charges.

Written Contracts or Other Proof

The expected supply and costs associated with the lining projects are based primarily on the following documents:

U.S. Public Law 100-675 (1988). Authorized the Department of the Interior to reduce seepage from the existing earthen AAC and CC. The law provides that conserved water will be made available to specified California contracting water agencies according to established priorities.

California Department of Water Resources - MWD Funding Agreement (2001). Reimburse MWD for project work necessary to construct the lining of the CC in an amount not to exceed \$74 million. Modified by First Amendment (2004) to replace MWD with the Authority. Modified by Second Amendment (2004) to increase funding amount to \$83.65 million, with addition of funds from Proposition 50.

California Department of Water Resources - IID Funding Agreement (2001). Reimburse IID for project work necessary to construct a lined AAC in an amount not to exceed \$126 million.

MWD - CVWD Assignment and Delegation of Design Obligations Agreement (2002). Assigns design of the CC lining project to CVWD.

MWD - CVWD Financial Arrangements Agreement for Design Obligations (2002). Obligates MWD to advance funds to CVWD to cover costs for CC lining project design and CVWD to invoice MWD to permit the Department of Water Resources to be billed for work completed.

Allocation Agreement among the United States of America, The MWD Water District of Southern California, Coachella Valley Water District, Imperial Irrigation District, San Diego County Water Authority, the La Jolla, Pala, Pauma, Rincon, and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido, and Vista Irrigation District (October 10, 2003). This agreement includes assignment of MWD's rights and interest in delivery of 77,700 AF of Colorado River water previously intended to be delivered to MWD to the Water Authority. Allocates water from the AAC and CC lining projects for at least 110 years to the Water Authority, the San Luis Rey Indian Water Rights Settlement Parties, and IID, if it exercises its call rights.

Amended and Restated Agreement between MWD and Water Authority for the Exchange of Water (October 10, 2003). This agreement was executed pursuant to the QSA and provides for delivery of the conserved canal lining water to the Water Authority.

Agreement between MWD and Water Authority regarding Assignment of Agreements related to the AAC and CC Lining Projects. This agreement was executed in April 2004 and assigns MWD's rights to the Water Authority for agreements that had been executed to facilitate funding and construction of the AAC and CC lining projects.

Assignment and Delegation of Construction Obligations for the Coachella Canal Lining Project under the Department of Water Resources Funding Agreement No. 4600001474 from the San Diego County Water Authority to the Coachella Valley Water District, dated September 8, 2004.

Agreement Regarding the Financial Arrangements between the San Diego County Water Authority and Coachella Valley Water District for the Construction Obligations for the Coachella Canal Lining Project, dated September 8, 2004.

Agreement No. 04-XX-30-W0429 Among the United States Bureau of Reclamation, the Coachella Valley Water District, and the San Diego County Water Authority for the Construction of the Coachella Canal Lining Project Pursuant to Title II of Public Law 100-675, dated October 19, 2004.

California Water Code Section 12560 et seq. This Water Code Section provides for \$200 million to be appropriated to the Department of Water Resources to help fund the canal lining projects in furtherance of implementing California's Colorado River Water Use Plan.

California Water Code Section 79567. This Water Code Section identifies \$20 million as available for appropriation by the California Legislature from the Water Security, Clean Drinking Water, Coastal, and Beach Protection Fund of 2002 (Proposition 50) to DWR for grants for canal lining and related projects necessary to reduce Colorado River water use. According to the Allocation Agreement, it is the intention of the agencies that those funds will be available for use by the Water Authority, IID, or CVWD for the AAC and CC lining projects.

California Public Resources Code Section 75050(b)(1). This section identifies up to \$36 million as available for water conservation projects that implement the Allocation Agreement as defined in the Quantification Settlement Agreement.

Federal, State, and Local Permits/Approvals

AAC Lining Project Final EIS/EIR (March 1994). A final EIR/EIS analyzing the potential impacts of lining the AAC was completed by the Bureau of Reclamation (Reclamation) in March 1994. A Record of Decision was signed by Reclamation in July 1994, implementing the preferred alternative for lining the AAC. A re-examination and analysis of these environmental compliance documents by Reclamation in November 1999 determined that these documents continued to meet the requirements of the NEPA and the CEQA and would be valid in the future.

CC Lining Project Final EIS/EIR (April 2001). The final EIR/EIS for the CC lining project was completed in 2001. Reclamation signed the Record of Decision in April 2002. An amended Record of Decision has also been signed to take into account revisions to the project description.

Mitigation, Monitoring, and Reporting Program for Coachella Canal Lining Project, SCH #1990020408; prepared by Coachella Valley Water District, May 16, 2001.

Environmental Commitment Plan for the Coachella Canal Lining Project, approved by the US Bureau of Reclamation (Boulder City, NV) on March 4, 2003.

Environmental Commitment Plan and Addendum to the All-American Canal Lining Project EIS/EIR California State Clearinghouse Number SCH 90010472 (June 2004, prepared by IID).

Addendum to Final EIS/EIR and Amendment to Environmental Commitment Plan for the All-American Canal Lining Project (approved June 27, 2006, by IID Board of Directors).

6.2.1.3 Carlsbad Seawater Desalination Project

Development of seawater desalination in San Diego County will assist the region in diversifying its water resources, reduce dependence on imported supplies, and provide a new drought-proof, locally treated water supply. The Carlsbad Desalination Project is a fully-permitted seawater desalination plant and conveyance pipeline currently being developed by Poseidon, a private investor-owned company that develops water and wastewater infrastructure. The project, located at the Encina Power Station in Carlsbad, has been in development since 1998 and was incorporated into the Water Authority's 2003 Water Facilities Master Plan and the 2010 UWMP. The Carlsbad Desalination Project has obtained all required permits and environmental clearances and, when completed, will provide a highly reliable local supply of 48,000 to 56,000 AFY for the region.

Implementation Status

The Project has obtained all required permits and environmental clearances, including the following:

- National Pollutant Discharge Elimination System (NPDES) Discharge Permit (Regional Water Quality Control Board)
- Conditional Drinking Water Permit (California Department of Health Services)
- State Lands Commission Lease (State Lands Commission)
- Coastal Development Permit (California Coastal Commission)

IDE Technologies, a worldwide leader in the design, construction, and operation of desalination plants, was selected by Poseidon to be the desalination process contractor for the Project.

On July 22, 2010, the Board approved a Term Sheet between the Water Authority and Poseidon Resources that outlined the key terms and conditions that would be detailed and incorporated in a comprehensive Water Purchase Agreement (WPA). Beginning in October 2011 and under the direction of the Board's Carlsbad Desalination Project Advisory Group, staff began developing and negotiating with Poseidon a WPA consistent with the July 22, 2010 Board approved Term Sheet. The July 2010 Term Sheet also identified specific conditions precedent to Board consideration of the WPA.

On November 29, 2012, the Water Authority Board adopted a resolution approving the Design-Build Agreement between the Water Authority and Poseidon. The Design-Build Agreement establishes the commercial and technical terms for implementation of the desalination product pipeline improvements. These improvements consist of an approximate 10-mile long, 54-inch diameter conveyance pipeline connecting the Desalination Plant to the Water Authority's Second Aqueduct. The pipeline will generally be constructed within

improved streets in commercial and industrial areas in the cities of Carlsbad, Vista, and San Marcos. The Water Authority will own the Project Water Pipeline Improvements upon execution of the Design-Build Agreement, and upon completion and acceptance of construction, the Water Authority will assume operational control of all pipeline improvements.

Expected Supply

When completed, the Project will provide a highly reliable local supply of 48,000 to 56,000 AFY of supply for the region, available in both normal and dry hydrologic conditions. In 2020, the Project would account for approximately 8% of the total projected regional supply and 30% of all locally generated water in San Diego County. When the project becomes operational in 2016, it will more than double the amount of local supplies developed in the region since 1991.

Transportation

On November 29, 2012, the Water Authority Board adopted a resolution approving the Design-Build Agreement between the Water Authority and Poseidon. The Design-Build Agreement establishes the commercial and technical terms for implementation of the desalination product pipeline improvements. These improvements consist of an approximate 10-mile long, 54-inch diameter conveyance pipeline connecting the Desalination Plant to the Water Authority's Second Aqueduct. The pipeline will generally be constructed within improved streets in commercial and industrial areas in the cities of Carlsbad, Vista, and San Marcos. The Water Authority will own the Project Water Pipeline Improvements upon execution of the Design-Build Agreement, and upon completion and acceptance of construction, the Water Authority will assume operational control of all pipeline improvements.

The Water Authority will be responsible for aqueduct improvements, including the relining and rehabilitation of Pipeline 3 to accept desalinated water under higher operating pressures, modifications to the San Marcos Vent that allows the flow of water between Pipelines 3 and 4, and improvements at the Twin Oaks Valley Water Treatment Plant necessary to integrate desalinated water into the Water Authority's system for optimal distribution to member agencies.

Cost/Financing

The plant and the offsite pipeline will be financed through tax exempt government bonds issued for the Water Authority by the California Pollution Control Financing Authority (CPCFA). On November 29, 2012, the Water Authority Board adopted a resolution approving agreements to accomplish tax exempt project financing through the CPCFA.

A preliminary September 2012 unit cost estimate was \$2,300/AF. The Water Authority's water purchase costs will be financed through Water Authority rates and charges. Poseidon is financing the capital cost of the Project with a combination of private equity and tax-exempt Private Activity Bonds.

Written Contracts or Other Proof

The expected supply and costs associated with the Carlsbad Desalination Project are based primarily on the following documents:

Development Agreement between City of Carlsbad and Poseidon (October 2009). A Development Agreement between Carlsbad and Poseidon was executed on October 5, 2009

Agreement of Term Sheet between the Water Authority and Poseidon Resources (July 2010). The Water Authority approved the Term Sheet at its July 2010 Board Meeting. The Term Sheet outlines the terms and conditions of a future Water Purchase Agreement with Poseidon and allocates the resources to prepare the draft Water Purchase Agreement.

Federal, State, and Local Permits/Approvals

Carlsbad Desalination Project Final EIR

The City of Carlsbad, acting as lead agency for Carlsbad Seawater Desalination Plant and appurtenant facilities proposed by Poseidon (the "Project") prepared an Environmental Impact Report for the Project in compliance with the California Environmental Quality Act ("CEQA"), which the City of Carlsbad certified on June 13, 2006.

<http://www.sdcwa.org/rwfmpeir>

The City of Carlsbad prepared an Addendum to the Carlsbad EIR ("Addendum") which was adopted on September 15, 2009, and reflects minor and immaterial design modifications to the Project site plan, appurtenant facilities, and water delivery pipeline network.

The environmental documents and permits are found at the following link:

<http://www.carlsbad-desal.com/EIR.asp>

The Water Authority, as a Responsible Agency under CEQA, adopted a resolution on November 29, 2012 approving a Second Addendum to the Carlsbad Precise Development Plan and Desalination Plant Final EIR and First Addendum that evaluates the environmental impacts of several proposed facility modifications that are necessary to allow for operational flexibility and efficiency in receiving and delivering desalination product water. These modifications include: a realignment of a portion of the approved desalination pipeline, the addition of chemical injection at the approved San Marcos Aqueduct Connection site, the relining of a portion of Pipeline 3, the addition of a pipeline and expanded flow control facility at Twin Oaks Valley Water Treatment Plant and a replacement of the San Marcos Vent on Pipeline 4. Impacts associated with the proposed modifications would not result in a

new significant impact or substantial increase in the severity of impacts previously evaluated in the Carlsbad FEIR or the First Addendum. There are no substantial changes to the circumstances under which the project will be undertaken, and no new information of substantial importance that was not known and could not have been known when the FEIR was certified and the First Addendum was approved, and that have since been identified. Therefore, the Second Addendum satisfies the CEQA requirements for the proposed project modifications.

Regional Water Facilities Master Plan EIR

On November 20, 2003, the Water Authority Board of Directors adopted Resolution No. 2003-34 certifying the Final Program Environmental Impact Report (State Clearinghouse No. 2003021052) for the Water Authority's Regional Water Facilities Master Plan Project (the "Master Plan EIR"), which evaluated, among other things, potential growth inducing impacts associated with new water supplies to the region including, but not limited to, up to 150 million gallons per day (mgd) of new supplies from seawater desalination. This certification included a 50 mgd plant located in the City of Carlsbad.

The environmental documents and permits are found at the following link:

<http://www.sdcwa.org/rwfmp-peir>

Sub regional Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)

On December 8, 2010, the Board adopted Resolution No. 2010-18 certifying a Final environmental Impact Report/Environmental Impact Statement for the San Diego County Water Authority Subregional Natural Community Conservation Plan/Habitat Conservation Plan (State Clearinghouse No. 2003121012) (the "Habitat Conservation Plan EIR/EIS"), which Plan was implemented on December 28, 2011.

The environmental documents and permits are found at the following link:

<http://www.sdcwa.org/nccp-hcp>

Twin Oaks Valley Water Treatment Plant EIR

On September 8, 2005, the Board adopted Resolution No. 2005-31 certifying a Final Environmental Impact Report for the Twin Oaks Valley Water Treatment Plant Project (State Clearinghouse No. 20040071034) (the "Twin Oaks EIR"), which project was constructed as a 100 mgd submerged membrane water treatment facility, including treated water holding tanks and distribution pipelines and other facilities, consistent with the conditions and mitigation measures included in the Twin Oaks EIR.

<http://www.sdcwa.org/twin-oaks-valley-treatment-plant-final-eir>

2010 Urban Water Management Plan

<http://www.sdcwa.org/2010-urban-water-management-plan>

Drinking Water Permit (October 2006). The California Department of Health Services approved the Conditional Drinking Water Permit on October 19, 2006.

Coastal Development Permit

The Project is fully permitted, with the California Coastal Commission issuing the following permits: Coastal Development Permit No. E-06-013, Energy Minimization and Greenhouse Gas Reduction Plan (December 2008), Marine Life Mitigation Plan (December 2008), Erosion Control Plan (November 2009), Landscaping Plan (September 2009), Lighting Plan (August 2009), Construction Plan (September 2009), and Water Pollution Control Plan (September 2009); the California Department of Public Health issuing Conceptual Approval Letter dated October 19, 2006; the California Regional Water Quality Control Board issuing NPDES Permit No. CA0109223 and Notice of Intent to Discharge for Storm Water Associated with Construction Activities (WDID #9 37C361181); the City of Carlsbad issuing Redevelopment Permit RP 05-12(A), Specific Plan 144 with Amendment 144(J) SP 144(J), Habitat Management Plan Permit Amendment HMP 05-08(A), Precise Development Plan PDP 00-02(B), Mitigation Monitoring and Reporting Program for EIR 03-05(A), Development Agreement DA 05-01(A), Standard Urban Storm Water Mitigation Program (September 2009), and Coastal Development Permit 04-41; the State of California State Lands Commission issuing an Amendment of Lease PRC 8727.1 (August 2008). The environmental documents and permits are found at the following link:
<http://www.sdcwa.org/carlsbad-desalination-project-approved-permits-and-plans>

State Lands Commission Lease Application (Amendment of Lease PRC 8727.1 August 2008). Amends lease of land by Cabrillo Power I LLC (Cabrillo) from the State Lands Commission for the lands where the project will be constructed. Cabrillo and Poseidon entered into agreement on July 1, 2003, authorizing Poseidon to use those lands to construct the project.

6.2.2 Water Authority Capital Improvement Program and Financial Information

The Water Authority's Capital Improvement Program (CIP) can trace its beginnings to a report approved by the Board in 1989 entitled, The Water Distribution Plan, and a Capital Improvement Program through the Year 2010. The Water Distribution Plan included ten projects designed to increase the capacity of the aqueduct system, increase the yield from existing water treatment plants, obtain additional supplies from MWD, and increase the reliability and flexibility of the aqueduct system. Since that time the Water Authority has made numerous additions to the list of projects included in its CIP as the region's infrastructure needs and water supply outlook have changed.

The current list of projects included in the CIP is based on the results of planning studies, including the 2005 UWMP and the 2002 Regional Water Facilities Master Plan. These CIP projects, which are most recently described in the Water Authority's Adopted Multi-Year Budget, include projects valued at \$3.50 billion. These CIP projects are designed to meet projected water supply and delivery needs of the member agencies through 2035. The projects include a mix of new facilities that will add capacity to existing conveyance, storage, and treatment facilities, as well as repair and replace aging infrastructure:

- **Asset Management** – The primary components of the asset management projects include relining and replacing existing pipelines and updating and replacing metering facilities.
- **New Facilities** – These projects will expand the capacity of the aqueduct system, complete the projects required under the Quantification Settlement Agreement (QSA), and evaluate new supply opportunities.
- **Emergency Storage Project** – Projects remaining to be completed under the ongoing ESP include the San Vicente Dam Raise, the Lake Hodges projects, and a new pump station to extend ESP supplies to the northern reaches of the Water Authority service area.
- **Other Projects** – This category includes out-of-region groundwater storage, increased local water treatment plant capacity, and projects that mitigate environmental impacts of the CIP.

The Water Authority Board of Directors is provided a semi-annual and annual report on the status of development of the CIP projects. As described in the Water Authority’s biennial budget, a combination of long and short term debt and cash (pay-as-you-go) will provide funding for capital improvements. Additional information is included in the Water Authority’s biennial budget, which also contains selected financial information and summarizes the Water Authority’s investment policy.

6.3 Otay Water District

The Otay WD 2010 Water Resources Master Plan Update and the 2010 Urban Water Management Plan contain comparisons of projected supply and demands through the year 2035. Projected potable water resources to meet planned demands as documented were planned to be supplied entirely with imported water received from the Water Authority. Recycled water resources to meet projected demands are planned to be supplied from local wastewater treatment plants. The Otay WD currently has no local supply of raw water, potable water, or groundwater resources.

The development and/or acquisition of potential groundwater, recycled water market expansion, and seawater desalination supplies by the Otay WD have evolved and are planned to occur in response to the regional water supply issues. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and MWD UWMP, IRP, Master Plans, and other planning documents. These new additional water supply projects are not currently developed and are in various stages of the planning process. These local and regional water supply projects will allow for less reliance upon imported water and are considered a new water supply resource for the Otay WD.

The Otay WD expansion of the market areas for the use of recycled water within the watersheds upstream of the Sweetwater Reservoir, Otay Mesa, and the Lower Otay Reservoir

will increase recycled water use and thus require less dependence on imported water for irrigation purposes.

The supply forecasts contained within this WSA&V Report do consider development and/or acquisition of potential groundwater, recycled water market expansion, and seawater desalination supplies by the Otay WD.

6.3.1 Availability of Sufficient Supplies and Plans for Acquiring Additional Supplies

The availability of sufficient potable water supplies and plans for acquiring additional potable water supplies to serve existing and future demands of the Otay WD is founded upon the preceding discussions regarding MWD's and the Water Authority's water supply resources and water supplies to be acquired by the Otay WD. Historic imported water deliveries from the Water Authority to Otay WD and recycled water deliveries from the Otay WD Ralph W. Chapman Water Reclamation Facility (RWCWRF) are shown in Table 7. Since the year 2000 through mid May 2007, recycled water demand has exceeded the recycled water supply capability typically in the summer months. The RWCWRF is limited to a maximum production of about 1,300 ac-ft/yr. The recycled water supply shortfall had been met by supplementing with potable water into the recycled water storage system as needed by adding potable water supplied by the Water Authority. On May 18, 2007 an additional source of recycled water supply from the City of San Diego's South Bay Water Reclamation Plant (SBWRP) became available. The supply of recycled water from the SBWRP is a result of essentially completing construction and commencement of operations of the transmission, storage, and pump station systems necessary to link the SBWRP recycled water supply source to the existing Otay WD recycled water system.

Table 7
Historic Imported and Local Water Supplies
Otay Water District

Calendar Year	Imported Water (AF)	Recycled Water (AF)	Total (AF)
1980	12,558	0	12,558
1985	14,529	0	14,529
1990	23,200	0	23,200
1995	20,922	614	21,536
2000	29,901	948	30,849
2005	37,678	1,227	38,905
2010	29,270	4,090	33,270
2011	30,158	3,880	34,038
2012	31,268	4,155	35,423

Source: Otay Water District operational records.

6.3.1.1 Imported and Regional Supplies

The availability of sufficient imported and regional potable water supplies to serve existing and planned uses within Otay WD is demonstrated in the above discussion on MWD and the Water Authority's water supply reliability. The County Water Authority Act, Section 5 subdivision 11, states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs." The Water Authority provides between 75 to 95 percent of the total supplies used by its 24 member agencies, depending on local weather and supply conditions. In calendar year 2010 the supply to Otay WD was 29,270 AF of supply from the Water Authority. An additional 4,090 AF of recycled water was supplied from the City of San Diego and from the District's Ralph W. Chapman Water Reclamation Facility. The demand for potable water within the Otay WD is expected to increase to about 77,177 AF by 2035 as per the Otay WD 2010 UWMP.

Potable Water System Facilities

The Otay WD continues to pursue diversification of its water supply resources to increase reliability and flexibility. The Otay WD also continues to plan, design, and construct potable water system facilities to obtain these supplies and to distribute potable water to meet customer demands. The Otay WD has successfully negotiated two water supply diversification agreements that enhance reliability and flexibility, which are briefly described as follows.

- The Otay WD entered into an agreement with the City of San Diego, known as the Otay Water Treatment Plant (WTP) Agreement. The Otay WTP Agreement provides for raw water purchase from the Water Authority and treatment by the City of San Diego at their Otay WTP for delivery to Otay WD. The supply system link to implement the Otay WTP Agreement to access the regions raw water supply system and the local water treatment plant became fully operational in August 2005. This supply link consists of the typical storage, transmission, pumping, flow measurement, and appurtenances to receive and transport the treated water to the Otay WD system. The City of San Diego obligation to supply 10 mgd of treated water under the Otay WTP Agreement is contingent upon there being available 10 mgd of surplus treatment capacity in the Otay WTP until such time as Otay WD pays the City of San Diego to expand the Otay WTP to meet the Otay WD future needs. In the event that the City of San Diego's surplus is projected to be less than 10 mgd the City of San Diego will consider and not unreasonably refuse the expansion of the Otay WTP to meet the Otay WD future needs. The Otay WTP existing rated capacity is 40 mgd with an actual effective capacity of approximately 34 mgd. The City of San Diego's typical demand for treated water from the Otay WTP is approximately 20 mgd. It is at the City of San Diego's discretion to

utilize either imported raw water delivered by the Water Authority Pipeline No. 3 or local water stored in Lower Otay Reservoir for treatment to supply the Otay WD demand.

- The Otay WD entered into an agreement with the Water Authority, known as the East County Regional Treated Water Improvement Program (ECRTWIP Agreement). The ECRTWIP Agreement provides for transmission of raw water to the Helix WD R. M. Levy WTP for treatment and delivery to Otay WD. The supply system link to implement the ECRTWIP Agreement is complete allowing access to the regions raw water supply system and the local water treatment plant. This supply link consists of the typical transmission, pumping, storage, flow control, and appurtenances to receive and transport the potable water from the R. M. Levy WTP to Otay WD. The Otay WD is required to take a minimum of 10,000 AFY of treated water from the R.M. Levy WTP supplied from the regions raw water system.

Cost and Financing

The capital improvement costs associated with water supply and delivery are financed through the Otay WD water meter capacity fee, New Water Supply Fee, and user rate structures. The Otay WD potable water sales revenue are used to pay for the wholesale cost of the treated water supply and the operating and maintenance expenses of the potable water system facilities.

Written Agreements, Contracts, or Other Proof

The supply and cost associated with deliveries of treated water from the Otay WTP and the R.M. Levy WTP is based on the following documents.

Agreement for the Purchase of Treated Water from the Otay Water Treatment Plant between the City of San Diego and the Otay Water District. The Otay WD entered into an agreement dated January 11, 1999 with the City of San Diego that provides for 10 mgd of surplus treated water to the Otay WD from the existing Otay WTP capacity. The agreement allows for the purchase of treated water on an as available basis from the Otay WTP. The Otay WD pays the Water Authority at the prevailing raw water rate for raw water and pays the City of San Diego at a rate equal to the actual cost of treatment to potable water standards.

Agreement between the San Diego County Water Authority and Otay Water District Regarding Implementation of the East County Regional Treated Water Improvement Program. The ECRTWIP Agreement requires the purchase of at least 10,000 AFY of potable water from the Helix WD R.M. Levy WTP at the prevailing Water Authority treated water rate. The ECRTWIP Agreement is dated April 27, 2006.

Agreement between the San Diego County Water Authority and Otay Water District for Design, Construction, Operation, and Maintenance of the Otay 14 Flow Control Facility Modification. The Otay WD entered into the Otay 14 Flow Control Facility Modification Agreement dated

January 24, 2007 with the Water Authority to increase the physical capacity of the Otay 14 Flow Control Facility. The Water Authority and Otay WD to 50% share the capital cost to expand its capacity from 8 mgd to 16 mgd.

Federal, State, and Local Permits/Approvals

The Otay WD acquired all the permits for the construction of the pipeline and pump station associated with the Otay WTP supply source and for the 640-1 and 640-2 water storage reservoirs project associated with the ECRTWIP Agreement through the typical planning, environmental approval, design, and construction processes.

The transmission main project constructed about 26,000 feet of a 36-inch diameter steel pipeline from the Otay 14 Flow Control Facility to the 640-1 and 640-2 Reservoirs project. The Otay 14 Flow Control Facility modification increased the capacity of the existing systems from 8 mgd to 16 mgd. CEQA documentation is complete for both projects. Construction of both of these projects was completed October 2010.

The City of San Diego and the Helix Water District are required to meet all applicable federal, state, and local health and water quality requirements for the potable water produced at the Otay WTP and the R.M. Levy WTP respectively.

6.3.1.2 Recycled Water Supplies

Wastewater collection, treatment, and disposal services provided by the Otay WD is limited to a relatively small area within what is known as the Jamacha Basin, located within the Middle Sweetwater River Basin watershed upstream of the Sweetwater Reservoir and downstream of Loveland Reservoir. Water recycling is defined as the treatment and disinfection of municipal wastewater to provide a water supply suitable for non-potable reuse. The Otay WD owns and operates the Ralph W. Chapman Water Reclamation Facility, which produces recycled water treated to a tertiary level for landscape irrigation purposes. The recycled water market area of the Otay WD is located primarily within the eastern area of the City of Chula Vista and on the Otay Mesa. The Otay WD distributes recycled water to a substantial market area that includes but is not limited to the U.S. Olympic Training Center, the EastLake Golf Course, and other development projects.

The Otay WD projects that annual average demands for recycled water will increase to 8,000 AFY by 2035. About 1,300 AFY of supply is generated by the RWCWRF, with the remainder planned to be supplied to Otay WD by the City of San Diego's SBWRP.

North District Recycled Water Concept

The Otay WD is a recognized leader in the use of recycled water for irrigation and other commercial uses. The Otay WD continues the quest to investigate all viable opportunities to expand the successful recycled water program into areas that are not currently served. One of

these areas is in the portion of the service area designated as the North District, located within the Middle Sweetwater River Basin watershed upstream of the Sweetwater River. The close proximity of the recycled water markets in the North District to the Otay WD's source of recycled water, the RWCWRF, means that the distribution system to serve this area could be constructed relatively cost effectively. This makes the North District a logical location for the expansion of the Otay WD's recycled water system and market area.

The purpose of the North District Recycled Water System Development Project, Phase I Concept Study, is to identify the feasibility of using recycled water in the North District and to investigate and assess any limitations or constraints to its use. The Phase I study components of the North District Recycled Water Concept encompassed the preparation of six technical memorandums including the project definition, a discussion of the regulatory process, a discussion of the protection of the watershed that would be affected by recycled water use in the North District, identification of stakeholders, public outreach, and an implementation plan.

Several opportunities that could be realized with the implementation of the use of recycled water in the North District were identified. These include a reduction of demand on the potable water system and maximizing recycled water resources which in turn minimizes treated wastewater discharges to the local ocean outfall. Other opportunities are a possible partnership with Sweetwater Authority to monitor any benefits and impacts of increased recycled water use in the watershed and stakeholder outreach to resolve any water quality concerns and to retain consumer confidence. Also identified were two major constraints associated with the North District Recycled Water System Development Project. One constraint is the water quality objectives for the Middle Sweetwater Basin that will affect the effluent limitations for the recycled water produced at the RWCWRF. At this time, the effluent limit that is of concern is total nitrogen. An examination as to how the treatment process might be modified to enhance nitrogen removal and an action plan is being developed. The other major constraint is the cost of the infrastructure needed to convey and store recycled water in the North District. These costs are estimated to be in the range of \$14 to \$15 million dollars.

There are two additional phases proposed for the North District Recycled Water System Development Project. Phase II would include further investigation of the issues identified in Phase I as requiring further study. These include stakeholder outreach, regulatory issues, and facility planning. The third phase of the effort would include the facility planning, permitting, environmental compliance, design, and construction of the improvements necessary for delivery of recycled water to the North District markets.

The estimated amount of imported water saved at full implementation of the North District Recycled Water System Development Project is 1,200 ac-ft/yr. This saved imported water could then be used to offset new potable water demands.

Recycled Water System Facilities

The Otay WD has and continues to construct recycled water storage, pumping, transmission, and distribution facilities to meet projected recycled water market demands. For nearly 20 years, millions of dollars of capital improvements have been constructed. The supply link consisting of a transmission main, storage reservoir, and a pump station to receive and transport the recycled water from the City of San Diego's SBWRP are complete and recycled water deliveries began on May 18, 2007.

Cost and Financing

The capital improvement costs associated with the recycled water supply and distribution systems are financed through the Otay WD water meter capacity fee and user rate structures. The Otay WD recycled water sales revenue, along with MWD and the Water Authority's recycled water sales incentive programs are used to help offset the costs for the wholesale purchase and production of the recycled water supply, the operating and maintenance expenses, and the capital costs of the recycled water system facilities.

Written Agreements, Contracts, or Other Proof

The supply and cost associated with deliveries of recycled water from the SBWRP is based on the following document.

Agreement between the Otay Water District and the City of San Diego for Purchase of Reclaimed Water from the South Bay Water Reclamation Plant. The agreement provides for the purchase of at least 6,721 ac-ft per year of recycled water from the SBWRP at an initial price of \$350 per acre-foot. The Otay WD Board of Directors approved the final agreement on June 4, 2003 and the San Diego City Council approved the final agreement on October 20, 2003.

Federal, State, and Local Permits/Approvals

The Otay WD has in place an agreement with MWD for their recycled water sales incentive program for supplies from the RWCWRF and the SBWRP. Also, the Otay WD has in place an agreement with the Water Authority for their recycled water sales incentive program for supplies from the RWCWRF and the SBWRP. The Water Authority sales incentive agreement was approved by Water Authority on July 26, 2007 and by Otay WD on August 1, 2007. All permits for the construction of the recycled water facilities to receive, store, and pump the SBWRP supply have been acquired through the typical planning, environmental approval, design, and construction processes.

The California Regional Water Quality Control Board San Diego Region (RWQCB) "Master Reclamation Permit for Otay Water District Ralph W. Chapman Reclamation Facility" was adopted on May 9, 2007 (Order No. R9-2007-0038). This order establishes master

reclamation requirements for the production, distribution, and use of recycled water in the Otay WD service area. The order includes the use of tertiary treated water produced and received from the City of San Diego's SBWRP. Recycled water received from and produced by the SBWRP is regulated by Regional Board Order No. 2000-203 and addenda. The City of San Diego is required to meet all applicable federal, state, and local health and water quality requirements for the recycled water produced at the SBWRP and delivered to Otay WD in conformance with Order No. 2000-203.

6.3.1.3 Potential Groundwater Supplies

The Otay WD 2010 UWMP, the WRMP Update, and the Otay WD March 2007 Integrated Water Resources Plan (2007 IRP) both contain a description of the development of potential groundwater supplies. Over the past several years, Otay WD has studied numerous potential groundwater supply options that have shown, through groundwater monitoring well activities, poor quality water and/or insufficient yield from the basins at a cost effective level. The Otay WD has a few capital improvement program projects to continue the quest to develop potential groundwater resources. Local Otay WD groundwater supply development is currently considered as a viable water supply resource to meet projected demands.

The development and/or acquisition of potential groundwater supply projects by the Otay WD has been resurrected and evolved in response to the regional water supply issues related to water source supply conditions. Local ground water supply projects will allow for less reliance upon imported water, achieve a level of independence of the regional wholesale water agencies, and diversify the Otay WD's water supply portfolio consistent the Otay WD 2007 IRP.

In recognition of the need to develop sufficient alternative water supplies, the Otay WD has taken the appropriate next steps towards development of production groundwater well projects.

There are three groundwater well projects that the Otay WD is actively pursuing to develop as new local water supplies. They are known as the Middle Sweetwater River Basin Groundwater Well, the Otay Mesa Lot 7 Groundwater Well, and the Rancho del Rey Groundwater Well.

Middle Sweetwater River Basin Groundwater Well

The Middle Sweetwater River Basin Groundwater Well is an additional water supply project that was thoroughly studied and documented in the 1990s. The Middle Sweetwater River Basin is located within the Sweetwater River watershed and that reach of the river extends from Sweetwater Reservoir to the upstream Loveland Reservoir. The next step in development of the Middle Sweetwater River Basin Groundwater Well is the implementation of a pilot well project. The ultimate objective of the Otay WD is to develop a groundwater

well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of potable water as a local supply.

The purpose of the Middle Sweetwater River Basin Groundwater Well Pilot project is to identify the feasibility of developing a groundwater resource production system and then determine and assess any limitations or constraints that may arise. The Middle Sweetwater River Basin Groundwater Well Pilot Project will accomplish six primary goals:

- Update project setting
- Update applicable project alternatives analysis
- Prepare groundwater well pilot project implementation plan
- Construct and test pilot monitoring and extraction wells
- Provide recommendations regarding costs and feasibility to develop a groundwater well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of potable water
- Prepare groundwater well production project implementation plan and scope of work

The groundwater conjunctive use concept is described as the extraction of the quantity of water from the groundwater basin that was placed there by customers of the Otay Water District, Helix Water District, and Padre Dam Municipal Water District by means of their use of imported treated water that contributed to the overall volume of groundwater within the basin. An estimated quantity was developed to be approximately 12.5 percent of the total consumption of the Otay WD customers within that basin, as measured by water meters. In the 1994-1995 period, the quantity of water that was returned to the groundwater basin by Otay WD customers was estimated to be 810 AFY. Currently, that 12.5 percent quantity could be on the order of 1,000 AFY. A future scope of work will need to address this concept while considering further development of the groundwater basin as an additional supply resource. If it is deemed that a Middle Sweetwater River Basin Groundwater Well Production Project is viable then the consultant will develop and provide a groundwater well production project implementation plan, cost estimate, and related scope of work.

Further development of the groundwater basin to enhance the total groundwater production could be accomplished by the Otay WD by means of additional extraction of water from the basin that is placed there by means of either injection and/or spreading basins using imported untreated water as the resource supply. The existing La Mesa Sweetwater Extension Pipeline, owned by the Water Authority, once converted to an untreated water delivery system, could be the conveyance system to transport untreated water for groundwater recharge in support of this conjunctive use concept. These two distinct water resource supply conjunctive use concepts will be addressed so they may coexist and to allow for their development as separate phases.

The scope of work to complete Middle Sweetwater River Basin Groundwater Well Pilot Project consists of many major tasks and is to address the groundwater supply concepts outlined above. It is anticipated that the cost for the entire scope of work, will be on the order

of \$2,000,000, which includes a contingency and may take up to one and a half years to complete.

The primary desired outcome of the Middle Sweetwater River Basin Groundwater Well Pilot Project is for the engineering consultant to determine and make recommendations if it is financially prudent and physically feasible to develop a Phase I groundwater well production system within the Middle Sweetwater River Basin capable of producing a sustainable yield of up to 1,500 ac-ft/yr of potable water for the Otay WD. If it is deemed that a Middle Sweetwater River Basin Groundwater Well Production Project is viable then the consultant will develop and provide a groundwater well production project implementation plan and related scope of work.

Otay Mesa Lot 7 Groundwater Well

In early 2001 the Otay WD was approached by a landowner representative about possible interest in purchasing an existing well or alternatively, acquiring groundwater supplied from the well located on Otay Mesa. The landowner, National Enterprises, Inc., reportedly stated that the well could produce 3,200 AFY with little or no treatment required prior to introducing the water into the Otay WD potable water system or alternatively, the recycled water system. In March 2001 authorization to proceed with testing of the Otay Mesa Lot 7 Groundwater Well was obtained and the Otay WD proceeded with the investigation of this potential groundwater supply opportunity.

The May 2001 Geoscience Support Services, Inc. completed for the Otay WD the preparation of a report entitled, "Otay Mesa Lot 7 Well Investigation," to assess the Otay Mesa Lot 7 Well. The scope of work included a geohydrologic evaluation of the well, analyses of the water quality samples, management and review of the well video log, and documentation of well pump testing. The primary findings, as documented in the report, formed the basis of the following recommendations:

- For the existing well to be use as a potable water supply resource, a sanitary seal must be installed in accordance with the CDPH guidelines.
- Drawdown in the well must be limited to avoid the possibility of collapsing the casing.
- Recover from drawdown from pumping is slow and extraction would need to be terminated for up to 2 days to allow for groundwater level recovery.
- The well water would need to be treated and/or blended with potable water prior to introduction into the potable water distribution system.

The existing Otay Mesa Lot 7 Well, based upon the above findings, was determined not to be a reliable municipal supply of potable water and that better water quality and quantity perhaps could be discovered deeper or at an alternative location within the San Diego Formation.

The Otay WD may still continue to pursue the Otay Mesa groundwater well opportunity with due consideration of the recommendations of the existing report. Based on the

recommendations of the investigation report, a groundwater well production facility at Otay Mesa Lot 7 could realistically extract approximately 300 AFY.

Rancho del Rey Groundwater Well

In 1991, the McMillin Development Company drilled the Rancho del Rey Groundwater Well to augment grading water supplies for their Rancho del Rey development projects. Although the well was considered a “good producer,” little was known regarding its water quality and sustainable yield because the water was used solely for earthwork (i.e. dust control and soil compaction). The well was drilled to 865 feet, with a finished depth of 830 feet and produced approximately 400 AFY of low quality water for four years until its use was discontinued in April 1995 when the well was no longer needed. McMillin notified the Otay WD of its intent to sell off the groundwater well asset.

In 1997, the Otay WD purchased an existing 7-inch well and the surrounding property on Rancho del Rey Parkway from the McMillin Company with the intent to develop it as a source of potable water. Treatment was required to remove salts and boron, among other constituents, using reverse osmosis membranes and ion exchange.

In 2000, having received proposals for the design and construction of a reverse osmosis treatment facility that far exceeded the allocated budget, the Board of Directors instructed staff to suspend the project until such time as it became economically viable.

In January 2010, citing the rising cost of imported water and the Otay WD's interest in securing its own water source for long-term supply reliability, the Board authorized Phase 1 for drilling and development of the Rancho del Rey Well.

On March 3, 2010, the Board adopted the Mitigated Negative Declaration for this project and a Notice of Determination was filed with the County of San Diego on March 5, 2010. In September 2010, a new 12-inch production well was drilled to a depth of 900 feet through the groundwater formation and into fractured bedrock. Testing showed the long-term yield of the new well to be 450 gpm, higher than previous studies had estimated. Separation Processes, Inc. (SPI), a highly qualified membrane treatment firm, was hired to conduct a detailed economic feasibility study to confirm that the annualized unit cost of the new water source was economically competitive with other sources. The economic study estimated the unit cost of water to be \$1,500 to \$2,000 per AF for an alternative that utilizes a seawater membrane for treating both salts and boron. When compared with the current imported treated water rate from the Water Authority, and with the knowledge that this rate will continually increase as MWD and the Water Authority raise their rates, the Rancho del Rey Well project appears to be economically viable.

The Otay WD is continuing to pursue the Rancho del Rey groundwater well opportunity with due consideration of the recommendations of the existing reports and plans to develop a groundwater well production facility to extract approximately 500 AFY. For water planning

purposes, production of groundwater from the Rancho del Rey well is considered “additional planned” for local supplies. During preparation of this 2010 UWMP, the Otay WD has contracted for design services for the wellhead treatment facilities.

6.3.1.4 Otay Water District Desalination Project

The Otay WD is currently investigating the feasibility of purchasing desalinated water from a seawater reverse osmosis plant that is planned to be located in Rosarito, Mexico, known as the Otay Mesa Desalinated Water Conveyance System (Desalination) project. The treatment facility is intended to be designed, constructed, and operated in Mexico by a third party. The Otay WD’s draft Desalination Feasibility Study, prepared in 2008, discusses the likely issues to be considered in terms of water treatment and monitoring, potential conveyance options within the United States from the international border to potential delivery points, and environmental, institutional, and permitting considerations for the Otay WD to import the Desalination project product water as a new local water supply resource.

While the treatment facility for the Desalination project will likely not be designed or operated by the Otay WD as the lead agency, it is important that the Otay WD maintain involvement with the planning, design, and construction of the facility to ensure that the implemented processes provide a product water of acceptable quality for distribution and use within the Otay WD’s system as well as in other regional agencies’ systems that may use the product water, i.e. City of San Diego, the Water Authority, etc. A seawater reverse osmosis treatment plant removes constituents of concern from the seawater, producing a water quality that far exceeds established United States and California drinking water regulations for most parameters, however, a two-pass treatment system may be required to meet acceptable concentrations of boron and chlorides, similar to the levels seen within the existing Otay WD supply sources. The Desalination Feasibility Study addresses product water quality that is considered acceptable for public health and distribution.

The Otay WD, or any other potential participating agencies, will be required to get approval from the CDPH in order to use the desalinated seawater as a water source. Several alternative approaches are identified for getting this approval. These alternatives vary in their cost and their likelihood of meeting CDPH approval.

The Rosarito Desalination Facility Conveyance and Disinfection System Project report addresses two supply targets for the desalinated water (i.e. local and regional). The local alternative assumes that only Otay WD would participate and receive desalinated water, while the regional alternative assumes that other regional and/or local agencies would also participated in the Rosarito project.

On November 3, 2010, the Otay WD authorized the General Manager to enter into an agreement with AECOM for the engineering design, environmental documentation, and the permitting for the construction of the conveyance pipeline, pump station, and disinfection

facility to be constructed within the Otay WD. The supply target is assumed to be 50 mgd while the ultimate capacity of the plant will be 100 mgd.

The Otay WD is proceeding with negotiations among the parties to establish water supply resource acquisition terms through development of a Principles of Understanding document.

6.3.2 Otay WD Capital Improvement Program

The Otay WD plans, designs, constructs, and operates water system facilities to acquire sufficient supplies and to meet projected ultimate demands placed upon the potable and recycled water systems. In addition, the Otay WD forecasts needs and plans for water supply requirements to meet projected demands at ultimate build out. The necessary water facilities and water supply projects are implemented and constructed when development activities proceed and require service to achieve timely and adequate cost effective water service.

New water facilities that are required to accommodate the forecasted growth within the entire Otay WD service area are defined and described within the Otay WD WRMP Update . These facilities are incorporated into the annual Otay WD Six Year Capital Improvement Program (CIP) for implementation when required to support development activities. As major development plans are formulated and precede through the land use jurisdictional agency approval processes, Otay WD prepares water system requirements specifically for the proposed development project consistent with the Otay WD WRMP Update . These requirements document, define, and describe all the potable water and recycled water system facilities to be constructed to provide an acceptable and adequate level of service to the proposed land uses, as well as the financial responsibility of the facilities required for service. The Otay WD funds the facilities identified as CIP projects. Established water meter capacity fees and user rates are collected to fund the CIP project facilities. The developer funds all other required water system facilities to provide water service to their project.

Section 7 – Conclusion: Availability of Sufficient Supplies

The Planning Area 12 Freeway Commercial Project is currently located within the jurisdictions of the Otay WD, Water Authority, and MWD. To obtain permanent imported water supply service, land areas are required to be within the jurisdictions of the Otay WD, Water Authority, and MWD to utilize imported water supply.

The Water Authority and MWD have an established process that ensures supplies are being planned to meet future growth. Any annexations and revisions to established land use plans are captured in the San Diego Association of Governments (SANDAG) updated forecasts for land use planning, demographics, and economic projections. SANDAG serves as the regional, intergovernmental planning agency that develops and provides forecast information. The Water Authority and MWD update their demand forecasts and supply needs based on the

most recent SANDAG forecast approximately every five years to coincide with preparation of their urban water management plans. Prior to the next forecast update, local jurisdictions with land use authority may require water supply assessment and/or verification reports for proposed land developments that are not within the Otay WD, Water Authority, or MWD jurisdictions (i.e. pending or proposed annexations) or that have revised land use plans with either lower or higher development intensities than reflected in the existing growth forecasts. Proposed land areas with pending or proposed annexations, or revised land use plans, typically result in creating higher demand and supply requirements than previously anticipated. The Otay WD, Water Authority, and MWD next demand forecast and supply requirements and associated planning documents would then capture any increase or decrease in demands and required supplies as a result of annexations or revised land use planning decisions.

MWD's Integrated Resources Plan (IRP) identifies a mix of resources (imported and local) that, when implemented, will provide 100 percent reliability for full-service demands through the attainment of regional targets set for conservation, local supplies, State Water Project supplies, Colorado River supplies, groundwater banking, and water transfers. The 2010 update to the IRP includes a planning buffer supply intended to mitigate against the risks associated with implementation of local and imported supply programs and for the risk that future demands could be higher than projected. The planning buffer identifies an additional increment of water that could potentially be developed when needed and if other supplies are not fully implemented as planned. As part of implementation of the planning buffer, MWD periodically evaluates supply development, supply conditions, and projected demands to ensure that the region is not under or over developing supplies. Managed properly, the planning buffer will help ensure that the southern California region, including San Diego County, will have adequate water supplies to meet long-term future demands.

In Section ES-5 of their 2010 RUWMP, MWD states that MWD has supply capacities that would be sufficient to meet expected demands from 2015 through 2035. MWD has plans for supply implementation and continued development of a diversified resource mix including programs in the Colorado River Aqueduct, State Water Project, Central Valley Transfers, local resource projects, and in-region storage that enables the region to meet its water supply needs. MWD's 2010 RUWMP identifies potential reserve supplies in the supply capability analysis (Tables 2-9, 2-10, and 2-11), which could be available to meet the unanticipated demands.

The County Water Authority Act, Section 5 subdivision 11, states that the Water Authority "as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs."

As part of preparation of a written water supply assessment report, an agency's shortage contingency analysis should be considered in determining sufficiency of supply. Section 11 of the Water Authority's 2010 Updated UWMP contains a detailed shortage contingency analysis that addresses a regional catastrophic shortage situation and drought management.

The analysis demonstrates that the Water Authority and its member agencies, through the Emergency Response Plan, Emergency Storage Project, Carlsbad Desalination Project, and Drought Management Plan (DMP) are taking actions to prepare for and appropriately handle an interruption of water supplies. The DMP, adopted in May 2006, provides the Water Authority and its member agencies with a series of potential actions to take when faced with a shortage of imported water supplies from MWD due to prolonged drought or other supply shortfall conditions. The actions will help the region avoid or minimize the impacts of shortages and ensure an equitable allocation of supplies.

The WSA&V Report identifies and describes the processes by which water demand projections for the proposed Planning Area 12 Freeway Commercial Project will be fully included in the water demand and supply forecasts of the Urban Water Management Plans and other water resources planning documents of the Water Authority and MWD. Water supplies necessary to serve the demands of the proposed Planning Area 12 Freeway Commercial Project, along with existing and other projected future users, as well as the actions necessary and status to develop these supplies, have been identified in the Planning Area 12 Freeway Commercial WSA&V Report and will be included in the future water supply planning documents of the Water Authority and MWD.

This WSA&V Report includes, among other information, an identification of existing water supply entitlements, water rights, water service contracts, water supply projects, or agreements relevant to the identified water supply needs for the proposed Planning Area 12 Freeway Commercial Project. This WSA&V Report assesses, demonstrates, and documents that sufficient water supplies are planned for and are intended to be available over a 20-year planning horizon, under normal conditions and in single and multiple dry years to meet the projected demand of the proposed Planning Area 12 Freeway Commercial Project and the existing and other planned development projects to be served by the Otay WD.

Table 8 presents the forecasted balance of water demands and required supplies for the Otay WD service area under average or normal year conditions. The total actual demand for FY 2010 was 33,270 acre feet. The demand for FY 2010 is 5,635 acre feet lower than the demand in FY 2005 of 38,905 acre feet. The drop in demand is a result of the unit price of water, the conservation efforts of users as a result of the prolonged drought, and the economy.

Table 9 presents the forecasted balance of water demands and supplies for the Otay WD service area under single dry year conditions. Table 9 presents the forecasted balance of water demands and supplies for the Otay WD service area under multiple dry year conditions for the three year period ending in 2018. The multiple dry year conditions for periods ending in 2023, 2028, and 2033 are provided in the Otay Water District 2010 UWMP. The projected potable demand and supply requirements shown the Tables 8 and 9 are from the Otay Water District 2010 UWMP. Hot, dry weather may generate urban water demands that are about 6.4 percent greater than normal. This percentage was utilized to generate the dry year demands shown in Table 9. The recycled water supplies are assumed to experience no reduction in a dry year.

Table 8
Projected Balance of Water Demands and Supplies Normal Year Conditions (AF)

Description	FY 2015	FY 2020	FY 2025	FY 2030	FY 2035
Demands					
Otay WD Demands	44,883	53,768	63,811	70,669	77,171
PA 12 Freeway Comm. Demands	127	127	127	127	127
Additional Conservation Target	0	(7,447)	(13,996)	(17,895)	(20,557)
Total Demand	45,010	46,478	49,942	52,901	56,741
Supplies					
Water Authority Supply	40,483	41,321	44,015	45,974	48,614
Water Authority Accelerated Forecast Growth Increment	127	127	127	127	127
Recycled Water Supply	4,400	5,000	5,800	6,800	8,000
Total Supply	45,010	46,478	49,942	52,901	56,741
Supply Surplus/(Deficit)	0	0	0	0	0
The 127 AFY increase in demand is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP.					

Table 9 presents the forecasted balance of water demands and supplies for the Otay WD service area under single dry year and multiple dry year conditions as from the Otay WD 2010 UWMP.

Table 9
Projected Balance of Water Demands and Supplies
Single Dry and Multiple Dry Year Conditions (acre feet)

	Normal Year	Single Dry Year	Multiple Dry Years		
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Demands					
Otay WD Demands	37,176	41,566	43,614	46,385	50,291
Total Demand	37,176	41,566	43,614	46,385	50,291
Supplies					
Water Authority Supply	33,268	37,535	39,460	42,108	45,891
Recycled Water Supply	3,908	4,031	4,154	4,277	4,400
Total Supply	37,176	41,566	43,614	46,385	50,291
Supply Surplus/(Deficit)	0	0	0	0	0
District Demand totals with SBX7-7 conservation target achievement plus single dry year increase as shown. The Water Authority could implement its DMP. In this instances, the Water Authority may have to allocate supply shortages based on it equitable allocation methodology in its DMP.					

Dry year demands assumed to generate a 6.4% increase in demand over normal conditions for each year in addition to new demand growth.

Table 9 also presents the forecasted balance of water demands and supplies for the Otay WD service area under multiple dry year conditions for the three year period ending in 2015.

In evaluating the availability of sufficient water supply, the Planning Area 12 Freeway Commercial Project development proponents will be required to participate in the development of alternative water supply project(s). This can be achieved through payment of the New Water Supply Fee adopted by the Otay WD Board in May 2010. These water supply projects are in addition to those identified as sustainable supplies in the current Water Authority and MWD UWMP, IRP, Master Plans, and other planning documents. These new water supply projects are in response to the regional water supply issues related to climatological, environmental, legal, and other challenges that impact water source supply conditions, such as the court rulings regarding the Sacramento-San Joaquin Delta and the current ongoing western states drought conditions. These new additional water supply projects are not currently developed and are in various stages of the planning process. The Otay WD water supply development program includes but is not limited to projects such as the Middle Sweetwater River Basin Groundwater Well project, the North District Recycled Water Supply Concept, the Otay WD Desalination project, and the Rancho del Rey Groundwater Well project. The Water Authority and MWD’s next forecasts and supply

planning documents would capture any increase in water supplies resulting from any new water resources developed by the Otay WD.

The Otay WD acknowledges the ever-present challenge of balancing water supply with demand and the inherent need to possess a flexible and adaptable water supply implementation strategy that can be relied upon during normal and dry weather conditions. The responsible regional water supply agencies have and will continue to adapt their resource plans and strategies to meet climate, environmental, and legal challenges so that they may continue to provide water supplies to their service areas. The regional water suppliers along with Otay WD fully intend to maintain sufficient reliable supplies through the 20-year planning horizon under normal, single, and multiple dry year conditions to meet projected demand of the Planning Area 12 Freeway Commercial Project, along with existing and other planned development projects within the Otay WD service area.

This WSA&V Report assesses, demonstrates, and documents that sufficient water supplies are planned for and are intended to be acquired, as well as the actions necessary and status to develop these supplies, to meet projected water demands of the Planning Area 12 Freeway Commercial Project as well as existing and other reasonably foreseeable planned development projects within the Otay WD for a 20-year planning horizon, in normal and in single and multiple dry years.

Source Documents

City of Chula Vista, Otay Ranch Planning Area 12 Freeway Commercial SB 610 and SB 221 Compliance request letter received May 31, 2013.

City of Chula Vista, "Otay Ranch General Development Plan/Sub-regional Plan, The Otay Ranch Joint Planning Project," October 1993 amended June 1996.

County of San Diego, "East Otay Mesa Specific Plan Area," adopted July 27, 1994.

Otay Water District, "2010 Water Resources Master Plan Update," Revised 2013.

Atkins and Otay Water District, "Otay Water District 2010 Urban Water Management Plan," June 2011.

Camp Dresser & McKee, Inc., "Otay Water District Integrated Water Resources Plan," March 2007

San Diego County Water Authority, "Urban Water Management Plan 2005 Update," November 2005 amended May 2007.

MWD Water District of Southern California, "Regional Urban Water Management Plan," November 2005.

Dexter Wilson Engineering, Inc., "Otay Ranch Planning Area 12 Freeway Commercial SPA Amendment Water System Evaluation" memorandum, May 21, 2013.

Camp Dresser & McKee, Inc., "Rosarito Desalination Facility Conveyance and Disinfection System Project," June 21, 2010.

PBS&J, "Draft Otay Water District North District Recycled Water System Development Project, Phase I Concept Study," December 2008.

NBS Lowry, "Middle Sweetwater River System Study Water Resources Audit," June 1991.

Michael R. Welch, "Middle Sweetwater River System Study Alternatives Evaluation," May 1993.

Michael R. Welch, "Middle Sweetwater River Basin Conjunctive Use Alternatives," September 1994.

Geoscience Support Services, Inc., "Otay Mesa Lot 7 Well Investigation," May 2001.

Boyle Engineering Corporation, "Groundwater Treatment Feasibility Study Ranch del Ray Well Site," September 1996.

Agreement for the Purchase of Treated Water from the Otay Water Treatment Plant between the City of San Diego and the Otay Water District.

Agreement between the San Diego County Water Authority and Otay Water District regarding Implementation of the East County Regional Treated Water Improvement Program.

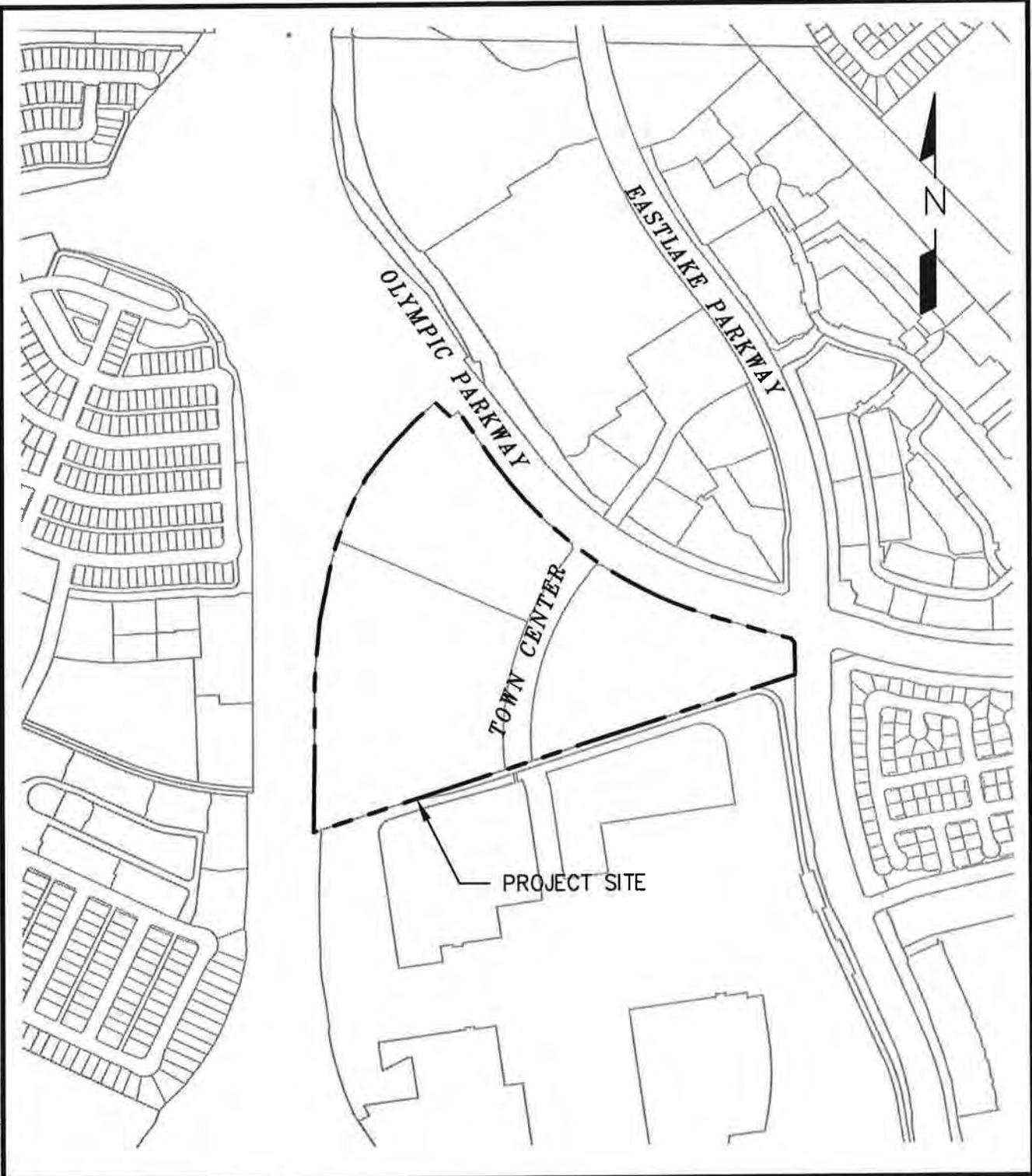
Agreement between the San Diego County Water Authority and Otay Water District for Design, Construction, Operation, and Maintenance of the Otay 14 Flow Control Facility Modification.

Agreement between the Otay Water District and the City of San Diego for Purchase of Reclaimed Water from the South Bay Water Reclamation Plant.

Appendix A

Planning Area 12 Freeway Commercial Regional Location Map

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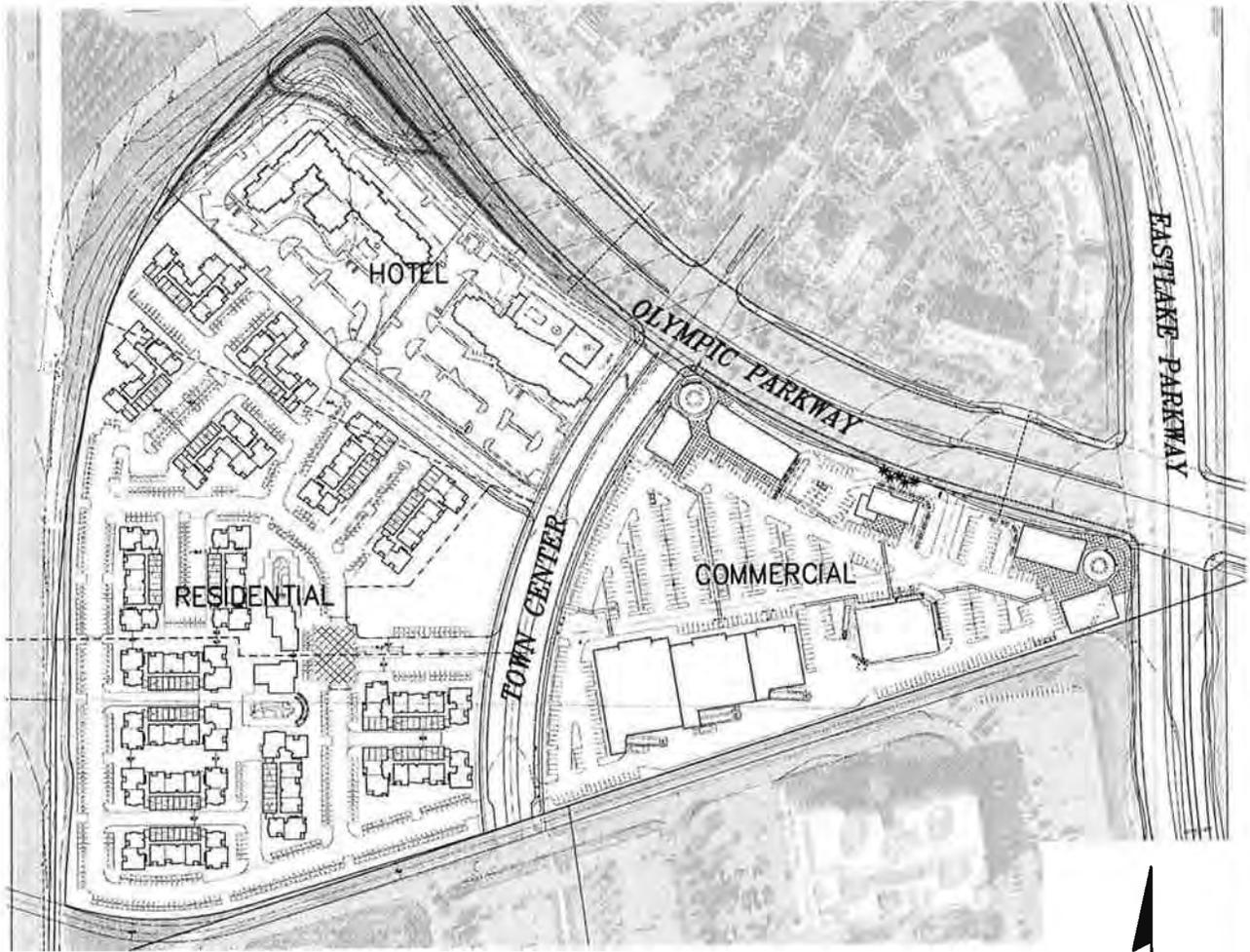


OTAY WATER DISTRICT
PA-12 FREEWAY COMMERCIAL
VICINITY MAP

Appendix B

Otay Ranch Planning Area 12 Freeway Commercial Proposed Development Plan

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OTAY WATER DISTRICT

PA-12 FREEWAY COMMERCIAL LAND USE MAP

APPENDIX B

Otay Water District Board of Directors Meeting

EXHIBIT D

July 3, 2013

Water Supply Assessment & Verification Report for Otay Ranch PA12 Freeway Commercial Project SB 610 & SB 221 Compliance



BACKGROUND

Senate Bills 610 and 221 became effective on January 1, 2002, with the primary intent to improve the link between water supply availability and land use decisions.

SB 610 Water Supply Assessment (WSA):

- **Requires water purveyor to prepare a Water Supply Assessment report for inclusion in agency CEQA documentation.**

SB 221 Water Supply Verification (WSA&V):

- **Requires water purveyor to prepare a Water Supply Assessment & Verification report for inclusion in agency CEQA documentation.**
- **Board approval required for submittal of the WSA&V report to City of Chula Vista.**

Otay Ranch PA12 Freeway Commercial Project

- **35.4 Acre Site**
- **448 Multi-family Units**
- **257 Room Hotel**
- **115,000 Sq. Ft. Commercial**

Water Demand
187 AFY
Potable
28.5 AFY
Recycled
127 AFY Demand
Increase



Water Supply Assessment & Verification Report

- **The regional and local water supply agencies acknowledge the challenges and fully intend to develop sufficient, reliable supplies to meet demands.**
- **Water suppliers recognize additional water supplies are necessary and portfolios need to be reassessed and redistributed with intent to serve existing and future needs.**

Water Supply Assessment & Verification Report

- **The Report documents the planned water supply projects and the actions necessary to develop the supplies.**
- **Water supply for the Projects and for existing and future developments within the District for a 20-year planning horizon, under normal and in single and multiple dry years, are planned for and are intended to be made available.**

Otay Water District

Planned Local Water Supply Projects	Supply (AF)
Rancho del Rey Groundwater Well	500
Rosarito Ocean Desalination Project	20,000-50,000
Otay Mesa Lot 7 Groundwater Well	300
Otay Mesa Recycled Water Supply Link Project	800

Water Authority Supplies

WATER AUTHORITY SUPPLIES (AFY)	2015	2020	2025	2030 / 2035
IID Water Transfer	100,000	190,000	200,000	200,000
ACC and CC Lining	80,200	80,200	80,200	80,200
Carlsbad Desalination	0	56,000	56,000	56,000
Sub-Total:	180,200	326,200	336,200	336,200

Source: Table 9-1 Water Authority 2010 UWMP

Otay Water District

Projected Balance of Supply and Demand

Description	FY 2015	FY 2020	FY 2025	FY 2030	FY 2035
Demands					
Otay WD Demands	44,883	53,768	63,811	70,669	77,171
Otay Ranch PA 12 Freeway Commercial Increase in Demands	127	127	127	127	127
Additional Conservation Target	0	(7,447)	(13,996)	(17,895)	(20,557)
Total Demand	45,010	46,478	49,942	52,901	56,741
Supplies					
Water Authority Supply	40,483	41,321	44,015	45,974	48,614
Water Authority Accelerated Forecast Growth Increment	127	127	127	127	127
Recycled Water Supply	4,400	5,000	5,800	6,800	8,000
Total Supply	45,010	46,478	49,942	52,901	56,741
Supply Surplus/(Deficit)	0	0	0	0	0

The 127 AFY increase in demand is accounted for through the Accelerated Forecasted Growth demand increment of the Water Authority's 2010 UWMP.

CONCLUSION

- **Water demand and supply forecasts are included in the planning documents of MWD, Water Authority, and the Otay Water District.**
- **Actions necessary to develop the identified water supplies are documented.**
- **The Otay Ranch PA12 Freeway Commercial Project SB 610 & SB 221 WSA&V Report demonstrates and documents that sufficient water supplies are planned for and are intended to be available over the next 20 years.**

CONCLUSION (continued)

- **It is believed that the Board has met the intent of SB 610 & SB 221 statute in that:**
 - 1) Land use agencies and water suppliers have demonstrated strong linkage.**
 - 2) The Otay Ranch PA12 Freeway Commercial Project Water Supply Assessment & Verification Report clearly documents the current water supply situation.**

STAFF RECOMMENDATION

That the Board of Directors approve Senate Bills 610 & 221 Water Supply Assessment & Verification Report dated May 2013 for the Otay Ranch PA12 Freeway Commercial Project.

QUESTIONS?





STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	July 3, 2013
SUBMITTED BY:	Dan Martin Engineering Manager	PROJECT:	AS001- DIV. NOS. 2,3,5 CS0005
APPROVED BY:	<input checked="" type="checkbox"/> Rod Posada, Chief, Engineering <input checked="" type="checkbox"/> German Alvarez, Assistant General Manager <input checked="" type="checkbox"/> Mark Watton, General Manager		
SUBJECT:	Request to Approve Lease Amendments with Sprint PCS Assets, LLC, a Delaware Limited Liability Company, for Modifications to Six (6) Existing Communications Facilities Located Throughout the District		

GENERAL MANAGER 'S RECOMMENDATION:

That the Otay Water District (District) Board of Directors (Board) authorize the General Manager to execute lease amendments with Sprint PCS Assets, LLC, a Delaware Limited Liability Company (Sprint PCS) for modifications to six (6) existing communications facilities located throughout the District (see Exhibit A for Property locations).

COMMITTEE ACTION:

See Attachment A.

PURPOSE:

To obtain Board approval authorizing the General Manager to execute lease amendments (see Attachment B) with Sprint PCS that allows modifications to six (6) existing communications facilities located throughout the District. The lease amendments will grant Sprint PCS the right to upgrade their existing site to Long Term Evolution (LTE) technology.

ANALYSIS:

The District currently maintains six (6) lease agreements with Sprint PCS that allow Sprint PCS to operate and maintain unmanned wireless communication facilities that include panel antennas that are attached to the District's water reservoirs and enclosures that contain Sprint PCS' equipment cabinets. The Sprint sites that are included in the existing lease agreements are at the following locations, as reflected in Exhibit A:

1. Point Barrow Drive (458-1 & 2 Reservoirs)
2. Weighorst Way (850-3 Reservoir)
3. Bear Mountain Way (1296-1, 2 & 3 Reservoirs)
4. Pence Drive (803-3 Reservoir)
5. Campo Road (832-1 & 2 Reservoirs)
6. Sweetwater Springs Boulevard (Otay Water District Headquarters)

Sprint PCS approached the District with a request to perform modifications to the existing wireless communication facilities to upgrade the facilities to LTE technology. Sprint PCS' scope work will include switching out existing four (4) foot antennas with larger six (6) foot antennas as well as the addition of Radio Repeater Units (RRUs) for each new antenna. The new antennas and RRUs work together as part of Sprint PCS' LTE upgrade to increase data capacity. Each facility has an existing SDG&E electrical service/meter and connection to a landline telephone service. As a result of the request from Sprint PCS, the District has required that the existing leases be amended to memorialize the addition of new improvements on the District's property and to strengthen the terms of the existing leases with language that reflects the current District lease terms.

The additional language in the proposed lease amendments include terms for the following:

- Security Deposit equal to the sum of two months' rent
- Elimination of pro-rating language to simplify the billing process
- 20 percent penalties for late payment
- Non-curable Event of Default for failure to pay rent
- Magnetic mount or other non-destructive alternative attachment requirement
- Utilities and back-up power provisions
- New Assignment of Lease requirement to assist in documenting change of ownership

As part of the lease amendments the Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater.

The lease amendments also include a non-refundable administrative fee of \$4,500 for each amendment that will be due within (30) days of the date of execution of the lease amendment by both parties to reimburse the District for administrative expenses and costs related to the District's supervision and assistance with the construction phases of the Project.

The District will receive copies of construction drawings, all permits, and approvals by local regulatory agencies prior to granting permission to start construction. Staff agrees with the design concept for the proposed facility construction.

FISCAL IMPACT: Joseph Beachem, Chief Financial Officer

The District will continue to receive rent which will now be subject to an annual inflation adjustment of four percent or the annual Consumer Price Index change ("CPI"), whichever is greater, effective upon the execution of the lease amendments.

LEGAL IMPACT:

The lease amendments have been reviewed and approved by District General Counsel for content and form.

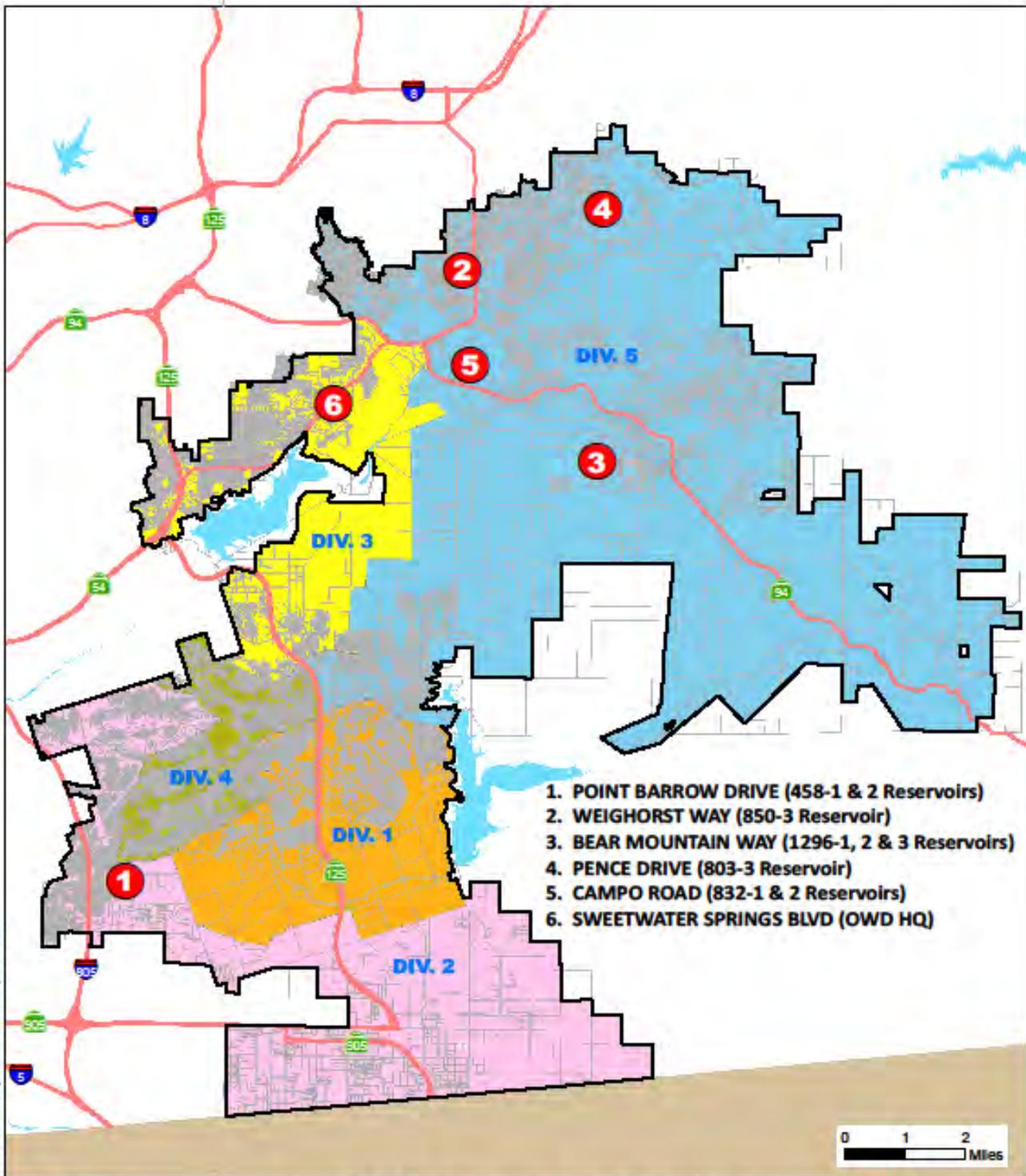
STRATEGIC GOAL:

The District ensures its continued financial health through long-term financial planning, formalized financial policies, enhanced budget controls, fair pricing, debt planning, and improved financial reporting.

DJM/RP:jf

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- Attachments:
- Exhibit A - Location Map
 - Attachment A - Committee Action
 - Attachment B-1 - Point Barrow Drive Agreement
 - Attachment B-2 - Weighorst Way Agreement
 - Attachment B-3 - Bear Mountain Way Agreement
 - Attachment B-4 - Pence Drive Agreement
 - Attachment B-5 - Campo Road Agreement
 - Attachment B-6 - Sweetwater Springs Boulevard Agreement



- 1. POINT BARROW DRIVE (458-1 & 2 Reservoirs)
- 2. WEIGHORST WAY (850-3 Reservoir)
- 3. BEAR MOUNTAIN WAY (1296-1, 2 & 3 Reservoirs)
- 4. PENCE DRIVE (803-3 Reservoir)
- 5. CAMPO ROAD (832-1 & 2 Reservoirs)
- 6. SWEETWATER SPRINGS BLVD (OWD HQ)

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OTAY WATER DISTRICT
SPRINT PCS ASSETS, LLC SITE
LOCATION MAP



EXHIBIT A



ATTACHMENT A

SUBJECT/PROJECT: AS002-CS0005 AS002-CS0006 AS002-CS0010 AS002-CS0013 AS004-CS0001 AS005-CS0012	Request to Approve Lease Amendments with Sprint PCS Assets, LLC, a Delaware Limited Liability Company, for Modifications to Six (6) Existing Communications Facilities Located Throughout the District
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COMMITTEE ACTION:

The Finance, Administration, and Communications Committee (Committee) reviewed this item at a meeting held on June 24, 2013 and the following comments were made:

- This item is to request approval to execute lease amendments with Sprint PCS Assets, LLC, a Delaware Limited Liability Company for modifications to six (6) existing communications facilities located throughout the District (see Exhibit A for facilities location map).
- The District currently maintains six (6) lease agreements with Sprint PCS that allow Sprint PCS to operate and maintain unmanned wireless communication facilities.
- Sprint PCS approached the District with a request to perform modifications to the existing six (6) wireless communication facilities to upgrade the facilities to LTE technology.
- As part of the lease amendments the Rent will be increased four percent (4%) per year or the annual Consumer Price Index change ("CPI"), whichever is greater.
- The lease amendments also include a non-refundable administrative fee of \$4,500 for each amendment to reimburse the District for administrative expenses and costs related to the District's supervision and assistance with the construction phases of the project.

- In response to an inquiry from the committee regarding contracts with other cellular providers, staff indicated that the District is currently in discussion with Verizon and T-Mobile for similar technology upgrades. Eventually, staff will be in discussions with all its cellular site lessees. It was stated that staff will present the proposed amended lease agreements as each vendor contacts the District.
- Staff indicated that the lease term is 20 years with the option to extend the agreement for two (2) additional 5-year terms.
- It was discussed that the lease rates for the six site leases with Sprint PCS ranges from \$2286/month to \$2735/month. It was indicated that the reason for the range is the date the agreement is signed and the size of the facility. It was noted that the lease cost is higher if the antennae is mounted on the District's reservoir versus mounted on a pole.
- Staff indicated that there are a total of 32 site leases with annual revenues of approximately \$1.1 million.
- There was discussion of how the District determines the monthly lease amount and what the competition was for cell sites. Staff indicated that the District had hired a consultant to perform a study to assure the District was charging market value for its leases. The consultant confirmed that the District was receiving the highest lease rates for its sites. The consultant also indicated that with the new cellular data technology, the highest location for an antennae is no longer the best location. Data requires lower antennae sites and this is the direction that cellular technology is moving towards. The District may have additional interest for its lower situated facilities.
- Staff also noted that the District is approached by vendors on a regular basis who offer to manage the District's leases. After reviewing the District's lease program, these vendors indicate that they cannot do much for the District as its leases are already at the top of the market.
- It was discussed if the lessee subleases the cellular site and it is prohibited in the lease agreement, it provides the District an opportunity to renegotiate the lease. At this time, the District can mark-to-market the lease rate.

Upon completion of the discussion, the committee supported staffs' recommendation and presentation to the board as a consent item.



ATTACHMENTS B-1 – B-6

SUBJECT/PROJECT: AS002-CS0005 AS002-CS0006 AS002-CS0010 AS002-CS0013 AS004-CS0001 AS005-CS0012	Request to Approve Lease Amendments with Sprint PCS Assets, LLC, a Delaware Limited Liability Company, for Modifications to Six (6) Existing Communications Facilities Located throughout the District
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See attached lease agreements.

FIRST AMENDMENT TO LEASE

This First Amendment to Lease (the "First Amendment") is made this day of ____, 2013, ("Effective Date") by and between Otay Water District ("OTAY") and Sprint PCS Assets, L.L.C., a Delaware limited liability company, f/k/a Cox PCS Assets, L.L.C., a Delaware limited liability company ("TENANT"), with reference to the facts set forth in the Recitals below:

RECITALS

- A. OTAY is the owner of that certain real property and facilities known as the "I.D. 10", 458-1-10 and 458-2-10, a Reservoir Site (the "Property").
- B. OTAY and TENANT are parties to that certain Lease dated July 19, 2001 (the "Lease" or "Agreement") pursuant to which TENANT is leasing from OTAY land at the Property, together with the right of access to and from the nearest public right-of-way and the right to install utilities (collectively, the "Premises").
- C. Tenant has requested a modification to the type and mounting of the Improvements currently on the Premises (the "New Improvements").
- D. OTAY and TENANT have agreed to amend the Agreement to memorialize the addition of the New Improvements to the Premises.

AGREEMENT

NOW, THEREFORE, in consideration of the facts contained in the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **New Improvements.** OTAY consents to TENANT construction and installation of new communications facilities, as more particularly described and depicted on Exhibit "B-1" which is attached hereto and made a part hereof. The parties acknowledge and agree that the attached Exhibit "B-1" is intended to supplement the Exhibit "B" attached to the Agreement.
2. **Governmental Approvals.** Any required permits for the use or operation of the New Improvements shall be obtained by TENANT at TENANT's sole expense. Furthermore, it is understood and agreed that TENANT's ability to install the New Improvements is contingent upon its obtaining all of the certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit TENANT to install and operate the New Improvements within the Premises. OTAY agrees, at no expense to OTAY, to reasonably cooperate with TENANT in making application for and obtaining all governmental licenses, permits and approvals that may be required for TENANT'S intended use of the Premises.
3. **Amended Provisions.** The following provisions shall be amended as follows:
 - 3a. Section 6; Rent shall be replaced with the following:

6.1 Tenant agrees to pay all costs and expenses incurred by Otay in connection with the Facilities and this Agreement, including negotiation and processing hereof, plan checking and inspection of Tenant facilities, costs of inspection, repairs or replacement of any Otay facilities affected or damaged, and all other costs or expenses of Otay attributable to the matters herein contemplated, plus a reasonable amount for Otay's overhead costs in connection therewith.

a. **Deposit.** Tenant has made a deposit, concurrent with its application, and has agreed to make any additional deposits required in connection with Otay's review of the application, negotiation of this Agreement, including legal review, site visits, review of drawings and other costs relating such matters incurred by Otay up to the time this Agreement is executed. Tenant forfeits any claim to such deposits except to the extent Otay determines after this Agreement is executed that amounts in excess of the District's costs and expenses have been paid. Any such excess amounts may, at the sole discretion of the District, be credited toward administrative fees or any other costs then due by Tenant, if any. If no amounts are due, excess deposits will be reimbursed to Tenant.

b. **Administrative Fees.** Administrative fees may be charged at Otay's discretion during the Term to recover costs and expenses incurred by Otay, including but not limited to attorneys and consultant's fees, review, processing of Tenant's conditional use permits, inspection of the Facilities during construction and other related costs if any, in connection with any Tenant activity that requires Otay staff to spend time in supervision, inspection, investigation or other review; such costs include but are not limited to any amendments to this Agreement, any default or any failure of Tenant to secure or renew any permit, approval, license or easement and any investigation Otay deems reasonably required in connection with the Premises or the Facilities, including without limitation any investigation of a potential contamination of any portion of the Property due to any Tenant activity or improvement.

c. **Security Deposit.** Concurrently upon execution of this Agreement, Tenant shall pay to Otay a sum equal to two months' rent as a deposit ("Security Deposit") to secure the Tenant's performance of the covenants contained herein. Tenant shall maintain the Security Deposit balance equal to the amount established herein over the life of the agreement. If Otay applies any portion of the Security Deposit, Tenant shall within 30 days after demand by Otay, deposit an amount sufficient to restore the Security Deposit to its original amount. No part of the Security Deposit is to be considered as an advance payment of rent, including last months' rent, nor is it to be used or refunded prior to the leased premises being permanently and totally vacated by the Tenant. After the Tenant has vacated the premises, Otay shall furnish Tenant with an itemized written statement of the basis for, and the amount of, any of the security deposit retained by Otay. Otay may withhold that portion of Tenant's security deposit necessary (a) to remedy any default by Tenant in the payment of rent or any other provision

of this Agreement, (b) to repair damages to the premises or any expense, loss, or damage that Otay may suffer because of Tenant's default, (c) to restore the premises to meet Otay's standards, (d) any amount that Otay may incur or become obligated to spend in exercising Otay's rights under this Agreement or available at law. The unused portion of this deposit shall be returned to the Tenant without interest no later than 60 days after termination of this Agreement.

Tenant waives the provisions of California Civil Code §1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Agreement, that provide that Otay may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of accrued Rent, to repair damage caused by Tenant, or to clean the Premises. Otay and Tenant agree that Otay may, in addition, claim those sums reasonably necessary to compensate Otay for any other foreseeable or unforeseeable loss or damage caused by the act or omission of Tenant or Tenant's officers, agents, employees, Independent contractors, or invitees, including future rent payments.

d. None of the deposits or other payment of costs or administrative fees constitutes or shall be considered Rent (defined below).

6.2 Beginning on the Commencement Date, Tenant shall pay Otay as rent the sum of \$2,000.00 per month ("Rent") payable on the first day of each month in advance. If the Commencement Date is prior to the fifteenth day of the month of commencement, the full month's Rent will be due on the Commencement Date. If the Commencement Date is on or after the fifteenth day of the month of commencement, payment of Rent will begin the first day of the following month.

Tenant may make Rent payments up to 5 days past due date without penalty, unless continual late payments for two consecutive months occur. A fee shall be imposed after the 5th day and shall be 20% of the amount currently due. Failure to pay Rent within ten (10) calendar days of the first of the month shall be an Event of Default as provided by Section 13.2. Failure to pay Rent on the due date for more than two (2) consecutive months or four (4) times over any twelve (12) month period shall be a non-curable Event of Default without the necessity of any notice or cure period. At District's sole discretion, immediately following such a non-curable Event of Default, District may terminate the Agreement and seek any remedy available by this Agreement or at law. If Tenant tenders a check, which is dishonored by a banking institution, then the Tenant shall tender cash or cashier's check only for all future payments, which shall continue until such time as written consent is obtained from Otay. In addition, Tenant shall be liable in the sum of \$25 for each dishonored check that is returned to Otay.

a. Rent Increases. The Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater. CPI shall be the average percentage increases in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100)

(the "CPI") for "All Items – All Urban Consumers" for the San Diego Metropolitan Statistical Area.

3b. Section 8; Improvements, and Section 9; Installation of Equipment shall be replaced with the following:

8. Installation and Maintenance of Improvements. Tenant is authorized to install, maintain and operate on the Premises only the Facilities described and depicted on Exhibit B; provided that all permits and zoning approvals shall have first been obtained by Tenant and shall at all times while the Facilities operate remain in full force and effect.

a. Installation of the Improvements. Tenant's design and installation of all portions of the Facilities shall be done, at no cost to Otay, according to plans approved by Otay, provided that such approval shall not be unreasonably withheld. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay of the method of attachment at Otay's sole discretion. If such Facilities are to be attached or mounted to a water tank, Tenant shall use an installation method such as a magnetic mount or other, non-destructive alternative. The Tenant shall be responsible for painting its antennas and/or equipment to match Otay's facility. Otay will provide Tenant with specifications regarding paint type, color and application method to accomplish this requirement. Painting/coating submittals shall be provided to Otay by the Tenant prior to receiving permission to begin painting. Otay may specify a camouflage design if not inconsistent with requirements of the city or county within which the Facilities are located. These camouflage designs may include but are not limited to faux palm trees, pine trees, cypress trees, broadleaf trees, and flag poles, unipoles, and other camouflaged antenna and antenna supports.

b. Record Drawings. Within thirty (30) days after completion of the Facilities, Tenant shall provide Otay with "record" (also called "as-built") drawings of the Facilities showing and identifying all the equipment and improvements installed on the Premises. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, including without limitation all personal property and antennas located on the Premises and any such property of Tenant located in the Easement. No property of Tenant other than such identified property shall be located on the Premises or the Property at any time. Upon acceptance by Otay of Tenant's record drawings, in form and content satisfactory to Otay, such drawings shall replace and supersede any similar drawings contained in any exhibit attached hereto.

c. Alterations. Tenant shall not alter or change its Improvements in a material manner without the prior approval of Otay, such approval not to be unreasonably withheld. "Material" refers to any physical change that could affect the building structure, antenna support, interconnecting facilities or its appearance

or any change that requires access to the Premises for installation of new equipment, removal of old equipment, trenching or digging or that could disrupt Otay's workplace or communications in any way or any change that requires a renewed or amended easement, permit or approval. All of Tenant's construction and installation work shall be performed at Tenant's sole cost and expense in a good and workmanlike manner and fully compliant with all government permit and code requirements. Tenant shall have the right to remove all Improvements it installs at its sole expense on or before the expiration or termination of this Agreement, but must at such time restore the ground and surface underlying the removed Improvements to its pre-installation condition, wear and tear excepted, and to the reasonable satisfaction of Otay.

d. Alterations to Improvements / Additional Space. If, at any time during the Term, Tenant requests permission from Otay to add improvements requiring construction to its then existing Improvements, the then current Administrative Fees shall be paid to Otay before any such changes are negotiated. In addition, if the requested Tenant improvements include additional area, a new agreement or, at Otay's discretion, an amendment for the additional lease space must be executed prior to start of construction and Tenant shall comply with Otay's requirements then in effect, including payment of additional rent, if any, for the additional area.

e. Permits and Compliance with Applicable Laws. During the Term, and prior to commencing any construction or installation of any improvements or equipment, as applicable, Tenant shall obtain all necessary approvals, permits and access easements or licenses, all of which shall be maintained in full force and effect at all times in accordance with all applicable laws, rules and regulations.

i. Prior to commencing construction, Tenant shall deliver to Otay copies of all executed licenses, approvals and permits required by local, state or federal agency in connection with the Improvements, which permits shall be attached hereto as Exhibit B.

ii. From time to time, as required by law or regulation in connection with the normal operation of the Improvements or as needed due to improvements or alterations to the same, Tenant shall provide Otay with updated permits, licenses and/or approvals, including without limitation written evidence, satisfactory to Otay, of all FCC approvals and other governmental permits and approvals, including but not limited to compliance with the FCC's electromagnetic radiation rules, set forth at 47 C.F.R. § 1.1307 et seq. and FCC Office of Engineering and Technology Bulletin 65, each as hereafter amended.

iii. Otay agrees, at no expense to Otay, to reasonably cooperate with Tenant in making application for and obtaining all governmental licenses,

permits and approvals that may be required for Tenant's intended use of the Premises.

f. Utilities. Tenant shall be authorized to install utilities for the Premises and the Improvements at Tenant's expense and to improve the present utilities on or near the Premises (including, but not limited to the installation of an emergency back-up power) subject to Otay's approval of the location, route, design and capacity, which approval shall not be unreasonably withheld. Tenant shall fully and promptly pay for all utilities furnished to the Premises for the use, operation and maintenance of Tenant's Improvements. If inadequate electrical power is available to provide for the Improvements, or additional electrical power is required to be installed on the Premises by Otay in its sole discretion, such installation shall be at Tenant's sole expense. The location, route, design and capacity of the additional power facility shall be approved by Otay, which shall not be unreasonably withheld.

g. Repair of Otay's Improvements/Systems. Any damage done to the Property or to any Otay improvement, facility or system in connection with the construction, installation, maintenance, repair, improvement, replacement or operation of the Improvements shall be repaired or replaced immediately at Tenant's expense and to Otay's reasonable satisfaction by Otay staff or contractors approved by Otay. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay. Tenant shall pay all costs and expenses in relation to maintaining the integrity of Otay's facilities, improvements and systems affected in any way by Tenant's Improvements or its use of the Property or the Premises.

h. Maintenance and Repair. At all time during the Term, Tenant shall maintain the Premises and the Improvements in a manner acceptable to Otay. Tenant's use of its Improvements shall not at any time or in any way adversely impact, impede or interfere with Otay's access to, use or operation of, its improvements, equipment or systems.

i. Liens. Tenant shall not encumber or allow the Premises or the Property to be encumbered in any manner other than as expressly authorized herein.

j. Security. Tenant recognizes and agrees that the Premises and the Reservoir Site are a sensitive area and that Otay's operations and services are highly sensitive and regulated. Tenant shall provide for the proper supervision of all Tenant Parties assigned or allowed by Tenant to enter and do work at the Premises. Tenant also agrees, holding Otay harmless for any cost or expense, to comply with any and all security measures instituted by Otay from time to time.

9. Maintenance, Repair or Replacement of Otay's Improvements. At any time while this Agreement remains in effect, Otay may, at its option and upon One Hundred Eighty (180) days prior written notice to Tenant, remove or cause

Tenant to remove all or any portion of its Facilities at Tenant's expense, in order for Otay to paint, repair, or make replacements to any or all its improvements on the Premises (the "Maintenance or Replacement Work"), as deemed necessary by Otay in its sole discretion. Tenant agrees to fully cooperate with Otay's efforts in connection with any Maintenance or Replacement Work, including without limitation timely, and at Tenant's cost, removing and re-installing any portion of the Facilities, as requested by Otay.

a. Temporary Facilities. During the Maintenance or Replacement Work, Tenant may, holding Otay harmless from any cost or expense, install temporary antennas on the Premises subject to Otay's approval of the location and type of replacement facilities, such approval shall not be unreasonably withheld or delayed. Once the Maintenance or Replacement Work is completed by Otay, Tenant agrees to promptly dismantle any temporary facilities and to relocate the facilities to their original location or to any other location approved by Otay. All work related to the removal of any portion of the Facilities, installation of temporary facilities, dismantling, relocation to their original location and any related work, shall be done at Tenant's sole cost and expense and in good and workmanlike manner.

b. Repair of damage. Tenant shall repair any damage caused by Tenant in connection with the installation, maintenance, operation or removal of any temporary facilities or the Facilities, and Tenant shall restore any distributed portions of the Property to their condition immediately prior to the installation of the temporary facilities.

c. Otay's option to remove temporary facilities. If any temporary facilities are not removed within sixty (60) days from the date the Maintenance or Replacement Work is completed, Otay shall have the right, but not the duty, to remove the temporary facilities at Tenant's cost and expense.

d. Painting of the Facilities. If the Maintenance or Replacement Work includes the painting, or any work affecting the surface of Otay's improvements, the Tenant shall be responsible for repainting or performing other surface treatment of its antennas and equipment to match Otay's. Otay will provide specifications to the Tenant regarding the treatment, paint type, color and application method to accomplish this requirement. The Tenant shall be required to obtain approval of specifications from Otay prior to commencing work on this requirement. Subject to Otay's prior written consent, Tenant may substitute an alternate treatment, paint type and application method if it reasonably determines that Otay's selection will adversely affect or otherwise degrade Tenant's wireless signal from the Reservoir Site.

3c. Section 11; Co-Location shall be replaced with the following:

11.1. Co-Location by Otay. Tenant agrees that Otay may enter into leases or other types of agreements with other communication carriers, wireless communications carriers and other utilities for use of any portion of the "Reservoir Site" as long as said leases do not result in unreasonable interference with Tenant's use of or access to the Premises. Tenant shall reasonably cooperate with Otay's efforts in this regard including, at Otay's request, the relocation of, or changes to, the Facilities; provided that any alterations or relocation needed to accommodate the new carrier or utility shall be performed at the expense of Otay or the new carrier or utility.

11.2. Co-Location by Tenant - Subleasing/Encumbrance. Tenant shall not sub-lease or sub-license or otherwise encumber the Premises or any portion of the Facilities without Otay's prior written consent, which may be granted or denied at Otay's sole discretion. Any sub-lease or other encumbrance shall require an amendment to this Agreement and shall specify the terms and conditions, including making provision for rent and increases thereto for the sub-lease or other encumbrance.

3d. Section 15; Termination shall be replaced with the following:

15. Termination.

(a) This Agreement may be terminated by Tenant without further liability if:

(i) Tenant delivers to Otay 30-day written notice at any time prior to commencing any work at the Premises in connection with the installation of any Facilities, for any reason or no reason;

(ii) Tenant gives Otay sixty (60) days' notice of Tenant's determination that a governmental or non-governmental license, permit, consent, approval, easement or waiver necessary to enable Tenant to construct, install or operate the Facilities cannot be obtained or renewed at reasonable expense or in reasonable time period for wireless sites at water reservoirs in metropolitan areas within San Diego County. If this notice is given, Tenant must immediately cease any and all transmissions through and from the Premises and shall promptly remove, within a period of time not to exceed sixty (60) days, any and all Tenant's personal property and improvements from the Property. This Agreement and any related easements shall automatically expire upon the earlier of removal of the Tenant's improvements or the 60th day from the notice; excepting only Tenant's indemnities and liabilities hereunder, including the obligation to pay Rent for any holdover period. Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated.

(iii) Tenant determines at any time after the Commencement Date that the Premises are not appropriate or suitable for its operations for economic, environmental or technological reasons, including without limitation, any ruling or directive of the FCC or other governmental or regulatory agency, or problems with signal strength or interference not encompassed by subsection (iv) below; provided that the right to terminate under this subsection (iii) is exercisable only upon payment by Tenant, as a termination fee, of the lesser of twelve monthly installments of rent or the balance of the rent due for the then current Initial Term, Extension Term or Additional Term, as applicable; and Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated;

(iv) Otay commits a default under this Agreement and fails to cure pursuant to Section 13.2, below;

(v) The Property or the Premises are totally or partially destroyed by fire or other casualty (not caused by Tenant) so as to hinder Tenant's normal operations and Otay does not provide to Tenant within thirty (30) days after the casualty occurs a suitable temporary relocation site for Tenant's facility pending repair and restoration of the Premises; or

(vi) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

(b) This Agreement may be terminated by Otay without further liability if:

(i) Tenant commits a default under this Agreement and fails to cure such default pursuant to Section 13.2, below;

(ii) Otay determines that continuing the Agreement or continuing to allow the Tenant to construct, install, maintain or operate the Facilities in any way violates a law, rule or regulation; or

(iii) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

3e. Section 16; Default shall be replaced with the following:

16. Default.

a. Event of Default. The parties covenant and agree that a default or breach of this Agreement (an "Event of Default") shall occur and be deemed to exist if, after notice and opportunity to cure as provided below:

(i) Tenant shall default in the payment of Rent, or any other amounts due Otay hereunder, and said default shall continue for ten (10) business days after the same becomes due; or

(ii) Either party shall default in the performance or observance of any other covenant or condition of this Agreement to be performed or observed if such failure persists for a period of thirty (30) days after the non-defaulting party provides written notice of the default to the defaulting party.

b. Rights upon Default. Upon the occurrence of an Event of Default, in addition to any other rights or remedies available to the non-defaulting party under any law, the non-defaulting party shall have the right to terminate the Agreement.

c. Cure Rights. An Event of Default shall not exist unless written notice has been given in accordance with this Agreement, and the defaulting party has had the opportunity to cure as provided herein. The defaulting party shall cure the alleged default within the manner provided herein; provided however, that if the nature of an alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the defaulting party shall not be in breach of this Agreement if it diligently commences a cure within such period, and thereafter diligently proceeds with the actions necessary to complete such cure.

3f. Section 20; Indemnity, shall be replaced with the following:

Tenant specifically agrees that it shall hold harmless, defend (with counsel, and if needed experts, reasonably acceptable to Otay), indemnify and otherwise protect Otay and each Otay Party, from and against all claims, suits or actions of any kind and description relating to (a) Tenant's obligations under this Agreement and any amendment hereto or (b) Tenant or Tenant Parties use of, and access to, the Premises, the Facilities or the Property. These obligations extend to and include without limitation any and all costs and expenses (including attorney's fees and court costs) incurred by Otay or the Otay Parties in connection with (i) damage to property (including the Premises, the Property or any personal property of Otay or any third party), (ii) any action or proceeding (including an enforcement action or criminal proceeding) related in any way to any permit (governmental or otherwise), approval or easement obtained by or required of Tenant in connection with this Agreement or the Facilities; and (iii) personal injury or death, except to

the extent that such claims, suits or actions directly arise from the gross negligence or willful misconduct of Otay or an Otay Party. This indemnification clause in no way limits any other specific indemnities given by Tenant under other provisions of this Agreement.

Nothing contained herein shall prohibit Otay, in its sole discretion, from participating in the defense of any demand, claim, action, proceeding, or litigation. In no event shall Otay's participation in the defense of any demand claim, action, proceeding, or litigation affect the obligations imposed upon Tenant herein.

This and all other Tenant indemnities shall survive the termination of this Agreement and shall remain in effect for as long as the underlying claim or action remains viable.

3g. Section 19; Assignment and Subletting, shall be replaced with the following:

Tenant shall not assign this Agreement or any portion of its rights or obligations hereunder without Otay's prior written consent, except to an affiliated parent entity, subsidiary, purchaser of at least 50% of the aggregate of the assets of Tenant ("assets" means and includes without limitation any and all real, personal or financial property or thing owned or controlled by Tenant or over which Tenant has an interest) or holder of Tenant's FCC license.

a. If during the Term hereof, Tenant requests the written consent of Otay to any assignment, and upon demonstration satisfactory to Otay of the proposed assignee's legal, financial, and technical qualifications to assume all of the Tenant's duties and obligations herein, Otay's consent thereto shall not unreasonably be withheld. Consent to one assignment shall not be deemed consent to any subsequent assignment.

b. Any attempted assignment not permitted under the first paragraph of this Section 19, without Otay's prior consent as set forth in Section 19(a), shall be void and, at Otay's option, shall constitute a termination of this Agreement for which a termination fee as described in Section 13.1.a(iii) shall be immediately due.

c. Any assignment of this Agreement shall require an executed "Assignment of Lease" whether or not the Consent of Otay is required pursuant to this section 19 or any other provision of this Agreement. A sample form of the "Assignment of Lease" is attached to this Agreement as Exhibit F which may be amended or modified in Otay's sole discretion.

4. **Continued Effect.** Except as specifically modified by this First Amendment, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between any term or provision of the Agreement and this First Amendment, the terms and provisions of this First Amendment shall control. In addition, except as otherwise stated in this First Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Agreement. All captions are for reference purposes only and shall not be used in the construction or interpretation of this First Amendment.

5. **Administrative Fees.** TENANT shall pay OTAY the amount of \$4,500 within (30) days of the date of execution of this Amendment by OTAY and TENANT.

6. **Current Rent.** The current monthly Rent amount at the Effective Date of this First Amendment is \$2,711.73.

IN WITNESS WHEREOF, OTAY and TENANT have caused this First Amendment to be executed by each party's duly authorized representative effective as of the date first above written.

OTAY WATER DISTRICT:

Sprint PCS Assets, L.L.C.,
a Delaware limited liability company, :

By: _____
Name: Mark Watton
Title: General Manager
Date: _____

By: 
Name: Matthew Bell
Title: Manager Real Estate
Date: 5/29/2013

Approved as to Form:

Approved as to Form:

By: _____
OWD General Counsel

By: _____
Its: _____

Exhibit B-1

NEW IMPROVEMENTS

NETWORK VISION MMBTS LAUNCH MALIBU POINT

SD54XC931

WATER TANK

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

LATITUDE: 32° 36' 20.735" N (32.60576000)
LONGITUDE: 117° 1' 33.384" W (-117.02594000)

SAN DIEGO METRO MARKET



CALIFORNIA STATE CODE COMPLIANCE:

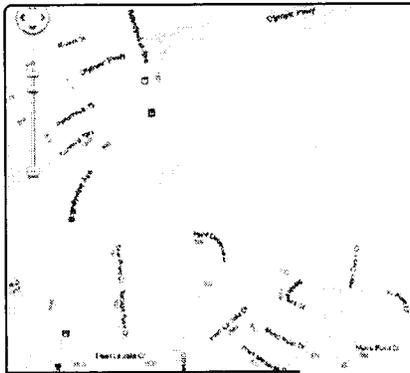
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- CALIFORNIA ADMINISTRATIVE CODE (INCL TITLE 24 & 25)
- 2010 CALIFORNIA BUILDING CODE
- CITY/COUNTY ORDINANCES
- BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
- 2010 MECHANICAL CALIFORNIA CODE
- ANSI/ISA-222-F LIFE SAFETY CODE NFPA-101
- 2010 CALIFORNIA PLUMBING CODE
- 2010 CALIFORNIA ELECTRICAL CODE
- 2010 LOCAL BUILDING CODE

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.

CODE BLOCK



VICINITY MAP

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY

- REMOVE (6) EXISTING SPRINT PANEL ANTENNAS
- INSTALL (5) NEW SPRINT PANEL ANTENNAS
- INSTALL (3) NEW RRW UNITS
- EXISTING ANTENNA COAX TO BE REMOVED
- INSTALL (3) NEW FIBER OPTIC CABLES USING EXISTING COAX ROUTE
- INSTALL (1) NEW JUNCTION BOX
- INSTALL (1) NEW RAY FIBER EQUIPMENT
- EQUIPMENT IS LOCATED WITHIN EXISTING SPRINT EQUIPMENT COMPOUND

PROJECT DESCRIPTION

APPLICANT:

SPRINT WIRELESS
CONTACT: ALEX TSATUROV
OFFICE PH: (858) 472-4048

PROPERTY INFORMATION:

PROPERTY OWNER: DTAT WATER DISTRICT
ADDRESS: 2504 SWEETWATER SPRINGS BLVD., SPRING VALLEY, CA 91978

CONTACT: GENERAL MANAGER
PH: (619) 670-2210

ZONING CLASSIFICATION: PLANNED COMMUNITY-R1 RESIDENTIAL
BUILDING CODE: 2010 CBC
CONSTRUCTION TYPE: V-N
OCCUPANCY: S-2
JURISDICTION: CITY OF CHULA VISTA
CURRENT USE: TELECOMMUNICATIONS FACILITY
PROPOSED USE: TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S):
644-221-68-00

LEASE AREA:
176.25 SQ FT

PROJECT SUMMARY

FROM SAN DIEGO INTERNATIONAL AIRPORT:
HEAD WEST ON AIRPORT TERMINAL RD
SLIGHT LEFT TO STAY ON AIRPORT TERMINAL RD
KEEP RIGHT AT THE FORK
TURN LEFT ONTO N HARBOR DR
TURN LEFT ONTO W GRAPPE ST
TAKE THE INTERSTATE 5 S SLIP ROAD
MERGE ONTO I-5 S
TAKE EXIT 158 TO MERGE ONTO CA-94 E
TAKE EXIT 3 TO MERGE ONTO I-805 S
TAKE EXIT 3 FOR MAIN ST TOWARDS AUTO PARK DR
TURN LEFT ONTO MAIN ST
TURN LEFT ONTO BRANDYWINE AVE
TAKE THE 1ST RIGHT ON TO SEDQUOA ST
TURN LEFT ONTO W POINT DR
CONTINUE ONTO POINT BARROW DR
CONTINUE ONTO LAGUNA POINT CT
ARRIVED AT SITE ON LAGUNA POINT CT

DRIVING DIRECTIONS

SHEET DESCRIPTION

- T-1 TITLE SHEET
- G-1 GENERAL NOTES & SYMBOLS
- G-2 SIGNAGE AND NOTES
- A-1 SITE PLAN
- A-2 ENLARGED SITE PLAN
- A-3 EXISTING ENLARGED EQUIPMENT & ANTENNA PLAN
- A-4 PROPOSED ENLARGED EQUIPMENT & ANTENNA PLAN
- A-5 NORTH & SOUTH ELEVATION
- A-6 EAST & WEST ELEVATION
- A-7 EQUIPMENT & CONSTRUCTION DETAILS
- A-8 CONSTRUCTION DETAILS
- A-9 CABLE COLOR CODING REQUIREMENTS
- A-10 CABLE COLOR CODING REQUIREMENTS
- A-11 CABLE COLOR CODING REQUIREMENTS
- A-12 CABLE COLOR CODING REQUIREMENTS
- A-13 PLUMBING DIAGRAMS
- A-14 PLUMBING DIAGRAMS
- A-15 PLUMBING DIAGRAMS
- A-16 PLUMBING DIAGRAMS
- A-17 PLUMBING DIAGRAMS
- F-1 FIBER PLAN
- E-1 SCHEMATIC GROUNDING PLAN
- E-2 GROUNDING DETAILS

SHEET INDEX

ARCHITECT:

THOMAS HOLLAND
PACIFIC TELECOM SERVICES, LLC
3189C AIRPORT LOOP DRIVE
COSTA MESA, CA 92626
CONTACT: ROBERT LEIGHTON
PH: (206) 484-4402
EMAIL: RLEIGHTON@PTSLWA.COM

STRUCTURAL ENGINEER:

FLORIN ARSENE, PE
25442 BURNWOOD
LAGUNA HILLS, CA 92677
PH: (949) 374-2405

SITE ACO PROJECT MANAGER:

ALCATEL LUCENT SAN DIEGO
CONTACT: ALEX TSATUROV
PH: (858) 472-4048

CONSTRUCTION MANAGER:

ALCATEL LUCENT SAN DIEGO
CONTACT: DILLON TERRY
PH: (619) 398-6199

LEASING:

SAC WIRELESS, LLC
CONTACT: MARY HAMILTON
PH: (858) 720-0166

PLANNING CONSULTANT:

CONTACT: MARK BERLIN
PH: (858) 922-0237

POWER COMPANY:

SOGAE
PH: (800)-336-7343

TELCO COMPANY:

AT&T
CONTACT: BOB ROVERE
PH: (858) 260-6919

PROJECT TEAM



At all new services & grounding trenches,
provide "WARNING" tape at 12" below grade.

DIG ALERT
"CALL BEFORE YOU DIG"
1-800-227-2600
UTILITY NOTIFICATION CENTER OF SOUTHERN CALIFORNIA

APPROVAL	SIGNATURE	DATE
PROJECT MANAGER		
CONSTRUCTION MANAGER		
RF ENGINEER		
SITE ACQUISITION		
PLANNING CONSULTANT		
PROPERTY OWNER		
SPRINT REPRESENTATIVE		

SIGNATURE BLOCK



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

REVISED CONSTRUCTION

REV.	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLD
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

ENCLOSURE:



SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

REVISION:

1

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY NETWORK CARRIER OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY, DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERROR, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF NETWORK CARRIER. CONSTRUCTION PROJECT MANAGER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY NETWORK CARRIER CONSTRUCTION PROJECT MANAGER.
2. PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
3. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE NETWORK CARRIER PROJECT SCOPE AND THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
4. 11x17 COPIES OF DRAWINGS ARE NOT TO BE SCALED DUE TO DISTORTION RESULTING FROM UNSTANDARD PHOTOGRAPHIC CORRECTION. DIMENSIONS TAKE PRECEDENCE OVER SCALES SHOWN ON PLANS.
5. OWNER, CONTRACTOR, AND NETWORK CARRIER REPRESENTATIVE SHALL REVIEW AND CONFIRM THAT PROJECT SCOPE, DESIGN INTENT AND UTILITY COORDINATION ITEMS ARE INCLUDED IN THE DRAWINGS AND/OR SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.
6. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION FROM NETWORK CARRIER REPRESENTATIVE TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK. THIS AUTHORITY SHALL BE CLEARLY DERIVED BY THE CONSTRUCTION DRAWING/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS OR TENANTS.
8. THE CONTRACTOR SHALL PROVIDE NETWORK CARRIER PROPER INSURANCE CERTIFICATES NAMING NETWORK CARRIER AS ADDITIONAL INSURED, AND PROVIDE NETWORK CARRIER PROOF OF LICENSE(S) INCLUDING PE & PD INSURANCE.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL ORDINANCES TAKE PRECEDENCE.
11. ALL WORK PERFORMED ON THE PROJECT ALONG WITH ALL MATERIALS INSTALLED, SHALL COMPLY IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL UNLESS ISSUE NOTICE TO ALL SUB-CONTRACTORS THAT THEY SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPALITY, UTILITY COMPANY AND LOCAL/STATE JURISDICTIONS, CROSS BEARING ON THE PERFORMANCE OF THE WORK.
12. A COPY OF THE GOVERNING AGENCY ISSUED AND APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY TIMES THE ORIGINAL PERMIT SET PLANS ARE NOT TO BE USED BY THE WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION AS GOVERNING AGENCY APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS, IN GOOD CONDITION, COMPLETE WITH ALL REVISIONS, ADDENDA AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES UNDER THE DIRECT CARE OF THE SUPERINTENDENT. THE CONTRACTOR SHALL SUPPLY THE NETWORK CARRIER CONSTRUCTION PROJECT MANAGER WITH A COPY OF ALL REVISIONS, ADDENDA, AND/OR CHANGE ORDERS AT THE CONCLUSION OF THE WORK AS A PART OF THE AS-BUILT DRAWING RECORDS.
13. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
14. THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND CROSS CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE JOB SITE WHILE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
16. THE CONTRACTOR HAS THE RESPONSIBILITY OF LOCATING ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THE PLANS, ALONG WITH PROTECTING THEM FROM DAMAGE. THE CONTRACTOR AND SUBCONTRACTOR SHALL BEAR THE EXPENSES OF REPAIR AND/OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGE RESULTING FROM OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.
17. ALL EXISTING CONSTRUCTION, EQUIPMENT, AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
 - A. PROPERTY NOTED TO BE RETURNED TO THE OWNER.
 - B. PROPERTY NOTED TO BE REMOVED BY THE OWNER.
19. THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES THROUGHOUT THE PROJECT. TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION.
20. WHEN ROOF TOP OR TOP FLOOR DECK TEMPORARY STAGING OF IS REQUIRED, MATERIALS SHALL BE EVENLY DISTRIBUTED OVER ROUGH FRAMED FLOORS OR ROOFS SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING AND/OR BRACING IS TO BE PROVIDED WHERE THE STRUCTURE DOESN'T HAVE THE DESIGN STRENGTH FOR ADDITIONAL LOADING.
21. SEAL ALL PENETRATIONS WITHIN FIRE-RATED AREAS WITH UL LISTED OR FIRE MARSHAL APPROVED MATERIALS IF APPLICABLE TO THE SUBJECT FACILITY AND OR PROJECT SITE.
22. BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GROUND DISTURBANCE, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.
23. CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
24. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ADJACENT TO THE PROPERTY.
25. CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION DISPOSING OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SHADES OF ANY NATURE.
26. NEW CONSTRUCTION INSTALLED ADJACENT EXISTING BUILDINGS OR CONSTRUCTION SHALL ARCHITECTURALLY MATCH THE EXISTING IN TERMS OF COLOR, TEXTURE, FINISH MATERIALS, ETC., EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.
27. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKING, BLOCKING, AND/OR OTHER ANCHORAGE DEVICES REQUIRED FOR THE INSTALLATION OF FIXTURES, MECHANICAL EQUIPMENT, PLUMBING, HARDWARE, AND FINISH ITEMS TO INSURE A PROPER AND CODE COMPLIANT INSTALLATION.
28. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING INSTALLATIONS THAT ARE CONSTRUCTED LEVEL, ERECT, TRULY ALIGNED, PLUMB, AND TRUE BASED ON THE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL COMPARE EXISTING CONDITIONS WITH THE PROPOSED DESIGN PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES OR INCONSISTENCIES TO THE NETWORK CARRIER'S REPRESENTATIVE AND FURTHER TO THE ABE SUCH THAT THE NEW INSTALLATION WILL MAINTAIN THE SAME LEVEL, ERECT, PLUMB AND TRUE. NETWORK CARRIER SHALL BE NOTIFIED OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES PRIOR TO ANY CONSTRUCTION.
29. THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES.
30. WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AND/OR REVISIONS AVAILABLE AS REQUIRED BY THE GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.
31. THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL MATERIALS AND SHALL NOT STORE OR STAGE MATERIALS ON PUBLIC PROPERTY WITHOUT A PERMIT TO DO SO FROM THE GOVERNING AGENCIES FOR THIS PURPOSE.
32. GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN ALL CONDITIONS UNLESS ILLUSTRATED AND NOTED OTHERWISE.
33. TRADES INVOLVED IN THE PROJECT SHALL BE RESPONSIBLE FOR THEIR OWN CUTTING, FITTING, PATCHING, ETC., SO AS TO BE PREPARED PROPERLY BY THE WORK OF OTHER TRADES.
34. ALL DEBRIS AND REFUSE SHALL BE REMOVED FROM THE PROJECT PREMISES AND LEFT IN A CLEAN SWEEP CONDITION AT ALL TIMES BY EACH TRADE AS THEY PERFORM THEIR OWN PORTION OF THE WORK.
35. NETWORK CARRIER DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER, GUARANTEE OR WARRANTY THAT MAY BE IN EFFECT IS DONE THROUGH THE CONTRACTOR OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.
36. CAUTION: CALL BEFORE YOU DIG. BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
37. WHEN APPLICABLE, CONTRACTOR IS RESPONSIBLE TO CALL, COORDINATE AND MAKE ARRANGEMENTS FOR R.O.W. AND/OR PRIVATE PROPERTY LOCATES BASED ON SPECIFIC SITE REQUIREMENTS.
38. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION.
39. CONTRACTORS TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO NETWORK CARRIER'S REPRESENTATIVE ALONG WITH REDLINED CONSTRUCTION SET.
40. CONTRACTOR SHALL DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDELINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED CONSTRUCTION SET ALONG WITH PHOTOGRAPHS PER NETWORK CARRIER REQUIREMENTS.
41. GENERAL CONTRACTOR SHALL COORDINATE AND SEEK APPROVAL OF ALL POWER DRAW, INSTALLATION AND/OR MODIFICATIONS WITH POWER COMPANY. CONTRACTOR, EXCEPT FOR THE ROOFING CONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.
42. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY NETWORK CARRIER CONSTRUCTION MANAGER.
43. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FACILITY, INTERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FACILITY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE ACCEPTING UNDER THIS CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR. EXCEPT FOR THE ROOFING CONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.

44. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
45. THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY PERMITS AND/OR FEES WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMITS APPLICATIONS SHALL BE FILED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL OBTAIN PERMIT UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE) AND MAKE FINAL PAYMENT FOR SAID DOCUMENTS.
46. NETWORK CARRIER'S REPRESENTATIVE SHALL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH DESIGN CONCEPT. NETWORK CARRIER'S REPRESENTATIVE PROJECT APPROVAL OF A SEPARATE ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.
47. ALL ANTENNAS MOUNTED ON ROOF SUPPORT FRAMES TO BE PROVIDED BY NETWORK CARRIER.
48. CONTRACTOR SHALL PROVIDE HEAVY STEEL PLATES AT OPEN TRENCHES FOR SAFETY AND TO PROTECT EXISTING GROUND SURFACES FROM HEAVY EQUIPMENT UTILIZED DURING CONSTRUCTION.
49. CONTRACTOR SHALL PATCH AND REPAIR ALL GROUND SURFACES WITHIN THE CONSTRUCTION AREA AS NECESSARY TO PROVIDE A UNIFORM SURFACE AND MAINTAIN EXISTING SURFACE DRAINAGE SLOPES.
50. CONTRACTOR SHALL REPLACE EXISTING LANDSCAPE VEGETATION DAMAGED DUE TO CONSTRUCTION ACTIVITIES, AND REPAIR, RESTORE AND MODIFY EXISTING IRRIGATION LINES IF NECESSARY TO OPERATING CONDITION, PROVIDING FULL COVERAGE TO IMPACTED AREAS.
51. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATING EXISTING ROOFING MATERIALS OCCUR, GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER TO OBTAIN CONTACT INFORMATION AND UTILIZE THE EXISTING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY ADJUSTMENT TO THE ROOF, AND HAVING THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S EXISTING WARRANTY ENSURING 100% MOISTURE PROTECTION.
52. IN THE CASE OF ROOFTOP SOLUTIONS WITH THE INSTALLATION OF ANTENNAS FRAMES WHERE PENETRATING EXISTING ROOFING MATERIALS OCCUR, GENERAL CONTRACTOR SHALL COORDINATE WITH THE FRP DESIGNER/FABRICATOR TO ENSURE THAT THE FINAL FRP SHOULD BE SIMULATING (IN APPEARANCE) EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. THE CONTRACTOR SHALL FURTHERMORE ENSURE THE USE OF COUNTERSUNK OR FLATHEAD FASTENERS IN ALL FRP CONSTRUCTION. WHEN PHOTOGRAPHS ARE PROVIDED, THE CONTRACTOR SHALL ENSURE THAT FINAL CONSTRUCTION REPRESENTS WHAT IS INDICATED IN PHOTOGRAPHS. SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR, CONSTRUCTION COORDINATOR, AND ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.
53. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE ANCHORING TO AN EXISTING CONCRETE ROOF SLAB IS REQUIRED, CONTRACTORS SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. AN UNDOCUMENTED DESIGN CHANGE IN THE EXISTING BUILDING "AS-BUILT DRAWING SET" HAVING INDICATED AN ORIGINAL DESIGN SOLUTION OF REINFORCED CONCRETE W/ EMBEDDED STEEL REBAR. IN THE EVENT POST TENSION SLAB SOLUTION IS PRESENT, CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES (INCLUDED IN BID) FOR ALL PENETRATION AREAS WHERE ANCHORING OCCURS.
54. GENERAL & SUB CONTRACTORS SHALL USE STAINLESS STEEL METAL LOCKING TEES FOR ALL CABLEING TEES DOWNS AND ALL OTHER GENERAL TEES DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON TOWER NETWORK CARRIER PROJECTS. RECOMMENDED MANUFACTURE SHALL BE: PANOUT CORP. METAL LOCKING TEE MODEL NO. M145-CP UNDER SERIES-304 (OR EQUAL). PANOUT PRODUCT DISTRIBUTED BY TRAMP.
55. GENERAL CONTRACTOR SHALL OBTAIN, REVIEW AND EXECUTE ALL NETWORK CARRIER CONSTRUCTION STANDARDS (MOST RECENT REVISION) AS A PART OF THIS BID AND CONSTRUCTION PROJECT.
56. GENERAL CONTRACTOR SHALL OBTAIN, REVIEW AND EXECUTE ALL NETWORK CARRIER CONSTRUCTION STANDARDS (MOST RECENT REVISION) AS A PART OF THIS BID AND CONSTRUCTION PROJECT.
57. CONTRACTOR SHALL BE RESPONSIBLE TO SET ELECTRONIC TILTS FOR NEWLY INSTALLED ANTENNAS UNDER THE CONDITION THAT THE OWNER THE MOST RECENT COPY OF THE RF TILT INFORMATION SUCH THAT THE ACCURATE CONTROLLER CAN BE ORDERED AND INSTALLED.
58. A STRUCTURAL ANALYSIS SHALL BE COMPLETED AND SUBMITTED TO THE NETWORK CARRIER REPRESENTATIVE AND GC DEMONSTRATING CAPACITY AT THE EXACT LOCATION OF EXISTING CONDITIONS TO SUSTAIN ADDITIONAL HEAVY BATTERY CABINETS OR OTHER OUT OF SCOPE EQUIPMENT.
59. THE GC SHALL PROVIDE MATERIALS LIST (BOM) TO THE NETWORK CARRIER REPRESENTATIVE PRIOR TO CONSTRUCTION.

CALIFORNIA SPECIFIC CODE COMPLIANCE NOTES:

1. WHEN COMPLETED, THE SUBJECT PROJECT SHALL COMPLY WITH LOCAL SECURITY CODES.
2. WHEN COMPLETED, THE SUBJECT PROJECT SHALL COMPLY WITH THE CALIFORNIA ENERGY CODE TITLE 24 ENERGY CONSERVATION REQUIREMENTS.
3. WHEN GLASS OR GLAZING REPLACEMENT IS A PART OF THE SCOPE OF THE PROJECT, GLASS AND GLAZING SHALL COMPLY WITH CHAPTER 54 OF THE U.S. CONSUMER SAFETY COMMISSION WITH SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS BEING COMPLY WITH PER 162 FR 1428, CFR PART 1201 & LOCAL SECURITY REQUIREMENTS.

SYMBOLS:

- GRID REFERENCE
- DETAIL REFERENCE
- ELEVATION REFERENCE
- SECTION REFERENCE
- CENTERLINE
- PROPERTY/LEASE LINE
- MATCH LINE
- WORK POINT
- GROUND CONDUCTOR
- TELEPHONE CONDUIT
- ELECTRICAL CONDUIT
- COAXIAL CABLE
- OVERHEAD SERVICE CONDUCTORS
- GROUT OR PLASTER
- (E) BRICK
- (E) MASONRY
- CONCRETE
- EARTH
- GRAVEL
- PLYWOOD
- SAND
- WOOD CONTINUOUS
- WOOD BLOCKING
- STEEL
- NEW
- EXISTING
- NEW ANTENNA
- EXISTING ANTENNA
- GROUND ROD
- GROUND BUS BAR
- MECHANICAL GRND. CONN.
- CANDLED
- GROUND ACCESS WELL
- ELECTRIC BOX
- TELEPHONE BOX
- LIGHT POLE
- FND MONUMENT
- SPOT ELEVATION
- SET POINT
- REVISION






PACIFIC TELECOM SERVICES, LLC
 11800 AIRPORT LOOP, SUITE 200
 COSTA MESA, CA 92626
 PHONE: (714) 236-8714

PROJECT INFORMATION

NETWORK VISION MB15LAUNJ11

MALIBU POINT

SDJ54XC931

651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUED FOR: REVISED CONSTRUCTION

REVISED CONSTRUCTION			
REV.	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLD
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSEUR:

LICENSED ARCHITECT

THOMAS R. HOLLAND

C-21496

Thomas R. Holland

REV. 2-28-13

STATE OF CALIFORNIA

SHEET TITLE: GENERAL NOTES & SYMBOLS

SHEET NUMBER: G-1

REVISION: 1

BATTERY INFORMATION /NOTES:

BATTERY MFG: EAST PENN MANUFACTURING
 MODEL No.: 12AVR-145L
 ELECTROLYTE CONTENT PER BATTERY: 2.17 GALLONS
 ELECTROLYTE HAZARD CLASSIFICATION PER '07 C.F.C. (8.7% SULFURIC ACID): CORROSIVE
 No. OF BATTERIES TO BE INSTALLED: 20 MAX.
 TOTAL ELECTROLYTE CONTAINED ON SITE (2.17 x 20 = 43.4): 43.4 GALLONS MAX.

FIRE DEPARTMENT NOTES:

- A. FIRE DEPARTMENT FINAL INSPECTION REQUIRED. SCHEDULE INSPECTION 2 DAYS IN ADVANCE.
- B. A CFC PERMIT TO OPERATE BATTERY SYSTEMS WITH STATIONARY LEAD-ACID BATTERIES IS NOT REQUIRED FOR THE QUANTITIES ON SITE.
- C. A CFC PERMIT MAY BE REQUIRED FOR THE HAZARDOUS MATERIALS ON SITE.
- D. A HAZARDOUS MATERIALS IDENTIFICATION SIGN IS REQUIRED FOR ALL ENTRANCES INTO BATTERY STORAGE AREAS. LETTERS MUST BE AT LEAST 1" IN HEIGHT AND IN A COLOR WHICH CONTRASTS TO THE BACKGROUND OF THE SIGN AND LIST THE FOLLOWING:

CLASS 1 WATER REACTIVE LIQUID
 TOXIC LIQUID
 CORROSIVE LIQUID
 OTHER HEALTH HAZARD LIQUID

- E. AN APPROVED METHOD TO NEUTRALIZE SPILLED ELECTROLYTE SHALL BE PROVIDED IN THE BATTERY ROOM.
- F. BATTERIES SHALL BE PROVIDED WITH SAFETY VENTING CAPS.
- G. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE 2010 CFC AND PLACEMENT IS SUBJECT TO APPROVAL OF THE FIRE INSPECTOR.
- H. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS SHALL COMPLY WITH 2010 CFC REGULATIONS.
- I. EXIST DOORS SHALL BE ABLE TO OPEN FROM THE INSIDE WITHOUT THE USE OF KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
- J. ADDRESS NUMBERS SHALL BE A MINIMUM 6 INCHES HIGH AND PLAINLY VISIBLE FROM ROADWAY BUILDING IS ADDRESSED ON.
- K. REQUIRED SIGNAGE SHALL INCLUDE LETTERING HEIGHT OF AT LEAST ONE INCH, IN A COLOR THAT CONTRASTS TO THE SIGN BACKGROUND, AND SHALL BE PROMINENTLY DISPLAYED.
- L. REQUIRED SIGNAGE SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, APPLICABLE TYPES FROM EXAMPLES SHOWN HEREIN (SEE SIGNAGE).

STATIONARY STORAGE BATTERY SYSTEMS CODE COMPLIANCE:

- APPLICABLE CODES:
 2010 CFC & 2010 CBC
- A. STATIONARY STORAGE BATTERY SYSTEMS HAVING A LIQUID ELECTROLYTE CAPACITY OF LESS THAN 50 GALLONS, OR A LITHIUM-ION CAPACITY OF 1,000 POUNDS USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTED POWER SUPPLIES, ARE EXEMPT FROM CONDITIONS OUTLINED PER SEPARATION AND/OR PROTECTION UNDER INCIDENTAL OCCUPANCIES TABLE 508.2.5 2010 CBC.
 - B. STATIONARY STORAGE BATTERY SYSTEMS HAVING AN ELECTROLYTE CAPACITY OF LESS THAN 50 GALLONS (189 L) FOR FLOODED LEAD-ACID, NICKEL CADMIUM (Ni-Cd) AND VALVE-REGULATED LEAD-ACID (VRLA), OR 1,000 POUNDS (454 kg) FOR LITHIUM-ION AND LITHIUM METAL POLYMER, USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTED POWER SUPPLIES, ARE NOT REQUIRED TO COMPLY TO THE CONDITIONS OUTLINED UNDER BATTERY REQUIREMENTS TABLE 608.1 2010 CFC CHAPTER 6 - BUILDING SERVICES & SYSTEMS SECTION 608 STATIONARY STORAGE BATTERY SYSTEMS.
 - C. GC SHALL COMPLY WITH 2010 CFC STATIONARY STORAGE BATTERY SYSTEM SPECIFIC CHAPTER 27 REQUIREMENTS INCLUDING SPILL CONTAINMENT OR MEANS TO RENDER A SPILL HARMLESS TO PEOPLE OR PROPERTY SHALL BE PROVIDED WITH IMPLEMENTATION OF APPROVED SPILL CONTAINMENT SHELVES WITHIN EACH CABINET BATTERY STRING TRAY SYSTEM OR EQUAL SYSTEM.
 - D. GC SHALL COMPLY WITH 2010 CFC STATIONARY STORAGE BATTERY SYSTEM SPECIFIC CHAPTER 27 REQUIREMENTS INCLUDING SAFEGUARDS BEING PROVIDED TO MINIMIZE THE RISK OF AND LIMIT DAMAGE FROM A FIRE OR EXPLOSION INVOLVING HAZARDOUS MATERIALS WITH BATTERY SYSTEMS BEING SECURED WITHIN VENTILATED PROTECTIVE STEEL CABINETS WITH FIRMLY SECURED LOCKING ACCESS DOORS.
 - E. GC SHALL COMPLY WITH 2010 CFC STATIONARY STORAGE BATTERY SYSTEM SPECIFIC CHAPTER 27 REQUIREMENTS INCLUDING HAZARDOUS MATERIALS WARNING SIGNS REQUIRED FOR LEAD-ACID BATTERY SYSTEMS WITH QUANTITIES OF ELECTROLYTE EXCEEDING THE MINIMUM PERMIT AMOUNT OF 10 GALLONS INCLUDING ELECTROLYTE PERCENTAGE OF OVER 12% OF SULFURIC ACID WITH SIGNAGE PER CFC 608.7.1 & 2703.5 (SEE FIRE DEPARTMENT NOTES).
 - F. GC SHALL COMPLY WITH 2010 CFC STATIONARY STORAGE BATTERY SYSTEM SPECIFIC CHAPTER 27 REQUIREMENTS INCLUDING ELECTRICAL WIRING AND EQUIPMENT BEING INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CALIFORNIA ELECTRIC CODE PER CFC 2703.9.4.

BATTERY INFO & FIRE DEPT NOTES | 5



REQUIRED NFPA SIGNAGE

**IN CASE OF
 EMERGENCY**

— CALL —

NOC #1-866-400-6040

SITE NUMBER: SD54XC931

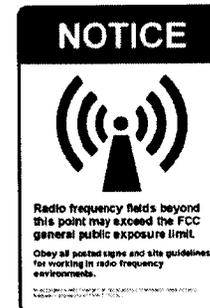
SITE NAME: MALIBU POINT

EMERGENCY CONTACT SIGNAGE

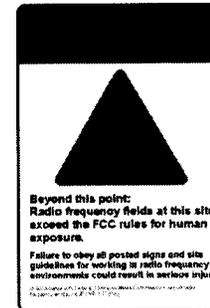
SITE IDENTIFICATION SIGNAGE | 4



Beyond this point:
 Radio frequency fields at this site may exceed FCC rules for human exposure.
 For your safety, obey all posted signs and site guidelines for working in radio frequency environments.

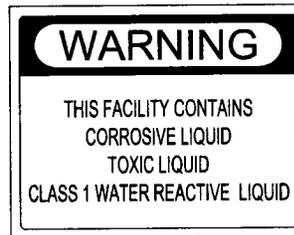


Radio frequency fields beyond this point may exceed the FCC general public exposure limit.
 Obey all posted signs and site guidelines for working in radio frequency environments.



Beyond this point:
 Radio frequency fields at this site exceed the FCC rules for human exposure.
 Failure to obey all posted signs and site guidelines for working in radio frequency environments could result in serious injury.

RF SIGNAGE | 1



HAZARDOUS MATERIAL SIGNAGE | 2

NOT USED | 3



PROJECT INFORMATION:

NETWORK VISION MVB15 LAUNCH

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUE NO.:

REVISED CONSTRUCTION

REVISIONS			
REV.	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLO
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLO
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSE:



SHEET TITLE:

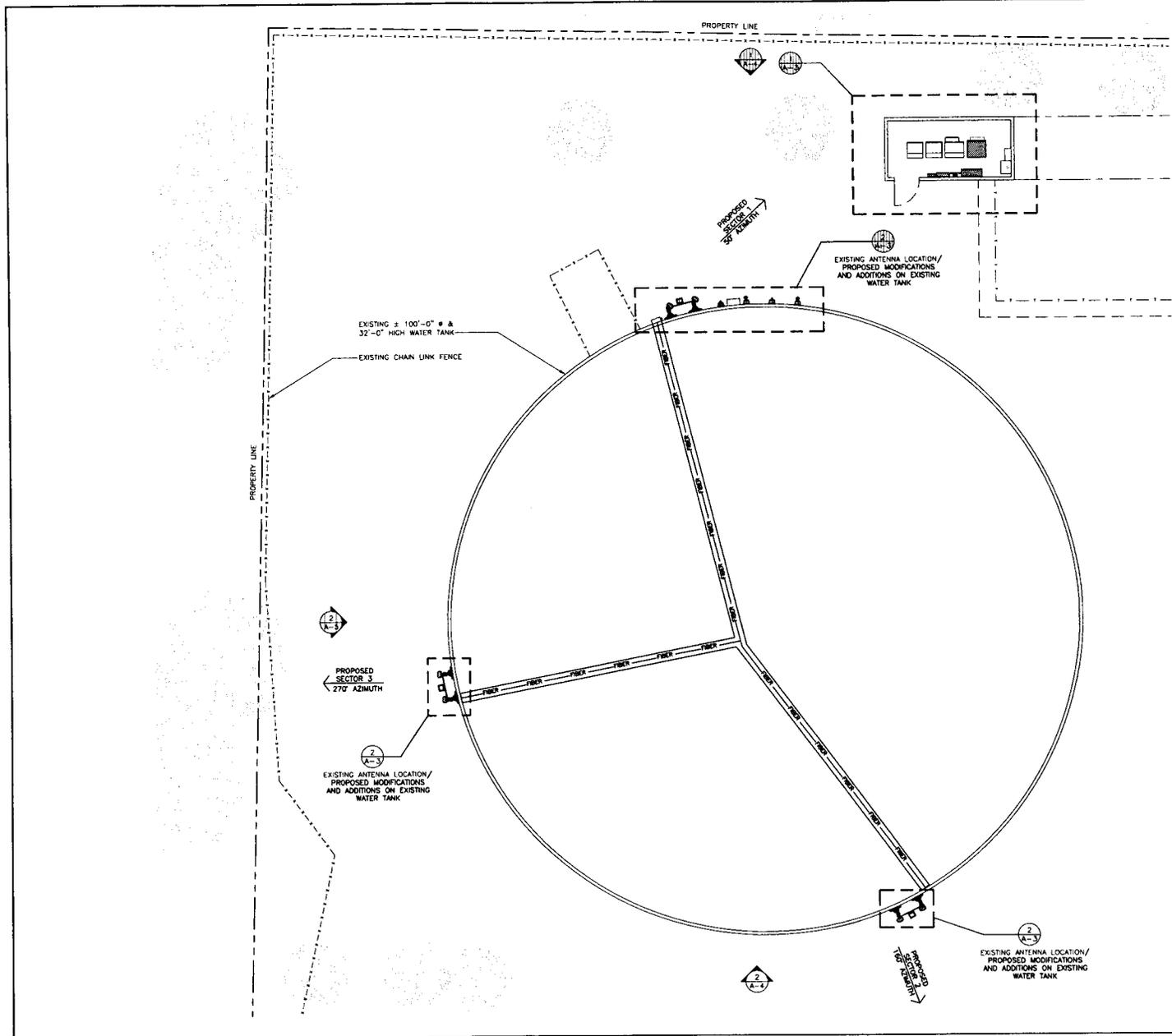
SIGNAGE AND NOTES

SHEET NUMBER:

REVISION:

G-2

1



NOTES TO CONTRACTOR:

1. REMOVE ALL EXISTING SPRINT ANTENNAS, MOUNTS AND COAX FROM SITE.
2. NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING TANK.
3. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.



PTS
 PACIFIC TELECOM SERVICES, LLC
 3180 AMBROS LOOP DRIVE
 COSTA MESA, CA 92626
 PHONE: (714) 250-8714

PROJECT INFORMATION

NETWORK VISION MIBIS LAUNCH

MALIBU POINT

SDJ54XC93I

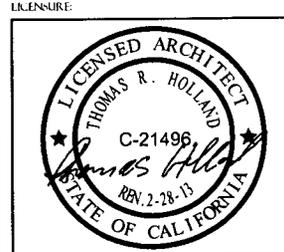
651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUE FOR: REVISED CONSTRUCTION

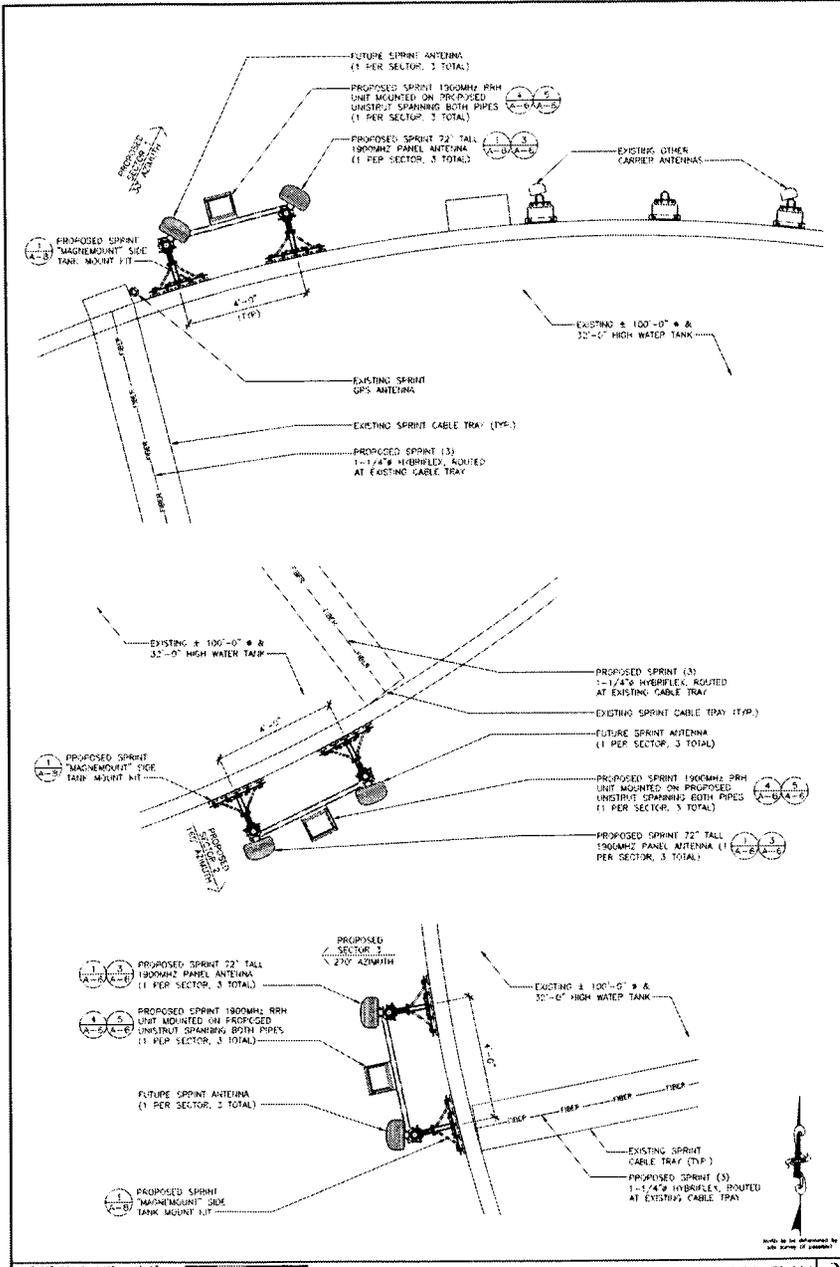
REVISIONS			
REV.	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLD
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

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SHEET TITLE: ENLARGED SITE PLAN

SHEET NUMBER: A-2 REVISION: 1

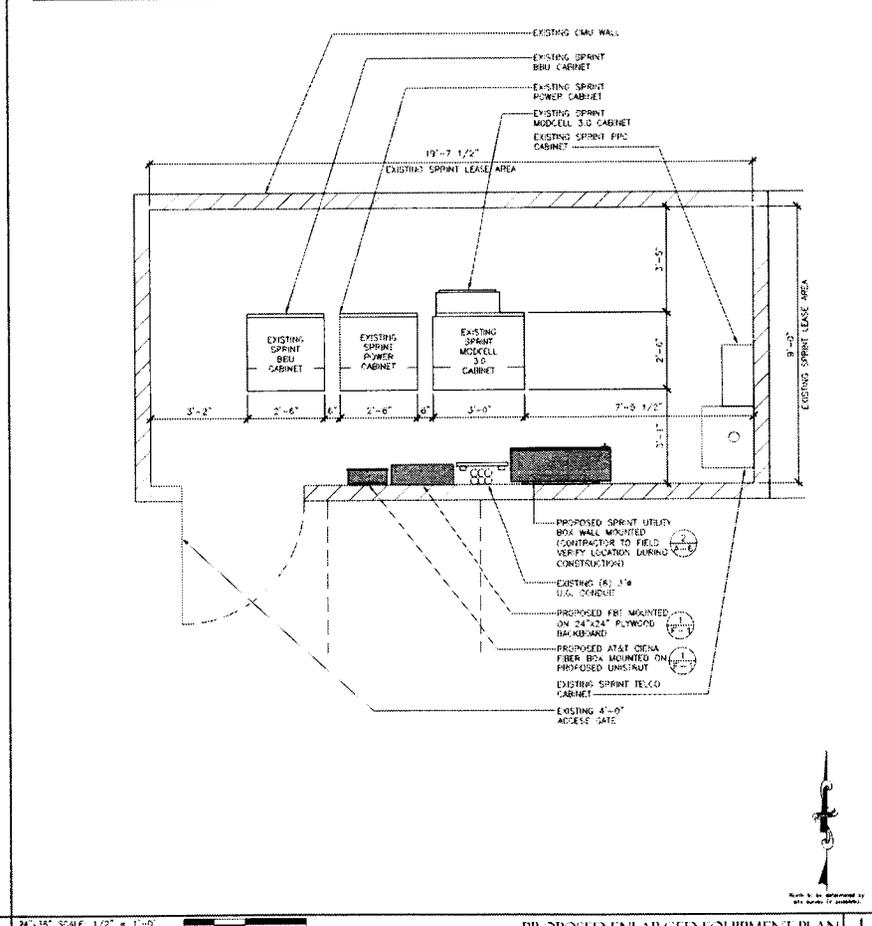


24"x36" SCALE 1/2" = 1'-0"
 13"x17" SCALE 1/4" = 1'-0"
PROPOSED ENLARGED ANTENNA PLAN 2

CONTRACTOR TO SET FINAL FREQUENCY FOR BUILD

SECTOR	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	EFFECTIVE TILT	MECH TILT	NET	SRH	JUMPER FROM TO ANT	COMBINER	FIBER OPTIC	FIBER LENGTH
SECTOR 1	30°	28'-0"	1	RFS	APXVSP18-0-A20	0	0	0	(1) 1900MHz	JUMPER FROM TO ANT 10' MAX	COMBINER	(1) 1-1/4" HYBRIFLEX MB114-1-08U4-MSE	90'-0"
SECTOR 2	150°	28'-0"	1	PFS	APXVSP18-0-A20	-6	0	-8	(1) 1900MHz	JUMPER FROM TO ANT 10' MAX	COMBINER	(1) 1-1/4" HYBRIFLEX MB114-1-08U4-MSE	90'-0"
SECTOR 3	270°	28'-0"	1	RFS	APXVSP18-0-A20	-2	0	-2	(1) 1900MHz	JUMPER FROM TO ANT 10' MAX	COMBINER	(1) 1-1/4" HYBRIFLEX MB114-1-08U4-MSE	90'-0"

- NOTES TO CONTRACTOR:**
1. REMOVE ALL EXISTING SPRINT ANTENNAS, MOUNTS AND COAX FROM SITE
 2. NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING TANK.
 3. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS. MOUNTING HARDWARE AND RF DESIGN ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.



24"x36" SCALE 1/2" = 1'-0"
 13"x17" SCALE 1/4" = 1'-0"
PROPOSED ENLARGED EQUIPMENT PLAN 1

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PROJECT INFORMATION:

NETWORK VISION MBBIS LAUNCH

MALIBU POINT
 SD54XC931

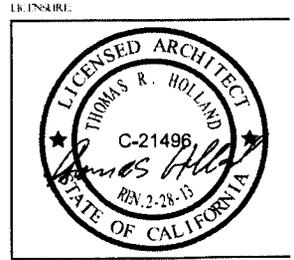
651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/15

REVISIONS

REV	DATE	DESCRIPTION	INITIALS
A	04/23/12	ISSUED FOR 50% CD REVIEW	RJD
D	06/29/12	ISSUED FOR 100% CONSTRUCTION	RJD
1	01/04/15	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

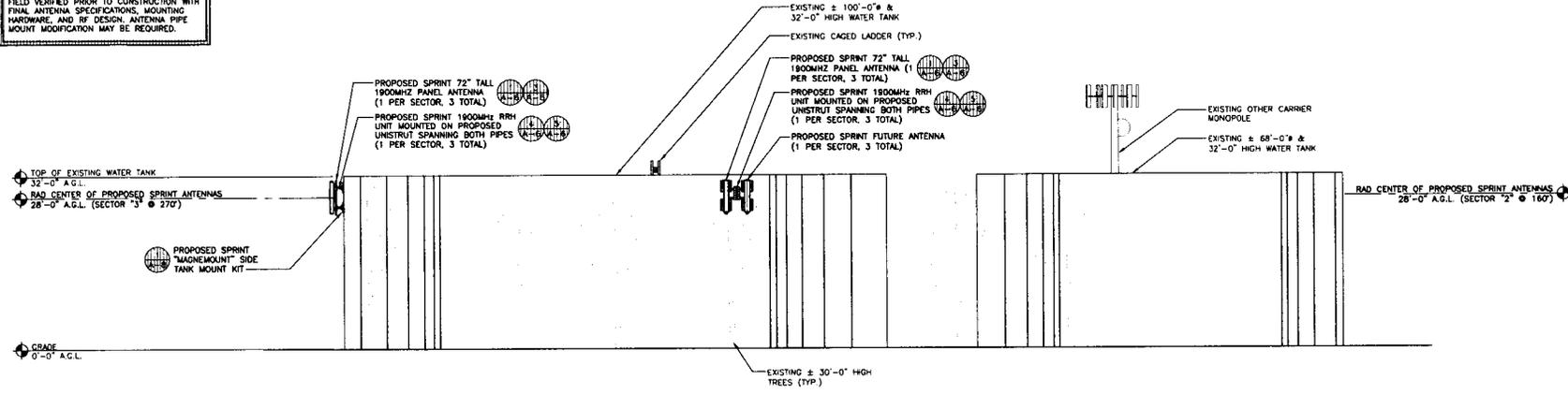


SHEET TITLE: PROPOSED ENLARGED EQUIPMENT & ANTENNA PLAN

SHEET NUMBER: A-4
 REVISION: 1

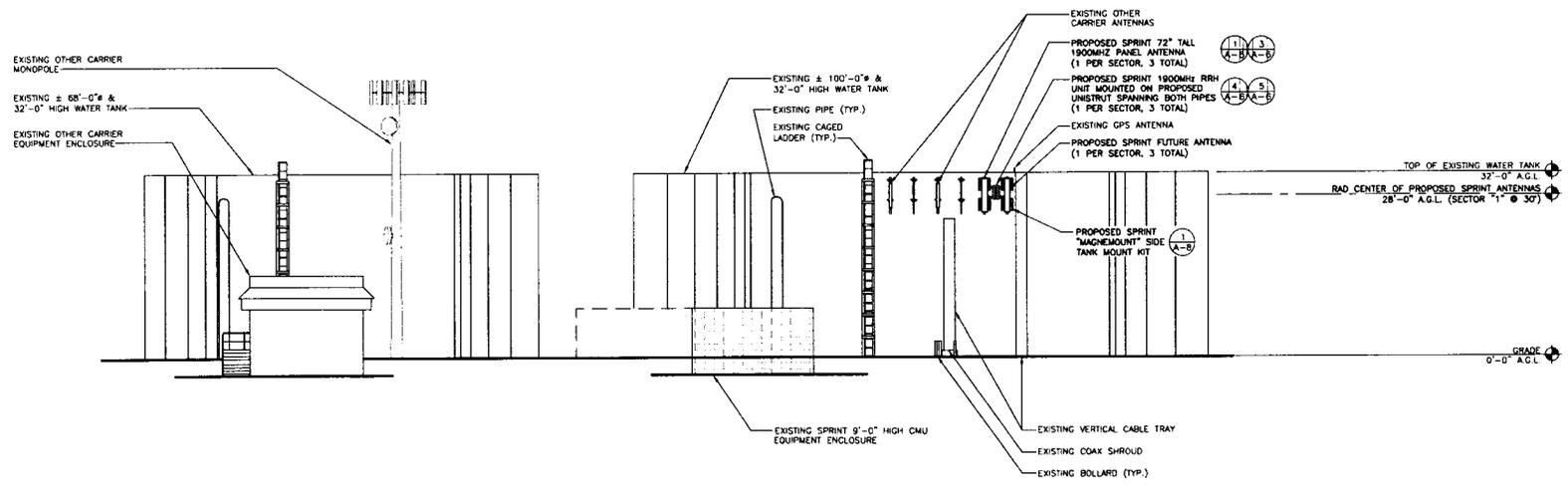
NOTES TO CONTRACTOR:

1. REMOVE ALL EXISTING SPRINT ANTENNAS, MOUNTS AND COAX FROM SITE.
2. NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING TANK.
3. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.



24"x36" SCALE: 3/32" = 1'-0"
 11"x17" SCALE: 3/64" = 1'-0"

SOUTH ELEVATION 2



24"x36" SCALE: 3/32" = 1'-0"
 11"x17" SCALE: 3/64" = 1'-0"

NORTH ELEVATION 1

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PROJECT INFORMATION:

NETWORK VISION WANTS LAUNCH
MALIBU POINT
 SD54XC931
 651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

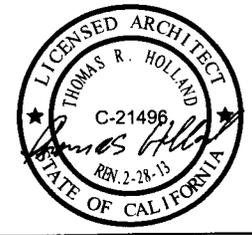
ISSUED FOR:

REVISED CONSTRUCTION

REVISIONS			
REV.	DATE	DESCRIPTION	INITIAL
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0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LEGEND:



SHEET TITLE:

NORTH & SOUTH ELEVATION

SHEET NUMBER:

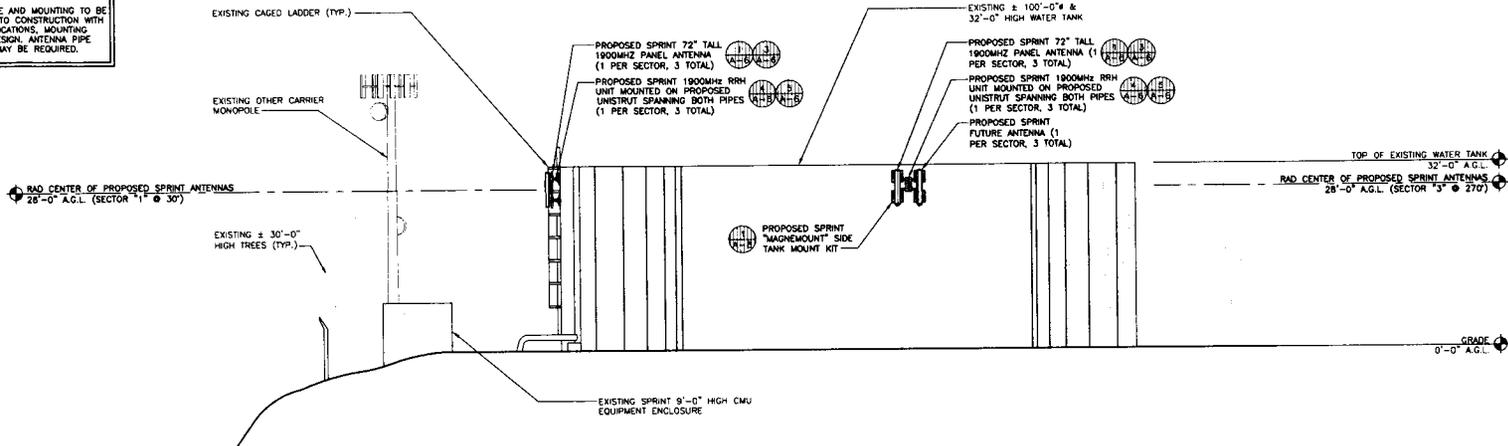
A-5

REVISION:

1

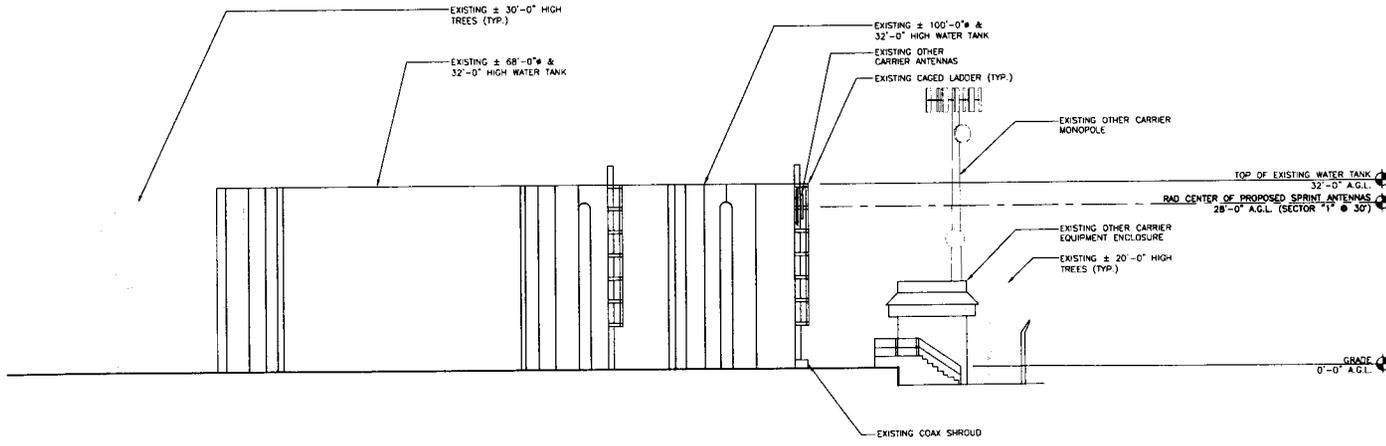
NOTES TO CONTRACTOR:

1. REMOVE ALL EXISTING SPRINT ANTENNAS, MOUNTS AND COAX FROM SITE.
2. NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING TANK.
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24"x36" SCALE: 3/32" = 1'-0"
 11"x17" SCALE: 3/64" = 1'-0"

WEST ELEVATION | 2



24"x36" SCALE: 3/32" = 1'-0"
 11"x17" SCALE: 3/64" = 1'-0"

EAST ELEVATION | 1

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PTS
 PACIFIC TELECOM SERVICES, LLC
 3100 HARBOR LOOP DRIVE
 COSTA MESA, CA 92626
 PHONE: (714) 236-8716

PROJECT INFORMATION:

NETWORK VISION MMBIS LALUN.H
MALIBU POINT
 SD54XC931
 651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

REVISED CONSTRUCTION

REVISIONS			
REV	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLD
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

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LICENSED ARCHITECT:



SHEET TITLE:

EAST & WEST ELEVATION

SHEET NUMBER:

A-6

REVISION:

1



PROJECT INFORMATION

NETWORK VISION MWMTS LAUNCH

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

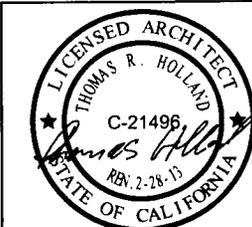
REVISED CONSTRUCTION

REVISIONS

REV.	DATE	DESCRIPTION	INITIAL
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0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSE:



SHEET TITLE:

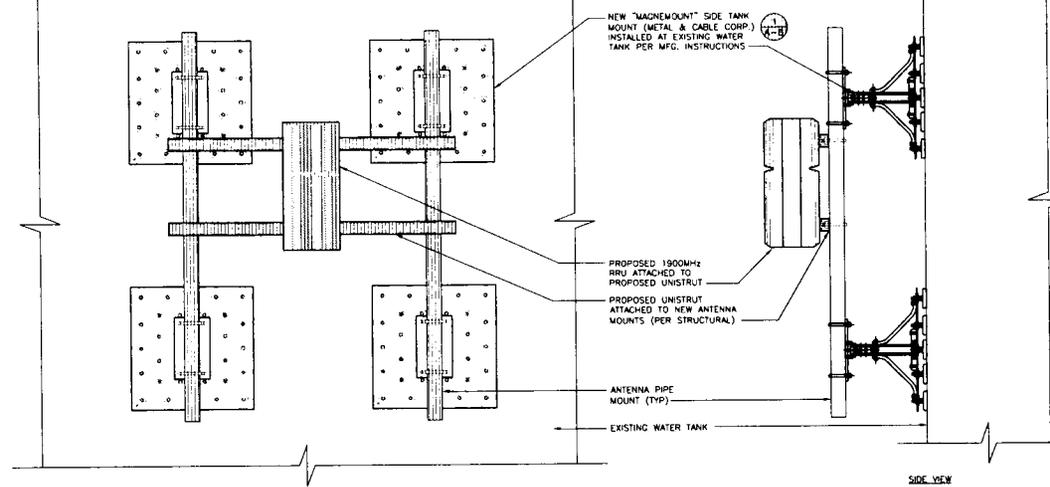
CONSTRUCTION AND EQUIPMENT DETAILS

SHEET NUMBER:

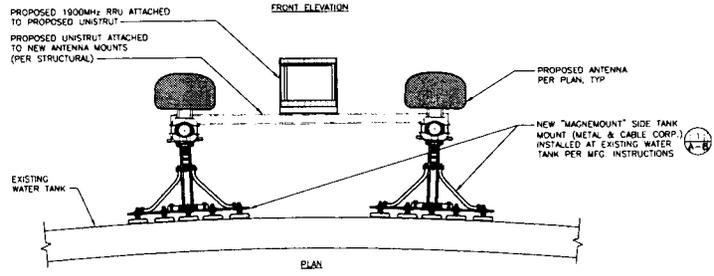
A-7

REVISION:

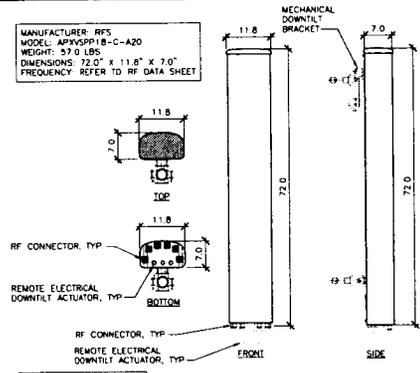
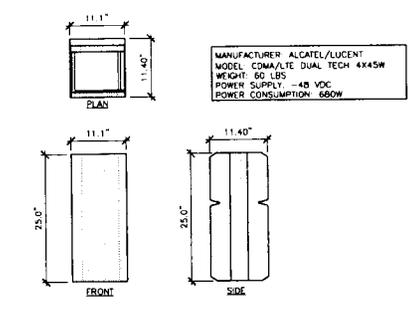
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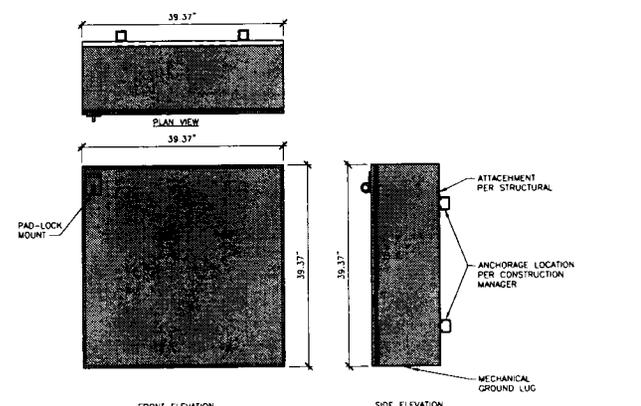
RRH MOUNTING DETAIL
24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



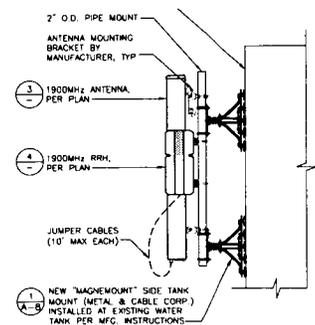
1900MHz RRH SPECIFICATION
24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



RFS ANTENNA SPECIFICATIONS
24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"



JUNCTION BOX DETAIL
24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



ANTENNA & RRH MOUNTING
24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



PROJECT INFORMATION

NETWORK VISION AMBISLAUNCH
MALIBU POINT
SD54XC0931
651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:
01/04/13

SUBJECT:
REVISED CONSTRUCTION

REVISIONS				
REV.	DATE	DESCRIPTION	INITIAL	DATE
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLD	
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD	
1	01/04/13	REVISED FOR CONSTRUCTION	AF	

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

EXPIRE:



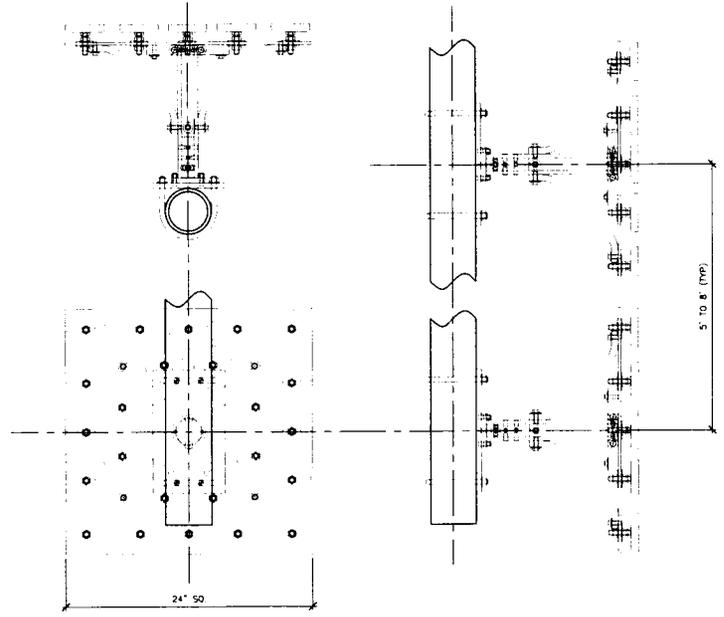
SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER: A-8
REVISION: 1

MFR INSTALLATION INSTRUCTIONS FOR THE MAGNEMOUNT TOWER SIDE MOUNT.

- TOOLS NEEDED: 1/2" ANGLED BOX WRENCH, 9/16" AND 3/4" SOCKETS, TORQUE WRENCH.
1. PRIOR TO THE INSTALLATION OF THE MAGNEMOUNT - DO NOT REMOVE THE ATTACHED INSULATING CORRUGATED CARDBOARD BASE.
 2. 1/3 OF THE MAST MUST BE ABOVE THE CENTER OF THE UPPER MAGNEMOUNT SECTION, AND 2/3 BELOW IT. KEEP FINGERS CLEAR OF THE MAGNETS WHEN LIFTING THE MOUNT INTO PLACE.
 3. LAY OUT AND INSTALL BOTH SECTIONS OF THE MAGNEMOUNTS SO THAT THE BOLTHOLES ON THE PLATES ARE APPROXIMATELY VERTICAL.
 4. REMOVE THE CARDBOARD BASE AND PLACE THE TOP MAGNEMOUNT ON THE TOWER WITH THE 2 CENTERLINES OF THE MAGNEMOUNT ALIGNED WITH THE VERTICAL INSTALLATION LINE. TO CORRECT ANY MISALIGNMENT, TAP THE PLATE WITH A LIGHT HAMMER.
 5. REMOVE THE CARDBOARD BASE FROM THE SECOND MAGNEMOUNT. ALIGN IT WITH THE VERTICAL INSTALLATION LINE. PLACE IT SO THAT THE BOTTOM U-BOLT HOLES ARE NO MORE THAN 2/3 OF THE LENGTH OF THE MAST BELOW THE CENTER OF THE TOP MAGNEMOUNT.
 6. TOTALLY LOOSEN THE 24 KEPS NUTS ON EACH MAGNEMOUNT TO ALLOW THE MAGNETS TO BE INDEPENDENTLY SEATED. (AT LEAST 3" ABOVE THE WASHER.)
 7. FINGER TIGHTEN EACH KEPS NUT. THEN, WITH A HAND WRENCH ONLY, TURN EACH KEPS NUT 1 TURN TO SET THE TEETH.
 8. INSTALL THE 4 U-BOLTS AND DOUBLE NUTS. SLIDE THE MAST THROUGH THE U-BOLTS. THE PLATES ROTATE TO ALLOW THE MAST TO ADJUST FOR MISALIGNMENT. IF IT IS NECESSARY TO ADJUST THE POSITION OF THE MAGNEMOUNTS FOR ALIGNMENT, TAP THE PLATE WITH A LIGHT HAMMER.
 9. TIGHTEN THE DOUBLE NUTS ON EACH U-BOLT LEG AND TIGHTEN THE 2 BOLTS ON EACH SIDE OF THE SHORT MAST SECTION TO 20 FT-LB.
 10. FOR SAFETY, TETHER THE MOUNT TO THE TOWER.

MANUFACTURER: METAL & CABLE CORP., INC.
MODEL: SIDE TANK MOUNT
PART#: STM



"MAGNEMOUNT" SIDE TANK MOUNT SPECIFICATIONS

24"x36" SCALE, NOT TO SCALE
11"x17" SCALE, NOT TO SCALE



Last Revision - 9/12/2011

1. Appendix A - Coaxial Cable Color Scheme

All cables shall be marked at the top and bottom with 2" colored tape, stencil tag colored tape, or colored heat shrink tubing. Colored tape may be obtained from Graybar Electronic. UV stabilized tape or heat shrink are preferred. The first ring shall be closest to the end of the cable, and 1" space between each ring. The cable color code shall be applied in accordance to table 1-1. Table 1-1 only shows 3 sectors but additional sectors are easily supported by adding the appropriate number of colored rings to the cable color code.

After the cable color code is applied the frequency color code, table 1-2, must be applied for the specific frequency band in use on a given line. A 2" gap shall separate the cable color code from the frequency color code. The 2" color rings for the frequency code shall be placed next to each other with no spaces.

Examples of the application of the cable and frequency color codes are shown in figure 1-1 and 1-2. Wrap 2" colored tape a minimum of 3 times around the circumference of the coax, keeping the tape in the same area as much as possible. This will allow the removal of tape that will be faded or discolored due to weather.



Last Revision - 9/12/2011

Table 1-1: Coaxial Cable Color Code

Sector	Cable	First Ring	Second Ring	Third Ring
1 Alpha	1		No Tape	No Tape
	2		No Tape	No Tape
	3		No Tape	No Tape
	4	White	No Tape	No Tape
	5		No Tape	No Tape
	6		No Tape	No Tape
	7		No Tape	No Tape
	8		No Tape	No Tape
2 Beta	1			No Tape
	2			No Tape
	3			No Tape
	4	White	White	No Tape
	5			No Tape
	6			No Tape
	7			No Tape
	8			No Tape
3 Gamma	1			
	2			
	3			
	4	White	White	White
	5			
	6			
	7			
	8			



PROJECT INFORMATION:

NETWORK VISION NMBT SAUN JI

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

SUBJECT:

REVISED CONSTRUCTION

REVISIONS

REV	DATE	DESCRIPTION	INITIAL
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LICENSEE:



SHEET TITLE:

CABLE COLOR CODING REQUIREMENTS

SHEET NUMBER:

REVISION:

A-9

1



PROJECT INFORMATION

NETWORK VISION ARCHITECTS, LLC

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

INDUSTRY:

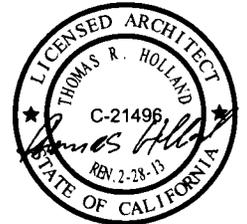
REVISED CONSTRUCTION

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LICENSEE:



SHEET TITLE:

CABLE COLOR CODING REQUIREMENTS

SHEET NUMBER:

A-10

REVISION:

1



Last Revision - 9/12/2011

Table 1-2: Frequency Color Code

Frequency	Indicator	ID
800 #1	Yellow	
1900 #1	Yellow	
1900 #2	Yellow	
Reserved	Yellow	White
1500 #1	Yellow	

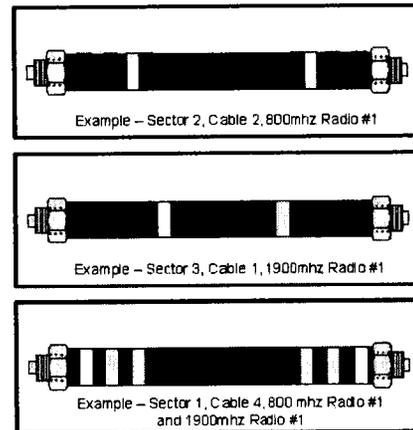
Official SprintNetsid_Ant_and_Line_color_coding_V1.docx

3



Last Revision - 9/12/2011

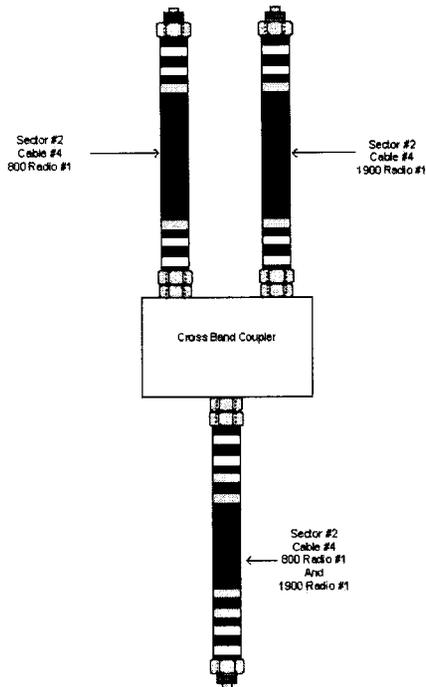
Figure 1-1: Coax Cable Color Code Example



Official SprintNetsid_Ant_and_Line_color_coding_V1.docx

4

Figure 1-2: Coax Cable Color Coding Cross Band Coupler Example



2. Appendix B - Hybrid Cable Color Scheme

Hybrid cable will be marked in a similar manner as coax cable described in the previous section. The main "trunk" of the hybrid cable will NOT be marked with the frequency code as the hybrid cable can contain all frequencies. The individual power pairs and fiber cables will be labeled with both the cable AND frequency markings. See Figure 2-1 as one example. The fiber and copper counts are just a representative of one possible configuration. Other fiber and power count combinations are possible.

PROJECT INFORMATION

NETWORK VISION MBMTS LAUNCH

MALIBU POINT

SD54XC93I

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

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LABELED AS CONSTRUCTION SET

LICENSEE:



SHEET TITLE:

CABLE COLOR CODING REQUIREMENTS

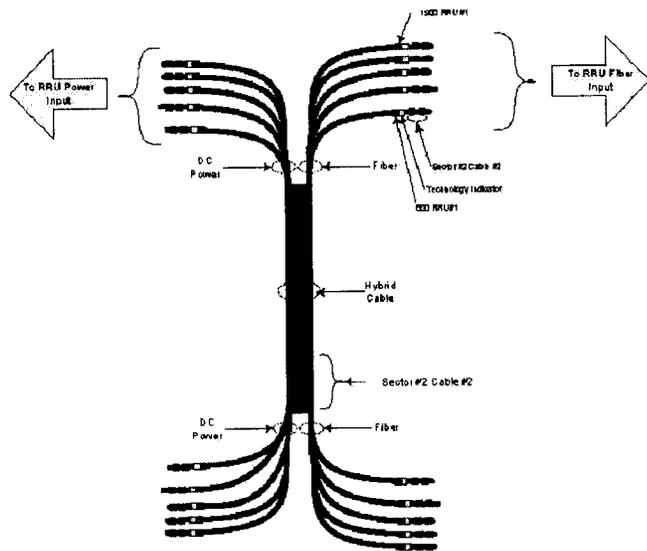
SHEET NUMBER:

A-11

REVISION:

1

Figure 2-1: Hybrid Cabled Color Code Example



3. Appendix C - RRU and Combiner Cabling

Coax jumpers connecting between remote radio units, combiners, and antenna at the tower top will not use a color code labeling scheme. These jumpers will use an appropriate weather proof label on both ends near the connectors. The labeling scheme will be determined by the OEM installation team. Each label will uniquely identify each jumper/cable.

PROJECT INFORMATION:

NETWORK VISION NMBT-1A1UNJH

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUE FOR:

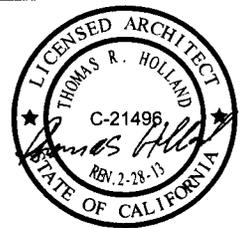
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DATE:



SHEET TITLE:

CABLE COLOR CODING REQUIREMENTS

SHEET NUMBER:

A-12

REVISION:

1



PROJECT INFORMATION:

NETWORK VISION AMBISTALUN II

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

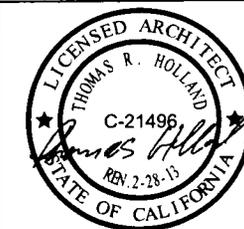
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0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSEE:



SHEET TITLE:

PLUMBING DIAGRAMS

SHEET NUMBER

REVISION

A-14

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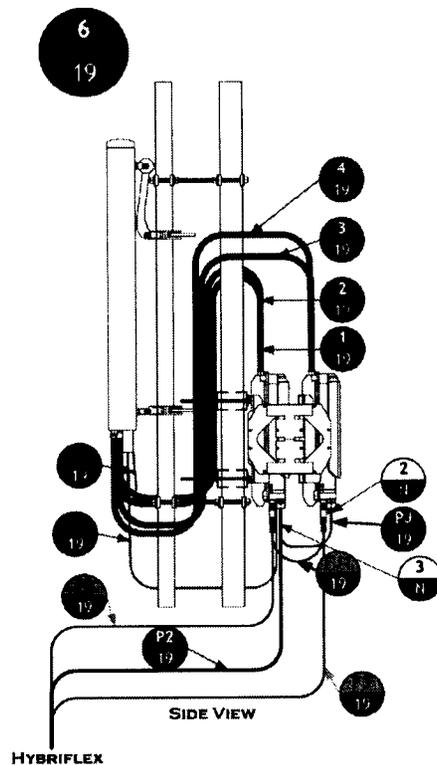
J. STEVE WILSON
STEVE.WILSON@NCSYSTEM.NET
PH: 619.224.6027

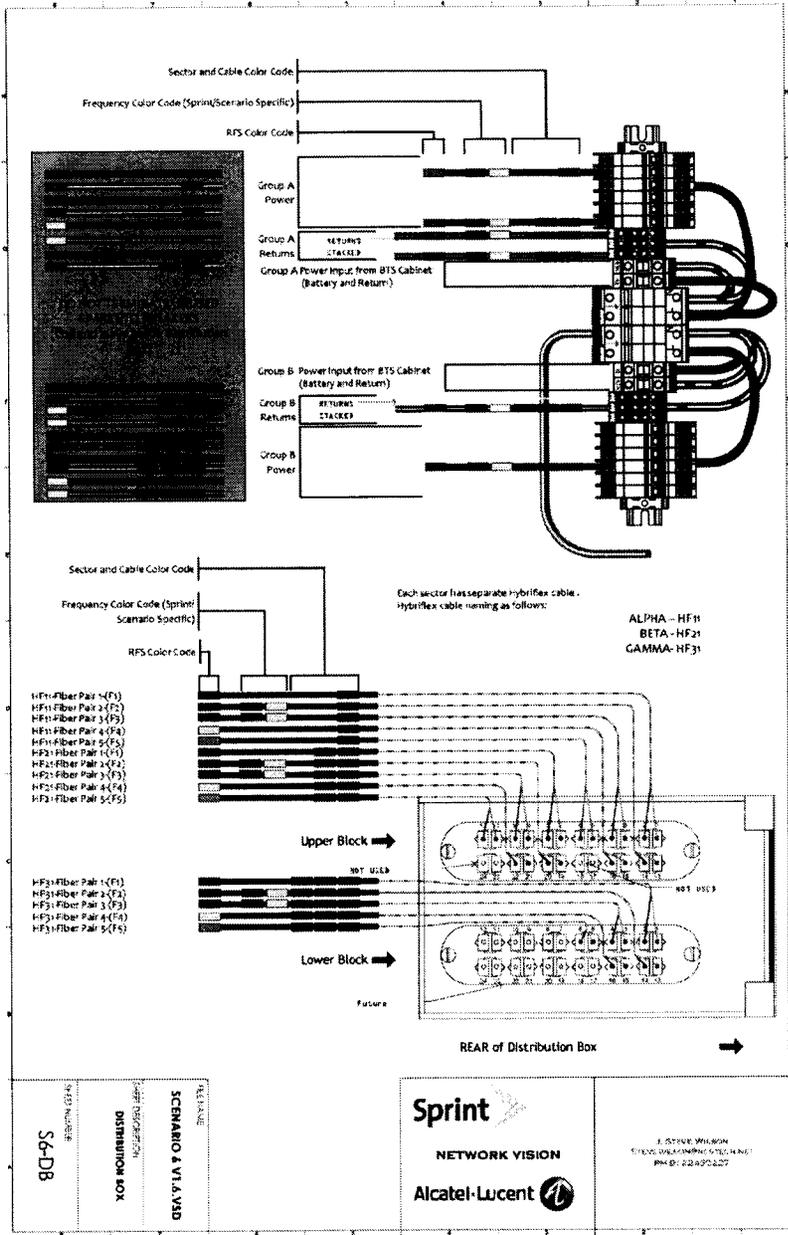


SITE CONNECTIONS AND IDENTIFICATION DIAGRAMS

SHEET DESCRIPTION
TOWER TOP DETAIL

SHEET NUMBER
S6-TTD





PROJECT INFORMATION:

NETWORK VISION NIMBLS LAUNCH

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

REVISED CONSTRUCTION

REVISIONS				
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0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD	
1	01/04/13	REVISED FOR CONSTRUCTION	AF	

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LICENSE:



SHEET TITLE:

PLUMBING DIAGRAMS

SHEET NUMBER:

REVISION:

A-15

1



PROJECT INFORMATION

NETWORK VISION AMBUSTAIN II

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

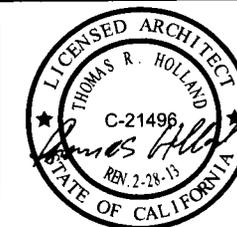
REVISED CONSTRUCTION

REVISIONS

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B	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

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LABELED AS CONSTRUCTION SET

INSURE:



SHEET TITLE:

PLUMBING DIAGRAMS

SHEET NUMBER:

REVISION

A-17

1

J. STEVE WILSON
STEVE.WILSON@NCSYSTEMS.NET
PH 9122460227



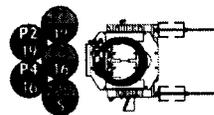
SCENARIO 6 V1.6.VSD

SHEET DESCRIPTION
NOTES 1

SHEET NUMBER
S6-N1

REVISIONS/CHANGES

12/16/11 V1.3
Initial release
01/19/12 V1.4 Draft
Removed revision blocks on drawings.
01/25/12 V1.5
Changed Distribution Box diagrams. Spares do not get terminated to breakers



SPARE FIBER AND POWER CABLE
MANAGEMENT
1 SCALE: 1:15

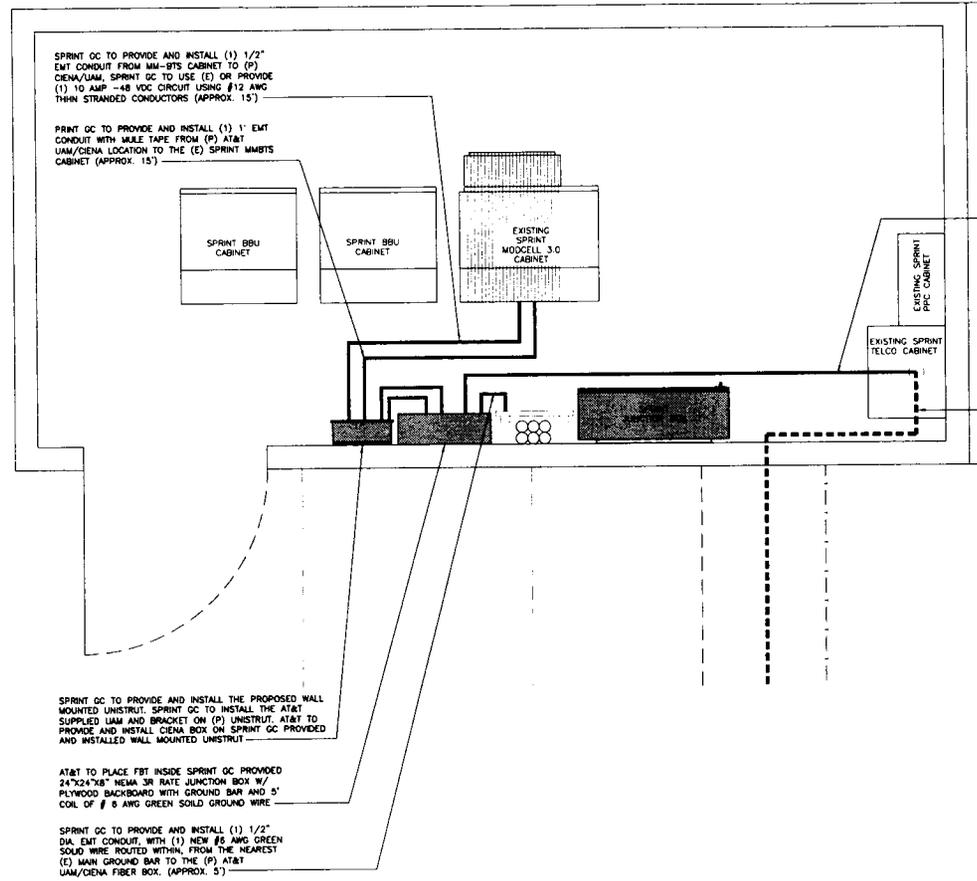


8 Pin DIN MALE Connector with
Pins 3-8 Shorted

2 ALARM CAP
SCALE: N.T.S.



3 DC-Y JUMPER
SCALE: N.T.S.



SPRINT GC TO PROVIDE AND INSTALL (1) 1/2" EMT CONDUIT FROM MM-BTS CABINET TO (P) CIENA/UAM. SPRINT GC TO USE (E) OR PROVIDE (1) 10 AMP -48 VDC CIRCUIT USING #12 AWG THIN STRANDED CONDUCTORS (APPROX. 15')

SPRINT GC TO PROVIDE AND INSTALL (1) 1" EMT CONDUIT WITH MULE TAPE FROM (P) AT&T UAM/CIENA LOCATION TO THE (E) SPRINT MMBS CABINET (APPROX. 15')

SPRINT GC TO PROVIDE AND INSTALL (1) 1-1/4" EMT CONDUIT FROM TELCO CABINET TO (P) FBT (APPROX. 15') AND FROM (P) FBT TO (P) UAM (APPROX. 5')

HOP IS THE EXISTING PULLBOX @ THE CORNER OF SOUTH WEST AREA OF THE EXISTING ASPHALT ACCESS ROAD NEAR LAQUA POINT. SPRINT GC TO PROVIDE & INSTALL (1) 3/4" INNERDUCT WITH MULE TAPE FROM EXISTING PULLBOX TO 11'X17" HAND HOLD TO SPRINT LEASE AREA. (APPROX. 335')

SPRINT GC TO PROVIDE AND INSTALL THE PROPOSED WALL MOUNTED UNISTRUT. SPRINT GC TO INSTALL THE AT&T SUPPLIED UAM AND BRACKET ON (P) UNISTRUT. AT&T TO PROVIDE AND INSTALL CIENA BOX ON SPRINT GC PROVIDED AND INSTALLED WALL MOUNTED UNISTRUT.

AT&T TO PLACE FBT INSIDE SPRINT GC PROVIDED 24"X24"X8" NEMA 3R RATE JUNCTION BOX W/ PLYWOOD BACKBOARD WITH GROUND BAR AND 5' COIL OF # 6 AWG GREEN SOLID GROUND WIRE.

SPRINT GC TO PROVIDE AND INSTALL (1) 1/2" DIA. EMT CONDUIT WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN. FROM THE NEAREST (E) MAIN GROUND BAR TO THE (P) AT&T UAM/CIENA FIBER BOX. (APPROX. 5')

SCOPE OF WORK:

ACCESS NOTE: CALL WHEN YOU ARRIVE AT SITE TO (619) 670-2207. MULTIPLE LOCKS TETHERED TOGETHER-USE KEY SHELTER COMBO 5247. TELCO BOX IS ALSO 5247.

AV. HOP/FIBER PATH: HOP IS THE EXISTING PULLBOX @ THE CORNER OF SOUTH WEST AREA OF THE EXISTING ASPHALT ACCESS ROAD NEAR LAQUA POINT. SPRINT GC TO PROVIDE & INSTALL (1) 3/4" INNERDUCT WITH MULE TAPE FROM EXISTING PULLBOX TO 11'X17" HAND HOLD TO SPRINT LEASE AREA. (APPROX. 335').

AT&T FIBER PATH: SPRINT GC TO PROVIDE AND INSTALL (1) 1-1/4" EMT CONDUIT FROM TELCO CABINET TO (P) FBT (APPROX. 15') AND FROM (P) FBT TO (P) UAM (APPROX. 5').

FBT LOCATION: AT&T TO PLACE FBT INSIDE SPRINT GC PROVIDED 24"X24"X8" NEMA 3R RATE JUNCTION BOX W/ PLYWOOD BACKBOARD WITH GROUND BAR AND 5' COIL OF # 6 AWG GREEN SOLID GROUND WIRE.

EQUIPMENT: SPRINT GC TO PROVIDE AND INSTALL THE PROPOSED WALL MOUNTED UNISTRUT. SPRINT GC TO INSTALL THE AT&T SUPPLIED UAM AND BRACKET ON (P) UNISTRUT. AT&T TO PROVIDE AND INSTALL CIENA BOX ON SPRINT GC PROVIDED AND INSTALLED WALL MOUNTED UNISTRUT.

POWER: SPRINT GC TO PROVIDE AND INSTALL (1) 1/2" EMT CONDUIT FROM MM-BTS CABINET TO (P) CIENA/UAM. SPRINT GC TO USE (E) OR PROVIDE (1) 10 AMP -48 VDC CIRCUIT USING #12 AWG THIN STRANDED CONDUCTORS (APPROX. 15').

GROUNDING: SPRINT GC TO PROVIDE AND INSTALL (1) 1/2" DIA. EMT CONDUIT WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN. FROM THE NEAREST (E) MAIN GROUND BAR TO THE (P) AT&T UAM/CIENA FIBER BOX. (APPROX. 5').

CUSTOMER FIBER PATH: SPRINT GC TO PROVIDE AND INSTALL (1) 1" EMT CONDUIT WITH MULE TAPE FROM (P) AT&T UAM/CIENA LOCATION TO THE (E) SPRINT MMBS CABINET (APPROX. 15').

At all new services & grounding trenches, provide "WARNING" tape at 12" below grade.

DIG ALERT
"CALL BEFORE YOU DIG"
1-800-227-2600
UTILITY NOTIFICATION CENTER OF SOUTHERN CALIFORNIA



PROJECT INFORMATION:

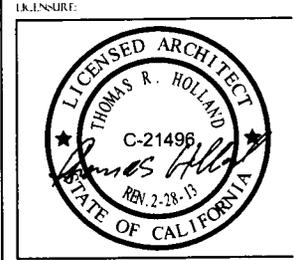
NETWORK ARCHITECTURE
MALIBU POINT
SLD54XC.931
651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUED FOR: REVISED CONSTRUCTION

REVISIONS			
REV	DATE	DESCRIPTION	INITIAL
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0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

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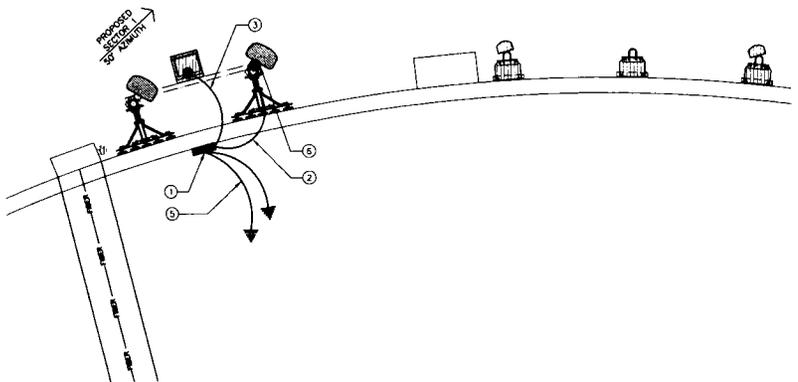


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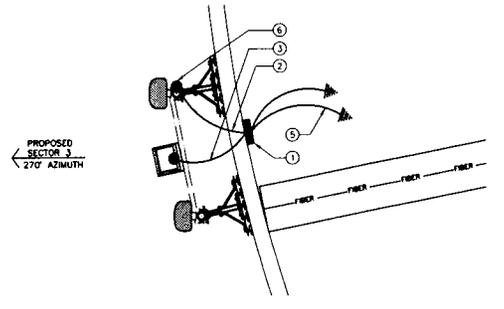
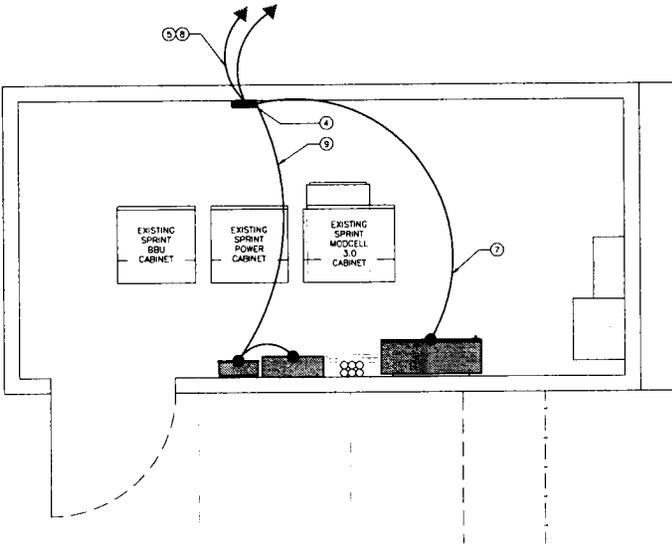
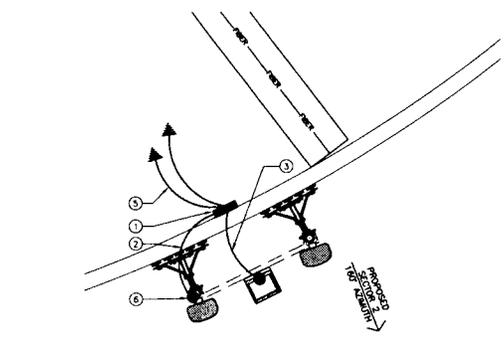
24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

FIBER PLAN | 1

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.



NOTE:
 NETWORK VISION MMBIS DEPLOYMENTS INSTALLED AT LEGACY CDMA OR IDEN SITES SHALL USE THE EXISTING COPPER GROUND BARS IF THEY ARE PRESENT. IF THE COPPER GROUND BARS HAVE BEEN STOLEN THEY SHALL BE REPLACED WITH THE STAINLESS STEEL BAR AFD00062 - MIN 010328 FOR MMBIS OUTDOOR AND AFD00063 - MIN 010330 FOR LEGACY SHELTER CELL SITES



- GROUNDING KEY NOTES:**
- ANTENNA GROUND BUS BAR NEAR ANTENNA MOUNTS. SEE DETAIL 9/E-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 2/E-2 FOR GROUND WIRE CONNECTIONS.
 - #6 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUS BAR (TYP OF 3). SEE DETAIL 2/E-2
 - #6 AWG GROUND FROM RRH UNIT TO ANTENNA GROUND BUS BAR. SEE DETAIL 2/E-2
 - EXISTING GROUND BUS BAR NEAR EQUIPMENT. SEE DETAIL 9/E-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 2/E-2 FOR GROUND WIRE CONNECTIONS.
 - #6 AWG GROUND FROM EXISTING GROUND BUS BAR TO TIE INTO EXISTING GROUNDING SYSTEM (TYP OF (2) PLACES).
 - CAD WELD (TYP) SEE DETAIL 1/E-2
 - #6 AWG GROUND FROM FIBER JUNCTION BOX TO TIE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/E-2
 - ALL GROUND LEADS SHALL BE THERMOPLASTIC HIGH HEAT-RESISTANT NYLON-COATED (THHN).
 - #6 AWG GROUND FROM CIENA FIBER BOX TO JUNCTION BOX FROM JUNCTION BOX TO TIE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/E-2

GROUNDING NOTES & LEGEND

- GENERAL GROUNDING NOTES**
- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS
 - GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES, AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURERS PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MET'S PRACTICES
 - SOME GROUND CONNECTIONS SHALL BE CADWELDED. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
 - CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY SPRINT WIRELESS, LLC REPRESENTATIVE.
 - REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS. ELECTRICAL CONTRACTOR SHALL OBTAIN REVIEW, PROVIDE TRAINING AND FULLY IMPLEMENT ALL GUIDELINES & REQUIREMENTS ASSOCIATED WITH SPRINT STANDARD GROUNDING METHODS FOR ROOF TOP INSTALLATIONS, INCLUDING METHOD FOR CONNECTIVITY FROM ROOF TOP MGB TO BUILDING GROUND SYSTEM (SPRINT STANDARD GROUNDING METHODS MOST RECENT REVISIONS SHALL BE REFERENCED)
 - ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED SPRINT MOBILITY REPRESENTATIVE. PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING
 - NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE CONDITIONS

GROUNDING ROD NOTES

- ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED. A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 6 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
- 2 POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFORE MENTIONED GROUNDING TESTS. TEST SHALL BE PERFORMED WHILE THE COLLECTOR/ROSE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
⊗	COPPER GROUND ROD	⊗	TEST WELL
●	CADWELDED CONNECTION	—	GROUND BAR
■	SIDE SPLICE CADWELD	—	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM

SCHEMATIC GROUNDING PLAN

24"x36" SCALE: 1/2" = 1'-0"
 11"x17" SCALE: 1/4" = 1'-0"



THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.



PROJECT INFORMATION

NETWORK VISION MMBIS-LAUNCH II

MALIBU POINT
 SD54XC931

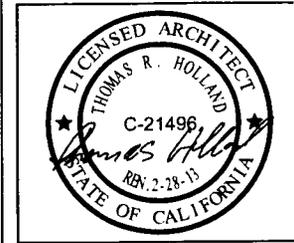
651 POINT BARROW DRIVE
 CHULA VISTA, CA 91911
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

INSPECTOR: REVISED CONSTRUCTION

REVISIONS			
REV	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RJD
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RJD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



SHEET TITLE: SCHEMATIC GROUNDING PLAN

SHEET NUMBER: E-1



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

MALIBU POINT

SD54XC931

651 POINT BARROW DRIVE
CHULA VISTA, CA 91911
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

REVISED CONSTRUCTION

REVISIONS

REV	DATE	DESCRIPTION	INITIAL
A	04/23/12	ISSUED FOR 90% CD REVIEW	RLD
0	08/29/12	ISSUED FOR 100% CONSTRUCTION	RLD
1	01/04/13	REVISED FOR CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

ENCLOSURE:



SHEET TITLE:

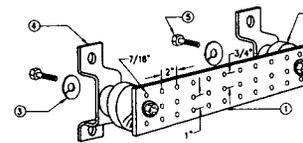
GROUNDING DETAILS

SHEET NUMBER:

REVISION:

E-2

1



NOTE

1. GALVANIZED STEEL GROUND BAR. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION. (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4 OR APPROVED EQUAL
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO., CAT NO. 3015-8 OR APPROVED EQUAL
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO., CAT NO. A-6056 OR APPROVED EQUAL
5. 5/8-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO., CAT NO. 3012-1 OR APPROVED EQUAL
6. INSULATORS SHALL BE ELIMINATED WHEN BONDING DIRECTLY TO TOWER/MONOPOLE STRUCTURE CONNECTION TO TOWER/MONOPOLE STRUCTURE SHALL BE PER MANUFACTURERS RECOMMENDATIONS.

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

10

GROUND BAR (IF REQUIRED)

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

9

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

8

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

7

NOT USED

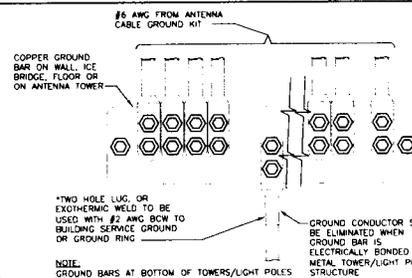
24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

6

ELECTRICAL NOTES

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

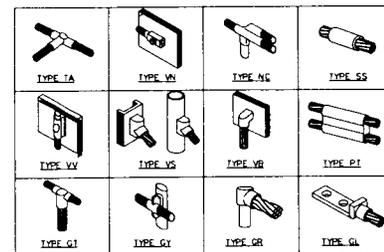
5



GROUND WIRE INSTALLATION

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

2



CADWELD GROUNDING CONNECTIONS

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

1

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

4

NOT USED

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

3

FIRST AMENDMENT TO LEASE

This First Amendment to Lease (the "First Amendment") is made this day of ____, 2013, ("Effective Date") by and between Otay Water District ("OTAY") and Sprint PCS Assets, L.L.C., a Delaware limited liability company ("TENANT"), with reference to the facts set forth in the Recitals below:

RECITALS

- A. OTAY is the owner of that certain real property located 12887 Weighorst Way, El Cajon, California a Reservoir Site formerly known as 12885 Jamacha Boulevard, El Cajon, California (the "Property").
- B. OTAY and TENANT are parties to that certain Lease dated August 24, 2000 (the "Lease" or "Agreement") pursuant to which TENANT is leasing from OTAY land at the Property, together with the right of access to and from the nearest public right-of-way and the right to install utilities (collectively, the "Premises").
- C. Tenant has requested a modification to the type and mounting of the Improvements currently on the Premises (the "New Improvements").
- D. OTAY and TENANT have agreed to amend the Agreement to memorialize the addition of the New Improvements to the Premises.

AGREEMENT

NOW, THEREFORE, in consideration of the facts contained in the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **New Improvements.** OTAY consents to TENANT construction and installation of new communications facilities, as more particularly described and depicted on Exhibit "B-1" which is attached hereto and made a part hereof. The parties acknowledge and agree that the attached Exhibit "B-1" is intended to supplement the Exhibit "B" attached to the Agreement.
2. **Governmental Approvals.** Any required permits for the use or operation of the New Improvements shall be obtained by TENANT at TENANT's sole expense. Furthermore, it is understood and agreed that TENANT's ability to install the New Improvements is contingent upon its obtaining all of the certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit TENANT to install and operate the New Improvements within the Premises. OTAY agrees, at no expense to OTAY, to reasonably cooperate with TENANT in making application for and obtaining all governmental licenses, permits and approvals that may be required for TENANT'S intended use of the Premises.
3. **Amended Provisions.** The following provisions shall be amended as follows:

5.1 Tenant agrees to pay all costs and expenses incurred by Otay in connection with the Facilities and this Agreement, including negotiation and processing hereof, plan checking and inspection of Tenant facilities, costs of inspection, repairs or replacement of any Otay facilities affected or damaged, and all other costs or expenses of Otay attributable to the matters herein contemplated, plus a reasonable amount for Otay's overhead costs in connection therewith.

a. **Deposit.** Tenant has made a deposit, concurrent with its application, and has agreed to make any additional deposits required in connection with Otay's review of the application, negotiation of this Agreement, including legal review, site visits, review of drawings and other costs relating such matters incurred by Otay up to the time this Agreement is executed. Tenant forfeits any claim to such deposits except to the extent Otay determines after this Agreement is executed that amounts in excess of the District's costs and expenses have been paid. Any such excess amounts may, at the sole discretion of the District, be credited toward administrative fees or any other costs then due by Tenant, if any. If no amounts are due, excess deposits will be reimbursed to Tenant.

b. **Administrative Fees.** Administrative fees may be charged at Otay's discretion during the Term to recover costs and expenses incurred by Otay, including but not limited to attorneys and consultant's fees, review, processing of Tenant's conditional use permits, inspection of the Facilities during construction and other related costs if any, in connection with any Tenant activity that requires Otay staff to spend time in supervision, inspection, investigation or other review; such costs include but are not limited to any amendments to this Agreement, any default or any failure of Tenant to secure or renew any permit, approval, license or easement and any investigation Otay deems reasonably required in connection with the Premises or the Facilities, including without limitation any investigation of a potential contamination of any portion of the Property due to any Tenant activity or improvement.

c. **Security Deposit.** Concurrently upon execution of this Agreement, Tenant shall pay to Otay a sum equal to two months' rent as a deposit ("Security Deposit") to secure the Tenant's performance of the covenants contained herein. Tenant shall maintain the Security Deposit balance equal to the amount established herein over the life of the agreement. If Otay applies any portion of the Security Deposit, Tenant shall within 30 days after demand by Otay, deposit an amount sufficient to restore the Security Deposit to its original amount. No part of the Security Deposit is to be considered as an advance payment of rent, including last months' rent, nor is it to be used or refunded prior to the leased premises being permanently and totally vacated by the Tenant. After the Tenant has vacated the premises, Otay shall furnish Tenant with an itemized written statement of the basis for, and the amount of, any of the security deposit retained by Otay. Otay may withhold that portion of Tenant's security deposit necessary (a) to remedy any default by Tenant in the payment of rent or any other provision

of this Agreement, (b) to repair damages to the premises or any expense, loss, or damage that Otay may suffer because of Tenant's default, (c) to restore the premises to meet Otay's standards, (d) any amount that Otay may incur or become obligated to spend in exercising Otay's rights under this Agreement or available at law. The unused portion of this deposit shall be returned to the Tenant without interest no later than 60 days after termination of this Agreement.

Tenant waives the provisions of California Civil Code §1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Agreement, that provide that Otay may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of accrued Rent, to repair damage caused by Tenant, or to clean the Premises. Otay and Tenant agree that Otay may, in addition, claim those sums reasonably necessary to compensate Otay for any other foreseeable or unforeseeable loss or damage caused by the act or omission of Tenant or Tenant's officers, agents, employees, Independent contractors, or invitees, including future rent payments.

d. None of the deposits or other payment of costs or administrative fees constitutes or shall be considered Rent (defined below).

5.2 Beginning on the Commencement Date, Tenant shall pay Otay as rent the sum of \$2,000.00 per month ("Rent") payable on the first day of each month in advance. If the Commencement Date is prior to the fifteenth day of the month of commencement, the full month's Rent will be due on the Commencement Date. If the Commencement Date is on or after the fifteenth day of the month of commencement, payment of Rent will begin the first day of the following month.

Tenant may make Rent payments up to 5 days past due date without penalty, unless continual late payments for two consecutive months occur. A fee shall be imposed after the 5th day and shall be 20% of the amount currently due. Failure to pay Rent within ten (10) calendar days of the first of the month shall be an Event of Default as provided by Section 13.2. Failure to pay Rent on the due date for more than two (2) consecutive months or four (4) times over any twelve (12) month period shall be a non-curable Event of Default without the necessity of any notice or cure period. At District's sole discretion, immediately following such a non-curable Event of Default, District may terminate the Agreement and seek any remedy available by this Agreement or at law. If Tenant tenders a check, which is dishonored by a banking institution, then the Tenant shall tender cash or cashier's check only for all future payments, which shall continue until such time as written consent is obtained from Otay. In addition, Tenant shall be liable in the sum of \$25 for each dishonored check that is returned to Otay.

a. Rent Increases. The Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater. CPI shall be the average percentage increases in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100)

(the "CPI") for "All Items – All Urban Consumers" for the San Diego Metropolitan Statistical Area.

3b. Section 7; Improvements, and Section 8; Installation of Equipment shall be replaced with the following:

7. Installation and Maintenance of Improvements. Tenant is authorized to install, maintain and operate on the Premises only the Facilities described and depicted on Exhibit B; provided that all permits and zoning approvals shall have first been obtained by Tenant and shall at all times while the Facilities operate remain in full force and effect.

a. Installation of the Improvements. Tenant's design and installation of all portions of the Facilities shall be done, at no cost to Otay, according to plans approved by Otay, provided that such approval shall not be unreasonably withheld. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay of the method of attachment at Otay's sole discretion. If such Facilities are to be attached or mounted to a water tank, Tenant shall use an installation method such as a magnetic mount or other, non-destructive alternative. The Tenant shall be responsible for painting its antennas and/or equipment to match Otay's facility. Otay will provide Tenant with specifications regarding paint type, color and application method to accomplish this requirement. Painting/coating submittals shall be provided to Otay by the Tenant prior to receiving permission to begin painting. Otay may specify a camouflage design if not inconsistent with requirements of the city or county within which the Facilities are located. These camouflage designs may include but are not limited to faux palm trees, pine trees, cypress trees, broadleaf trees, and flag poles, unipoles, and other camouflaged antenna and antenna supports.

b. Record Drawings. Within thirty (30) days after completion of the Facilities, Tenant shall provide Otay with "record" (also called "as-built") drawings of the Facilities showing and identifying all the equipment and improvements installed on the Premises. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, including without limitation all personal property and antennas located on the Premises and any such property of Tenant located in the Easement. No property of Tenant other than such identified property shall be located on the Premises or the Property at any time. Upon acceptance by Otay of Tenant's record drawings, in form and content satisfactory to Otay, such drawings shall replace and supersede any similar drawings contained in any exhibit attached hereto.

c. Alterations. Tenant shall not alter or change its Improvements in a material manner without the prior approval of Otay, such approval not to be unreasonably withheld. "Material" refers to any physical change that could affect the building structure, antenna support, interconnecting facilities or its appearance

or any change that requires access to the Premises for installation of new equipment, removal of old equipment, trenching or digging or that could disrupt Otay's workplace or communications in any way or any change that requires a renewed or amended easement, permit or approval. All of Tenant's construction and installation work shall be performed at Tenant's sole cost and expense in a good and workmanlike manner and fully compliant with all government permit and code requirements. Tenant shall have the right to remove all Improvements it installs at its sole expense on or before the expiration or termination of this Agreement, but must at such time restore the ground and surface underlying the removed Improvements to its pre-installation condition, wear and tear excepted, and to the reasonable satisfaction of Otay.

d. Alterations to Improvements / Additional Space. If, at any time during the Term, Tenant requests permission from Otay to add improvements requiring construction to its then existing Improvements, the then current Administrative Fees shall be paid to Otay before any such changes are negotiated. In addition, if the requested Tenant improvements include additional area, a new agreement or, at Otay's discretion, an amendment for the additional lease space must be executed prior to start of construction and Tenant shall comply with Otay's requirements then in effect, including payment of additional rent, if any, for the additional area.

e. Permits and Compliance with Applicable Laws. During the Term, and prior to commencing any construction or installation of any improvements or equipment, as applicable, Tenant shall obtain all necessary approvals, permits and access easements or licenses, all of which shall be maintained in full force and effect at all times in accordance with all applicable laws, rules and regulations.

i. Prior to commencing construction, Tenant shall deliver to Otay copies of all executed licenses, approvals and permits required by local, state or federal agency in connection with the Improvements, which permits shall be attached hereto as Exhibit B.

ii. From time to time, as required by law or regulation in connection with the normal operation of the Improvements or as needed due to improvements or alterations to the same, Tenant shall provide Otay with updated permits, licenses and/or approvals, including without limitation written evidence, satisfactory to Otay, of all FCC approvals and other governmental permits and approvals, including but not limited to compliance with the FCC's electromagnetic radiation rules, set forth at 47 C.F.R. § 1.1307 et seq. and FCC Office of Engineering and Technology Bulletin 65, each as hereafter amended.

iii. Otay agrees, at no expense to Otay, to reasonably cooperate with Tenant in making application for and obtaining all governmental licenses,

permits and approvals that may be required for Tenant's intended use of the Premises.

f. Utilities. Tenant shall be authorized to install utilities for the Premises and the Improvements at Tenant's expense and to improve the present utilities on or near the Premises (including, but not limited to the installation of an emergency back-up power) subject to Otay's approval of the location, route, design and capacity, which approval shall not be unreasonably withheld. Tenant shall fully and promptly pay for all utilities furnished to the Premises for the use, operation and maintenance of Tenant's Improvements. If inadequate electrical power is available to provide for the Improvements, or additional electrical power is required to be installed on the Premises by Otay in its sole discretion, such installation shall be at Tenant's sole expense. The location, route, design and capacity of the additional power facility shall be approved by Otay, which shall not be unreasonably withheld.

g. Repair of Otay's Improvements/Systems. Any damage done to the Property or to any Otay improvement, facility or system in connection with the construction, installation, maintenance, repair, improvement, replacement or operation of the Improvements shall be repaired or replaced immediately at Tenant's expense and to Otay's reasonable satisfaction by Otay staff or contractors approved by Otay. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay. Tenant shall pay all costs and expenses in relation to maintaining the integrity of Otay's facilities, improvements and systems affected in any way by Tenant's Improvements or its use of the Property or the Premises.

h. Maintenance and Repair. At all time during the Term, Tenant shall maintain the Premises and the Improvements in a manner acceptable to Otay. Tenant's use of its Improvements shall not at any time or in any way adversely impact, impede or interfere with Otay's access to, use or operation of, its improvements, equipment or systems.

i. Liens. Tenant shall not encumber or allow the Premises or the Property to be encumbered in any manner other than as expressly authorized herein.

j. Security. Tenant recognizes and agrees that the Premises and the Reservoir Site are a sensitive area and that Otay's operations and services are highly sensitive and regulated. Tenant shall provide for the proper supervision of all Tenant Parties assigned or allowed by Tenant to enter and do work at the Premises. Tenant also agrees, holding Otay harmless for any cost or expense, to comply with any and all security measures instituted by Otay from time to time.

8. Maintenance, Repair or Replacement of Otay's Improvements. At any time while this Agreement remains in effect, Otay may, at its option and upon One Hundred Eighty (180) days prior written notice to Tenant, remove or cause

Tenant to remove all or any portion of its Facilities at Tenant's expense, in order for Otay to paint, repair, or make replacements to any or all its improvements on the Premises (the "Maintenance or Replacement Work"), as deemed necessary by Otay in its sole discretion. Tenant agrees to fully cooperate with Otay's efforts in connection with any Maintenance or Replacement Work, including without limitation timely, and at Tenant's cost, removing and re-installing any portion of the Facilities, as requested by Otay.

a. Temporary Facilities. During the Maintenance or Replacement Work, Tenant may, holding Otay harmless from any cost or expense, install temporary antennas on the Premises subject to Otay's approval of the location and type of replacement facilities, such approval shall not be unreasonably withheld or delayed. Once the Maintenance or Replacement Work is completed by Otay, Tenant agrees to promptly dismantle any temporary facilities and to relocate the facilities to their original location or to any other location approved by Otay. All work related to the removal of any portion of the Facilities, installation of temporary facilities, dismantling, relocation to their original location and any related work, shall be done at Tenant's sole cost and expense and in good and workmanlike manner.

b. Repair of damage. Tenant shall repair any damage caused by Tenant in connection with the installation, maintenance, operation or removal of any temporary facilities or the Facilities, and Tenant shall restore any distributed portions of the Property to their condition immediately prior to the installation of the temporary facilities.

c. Otay's option to remove temporary facilities. If any temporary facilities are not removed within sixty (60) days from the date the Maintenance or Replacement Work is completed, Otay shall have the right, but not the duty, to remove the temporary facilities at Tenant's cost and expense.

d. Painting of the Facilities. If the Maintenance or Replacement Work includes the painting, or any work affecting the surface of Otay's improvements, the Tenant shall be responsible for repainting or performing other surface treatment of its antennas and equipment to match Otay's. Otay will provide specifications to the Tenant regarding the treatment, paint type, color and application method to accomplish this requirement. The Tenant shall be required to obtain approval of specifications from Otay prior to commencing work on this requirement. Subject to Otay's prior written consent, Tenant may substitute an alternate treatment, paint type and application method if it reasonably determines that Otay's selection will adversely affect or otherwise degrade Tenant's wireless signal from the Reservoir Site.

3c. Section 9; Co-Location shall be replaced with the following:

9.1. Co-Location by Otay. Tenant agrees that Otay may enter into leases or other types of agreements with other communication carriers, wireless communications carriers and other utilities for use of any portion of the "Reservoir Site" as long as said leases do not result in unreasonable interference with Tenant's use of or access to the Premises. Tenant shall reasonably cooperate with Otay's efforts in this regard including, at Otay's request, the relocation of, or changes to, the Facilities; provided that any alterations or relocation needed to accommodate the new carrier or utility shall be performed at the expense of Otay or the new carrier or utility.

9.2. Co-Location by Tenant - Subleasing/Encumbrance. Tenant shall not sub-lease or sub-license or otherwise encumber the Premises or any portion of the Facilities without Otay's prior written consent, which may be granted or denied at Otay's sole discretion. Any sub-lease or other encumbrance shall require an amendment to this Agreement and shall specify the terms and conditions, including making provision for rent and increases thereto for the sub-lease or other encumbrance.

3d. Section 13; Termination shall be replaced with the following:

13.1 Termination.

(a) This Agreement may be terminated by Tenant without further liability if:

(i) Tenant delivers to Otay 30-day written notice at any time prior to commencing any work at the Premises in connection with the installation of any Facilities, for any reason or no reason;

(ii) Tenant gives Otay sixty (60) days' notice of Tenant's determination that a governmental or non-governmental license, permit, consent, approval, easement or waiver necessary to enable Tenant to construct, install or operate the Facilities cannot be obtained or renewed at reasonable expense or in reasonable time period for wireless sites at water reservoirs in metropolitan areas within San Diego County. If this notice is given, Tenant must immediately cease any and all transmissions through and from the Premises and shall promptly remove, within a period of time not to exceed sixty (60) days, any and all Tenant's personal property and improvements from the Property. This Agreement and any related easements shall automatically expire upon the earlier of removal of the Tenant's improvements or the 60th day from the notice; excepting only Tenant's indemnities and liabilities hereunder, including the obligation to pay Rent for any holdover period. Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated.

(iii) Tenant determines at any time after the Commencement Date that the Premises are not appropriate or suitable for its operations for economic, environmental or technological reasons, including without limitation, any ruling or directive of the FCC or other governmental or regulatory agency, or problems with signal strength or interference not encompassed by subsection (iv) below; provided that the right to terminate under this subsection (iii) is exercisable only upon payment by Tenant, as a termination fee, of the lesser of twelve monthly installments of rent or the balance of the rent due for the then current Initial Term, Extension Term or Additional Term, as applicable; and Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated;

(iv) Otay commits a default under this Agreement and fails to cure pursuant to Section 13.2, below;

(v) The Property or the Premises are totally or partially destroyed by fire or other casualty (not caused by Tenant) so as to hinder Tenant's normal operations and Otay does not provide to Tenant within thirty (30) days after the casualty occurs a suitable temporary relocation site for Tenant's facility pending repair and restoration of the Premises; or

(vi) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

(b) This Agreement may be terminated by Otay without further liability if:

(i) Tenant commits a default under this Agreement and fails to cure such default pursuant to Section 13.2, below;

(ii) Otay determines that continuing the Agreement or continuing to allow the Tenant to construct, install, maintain or operate the Facilities in any way violates a law, rule or regulation; or

(iii) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

13.2 Default.

a. Event of Default. The parties covenant and agree that a default or breach of this Agreement (an "Event of Default") shall occur and be deemed to exist if, after notice and opportunity to cure as provided below:

(i) Tenant shall default in the payment of Rent, or any other amounts due Otay hereunder, and said default shall continue for ten (10) business days after the same becomes due; or

(ii) Either party shall default in the performance or observance of any other covenant or condition of this Agreement to be performed or observed if such failure persists for a period of thirty (30) days after the non-defaulting party provides written notice of the default to the defaulting party.

b. Rights upon Default. Upon the occurrence of an Event of Default, in addition to any other rights or remedies available to the non-defaulting party under any law, the non-defaulting party shall have the right to terminate the Agreement.

c. Cure Rights. An Event of Default shall not exist unless written notice has been given in accordance with this Agreement, and the defaulting party has had the opportunity to cure as provided herein. The defaulting party shall cure the alleged default within the manner provided herein; provided however, that if the nature of an alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the defaulting party shall not be in breach of this Agreement if it diligently commences a cure within such period, and thereafter diligently proceeds with the actions necessary to complete such cure.

3e. Section 17; Indemnity, shall be replaced with the following:

Tenant specifically agrees that it shall hold harmless, defend (with counsel, and if needed experts, reasonably acceptable to Otay), indemnify and otherwise protect Otay and each Otay Party, from and against all claims, suits or actions of any kind and description relating to (a) Tenant's obligations under this Agreement and any amendment hereto or (b) Tenant or Tenant Parties use of, and access to, the Premises, the Facilities or the Property. These obligations extend to and include without limitation any and all costs and expenses (including attorney's fees and court costs) incurred by Otay or the Otay Parties in connection with (i) damage to property (including the Premises, the Property or any personal property of Otay or any third party), (ii) any action or proceeding (including an enforcement action or criminal proceeding) related in any way to any permit (governmental or otherwise), approval or easement obtained by or required of Tenant in connection with this Agreement or the Facilities; and (iii) personal injury or death, except to the extent that such claims, suits or actions directly arise from the gross negligence or willful misconduct of Otay or an Otay Party. This indemnification clause in no way limits any other specific indemnities given by Tenant under other provisions of this Agreement.

Nothing contained herein shall prohibit Otay, in its sole discretion, from participating in the defense of any demand, claim, action, proceeding, or litigation. In no event shall Otay's participation in the defense of any demand

claim, action, proceeding, or litigation affect the obligations imposed upon Tenant herein.

This and all other Tenant indemnities shall survive the termination of this Agreement and shall remain in effect for as long as the underlying claim or action remains viable.

3f. Section 19; Assignment, shall be replaced with the following:

Tenant shall not assign this Agreement or any portion of its rights or obligations hereunder without Otay's prior written consent, except to an affiliated parent entity, subsidiary, purchaser of at least 50% of the aggregate of the assets of Tenant ("assets" means and includes without limitation any and all real, personal or financial property or thing owned or controlled by Tenant or over which Tenant has an interest) or holder of Tenant's FCC license.

a. If during the Term hereof, Tenant requests the written consent of Otay to any assignment, and upon demonstration satisfactory to Otay of the proposed assignee's legal, financial, and technical qualifications to assume all of the Tenant's duties and obligations herein, Otay's consent thereto shall not unreasonably be withheld. Consent to one assignment shall not be deemed consent to any subsequent assignment.

b. Any attempted assignment not permitted under the first paragraph of this Section 19, without Otay's prior consent as set forth in Section 19(a), shall be void and, at Otay's option, shall constitute a termination of this Agreement for which a termination fee as described in Section 13.1.a(iii) shall be immediately due.

c. Any assignment of this Agreement shall require an executed "Assignment of Lease" whether or not the Consent of Otay is required pursuant to this section 19 or any other provision of this Agreement. A sample form of the "Assignment of Lease" is attached to this Agreement as Exhibit F which may be amended or modified in Otay's sole discretion.

4. **Continued Effect.** Except as specifically modified by this First Amendment, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between any term or provision of the Agreement and this First Amendment, the terms and provisions of this First Amendment shall control. In addition, except as otherwise stated in this First Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Agreement. All captions are for reference purposes only and shall not be used in the construction or interpretation of this First Amendment.

5. **Administrative Fees.** TENANT shall pay OTAY the amount of \$4,500 within (30) days of the date of execution of this Amendment by OTAY and TENANT.

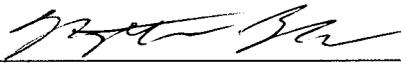
6. **Current Rent.** The current monthly Rent amount at the Effective Date of this First Amendment is \$2,734.54.

IN WITNESS WHEREOF, OTAY and TENANT have caused this First Amendment to be executed by each party's duly authorized representative effective as of the date first above written.

OTAY WATER DISTRICT:

Sprint PCS Assets, L.L.C.,
a Delaware limited liability company, :

By: _____
Name: Mark Watton
Title: General Manager
Date: _____

By: 
Name: Matthew Bell
Title: Manager Real Estate
Date: 5/29/2013

Approved as to Form:

By: _____
OWD General Counsel

Approved as to Form:

By: _____
Its: _____

Exhibit B-1

NEW IMPROVEMENTS

BATTERY INFORMATION /NOTES:

BATTERY MFG: EAST PENN MANUFACTURING
 MODEL NO. 12AVR-145L
 ELECTROLYTE CONTENT PER BATTERY: 2.17 GALLONS
 ELECTROLYTE HAZARD CLASSIFICATION PER 19 C.F.R. (7 & SULFURIC ACID): CORROSIVE
 NO. OF BATTERIES TO BE INSTALLED: 6
 TOTAL ELECTROLYTE CONTAINED ON SITE (7.2 x 6 = 43.2): 26 GALLONS MAX

A. QUANTITIES OF 100 GAL. OR LESS ARE EXEMPT PER TABLE 3 OF THE 2010 IBC.
 B. SINGLE VESSEL CAPACITIES OF 20 GAL. OR LESS, AND AGGREGATE QUANTITIES NOT IN EXCESS OF 100 GAL. ARE EXEMPT PER ARTICLE 84 OF THE 2010 C.F.C.
 C. QUANTITIES LESS THAN 30 GAL. ARE EXEMPT FROM C.F.C. ARTICLE 80, AND SHALL NOT REQUIRE PERMIT.
 D. ANY CHANGES OR ADDITIONS TO BACK-UP BATTERIES MUST COMPLY WITH 2010 C.F.C. ARTICLE 84, AND SHALL NOT CONTAIN ELECTROLYTE QUANTITIES IN EXCESS OF 50.

FIRE DEPARTMENT NOTES:

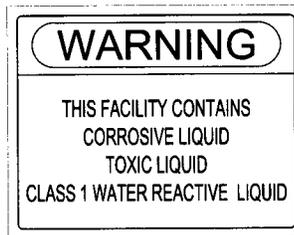
A. FIRE DEPARTMENT FINAL INSPECTION REQUIRED. SCHEDULE INSPECTION 2 DAYS IN ADVANCE.
 B. A CFC PERMIT TO OPERATE BATTERY SYSTEMS WITH STATIONARY LEAD ACID BATTERIES IS NOT REQUIRED FOR THE QUANTITIES ON SITE.
 C. A CFC PERMIT MAY BE REQUIRED FOR THE HAZARDOUS MATERIALS ON SITE.
 D. A HAZARDOUS MATERIALS IDENTIFICATION SIGN IS REQUIRED FOR ALL ENTRANCES INTO BATTERY STORAGE AREAS. LETTERS MUST BE AT LEAST 1" IN HEIGHT AND IN A COLOR WHICH CONTRASTS TO THE BACKGROUND OF THE SIGN AND LIST THE FOLLOWING:

CLASS 1 WATER REACTIVE LIQUID
 TOXIC LIQUID
 CORROSIVE LIQUID
 OTHER HEALTH HAZARD LIQUID

E. AN APPROVED METHOD TO NEUTRALIZE SPILLED ELECTROLYTE SHALL BE PROVIDED IN THE BATTERY ROOM.
 F. BATTERIES SHALL BE PROVIDED WITH SAFETY VENTING CAPS.
 G. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE UNIFORM FIRE CODE STANDARD (UFC) AND PLACEMENT IS SUBJECT TO APPROVAL OF THE FIRE INSPECTOR.
 H. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS.
 I. EXIST DOORS SHALL BE ABLE TO OPEN FROM THE INSIDE WITHOUT THE USE OF KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
 J. ADDRESS NUMBERS SHALL BE A MINIMUM 6 INCHES HIGH AND PLAINLY VISIBLE FROM ROADWAY BUILDING IS ADDRESSED ON.
 K. REQUIRED SIGNAGE SHALL INCLUDE LETTERING HEIGHT OF AT LEAST ONE INCH IN A COLOR THAT CONTRASTS TO THE SIGN BACKGROUND, AND SHALL BE PROMINENTLY DISPLAYED.
 L. REQUIRED SIGNAGE SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, APPLICABLE TYPES FROM EXAMPLES SHOWN HEREIN (SEE SIGNAGE).

NOT USED

3

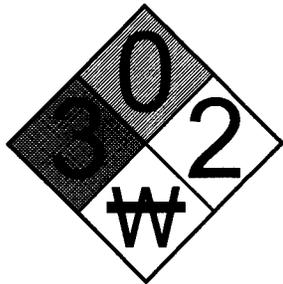


GENERAL NOTES

1

HAZARDOUS MATERIAL SIGNAGE

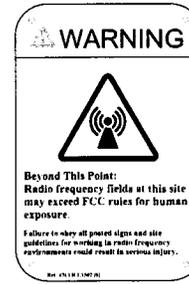
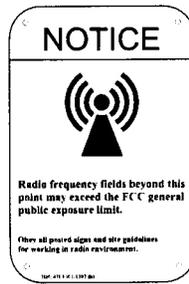
4



REQUIRED NFPA SIGNAGE

IN CASE OF EMERGENCY
CALL
1-818-756-9674
 SITE NUMBER: SD34XC549
 SITE NAME: BLUE TANK (7 O)

EMERGENCY CONTACT SIGNAGE



2

RF SIGNAGE

5

SITE IDENTIFICATION SIGNAGE



PLANS PREPARED BY:

Technology Associates
SAN DIEGO MARKET OFFICE
 5473 KEARNY VILLA RD. STE. 300
 SAN DIEGO, CA 92123

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PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
BLUE TANK (7 O)
 SD34XC549
 12885 WIEGHORST WAY
 EL CAJON, CA 92021

ISSUE DATE:

04/12/2013

ISSUED FOR:

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REVISIONS

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SHEET TITLE:

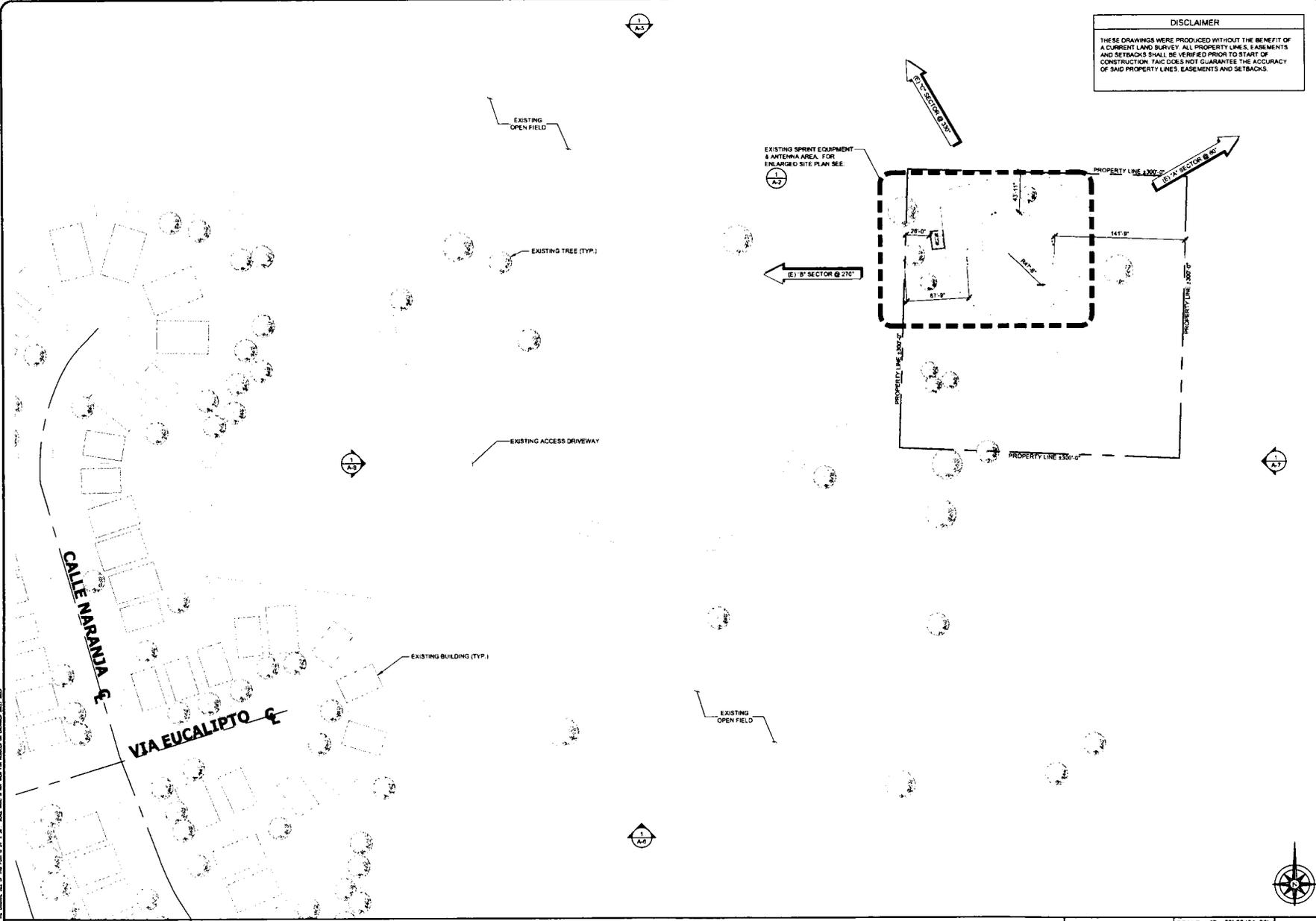
SIGNAGE & NOTES

SHEET NUMBER:

REVISION:

T-3

A



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Alcatel-Lucent
 1805 SCRANTON RD. SUITE 400
 SAN DIEGO, CA 92121

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LICENSURE:

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER: **A-1** **REVISION:** **A**

OVERALL SITE PLAN

50' 0 25' 50' **SCALE:** 1" = 50'-0" (24x36)
 (OR) 1/2" = 50'-0" (11x17) **1**

DISCLAIMER

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1905 SCRANTON RD. SUITE 400
SAN DIEGO, CA 92121

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NETWORK VISION MMBTS LAUNCH

BLUE TANK (70)

SD34XC549

12885 WIEGHORST WAY
EL CAJON, CA 92021

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LICENSURE:



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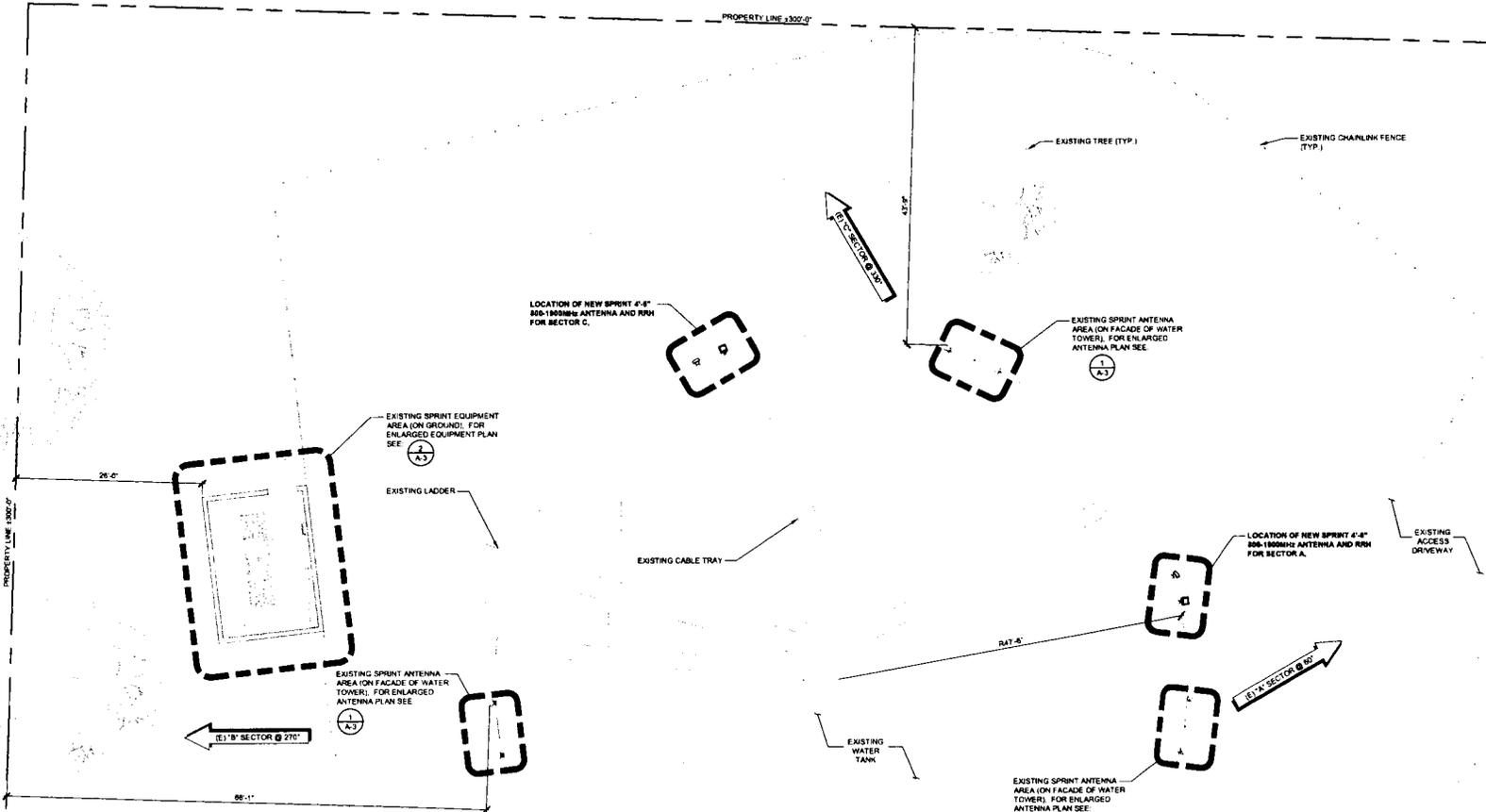
ENLARGED SITE PLAN

SHEET NUMBER:

A-2

REVISION:

A



ENLARGED SITE PLAN

SCALE: 1/8" = 1'-0" (24x38)
OR: 1/16" = 1'-0" (11x17)



1



Alcatel-Lucent
 9805 SCRANTON RD. SUITE 400
 SAN DIEGO, CA 92121

PLANS PREPARED BY:

Technology Associates

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 SAN DIEGO, CA 92123

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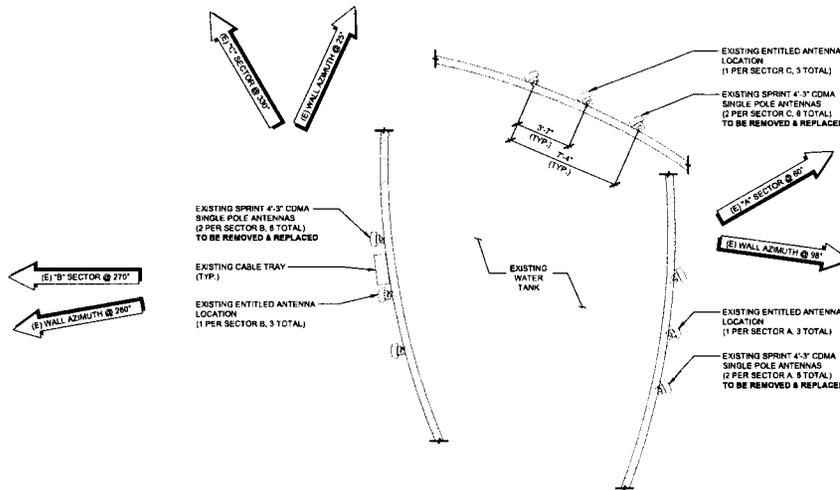
PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH

BLUE TANK (7 0)

SD34XC549

12885 WIEGHORST WAY
 EL CAJON, CA 92021



EXISTING ANTENNA PLAN

0 1' 2' 4' SCALE: 1/4" = 1'-0" (24x36)
 (OR) 1/8" = 1'-0" (11x17)

1

NOTE:
 NO PROPOSED CHANGES
 TO EQUIPMENT AREA.

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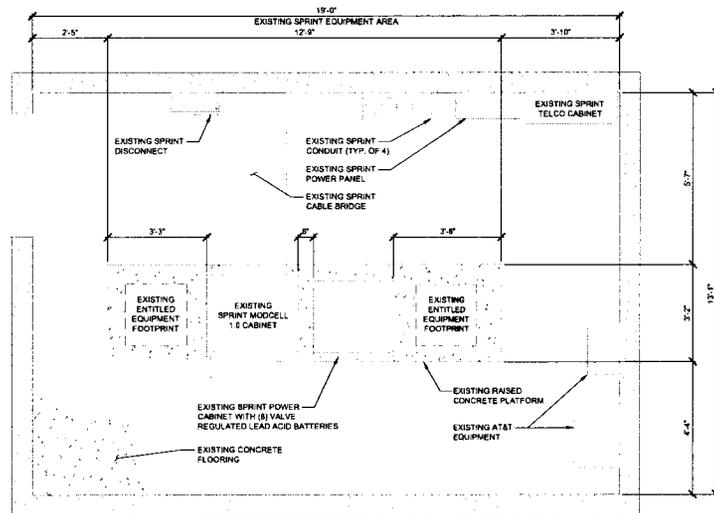
EXISTING ANTENNA & EQUIPMENT PLANS

SHEET NUMBER:

A-3

REVISION:

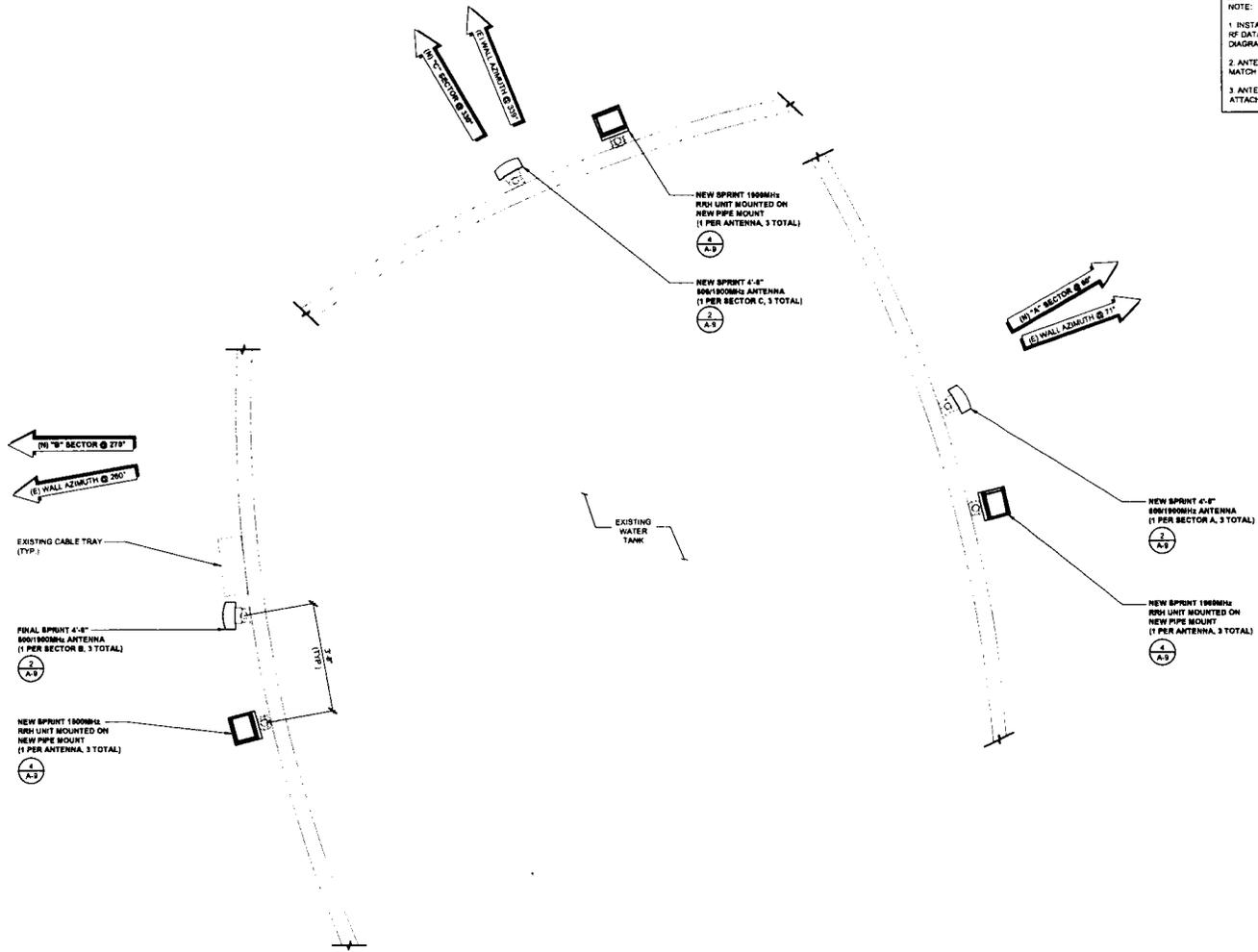
A



EXISTING EQUIPMENT PLAN

0 6" 1' 2' SCALE: 1/2" = 1'-0" (24x36)
 (OR) 1/4" = 1'-0" (11x17)

2



NOTE:
 1. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING / WIRING DIAGRAMS PRIOR TO INSTALLATION.
 2. ANTENNAS & RRHS TO BE PAINTED TO MATCH EXISTING WATER TANK.
 3. ANTENNAS & CABLE TRAYS TO BE ATTACHED USING MAGNETS

PH "B" SECTOR @ 270°
 (1) WALL AZIMUTH @ 260°

EXISTING CABLE TRAY (TYP.)

FINAL SPRINT 4.4" 800/1800MHz ANTENNA (1 PER SECTOR B, 3 TOTAL)

NEW SPRINT 1800MHz RRH UNIT MOUNTED ON NEW PIPE MOUNT (1 PER ANTENNA, 3 TOTAL)

EXISTING WATER TANK

PH "C" SECTOR @ 90°
 (1) WALL AZIMUTH @ 75°

NEW SPRINT 4.4" 800/1800MHz ANTENNA (1 PER SECTOR A, 3 TOTAL)

NEW SPRINT 1800MHz RRH UNIT MOUNTED ON NEW PIPE MOUNT (1 PER ANTENNA, 3 TOTAL)

COAX SCHEDULE				
	SECTOR A	SECTOR B	SECTOR C	SECTOR D
1/2" HYBRIFLEX	± 200'	± 185'	± 200'	N/A
1/2" COAX JUMPER	± 10'	± 10'	± 10'	N/A

FINAL ANTENNA PLAN

SCALE: 1/2" = 1'-0" (24x38)
 (OR) 1/4" = 1'-0" (11x17)



Alcatel-Lucent
 9605 SCRANTON RD. SUITE 400
 SAN DIEGO, CA 92121

PLANS PREPARED BY:

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 SAN DIEGO, CA 92123

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BLUE TANK (70)
 SD34XC549
 12885 WIEGHORST WAY
 EL CAJON, CA 92021

ISSUE DATE:

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SHEET TITLE:

FINAL ANTENNA PLAN

SHEET NUMBER:

A-4

REVISION:

A



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 SD34XC549
 12885 WIEGHORST WAY
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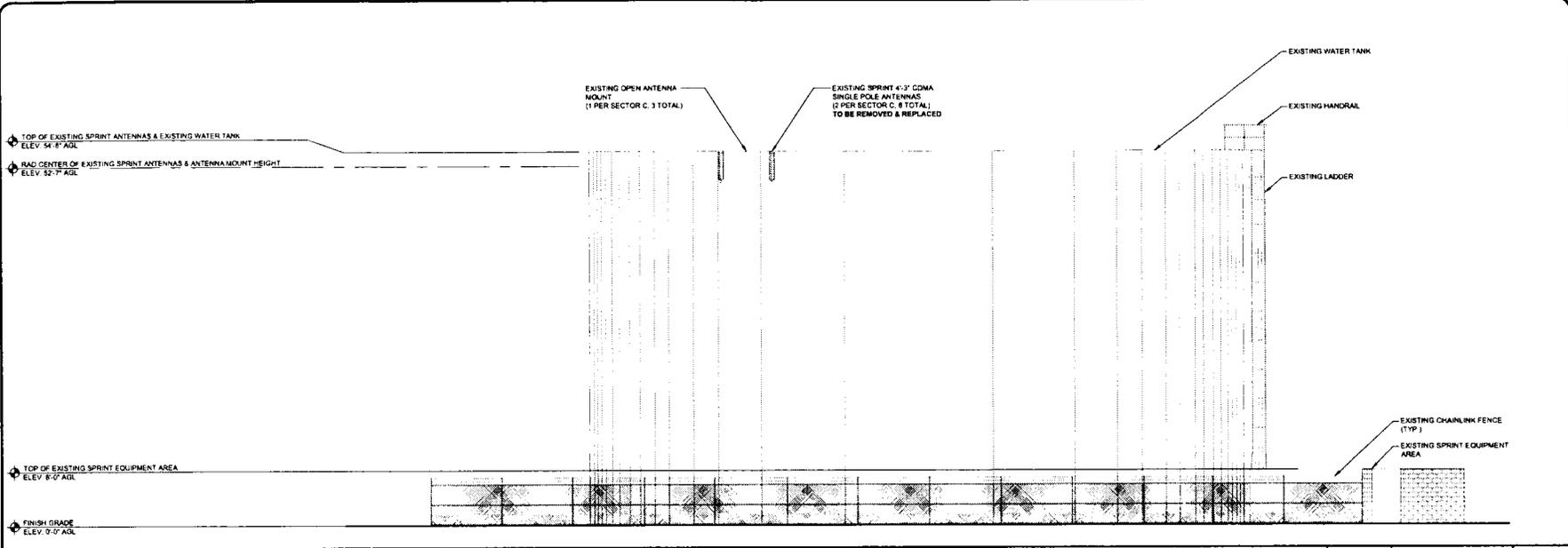
REVISIONS

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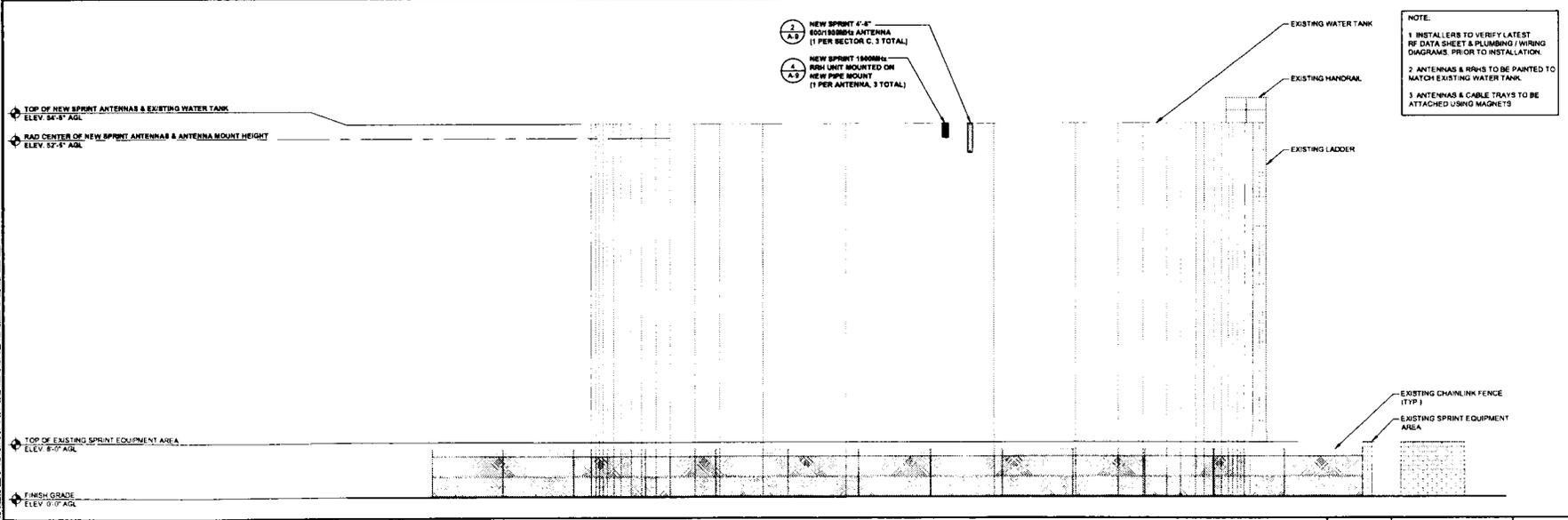
SHEET TITLE:
NORTH ELEVATIONS

SHEET NUMBER: **A-5** REVISION: **A**



EXISTING NORTH ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
 (OR) 1/16" = 1'-0" (11x17)



FINAL NORTH ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
 (OR) 1/16" = 1'-0" (11x17)



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SHEET TITLE:

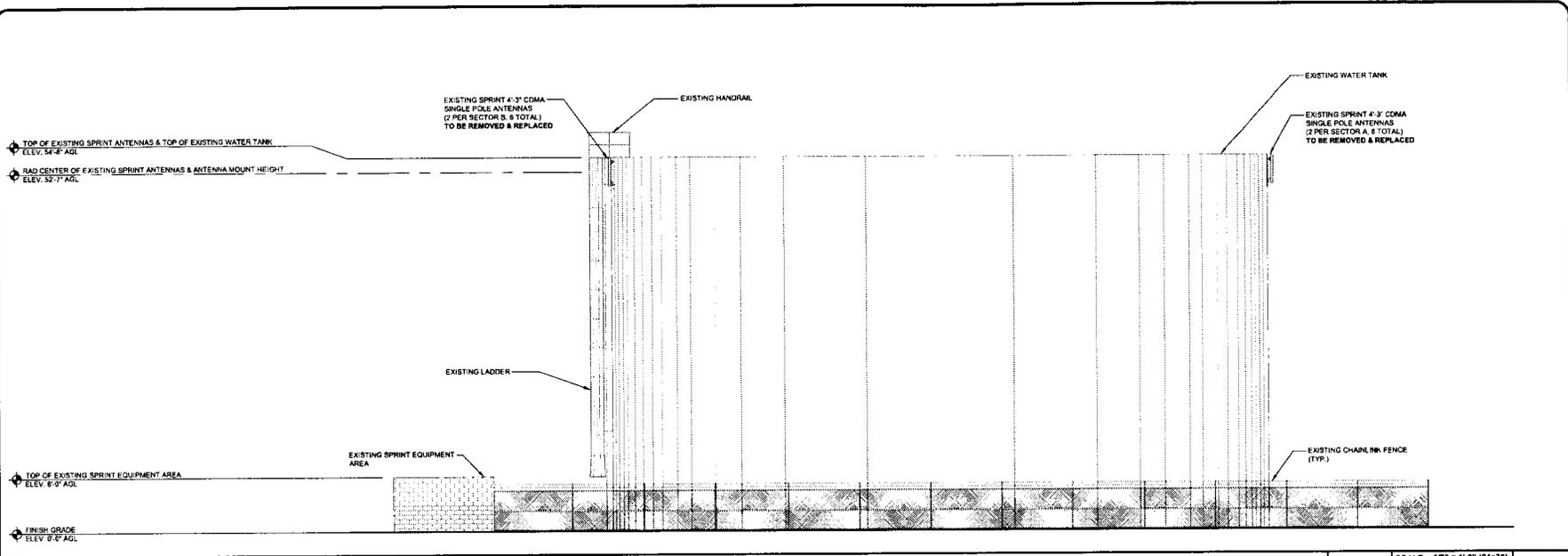
SOUTH ELEVATIONS

SHEET NUMBER:

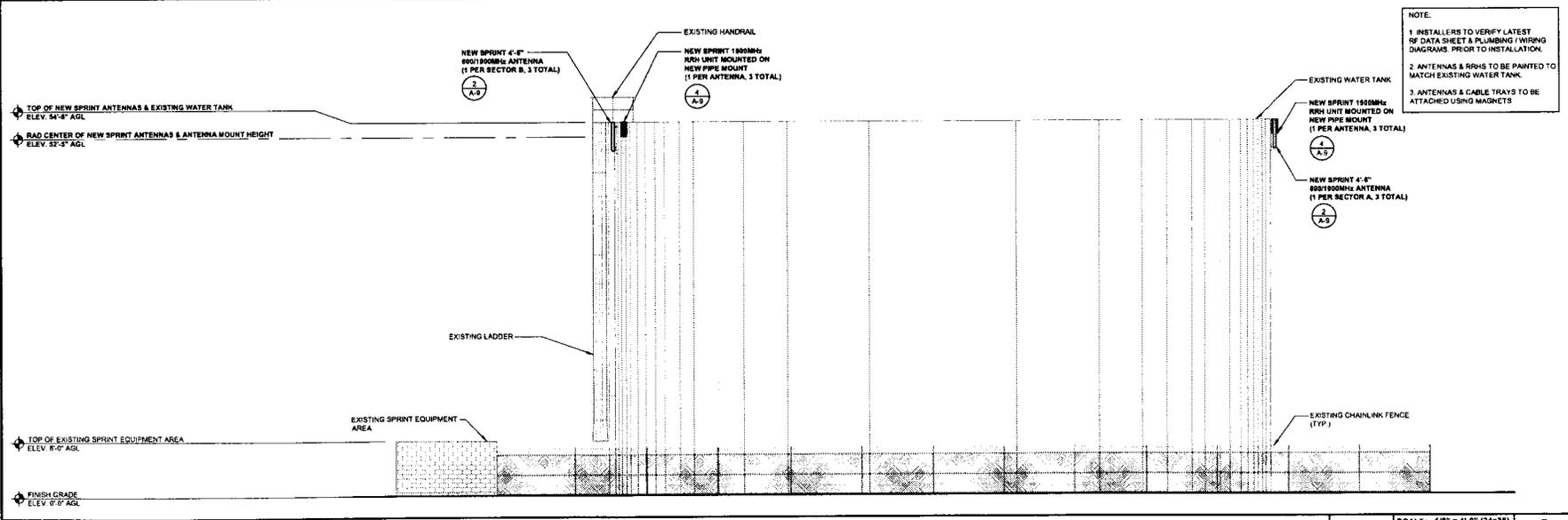
A-6

REVISION:

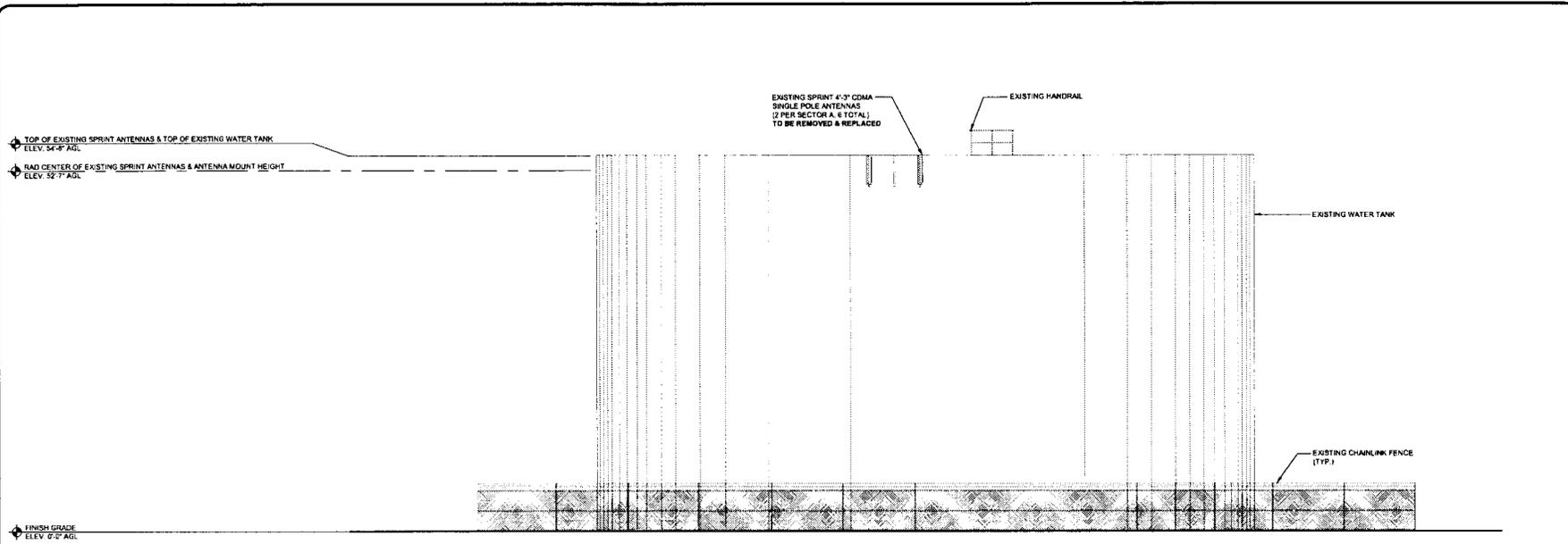
A



EXISTING SOUTH ELEVATION

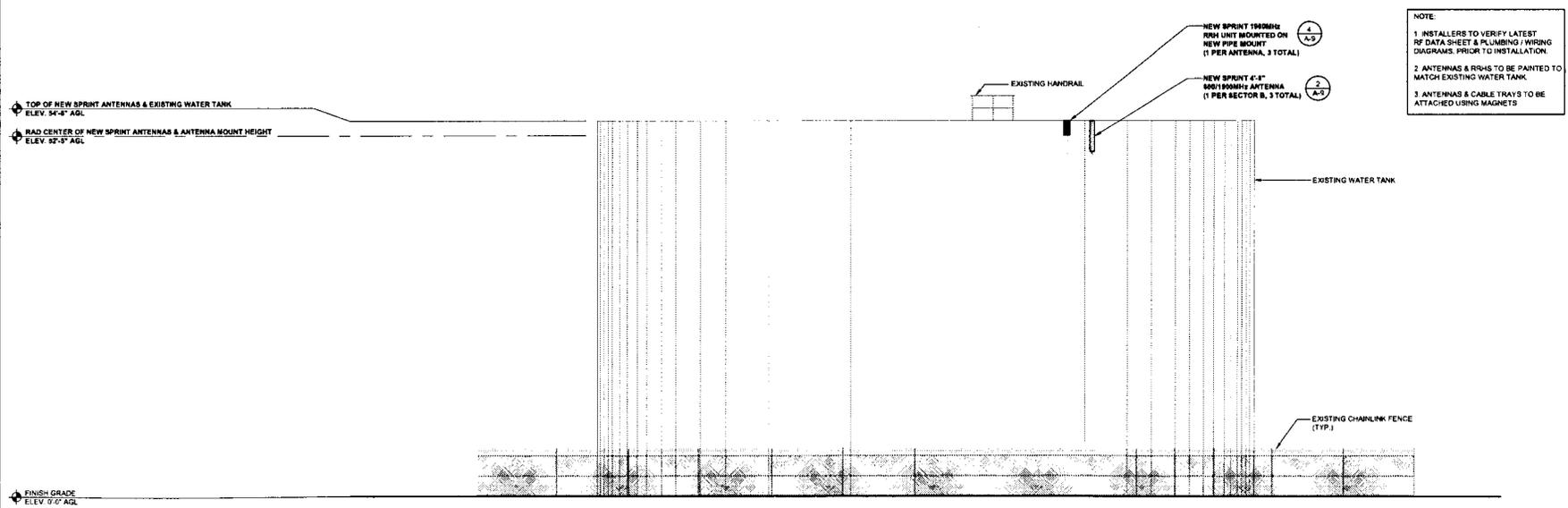


FINAL SOUTH ELEVATION



EXISTING EAST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17) **1**



FINAL EAST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17) **2**



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SAN DIEGO, CA 92121

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BLUE TANK (7 0)

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SHEET TITLE:

EAST ELEVATIONS

SHEET NUMBER:

A-7

REVISION:

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SHEET TITLE:

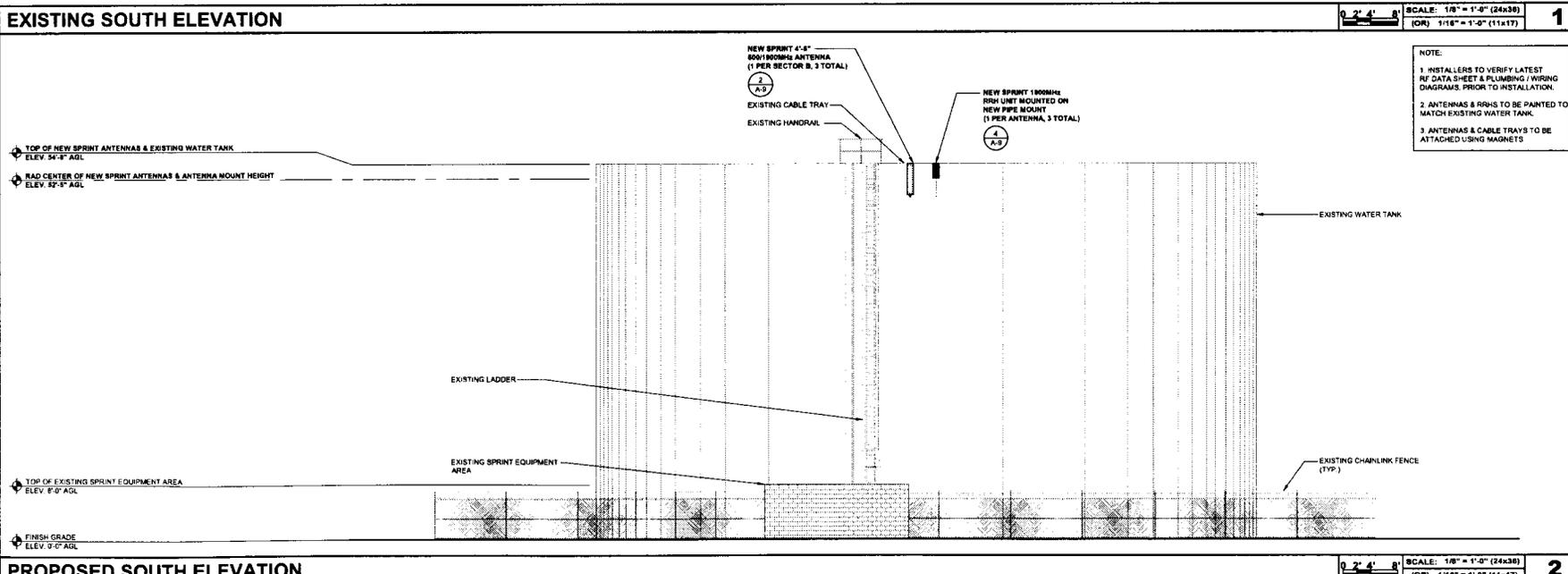
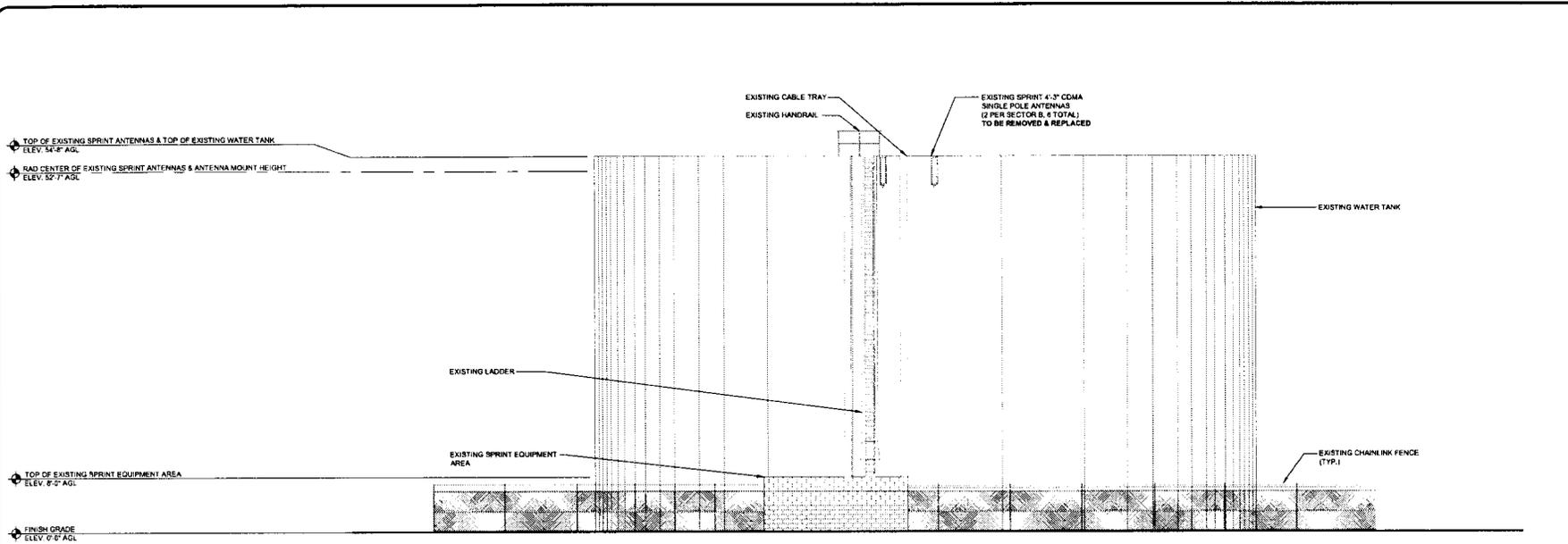
SOUTH ELEVATIONS

SHEET NUMBER:

A-6

REVISION:

A



FIRST AMENDMENT TO LEASE

This First Amendment to Lease (the "First Amendment") is made this day of ____, 2013, ("Effective Date") by and between Otay Water District ("OTAY") and Sprint PCS Assets, L.L.C., a Delaware limited liability company, f/k/a Cox PCS Assets, L.L.C., a Delaware limited liability company ("TENANT"), with reference to the facts set forth in the Recitals below:

RECITALS

- A. OTAY is the owner of that certain real property located on 13635 Bear Mountain Road, Jamul, California a Reservoir Site (the "Property").
- B. OTAY and TENANT are parties to that certain Lease dated July 12, 2000 (the "Lease" or "Agreement") pursuant to which TENANT is leasing from OTAY land at the Property, together with the right of access to and from the nearest public right-of-way and the right to install utilities (collectively, the "Premises").
- C. Tenant has requested a modification to the type and mounting of the Improvements currently on the Premises (the "New Improvements").
- D. OTAY and TENANT have agreed to amend the Agreement to memorialize the addition of the New Improvements to the Premises.

AGREEMENT

NOW, THEREFORE, in consideration of the facts contained in the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **New Improvements.** OTAY consents to TENANT construction and installation of new communications facilities, as more particularly described and depicted on Exhibit "B-1" which is attached hereto and made a part hereof. The parties acknowledge and agree that the attached Exhibit "B-1" is intended to supplement the Exhibit "B" attached to the Agreement.
2. **Governmental Approvals.** Any required permits for the use or operation of the New Improvements shall be obtained by TENANT at TENANT's sole expense. Furthermore, it is understood and agreed that TENANT's ability to install the New Improvements is contingent upon its obtaining all of the certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit TENANT to install and operate the New Improvements within the Premises. OTAY agrees, at no expense to OTAY, to reasonably cooperate with TENANT in making application for and obtaining all governmental licenses, permits and approvals that may be required for TENANT'S intended use of the Premises.
3. **Amended Provisions.** The following provisions shall be amended as follows:
 - 3a. Section 5; Rent shall be replaced with the following:

5.1 Tenant agrees to pay all costs and expenses incurred by Otay in connection with the Facilities and this Agreement, including negotiation and processing hereof, plan checking and inspection of Tenant facilities, costs of inspection, repairs or replacement of any Otay facilities affected or damaged, and all other costs or expenses of Otay attributable to the matters herein contemplated, plus a reasonable amount for Otay's overhead costs in connection therewith.

a. **Deposit.** Tenant has made a deposit, concurrent with its application, and has agreed to make any additional deposits required in connection with Otay's review of the application, negotiation of this Agreement, including legal review, site visits, review of drawings and other costs relating such matters incurred by Otay up to the time this Agreement is executed. Tenant forfeits any claim to such deposits except to the extent Otay determines after this Agreement is executed that amounts in excess of the District's costs and expenses have been paid. Any such excess amounts may, at the sole discretion of the District, be credited toward administrative fees or any other costs then due by Tenant, if any. If no amounts are due, excess deposits will be reimbursed to Tenant.

b. **Administrative Fees.** Administrative fees may be charged at Otay's discretion during the Term to recover costs and expenses incurred by Otay, including but not limited to attorneys and consultant's fees, review, processing of Tenant's conditional use permits, inspection of the Facilities during construction and other related costs if any, in connection with any Tenant activity that requires Otay staff to spend time in supervision, inspection, investigation or other review; such costs include but are not limited to any amendments to this Agreement, any default or any failure of Tenant to secure or renew any permit, approval, license or easement and any investigation Otay deems reasonably required in connection with the Premises or the Facilities, including without limitation any investigation of a potential contamination of any portion of the Property due to any Tenant activity or improvement.

c. **Security Deposit.** Concurrently upon execution of this Agreement, Tenant shall pay to Otay a sum equal to two months' rent as a deposit ("Security Deposit") to secure the Tenant's performance of the covenants contained herein. Tenant shall maintain the Security Deposit balance equal to the amount established herein over the life of the agreement. If Otay applies any portion of the Security Deposit, Tenant shall within 30 days after demand by Otay, deposit an amount sufficient to restore the Security Deposit to its original amount. No part of the Security Deposit is to be considered as an advance payment of rent, including last months' rent, nor is it to be used or refunded prior to the leased premises being permanently and totally vacated by the Tenant. After the Tenant has vacated the premises, Otay shall furnish Tenant with an itemized written statement of the basis for, and the amount of, any of the security deposit retained by Otay. Otay may withhold that portion of Tenant's security deposit necessary (a) to remedy any default by Tenant in the payment of rent or any other provision

of this Agreement, (b) to repair damages to the premises or any expense, loss, or damage that Otay may suffer because of Tenant's default, (c) to restore the premises to meet Otay's standards, (d) any amount that Otay may incur or become obligated to spend in exercising Otay's rights under this Agreement or available at law. The unused portion of this deposit shall be returned to the Tenant without interest no later than 60 days after termination of this Agreement.

Tenant waives the provisions of California Civil Code §1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Agreement, that provide that Otay may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of accrued Rent, to repair damage caused by Tenant, or to clean the Premises. Otay and Tenant agree that Otay may, in addition, claim those sums reasonably necessary to compensate Otay for any other foreseeable or unforeseeable loss or damage caused by the act or omission of Tenant or Tenant's officers, agents, employees, Independent contractors, or invitees, including future rent payments.

d. None of the deposits or other payment of costs or administrative fees constitutes or shall be considered Rent (defined below).

5.2 Beginning on the Commencement Date, Tenant shall pay Otay as rent the sum of \$2,000.00 per month ("Rent") payable on the first day of each month in advance. If the Commencement Date is prior to the fifteenth day of the month of commencement, the full month's Rent will be due on the Commencement Date. If the Commencement Date is on or after the fifteenth day of the month of commencement, payment of Rent will begin the first day of the following month.

Tenant may make Rent payments up to 5 days past due date without penalty, unless continual late payments for two consecutive months occur. A fee shall be imposed after the 5th day and shall be 20% of the amount currently due. Failure to pay Rent within ten (10) calendar days of the first of the month shall be an Event of Default as provided by Section 13.2. Failure to pay Rent on the due date for more than two (2) consecutive months or four (4) times over any twelve (12) month period shall be a non-curable Event of Default without the necessity of any notice or cure period. At District's sole discretion, immediately following such a non-curable Event of Default, District may terminate the Agreement and seek any remedy available by this Agreement or at law. If Tenant tenders a check, which is dishonored by a banking institution, then the Tenant shall tender cash or cashier's check only for all future payments, which shall continue until such time as written consent is obtained from Otay. In addition, Tenant shall be liable in the sum of \$25 for each dishonored check that is returned to Otay.

a. Rent Increases. The Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater. CPI shall be the average percentage increases in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100)

(the "CPI") for "All Items – All Urban Consumers" for the San Diego Metropolitan Statistical Area.

3b. Section 7; Improvements, and Section 8; Installation of Equipment shall be replaced with the following:

7. Installation and Maintenance of Improvements. Tenant is authorized to install, maintain and operate on the Premises only the Facilities described and depicted on Exhibit B; provided that all permits and zoning approvals shall have first been obtained by Tenant and shall at all times while the Facilities operate remain in full force and effect.

a. Installation of the Improvements. Tenant's design and installation of all portions of the Facilities shall be done, at no cost to Otay, according to plans approved by Otay, provided that such approval shall not be unreasonably withheld. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay of the method of attachment at Otay's sole discretion. If such Facilities are to be attached or mounted to a water tank, Tenant shall use an installation method such as a magnetic mount or other, non-destructive alternative. The Tenant shall be responsible for painting its antennas and/or equipment to match Otay's facility. Otay will provide Tenant with specifications regarding paint type, color and application method to accomplish this requirement. Painting/coating submittals shall be provided to Otay by the Tenant prior to receiving permission to begin painting. Otay may specify a camouflage design if not inconsistent with requirements of the city or county within which the Facilities are located. These camouflage designs may include but are not limited to faux palm trees, pine trees, cypress trees, broadleaf trees, and flag poles, unipoles, and other camouflaged antenna and antenna supports.

b. Record Drawings. Within thirty (30) days after completion of the Facilities, Tenant shall provide Otay with "record" (also called "as-built") drawings of the Facilities showing and identifying all the equipment and improvements installed on the Premises. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, including without limitation all personal property and antennas located on the Premises and any such property of Tenant located in the Easement. No property of Tenant other than such identified property shall be located on the Premises or the Property at any time. Upon acceptance by Otay of Tenant's record drawings, in form and content satisfactory to Otay, such drawings shall replace and supersede any similar drawings contained in any exhibit attached hereto.

c. Alterations. Tenant shall not alter or change its Improvements in a material manner without the prior approval of Otay, such approval not to be unreasonably withheld. "Material" refers to any physical change that could affect the building structure, antenna support, interconnecting facilities or its appearance

or any change that requires access to the Premises for installation of new equipment, removal of old equipment, trenching or digging or that could disrupt Otay's workplace or communications in any way or any change that requires a renewed or amended easement, permit or approval. All of Tenant's construction and installation work shall be performed at Tenant's sole cost and expense in a good and workmanlike manner and fully compliant with all government permit and code requirements. Tenant shall have the right to remove all Improvements it installs at its sole expense on or before the expiration or termination of this Agreement, but must at such time restore the ground and surface underlying the removed Improvements to its pre-installation condition, wear and tear excepted, and to the reasonable satisfaction of Otay.

d. Alterations to Improvements / Additional Space. If, at any time during the Term, Tenant requests permission from Otay to add improvements requiring construction to its then existing Improvements, the then current Administrative Fees shall be paid to Otay before any such changes are negotiated. In addition, if the requested Tenant improvements include additional area, a new agreement or, at Otay's discretion, an amendment for the additional lease space must be executed prior to start of construction and Tenant shall comply with Otay's requirements then in effect, including payment of additional rent, if any, for the additional area.

e. Permits and Compliance with Applicable Laws. During the Term, and prior to commencing any construction or installation of any improvements or equipment, as applicable, Tenant shall obtain all necessary approvals, permits and access easements or licenses, all of which shall be maintained in full force and effect at all times in accordance with all applicable laws, rules and regulations.

i. Prior to commencing construction, Tenant shall deliver to Otay copies of all executed licenses, approvals and permits required by local, state or federal agency in connection with the Improvements, which permits shall be attached hereto as Exhibit B.

ii. From time to time, as required by law or regulation in connection with the normal operation of the Improvements or as needed due to improvements or alterations to the same, Tenant shall provide Otay with updated permits, licenses and/or approvals, including without limitation written evidence, satisfactory to Otay, of all FCC approvals and other governmental permits and approvals, including but not limited to compliance with the FCC's electromagnetic radiation rules, set forth at 47 C.F.R. § 1.1307 et seq. and FCC Office of Engineering and Technology Bulletin 65, each as hereafter amended.

iii. Otay agrees, at no expense to Otay, to reasonably cooperate with Tenant in making application for and obtaining all governmental licenses,

permits and approvals that may be required for Tenant's intended use of the Premises.

f. Utilities. Tenant shall be authorized to install utilities for the Premises and the Improvements at Tenant's expense and to improve the present utilities on or near the Premises (including, but not limited to the installation of an emergency back-up power) subject to Otay's approval of the location, route, design and capacity, which approval shall not be unreasonably withheld. Tenant shall fully and promptly pay for all utilities furnished to the Premises for the use, operation and maintenance of Tenant's Improvements. If inadequate electrical power is available to provide for the Improvements, or additional electrical power is required to be installed on the Premises by Otay in its sole discretion, such installation shall be at Tenant's sole expense. The location, route, design and capacity of the additional power facility shall be approved by Otay, which shall not be unreasonably withheld.

g. Repair of Otay's Improvements/Systems. Any damage done to the Property or to any Otay improvement, facility or system in connection with the construction, installation, maintenance, repair, improvement, replacement or operation of the Improvements shall be repaired or replaced immediately at Tenant's expense and to Otay's reasonable satisfaction by Otay staff or contractors approved by Otay. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay. Tenant shall pay all costs and expenses in relation to maintaining the integrity of Otay's facilities, improvements and systems affected in any way by Tenant's Improvements or its use of the Property or the Premises.

h. Maintenance and Repair. At all time during the Term, Tenant shall maintain the Premises and the Improvements in a manner acceptable to Otay. Tenant's use of its Improvements shall not at any time or in any way adversely impact, impede or interfere with Otay's access to, use or operation of, its improvements, equipment or systems.

i. Liens. Tenant shall not encumber or allow the Premises or the Property to be encumbered in any manner other than as expressly authorized herein.

j. Security. Tenant recognizes and agrees that the Premises and the Reservoir Site are a sensitive area and that Otay's operations and services are highly sensitive and regulated. Tenant shall provide for the proper supervision of all Tenant Parties assigned or allowed by Tenant to enter and do work at the Premises. Tenant also agrees, holding Otay harmless for any cost or expense, to comply with any and all security measures instituted by Otay from time to time.

8. Maintenance, Repair or Replacement of Otay's Improvements. At any time while this Agreement remains in effect, Otay may, at its option and upon One Hundred Eighty (180) days prior written notice to Tenant, remove or cause

Tenant to remove all or any portion of its Facilities at Tenant's expense, in order for Otay to paint, repair, or make replacements to any or all its improvements on the Premises (the "Maintenance or Replacement Work"), as deemed necessary by Otay in its sole discretion. Tenant agrees to fully cooperate with Otay's efforts in connection with any Maintenance or Replacement Work, including without limitation timely, and at Tenant's cost, removing and re-installing any portion of the Facilities, as requested by Otay.

a. Temporary Facilities. During the Maintenance or Replacement Work, Tenant may, holding Otay harmless from any cost or expense, install temporary antennas on the Premises subject to Otay's approval of the location and type of replacement facilities, such approval shall not be unreasonably withheld or delayed. Once the Maintenance or Replacement Work is completed by Otay, Tenant agrees to promptly dismantle any temporary facilities and to relocate the facilities to their original location or to any other location approved by Otay. All work related to the removal of any portion of the Facilities, installation of temporary facilities, dismantling, relocation to their original location and any related work, shall be done at Tenant's sole cost and expense and in good and workmanlike manner.

b. Repair of damage. Tenant shall repair any damage caused by Tenant in connection with the installation, maintenance, operation or removal of any temporary facilities or the Facilities, and Tenant shall restore any distributed portions of the Property to their condition immediately prior to the installation of the temporary facilities.

c. Otay's option to remove temporary facilities. If any temporary facilities are not removed within sixty (60) days from the date the Maintenance or Replacement Work is completed, Otay shall have the right, but not the duty, to remove the temporary facilities at Tenant's cost and expense.

d. Painting of the Facilities. If the Maintenance or Replacement Work includes the painting, or any work affecting the surface of Otay's improvements, the Tenant shall be responsible for repainting or performing other surface treatment of its antennas and equipment to match Otay's. Otay will provide specifications to the Tenant regarding the treatment, paint type, color and application method to accomplish this requirement. The Tenant shall be required to obtain approval of specifications from Otay prior to commencing work on this requirement. Subject to Otay's prior written consent, Tenant may substitute an alternate treatment, paint type and application method if it reasonably determines that Otay's selection will adversely affect or otherwise degrade Tenant's wireless signal from the Reservoir Site.

3c. Section 9; Co-Location shall be replaced with the following:

9.1. Co-Location by Otay. Tenant agrees that Otay may enter into leases or other types of agreements with other communication carriers, wireless communications carriers and other utilities for use of any portion of the "Reservoir Site" as long as said leases do not result in unreasonable interference with Tenant's use of or access to the Premises. Tenant shall reasonably cooperate with Otay's efforts in this regard including, at Otay's request, the relocation of, or changes to, the Facilities; provided that any alterations or relocation needed to accommodate the new carrier or utility shall be performed at the expense of Otay or the new carrier or utility.

9.2. Co-Location by Tenant - Subleasing/Encumbrance. Tenant shall not sub-lease or sub-license or otherwise encumber the Premises or any portion of the Facilities without Otay's prior written consent, which may be granted or denied at Otay's sole discretion. Any sub-lease or other encumbrance shall require an amendment to this Agreement and shall specify the terms and conditions, including making provision for rent and increases thereto for the sub-lease or other encumbrance.

3d. Section 13; Termination shall be replaced with the following:

13.1 Termination.

(a) This Agreement may be terminated by Tenant without further liability if:

(i) Tenant delivers to Otay 30-day written notice at any time prior to commencing any work at the Premises in connection with the installation of any Facilities, for any reason or no reason;

(ii) Tenant gives Otay sixty (60) days' notice of Tenant's determination that a governmental or non-governmental license, permit, consent, approval, easement or waiver necessary to enable Tenant to construct, install or operate the Facilities cannot be obtained or renewed at reasonable expense or in reasonable time period for wireless sites at water reservoirs in metropolitan areas within San Diego County. If this notice is given, Tenant must immediately cease any and all transmissions through and from the Premises and shall promptly remove, within a period of time not to exceed sixty (60) days, any and all Tenant's personal property and improvements from the Property. This Agreement and any related easements shall automatically expire upon the earlier of removal of the Tenant's improvements or the 60th day from the notice; excepting only Tenant's indemnities and liabilities hereunder, including the obligation to pay Rent for any holdover period. Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated.

(iii) Tenant determines at any time after the Commencement Date that the Premises are not appropriate or suitable for its operations for economic, environmental or technological reasons, including without limitation, any ruling or directive of the FCC or other governmental or regulatory agency, or problems with signal strength or interference not encompassed by subsection (iv) below; provided that the right to terminate under this subsection (iii) is exercisable only upon payment by Tenant, as a termination fee, of the lesser of twelve monthly installments of rent or the balance of the rent due for the then current Initial Term, Extension Term or Additional Term, as applicable; and Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated;

(iv) Otay commits a default under this Agreement and fails to cure pursuant to Section 13.2, below;

(v) The Property or the Premises are totally or partially destroyed by fire or other casualty (not caused by Tenant) so as to hinder Tenant's normal operations and Otay does not provide to Tenant within thirty (30) days after the casualty occurs a suitable temporary relocation site for Tenant's facility pending repair and restoration of the Premises; or

(vi) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

(b) This Agreement may be terminated by Otay without further liability if:

(i) Tenant commits a default under this Agreement and fails to cure such default pursuant to Section 13.2, below;

(ii) Otay determines that continuing the Agreement or continuing to allow the Tenant to construct, install, maintain or operate the Facilities in any way violates a law, rule or regulation; or

(iii) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

13.2 Default.

a. Event of Default. The parties covenant and agree that a default or breach of this Agreement (an "Event of Default") shall occur and be deemed to exist if, after notice and opportunity to cure as provided below:

(i) Tenant shall default in the payment of Rent, or any other amounts due Otay hereunder, and said default shall continue for ten (10) business days after the same becomes due; or

(ii) Either party shall default in the performance or observance of any other covenant or condition of this Agreement to be performed or observed if such failure persists for a period of thirty (30) days after the non-defaulting party provides written notice of the default to the defaulting party.

b. Rights upon Default. Upon the occurrence of an Event of Default, in addition to any other rights or remedies available to the non-defaulting party under any law, the non-defaulting party shall have the right to terminate the Agreement.

c. Cure Rights. An Event of Default shall not exist unless written notice has been given in accordance with this Agreement, and the defaulting party has had the opportunity to cure as provided herein. The defaulting party shall cure the alleged default within the manner provided herein; provided however, that if the nature of an alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the defaulting party shall not be in breach of this Agreement if it diligently commences a cure within such period, and thereafter diligently proceeds with the actions necessary to complete such cure.

3e. Section 17; Indemnity, shall be replaced with the following:

Tenant specifically agrees that it shall hold harmless, defend (with counsel, and if needed experts, reasonably acceptable to Otay), indemnify and otherwise protect Otay and each Otay Party, from and against all claims, suits or actions of any kind and description relating to (a) Tenant's obligations under this Agreement and any amendment hereto or (b) Tenant or Tenant Parties use of, and access to, the Premises, the Facilities or the Property. These obligations extend to and include without limitation any and all costs and expenses (including attorney's fees and court costs) incurred by Otay or the Otay Parties in connection with (i) damage to property (including the Premises, the Property or any personal property of Otay or any third party), (ii) any action or proceeding (including an enforcement action or criminal proceeding) related in any way to any permit (governmental or otherwise), approval or easement obtained by or required of Tenant in connection with this Agreement or the Facilities; and (iii) personal injury or death, except to the extent that such claims, suits or actions directly arise from the gross negligence or willful misconduct of Otay or an Otay Party. This indemnification clause in no way limits any other specific indemnities given by Tenant under other provisions of this Agreement.

Nothing contained herein shall prohibit Otay, in its sole discretion, from participating in the defense of any demand, claim, action, proceeding, or litigation. In no event shall Otay's participation in the defense of any demand

claim, action, proceeding, or litigation affect the obligations imposed upon Tenant herein.

This and all other Tenant indemnities shall survive the termination of this Agreement and shall remain in effect for as long as the underlying claim or action remains viable.

3f. Section 19; Assignment, shall be replaced with the following:

Tenant shall not assign this Agreement or any portion of its rights or obligations hereunder without Otay's prior written consent, except to an affiliated parent entity, subsidiary, purchaser of at least 50% of the aggregate of the assets of Tenant ("assets" means and includes without limitation any and all real, personal or financial property or thing owned or controlled by Tenant or over which Tenant has an interest) or holder of Tenant's FCC license.

a. If during the Term hereof, Tenant requests the written consent of Otay to any assignment, and upon demonstration satisfactory to Otay of the proposed assignee's legal, financial, and technical qualifications to assume all of the Tenant's duties and obligations herein, Otay's consent thereto shall not unreasonably be withheld. Consent to one assignment shall not be deemed consent to any subsequent assignment.

b. Any attempted assignment not permitted under the first paragraph of this Section 19, without Otay's prior consent as set forth in Section 19(a), shall be void and, at Otay's option, shall constitute a termination of this Agreement for which a termination fee as described in Section 13.1.a(iii) shall be immediately due.

c. Any assignment of this Agreement shall require an executed "Assignment of Lease" whether or not the Consent of Otay is required pursuant to this section 19 or any other provision of this Agreement. A sample form of the "Assignment of Lease" is attached to this Agreement as Exhibit F which may be amended or modified in Otay's sole discretion.

4. **Continued Effect.** Except as specifically modified by this First Amendment, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between any term or provision of the Agreement and this First Amendment, the terms and provisions of this First Amendment shall control. In addition, except as otherwise stated in this First Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Agreement. All captions are for reference purposes only and shall not be used in the construction or interpretation of this First Amendment.

5. **Administrative Fees.** TENANT shall pay OTAY the amount of \$4,500 within (30) days of the date of execution of this Amendment by OTAY and TENANT.

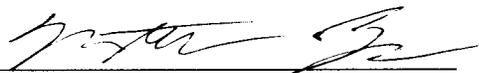
6. **Current Rent.** The current monthly Rent amount at the Effective Date of this First Amendment is \$2,783.39.

IN WITNESS WHEREOF, OTAY and TENANT have caused this First Amendment to be executed by each party's duly authorized representative effective as of the date first above written.

OTAY WATER DISTRICT:

By: _____
Name: Mark Watton
Title: General Manager
Date: _____

**Sprint PCS Assets, L.L.C.,
a Delaware limited liability company, :**

By: 
Name: Matthew Bell
Title: Manager Real Estate
Date: 5/29/2013

Approved as to Form:

By: _____
OWD General Counsel

Approved as to Form:

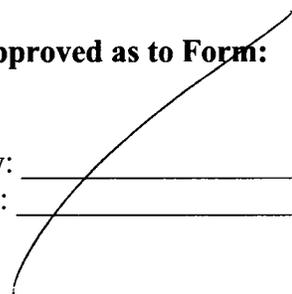
By: 
Its: _____

Exhibit B-1

NEW IMPROVEMENTS



NETWORK VISION MMBTS LAUNCH JAMUL WATER TANK SD34XC522 WATER TANK

13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY
LATITUDE: 32° 42' 36.5106" N (32.710142)
LONGITUDE: 116° 53' 32.8194" W (-116.89245)
SAN DIEGO METRO MARKET

CALIFORNIA STATE CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- CALIFORNIA ADMINISTRATIVE CODE (INCL TITLE 24 & 25)
- 2010 CALIFORNIA BUILDING CODE
- CITY/COUNTY ORDINANCES
- BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
- 2010 MECHANICAL CALIFORNIA CODE
- ANS/ISA-222-1 LIFE SAFETY CODE NFPA-101
- 2010 CALIFORNIA PLUMBING CODE
- 2010 CALIFORNIA ELECTRICAL CODE
- 2010 LOCAL BUILDING CODE

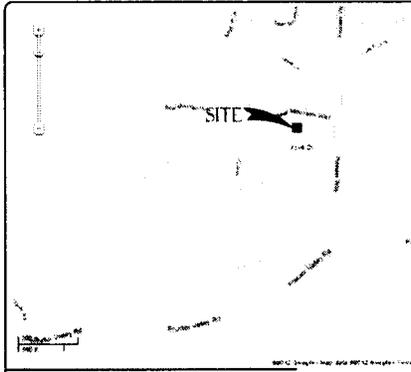
ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.

CODE BLOCK

APPROVAL	SIGNATURE	DATE
PROJECT MANAGER		
CONSTRUCTION MANAGER		
RF ENGINEER		
SITE ACQUISITION		
PLANNING CONSULTANT		
PROPERTY OWNER		
SPRINT REPRESENTATIVE		

SIGNATURE BLOCK



VICINITY MAP

FROM SAN DIEGO INTERNATIONAL AIRPORT, CA
 HEAD WEST ON AIRPORT TERMINAL RD 420 FT
 SLIGHT LEFT TO STAY ON AIRPORT TERMINAL RD 0.3 MI
 KEEP RIGHT AT THE FORK 443 FT
 TURN LEFT ONTO N HARBOR DR 1.4 MI
 TURN LEFT ONTO W GRAPE ST 0.4 MI
 TAKE THE INTERSTATE 5 S SLIP ROAD 0.2 MI
 MERGE ONTO I-5 S 1.0 MI
 TAKE EXIT 15B TO MERGE ONTO CA-94 E 13.9 MI
 TURN RIGHT ONTO CA-94 E/CAMPO RD 0.8 MI
 CONTINUE STRAIGHT ONTO PROCTOR VALLEY RD 0.4 MI
 TURN RIGHT ONTO PIONEER WAY 0.3 MI
 TURN LEFT ONTO BEAR MOUNTAIN WAY 0.3 MI
 DESTINATION WILL BE ON THE LEFT

DRIVING DIRECTIONS

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY

- (9) EXISTING CDMA ANTENNAS (3) TO BE REMOVED AND REPLACED WITH (3) PROPOSED ANTENNAS
- INSTALL (3) NEW RRH UNITS
- EXISTING (1) MODEL 3/D CABINET TO BE REMOVED AND REPLACED WITH (1) NEW 9928 MMBTS CABINET
- EXISTING (1) BBU CABINET TO BE REMOVED AND REPLACED WITH (1) NEW BBU CABINET
- INSTALL (1) NEW JUNCTION BOX
- INSTALL (1) NEW FIBER AND HW EQUIPMENT
- ANTENNAS AND MOUNTING HARDWARE PAINTED TO MATCH EXISTIN WATER TANK

PROJECT DESCRIPTION

APPLICANT:
 SAC WIRELESS ON BEHALF OF ALCATEL LUCENT/SPRINT/NEXTEL
 CONTACT: ALEX TSATUROV
 PH: (858) 472-4048

PROPERTY INFORMATION:
 PROPERTY OWNER: OTAY WATER DISTRICT
 ADDRESS: 2554 SWEETWATER SPRINGS BLVD
 SPRING VALLEY, CA 91978
 CONTACT: TBD
 PH: (619) 670-2222

ZONING CLASSIFICATION: A70
 BUILDING CODE: 2010 CBC
 CONSTRUCTION TYPE: 'IB'
 OCCUPANCY: S-2
 JURISDICTION: COUNTY OF SAN DIEGO
 CURRENT USE: WATER TANK / UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY
 PROPOSED USE: UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S):

597-220-44-00

LEASE AREA:
 400 SQ FT.

PROJECT SUMMARY

SHEET DESCRIPTION

SHEET	DESCRIPTION
T-1	TITLE SHEET
T-2	CONDITION OF APPROVAL
G-1	GENERAL NOTES & SYMBOLS
G-2	SIGNAGE AND NOTES
A-1	SITE PLAN
A-2	ENLARGED SITE PLAN
A-3	EXISTING ENLARGED EQUIPMENT & ANTENNA PLAN
A-4	PROPOSED ENLARGED EQUIPMENT & ANTENNA PLAN
A-5	EXISTING & PROPOSED NORTH ELEVATION
A-6	EXISTING & PROPOSED EAST ELEVATION
A-7	EXISTING & PROPOSED SOUTH ELEVATION
A-8	EXISTING & PROPOSED WEST ELEVATION
A-9	EQUIPMENT & CONSTRUCTION DETAILS
A-10	CONSTRUCTION DETAILS
A-11	H-FRAME CALCULATION DETAIL
A-12	CABINET STRUCTURAL CALCULATIONS DETAIL
A-13	CABLE COLOR CODING REQUIREMENTS
A-14	CABLE COLOR CODING REQUIREMENTS
A-15	CABLE COLOR CODING REQUIREMENTS
A-16	CABLE COLOR CODING REQUIREMENTS
A-17	PLUMBING DIAGRAMS
A-18	PLUMBING DIAGRAMS
A-19	PLUMBING DIAGRAMS
A-20	PLUMBING DIAGRAMS
A-21	PLUMBING DIAGRAMS
E-1	FIBER PLAN
E-1	SCHEMATIC GROUNDING PLAN
E-2	GROUNDING DETAILS

SHEET INDEX

ARCHITECT:
 THOMAS HOLLAND
 PACIFIC TELECOM SERVICES, LLC
 3199C AIRPORT LOOP DRIVE
 COSTA MESA, CA 92626
 CONTACT: ROBERT LEIGHTON
 PH: (708) 464-4402
 EMAIL: RLEIGHTON@PTSSWA.COM

STRUCTURAL ENGINEER:
 FLORIN ARSENE, PE
 25442 BURNTWOOD
 LAGUNA HILLS, CA 92677
 PH: (848) 374-2405

SITE ACO PROJECT MANAGER:
 ALCATEL-LUCENT
 CONTACT: ALEX TSATUROV
 PH: (858) 320-3128

CONSTRUCTION MANAGER:
 ALCATEL LUCENT SAN DIEGO
 CONTACT: DILLON TERRY
 PH: (619) 398-6199

PLANNING & ZONING:
 CONTACT: MARK BERLIN
 PH: (858) 922-0237

LEASING:
 SAC WIRELESS LLC
 CONTACT: MARY HAMILTON
 PH: (858) 720-0166

POWER COMPANY:
 SDG&E
 PH: (800)-336-7343

TELCO COMPANY:
 AT&T
 PH: (888)-944-0447

PROJECT TEAM

At all new services & grounding trenches,
 provide "WARNING" tape at 12" below grade

DIG ALERT
 "CALL BEFORE YOU DIG"
 1-800-227-2600
 UTILITY NOTIFICATION CENTER OF SOUTHERN CALIFORNIA



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

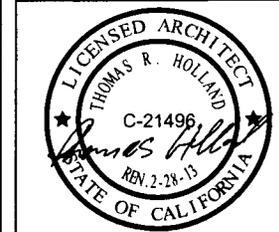
ISSUE NO.:

REVISED CONSTRUCTION

REVISIONS				
REV	DATE	DESCRIPTION	INITIAL	
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK	
1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

NOT FOR CONSTRUCTION UNLESS
 LABELED AS CONSTRUCTION SET

LICENSE:



SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

REVISION:

4

GENERAL NOTES:

- THE CONTRACTOR SHALL NOTIFY NETWORK CARRIER OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS, PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERRORS, OMISSIONS, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF NETWORK CARRIER. CONSTRUCTION PROJECT MANAGER SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY NETWORK CARRIER CONSTRUCTION PROJECT MANAGER.
- PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
- THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE NETWORK CARRIER PROJECT SCOPE AND THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
- 11X17 COPIES OF DRAWINGS ARE NOT TO BE SCALED DUE TO DISTORTIONS RESULTING FROM MULTIPLE REPROGRAPHIC COPIES. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER DIMENSIONS SHOWN ON PLANS.
- OWNER, CONTRACTOR, AND NETWORK CARRIER REPRESENTATIVE SHALL REVIEW AND CONFIRM PROJECT SCOPE, DESIGN INTENT AND UTILITY COORDINATION ITEMS ARE INCLUDED IN THE DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION FROM NETWORK CARRIER REPRESENTATIVE TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS OR TENANTS.
- THE CONTRACTOR SHALL PROVIDE NETWORK CARRIER PROPER INSURANCE CERTIFICATES NAMING NETWORK CARRIER AS ADDITIONAL INSURED, AND PROVIDE NETWORK CARRIER PROOF OF LICENSE(S) INCLUDING FE & PD INSURANCE.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL WORK PERFORMED ON THE PROJECT ALONG WITH ALL MATERIALS INSTALLED SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, FEDERAL CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL LIKEWISE ISSUE NOTICE TO ALL SUB-CONTRACTORS THAT THEY SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWS, ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPALITY, UTILITY COMPANY AND LOCAL/STATE/JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- A COPY OF THE GOVERNING AGENCY ISSUED AND APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY AND BY LAW, SHALL BE AVAILABLE AT THE JOB SITE FOR INSPECTION AT ALL TIMES. THE ORIGINAL PERMIT SET PLANS ARE NOT TO BE USED BY THE WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION AS GOVERNING AGENCY APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS, IN GOOD CONDITION, COMPLETE WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES UNDER THE DIRECT CARE OF THE SUPERINTENDENT. THE CONTRACTOR SHALL SUPPLY THE NETWORK CARRIER CONSTRUCTION PROJECT MANAGER WITH A COPY OF ALL REVISIONS, ADDENDA, AND/OR CHANGE ORDERS AT THE CONCLUSION OF THE WORK AS A PART OF THE AS-BUILT DRAWING RECORDS.
- THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE JOB SITE WHILE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
- THE CONTRACTOR HAS THE RESPONSIBILITY OF LOCATING ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THE PLANS, ALONG WITH PROTECTING THEM FROM DAMAGE. THE CONTRACTOR AND SUB-CONTRACTOR SHALL BEAR THE EXPENSES OF REPAIR AND/OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGE RESULTING FROM OPERATIONS IN CONNECTION WITH THE EXECUTION OF THE WORK.
- ALL EXISTING CONSTRUCTION EQUIPMENT AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
 - PROPERTY NOTED TO BE RETURNED TO THE OWNER
 - PROPERTY NOTED TO BE REMOVED BY THE OWNER
- THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES USED THROUGHOUT THE PROJECT. TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION
- WHEN ROOF TOP OR TOP FLOOR DECK TEMPORARY STAGING OF IS REQUIRED, MATERIALS SHALL BE EVENLY DISTRIBUTED OVER ROUGH FRAMED FLOORS OR ROOFS SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING AND/OR BRACING IS TO BE PROVIDED WHERE THE STRUCTURE DOESN'T HAVE THE DESIGN STRENGTH FOR ADDITIONAL LOADING.
- SEAL ALL PENETRATIONS WITH FINE-GRAINED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THE SUBJECT FACILITY AND/OR PROJECT SITE.
- BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GROUND DISTURBANCE, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.
- CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITH 7.5 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
- CONTRACTOR SHALL MAKE NECESSARY PROMISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBS, DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ADJACENT TO THE PROPERTY.
- CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION. DISPOSING OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, OUST, OR SMUDGES OF ANY NATURE.
- NEW CONSTRUCTION INSTALLED ADJACENT EXISTING BUILDINGS OR CONSTRUCTION SHALL ARCHITECTURALLY MATCH EXISTING IN TERMS OF COLOR, TEXTURE, FINISH MATERIALS, ETC., EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKING, BLOCKING, AND/OR OTHER ANCHORAGE DEVICES REQUIRED FOR THE INSTALLATION OF FIXTURES, MECHANICAL EQUIPMENT, PLUMBING, HARDWARE, AND FINISH ITEMS TO INSURE A PROPER AND CODE COMPLIANT INSTALLATION.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING INSTALLATIONS THAT ARE CONSTRUCTED LEVEL, EXACT, EVENLY ALIGNED, PLUMB AND TRUE BASED ON THE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL COMPARE EXISTING CONDITIONS WITH THE PROPOSED DESIGN PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE NETWORK CARRIER REPRESENTATIVE AND FURTHER TO THE A/E SUCH THAT THE NEW INSTALLATION WILL LIKEWISE BE LEVEL, EXACT, EVENLY ALIGNED, PLUMB AND TRUE. NETWORK CARRIER SHALL BE NOTIFIED OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES PRIOR TO ANY CONSTRUCTION.
- THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES.
- WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AND/OR REVISIONS AVAILABLE AS REQUIRED BY THE GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL MATERIALS AND SHALL NOT STORE OR STAGE MATERIALS ON PUBLIC PROPERTY WITHOUT A PERMIT TO DO SO FROM THE GOVERNING AGENCIES FOR THIS PURPOSE.
- GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN ALL CONDITIONS UNLESS ILLUSTRATED AND NOTED OTHERWISE.
- TRADES INVOLVED IN THE PROJECT SHALL BE RESPONSIBLE FOR THEIR OWN CUTTING, FITTING, PATCHING, ETC., SO AS TO BE PREPARED PROPERLY BY THE WORK OF OTHER TRADES.
- ALL DEBRIS AND REFUSE SHALL BE REMOVED FROM THE PROJECT PREMISES AND LEFT IN A CLEAN SWEEP CONDITION AT ALL TIMES BY EACH TRADE AS THEY PERFORM THEIR OWN PORTION OF THE WORK.
- NETWORK CARRIER DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER GUARANTEE OR WARRANTY THAT MAY BE IN EFFECT IS DONE THROUGH THE COMPANY OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.
- CAUTION CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- WHEN APPLICABLE, CONTRACTOR IS RESPONSIBLE TO CALL, COORDINATE AND MAKE ARRANGEMENTS FOR R.O.W. AND/OR PRIVATE PROPERTY LOCATES BASED ON SPECIFIC SITE REQUIREMENTS.
- SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION.
- CONTRACTORS TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO NETWORK CARRIER'S REPRESENTATIVE ALONG WITH REDLINED CONSTRUCTION SET.
- CONTRACTOR SHALL DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED ALONG WITH PHOTOGRAPHS PER NETWORK CARRIER REQUIREMENTS.
- GENERAL CONTRACTOR SHALL COORDINATE AND SEEK APPROVAL OF ALL POWER DRAW, INSTALLATION AND/OR MODIFICATIONS WITH POWER COMPANY, OWNER AND JURISDICTION AS REQUIRED. CONTRACTOR SHALL REPORT POWER INSTALLATION SOLUTIONS TO NETWORK CARRIER REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.
- ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY NETWORK CARRIER CONSTRUCTION MANAGER.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE. EXCEPTION: THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, DESIGNATED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING WITH THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.

CALIFORNIA SPECIFIC CODE COMPLIANCE NOTES:

- WHEN COMPLETED, THE SUBJECT PROJECT SHALL COMPLY WITH LOCAL SECURITY CODES.
- WHEN COMPLETED, THE SUBJECT PROJECT SHALL COMPLY WITH THE CALIFORNIA ENERGY CODE TITLE-24 ENERGY CONSERVATION REQUIREMENTS.
- WHEN GLASS OR GLAZING REPLACEMENT IS A PART OF THE SCOPE OF THE PROJECT, GLASS AND GLAZING SHALL COMPLY WITH CHAPTER 54 OF THE U.S. CONSUMER SAFETY COMMISSION WITH SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS BEING COMPLY WITH PER (42 CFR 1428, CFR PART 1201 & LOCAL SECURITY REQUIREMENTS).

SYMBOLS:

- GRID REFERENCE
- DETAIL REFERENCE
- ELEVATION REFERENCE
- SECTION REFERENCE
- CENTERLINE
- PROPERTY/LEASE LINE
- MATCH LINE
- WORK POINT
- GROUND CONDUCTOR
- TELEPHONE CONDUIT
- ELECTRICAL CONDUIT
- COAXIAL CABLE
- OVERHEAD SERVICE CONDUCTORS
- GROUT OR PLASTER
- (E) BRICK
- (E) MASONRY
- CONCRETE
- EARTH
- GRAVEL
- PLYWOOD
- SAND
- WOOD CONTINUOUS
- WOOD BLOCKING
- STEEL
- NEW
- EXISTING
- NEW ANTENNA
- EXISTING ANTENNA
- GROUND ROD
- GROUND BUS BAR
- MECHANICAL GRND CONN.
- CADWELD
- GROUND ACCESS WELL
- ELECTRIC BOX
- TELEPHONE BOX
- LIGHT POLE
- PO MONUMENT
- SPOT ELEVATION
- SET POINT
- REVISION





31000 AVENUE LOOP DRIVE
COSTA MESA, CA 92626

PROJECT INFORMATION:

NETWORK VISION NUMBER: ATN111

JAMUL WATER TANK

SD34XC522

13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUE TYPE: REVISED CONSTRUCTION

REVISIONS				
REV	DATE	DESCRIPTION	INITIAL	CHK
0	05/21/12	ISSUED FOR 80% CD REVIEW	CBR	AF
1	07/16/12	REVISED BOX CONSTRUCTION	CBR	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RJD	AF
3	10/17/12	CONDITION OF APPROVAL	RJD	AF
4	01/04/13	REVISED CONSTRUCTION	AF	AF

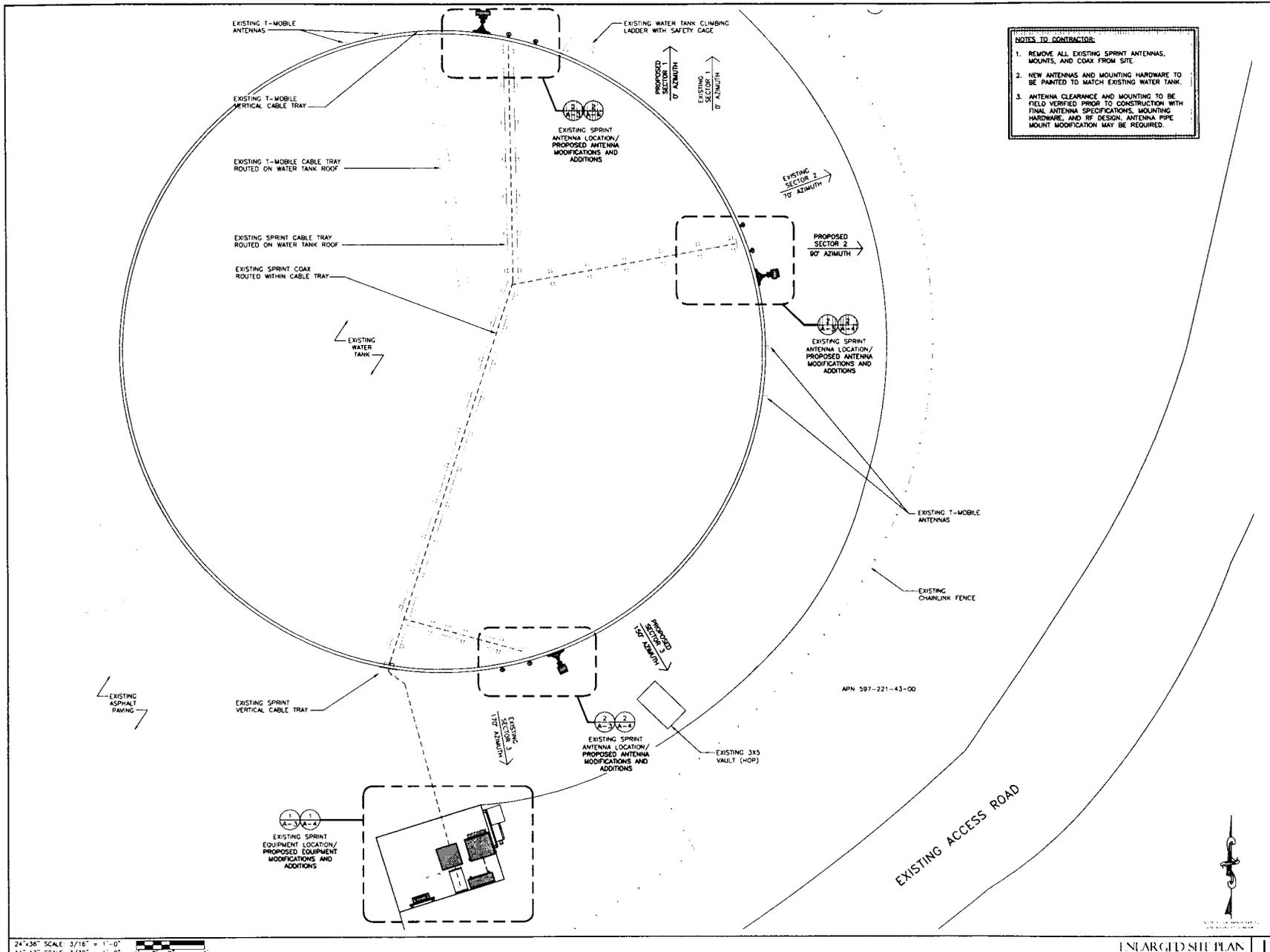
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSE:



SHEET TITLE: GENERAL NOTES & SYMBOLS

SHEET NUMBER: G-1 REVISION: 4



NOTES TO CONTRACTOR:

1. REMOVE ALL EXISTING SPRINT ANTENNAS, MOUNTS, AND COAX FROM SITE.
2. NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING WATER TANK.
3. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.



PROJECT INFORMATION:

NETWORK VISION SERVICES, INC.

JAMUL WATER TANK
 SD34XC522

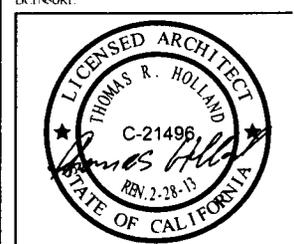
13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUED FOR: REVISED CONSTRUCTION

REVISIONS				
REV.	DATE	REVISIONS	DESCRIPTION	INITIAL
0	05/21/12	ISSUED FOR 90% CD REVIEW		CBK
1	07/16/12	REVISED 90% CONSTRUCTION		AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION		RLD
3	10/17/12	CONDITION OF APPROVAL		RLD
4	01/04/13	REVISED CONSTRUCTION		AF

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SHEET TITLE: ENLARGED SITE PLAN

SHEET NUMBER: A-2 REVISION: 4

24"x36" SCALE: 3/16" = 1'-0"
 11"x17" SCALE: 3/32" = 1'-0"

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

ENLARGED SITE PLAN | 1



PROJECT INFORMATION:

NETWORK VISION AMBIS LAUNCH
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:
 01/04/13

INCLUDED FOR:
 REVISED CONSTRUCTION

REVISIONS				
REV	DATE	DESCRIPTION	INITIAL	
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK	
1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

NOT FOR CONSTRUCTION UNLESS
 LABELED AS CONSTRUCTION SET

REGISTERED:

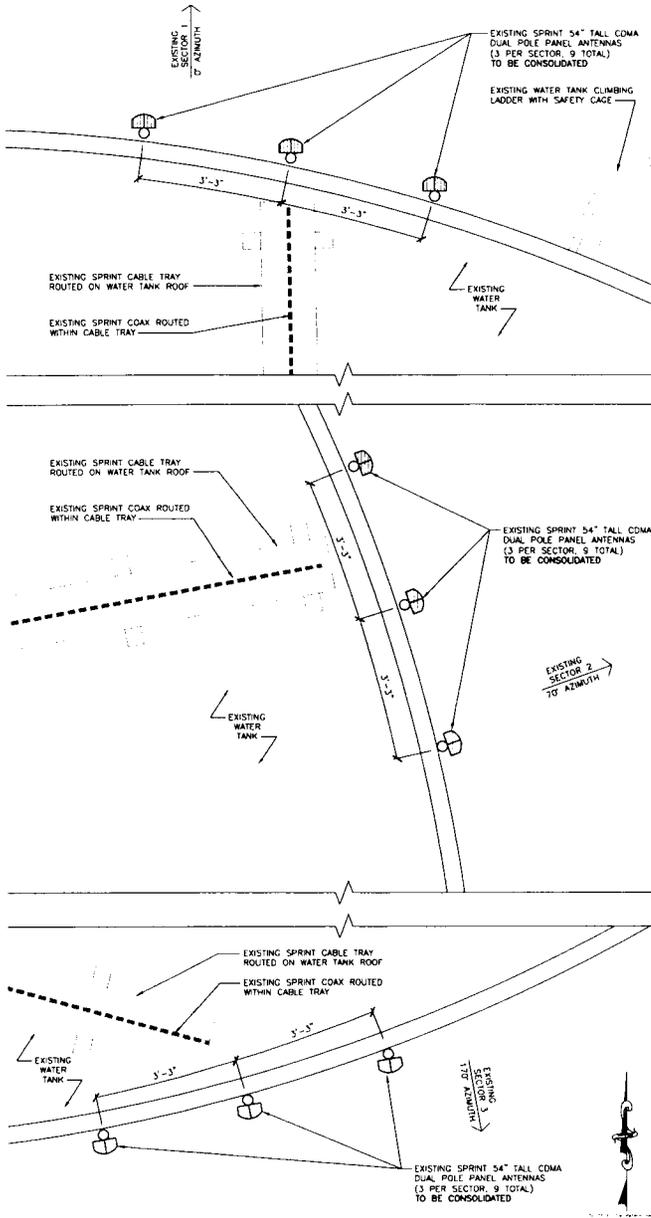


SHEET TITLE:
 EXISTING ENLARGED EQUIPMENT
 AND ANTENNA PLAN

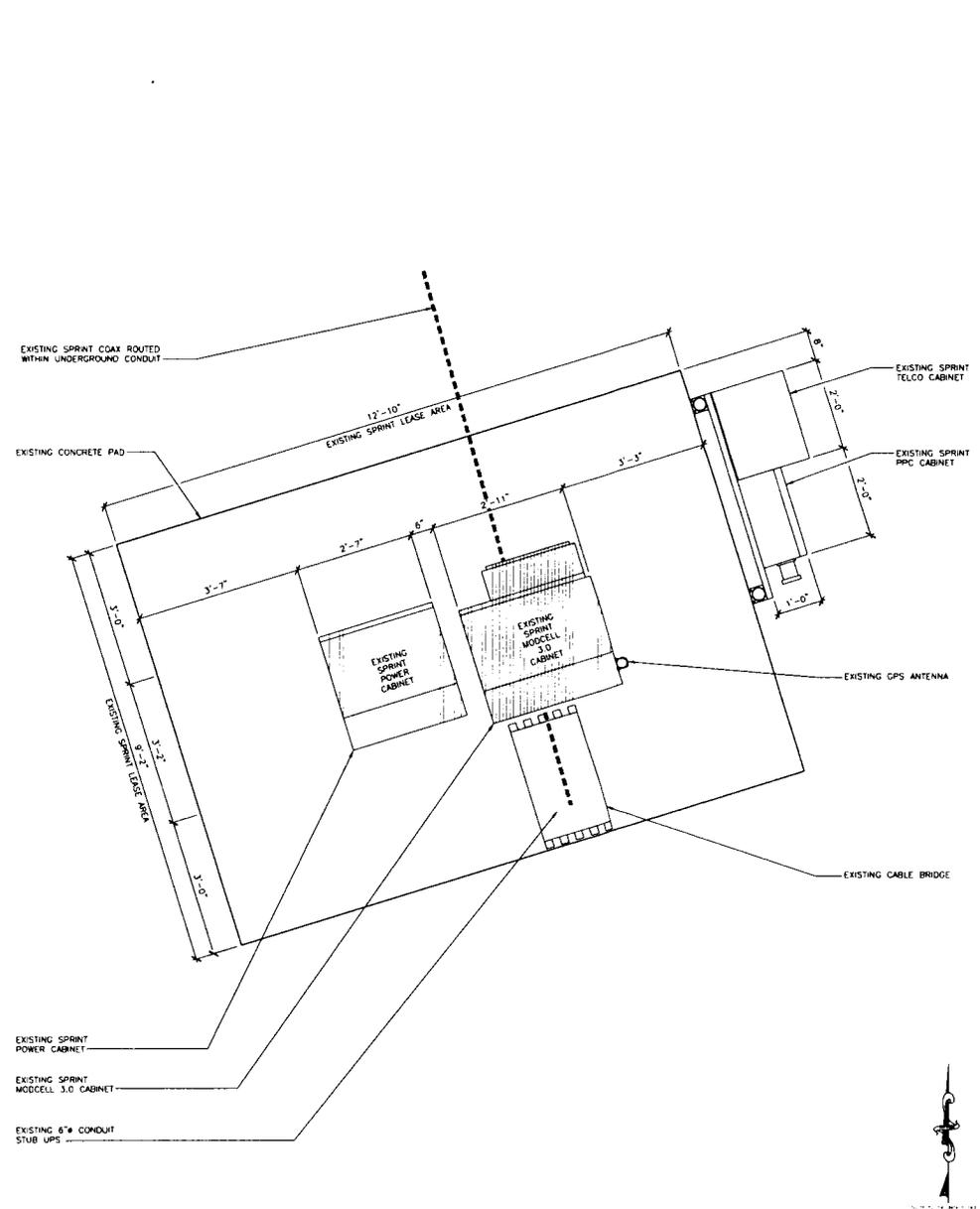
SHEET NUMBER: REVISION:

A-3

4



EXISTING ENLARGED ANTENNA PLAN 2

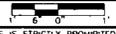


EXISTING ENLARGED EQUIPMENT PLAN 1

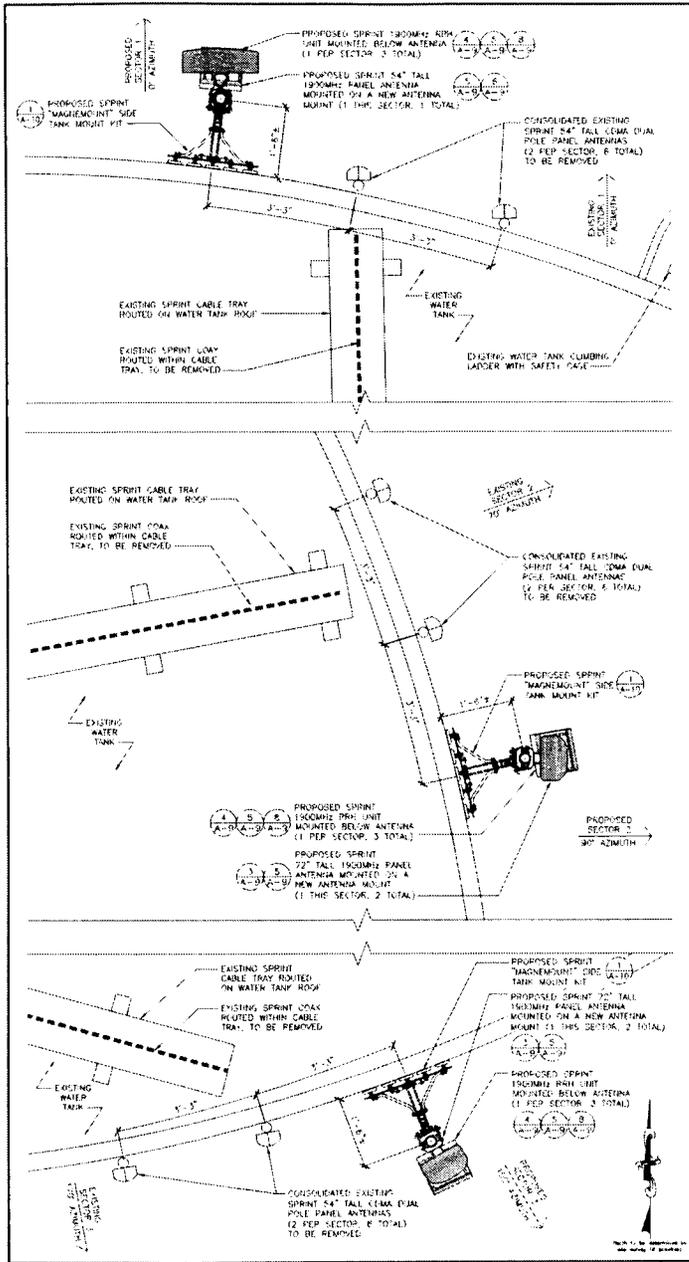
24"x36" SCALE: 3/4" = 1'-0"
 11"x17" SCALE: 3/8" = 1'-0"



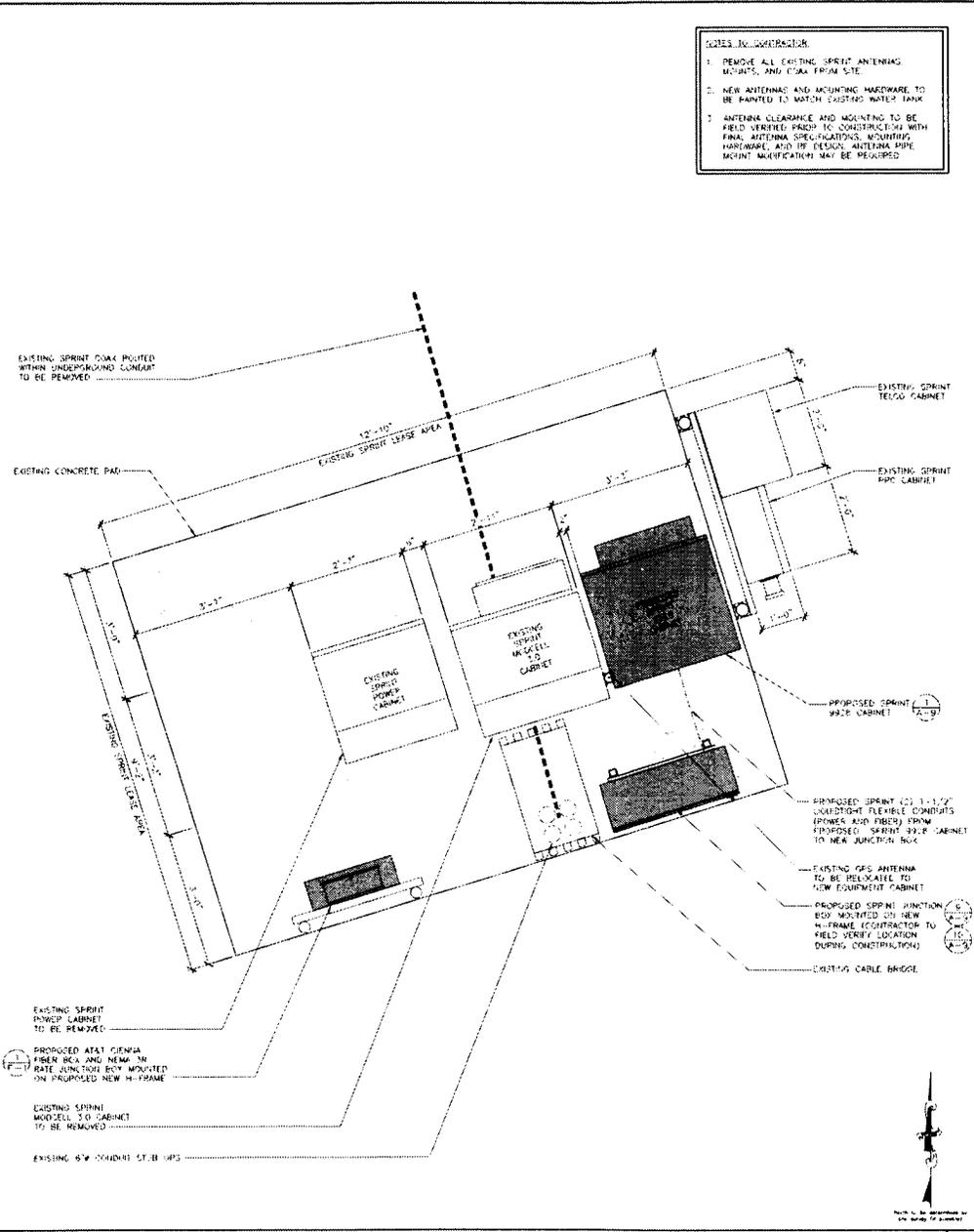
24"x36" SCALE: 3/4" = 1'-0"
 11"x17" SCALE: 3/8" = 1'-0"



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24"x36" SCALE 3/4" = 1'-0"
 13"x17" SCALE 3/8" = 1'-0"
ENLARGED ANTENNA PLAN (DURING) 2



24"x36" SCALE 3/4" = 1'-0"
 13"x17" SCALE 3/8" = 1'-0"
ENLARGED EQUIPMENT PLAN (DURING) 1

- NOTES TO CONSTRUCTION**
- REMOVE ALL EXISTING SPRINT ANTENNAS, MOUNTS, AND COAX FROM SITE.
 - NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING WATER TANK.
 - ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND IP FIELD. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.



PROJECT INFORMATION

NETWORK DESIGN AMBITION II

JAMUL WATER TANK
 SD34XC522

13619 - 13633 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUE TYPE: REVISED CONSTRUCTION

REV.	DATE	DESCRIPTION	INITIAL
0	05/21/12	ISSUED FOR POC REVIEW	CRN
1	07/16/12	REVISED 90% CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	FLD
3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

DATE PLOTTED:



SHEET TITLE: ENLARGED EQUIPMENT AND ANTENNA PLAN (DURING)

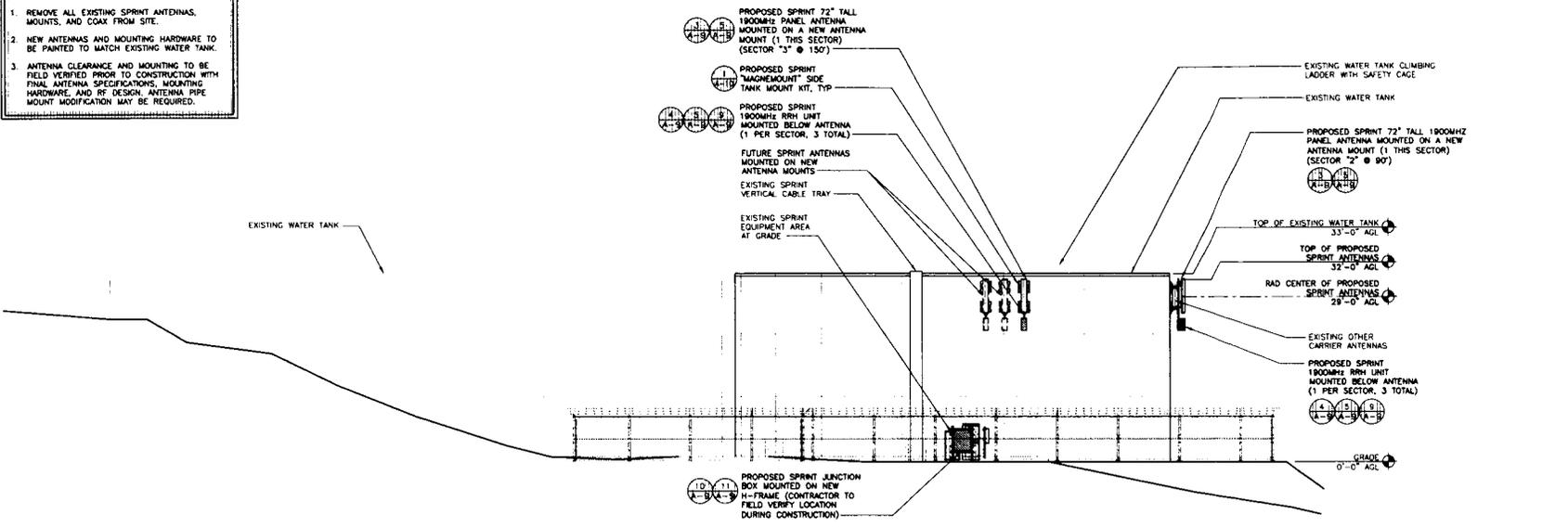
SHEET NUMBER: A-3A

REVISIONS: 4

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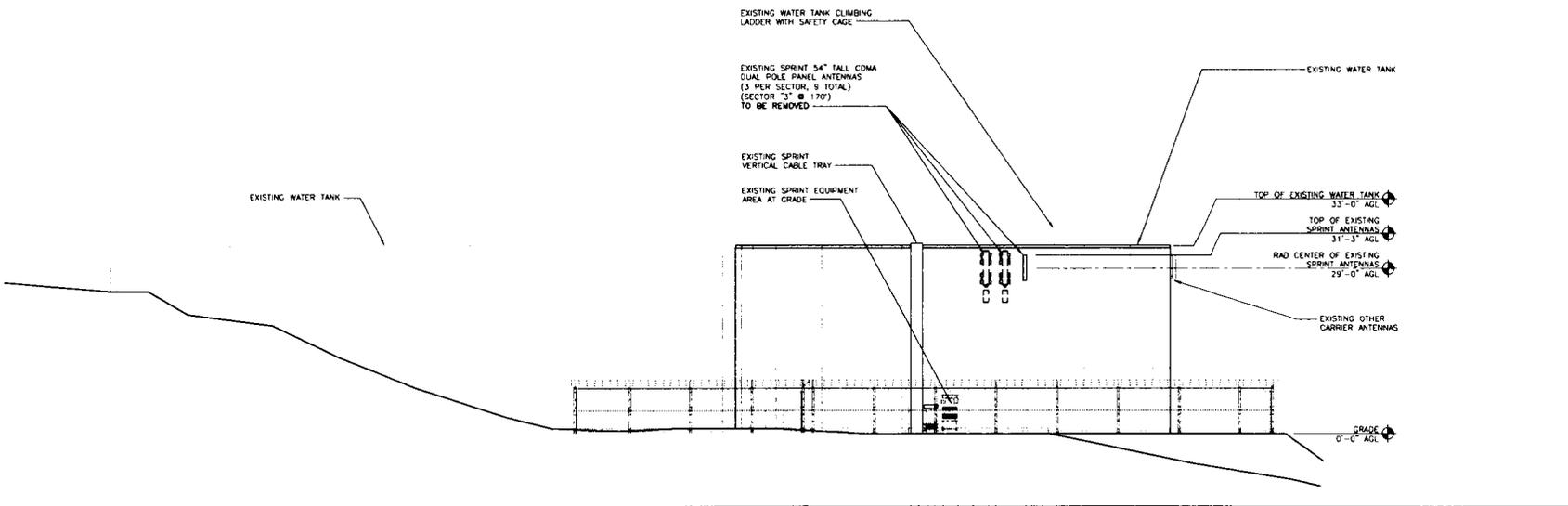
NOTES TO CONTRACTOR

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2. NEW ANTENNAS AND MOUNTING HARDWARE TO BE PAINTED TO MATCH EXISTING WATER TANK.
3. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.



24"x36" SCALE: 1" = 10'-0"
 11"x17" SCALE: 1" = 20'-0"

PROPOSED SOUTH ELEVATION 2



24"x36" SCALE: 1" = 10'-0"
 11"x17" SCALE: 1" = 20'-0"

EXISTING SOUTH ELEVATION 1



PROJECT INFORMATION

NETWORK VISION MMBHSLAUNJH

JAMUL WATER TANK
 SD34XC.522

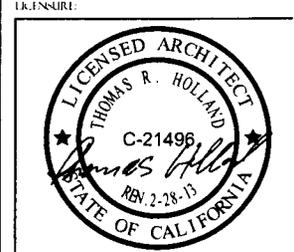
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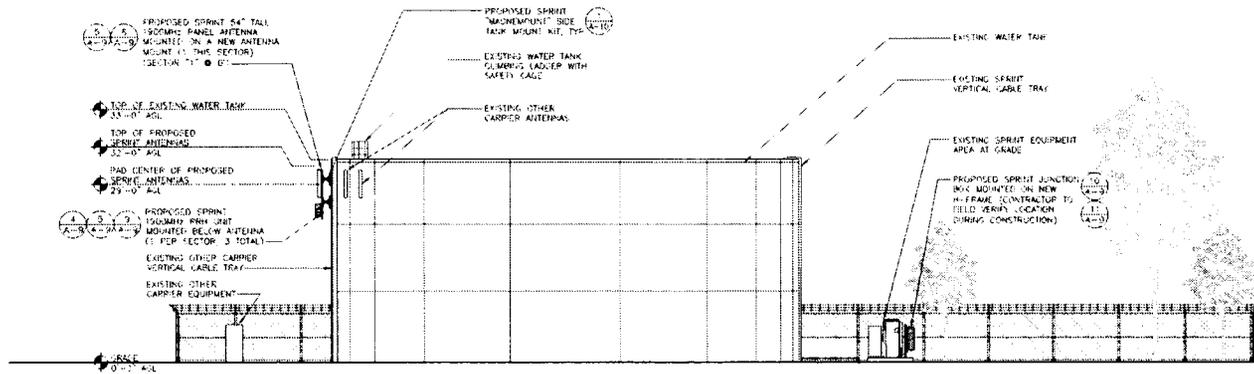


SHEET TITLE: EXISTING & PROPOSED SOUTH ELEVATION

SHEET NUMBER: A-7
 REVISION: 4

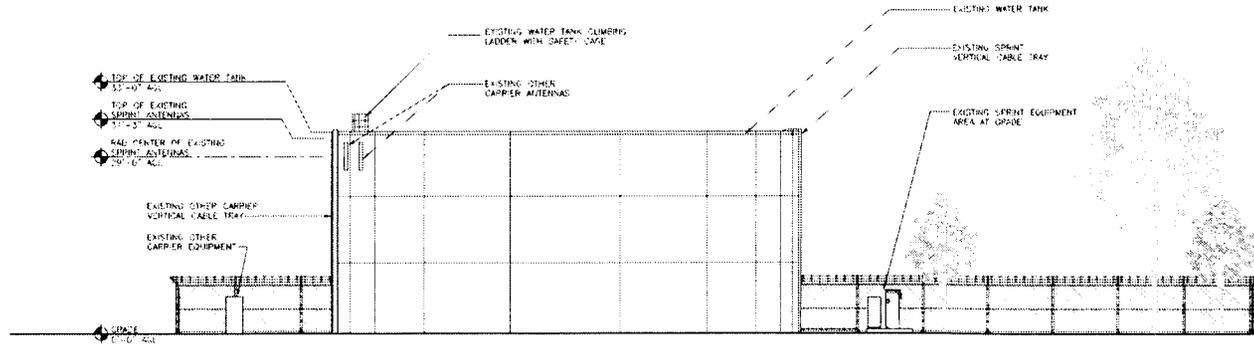
NOTES TO CONTRACTOR

- REMOVE ALL EXISTING SPRINT ANTENNAE, MOUNTS, AND CABLE FROM SITE
- NEW ANTENNAS AND MOUNTING HARDWARE TO BE INSTALLED TO MATCH EXISTING WATER TANK
- ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED



24'-3/4\"/>

PROPOSED WEST ELEVATION 2



24'-3/4\"/>

EXISTING WEST ELEVATION 1



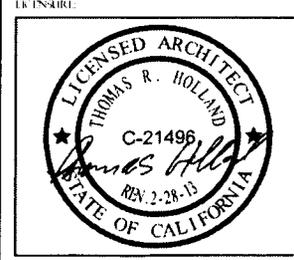
PROJECT INFORMATION
 NETWORK VISION AMBIS LAUNCH II
JAMUL WATER TANK
 SD34XC522
 12619-11639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUED FOR: REVISED CONSTRUCTION

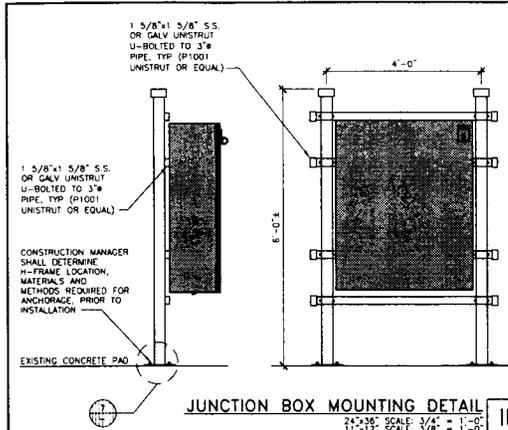
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0	05/21/12	ISSUED FOR 90% CD REVIEW	TRK
1	07/16/12	REVISED 30% CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	PLD
3	10/17/12	CORRECTION OF APPROVAL	R.E.
4	01/04/13	REVISED CONSTRUCTION	AF

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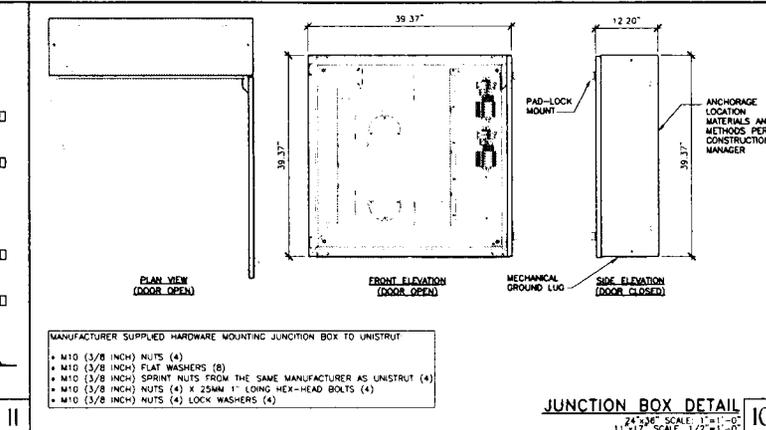
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SHEET NUMBER: A-8
 REVISION: 4



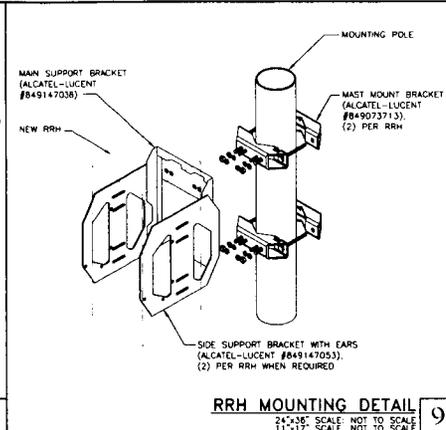
JUNCTION BOX MOUNTING DETAIL

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"



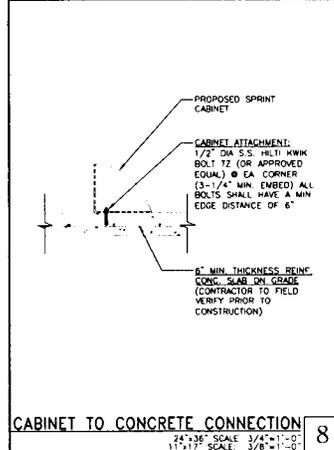
JUNCTION BOX DETAIL

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



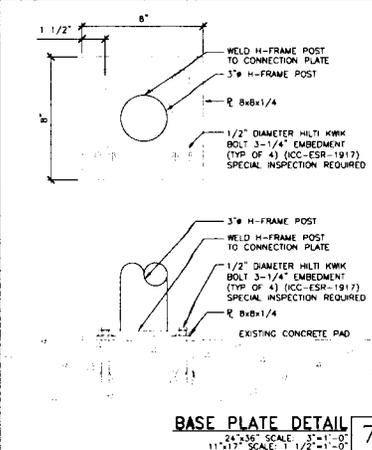
RRH MOUNTING DETAIL

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



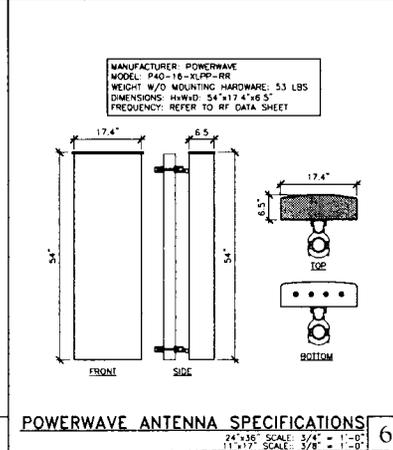
CABINET TO CONCRETE CONNECTION

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"



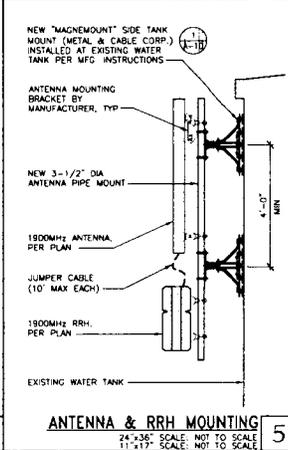
BASE PLATE DETAIL

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



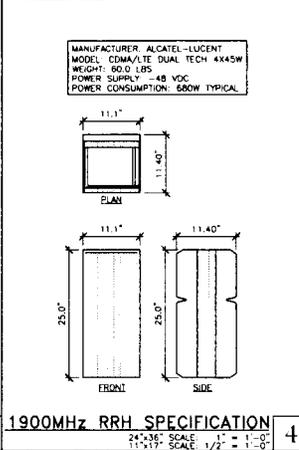
POWERWAVE ANTENNA SPECIFICATIONS

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"



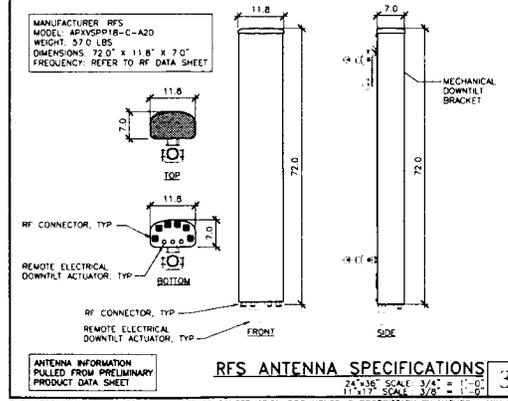
ANTENNA & RRH MOUNTING

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE



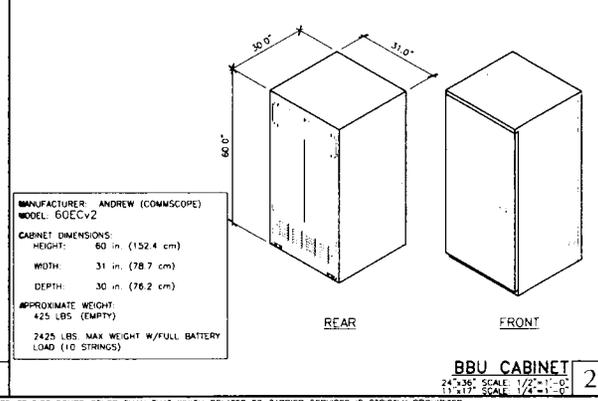
1900MHZ RRH SPECIFICATION

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



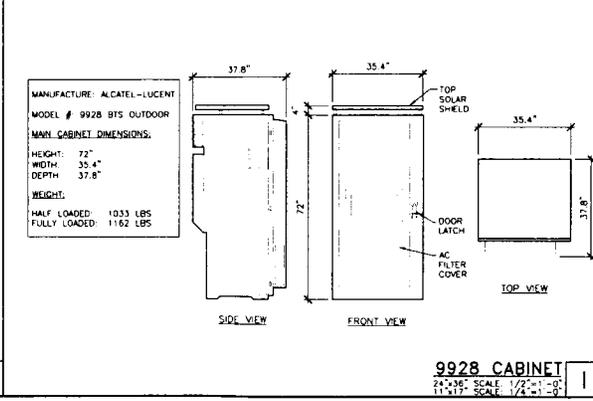
RFS ANTENNA SPECIFICATIONS

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"



BBU CABINET

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"



9928 CABINET

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/2" = 1'-0"

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.



PROJECT INFORMATION

NETWORK VISION MMHSTAINC.H

JAMUL WATER TANK
SD34XC.522

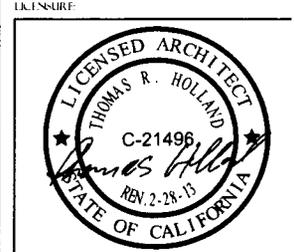
13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUE FOR: REVISED CONSTRUCTION

REVISIONS			
REV	DATE	DESCRIPTION	INITIAL
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK
1	07/16/12	REVISED FOR CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD
3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

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SHEET TITLE: EQUIPMENT & CONSTRUCTION DETAILS

SHEET NUMBER: A-9

REVISION: 4



PROJECT INFORMATION

NETWORK VISION WMBIS-LAUN II
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:
 01/04/13

ISSUED FOR:
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REVISIONS				
REV	DATE	DESCRIPTION	INITIALS	
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK	
1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

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 LABELED AS CONSTRUCTION SET

EXEMPTURE



SHEET TITLE:
 CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

A-10

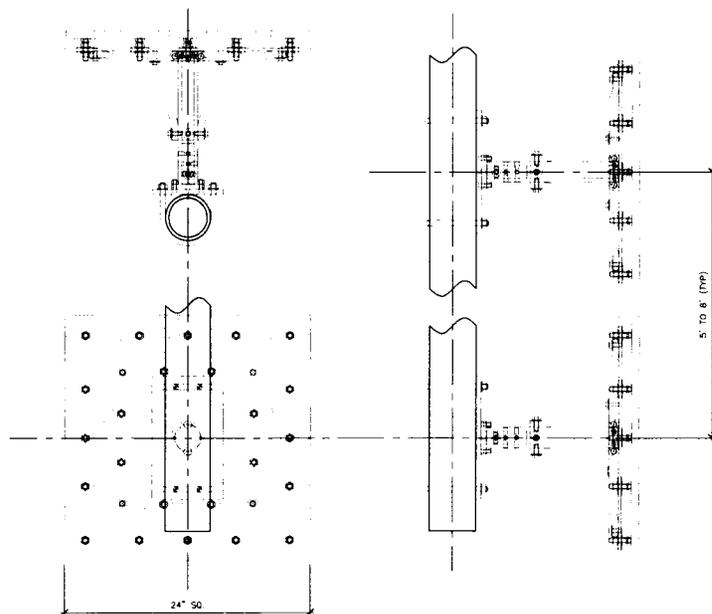
4

MFR INSTALLATION INSTRUCTIONS FOR THE MAGNEMOUNT TOWER SIDE MOUNT.

TOOLS NEEDED: 1/2" ANGLED BOX WRENCH, 9/16" AND 3/4" SOCKETS, TORQUE WRENCH.

1. PRIOR TO THE INSTALLATION OF THE MAGNEMOUNT - DO NOT REMOVE THE ATTACHED INSULATING CORRUGATED CARDBOARD BASE.
2. 1/3 OF THE MAST MUST BE ABOVE THE CENTER OF THE UPPER MAGNEMOUNT SECTION, AND 2/3 BELOW IT. KEEP FINGERS CLEAR OF THE MAGNETS WHEN LIFTING THE MOUNT INTO PLACE.
3. LAY OUT AND INSTALL BOTH SECTIONS OF THE MAGNEMOUNTS SO THAT THE BOLTHOLES ON THE PLATES ARE APPROXIMATELY VERTICAL.
4. REMOVE THE CARDBOARD BASE AND PLACE THE TOP MAGNEMOUNT ON THE TOWER WITH THE 2 CENTERLINES OF THE MAGNEMOUNT ALIGNED WITH THE VERTICAL INSTALLATION LINE. TO CORRECT ANY MISALIGNMENT, TAP THE PLATE WITH A LIGHT HAMMER.
5. REMOVE THE CARDBOARD BASE FROM THE SECOND MAGNEMOUNT. ALIGN IT WITH THE VERTICAL INSTALLATION LINE. PLACE IT SO THAT THE BOTTOM U-BOLT HOLES ARE NO MORE THAN 2/3 OF THE LENGTH OF THE MAST BELOW THE CENTER OF THE TOP MAGNEMOUNT.
6. TOTALLY LOOSEN THE 24 KEPS NUTS ON EACH MAGNEMOUNT TO ALLOW THE MAGNETS TO BE INDEPENDENTLY SEATED. (AT LEAST 1/2" ABOVE THE WASHER.)
7. FINGER TIGHTEN EACH KEPS NUT. THEN, WITH A HAND WRENCH ONLY, TURN EACH KEPS NUT 1 TURN TO SET THE TEETH.
8. INSTALL THE 4 U-BOLTS AND DOUBLE NUTS. SLIDE THE MAST THROUGH THE U-BOLTS. THE PLATES ROTATE TO ALLOW THE MAST TO ADJUST FOR MISALIGNMENT. IF IT IS NECESSARY TO ADJUST THE POSITION OF THE MAGNEMOUNTS FOR ALIGNMENT, TAP THE PLATE WITH A LIGHT HAMMER.
9. TIGHTEN THE DOUBLE NUTS ON EACH U-BOLT LEG AND TIGHTEN THE 2 BOLTS ON EACH SIDE OF THE SHORT MAST SECTION TO 20 FT-LB.
10. FOR SAFETY, TETHER THE MOUNT TO THE TOWER.

MANUFACTURER: METAL & CABLE CORP., INC.
 MODEL: SIDE TANK MOUNT
 PART#: STM



"MAGNEMOUNT" SIDE TANK MOUNT SPECIFICATIONS

24" x 24" SCALE: NOT TO SCALE
 11-17-12 2:28 PM

LOADS
Design Criteria

- 2010 California Building Code
- ASCE 7-05

- Notes**
- Figure 6-21 C1
 - Force = p/CMA

Ice Wt = 56 pcf	Design Wind Pressure = 43.13 pcf
Design Ice Thickness = 1.40 in	Design Wind Pressure (Ice) = 4.17 pcf
Height of Component, z = 103 ft	Fp = 0.63 W (0.7E)
Sg = 1.500 g	G = 0.85 4.5 8.1

APPEARANCE				NOTICE				ICE				Overturning Moments				
Model	Manufacturer	Quantity	Blocked Face	Blocked Side	Weight lbs.	Force Face lbs.	Force Side lbs.	0.7Eh lbs.	0.7Ev lbs.	Weight lbs.	Force Face lbs.	Force Side lbs.	Height feet	Wind 1.0W lb-ft	Seismic 3.7E lb-ft	Wind (Ice) 1.0W lb-ft
H-Frame 2.1" x 4" Std. Steel Pipe	AISC Manual	2	0	0	69.60	149.07	149.07	48.86	14.42	141.74	23.02	23.32	3.8	223.60	111.44	34.23
Fiber Junction Box (Spant)	Spant	1	0	0	40.00	504.66	172.53	24.20	8.40	341.74	56.62	22.34	3.8	756.99	64.05	84.93
P1000 Unistrut x 4'-0"	Unistrut	4	2	0	30.24	93.46	186.91	19.05	6.36	142.35	20.13	40.26	3.8	140.18	48.42	30.20
Totals					139.84	747.2	586.5	88.1	27.6	445.8	77.8	85.3		1126.78	223.93	109.44

Bolt Spacing feet Min. Pipe (ASD) lb-ft 1120.78 Zx (max) in² 0.64 Min. 2" std. steel pipe
 Bolts Per Face 2
 Total bolts 4

ASD Load Combinations		Roof Loads per Edge	
		Single Edge T lb	Single Edge C lb
D	1	49.94	67.72
1.0D+W	5	-2171.63	2311.47
0.6D+W	7	-2199.88	2281.51
1.0D+1.4SD+0.7E	5E	-368.65	617.74
0.6+1.4SD+0.7E	8E	-486.89	688.82
D+C 70%+0.7W	2i	22.44	664.63
0.6D+0.7D+0.7W	7i	3.63	628.66
Max Loads Wind		-2199.88	2311.47
Max Seismic Loads		-486.89	617.74

Bolt Load per Conn	Vertical		Lateral Shear lb/bolt
	T lb/bolt	C lb/bolt	
	24.94	0.89	
	-1866.82	186.89	
	-1899.88	186.89	
	-174.26	22.82	
	-202.94	22.82	
	18.24	17.64	
	4.24	17.64	
	-1899.88	186.89	
	-486.89	22.82	

Bolts to Steel Platform / thru bolts to wood
 1/2" A307 bolts (Max. T = 4.17 kips, Max. V = 2.359 kips)

0.33 O.K.

Bolts to Concrete Section
 1/2" Hilti Fmk Bolt 1/2 3 1/4" min embed (Max. T = 2.028 kips, Max. V = 2.39 kips)
 Cracked Concrete, Seismic Conditions, FC = 5,000 psi min

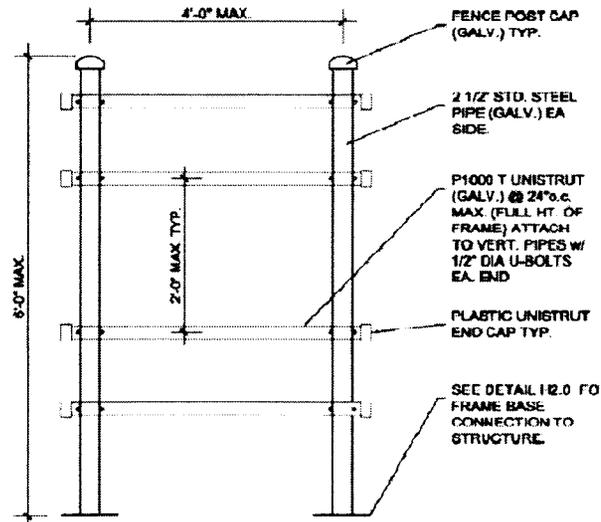
0.11 O.K.

Bolts to Concrete Wind
 1/2" Hilti Fmk Bolt 1/2 3 1/4" min embed (Max. T = 2.600 kips, Max. V = 2.345 kips)
 Cracked Concrete, Seismic Conditions, FC = 5,000 psi min

0.58 O.K.

6/8" x 8" x 4" base plate, 34 std. bolts of 4" o.c.
 Zx = 0.78126 in²
 Mmax = 1403.449 lb-ft

0.60 O.K.



H-FRAME CALCULATION DETAIL

24x36 SCALE NTS
 11x17 SCALE NTS



PROJECT INFORMATION

NETWORK VISION ADMINISTRATION
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:
 01/04/13

DESCRIPTION:
 REVISED CONSTRUCTION

REVISIONS				
REV	DATE	DESCRIPTION	INITIALS	STATUS
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK	
1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

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EXEMPTURE



SHEET TITLE:
 H-FRAME CALCULATION DETAIL

SHEET NUMBER: REVISION:

A-11

4

PTS

LOADS
Design Criteria:
 • 2010 California Building Code
 • ASCE 7-05

Relief:
 • Figure 4-21.1C
 • Figure 4-21.1A

• Center of gravity for beam load on cabinet is based on 20' dia height
 • Bolt is in center of beam

180 CABINET CONNECTION TO CONCRETE & THICK (MIN) SLAB-ON-GRADE:

APPLICABLE ANCHORS	Manufacturer	Quantity	NO ICE		NO ICE			ICE			Overturning Moments				
			Blocked	Unblocked	Weight	Force Face	Force Side	OTM ⁺	Wind	Seismic	Wind Load				
180 Cabinet ANCHOR (Steel)	MasterLock	1			24,25.00	32.49	319.13	3228.90	932.46	0.00	0.00	0.00	823.74	4647.21	0.00
Total					24,25.00	32.49	319.13	3228.90	932.46	0.00	0.00	0.00	823.74	4647.21	0.00

ASB Load Combinations	Vertical	Lateral
1	1.0D+1W	0.50
2	1.0D+1W	0.50
3	1.2D+1.4W+0.2E	0.75
4	1.2D+1.4W+0.2E	0.75
5	1.0D+0.7E+0.5W	0.50
6	1.0D+0.7E+0.5W	0.50
Max Load	1.2D+1.4W	0.75

Notes:
 1. 180 Cabinet ANCHOR (Steel) 3/8" dia x 10" long x 1/2" thick
 2. 180 Cabinet ANCHOR (Steel) 3/8" dia x 10" long x 1/2" thick
 3. 180 Cabinet ANCHOR (Steel) 3/8" dia x 10" long x 1/2" thick
 4. 180 Cabinet ANCHOR (Steel) 3/8" dia x 10" long x 1/2" thick
 5. 180 Cabinet ANCHOR (Steel) 3/8" dia x 10" long x 1/2" thick
 6. 180 Cabinet ANCHOR (Steel) 3/8" dia x 10" long x 1/2" thick

MANUFACTURED BY: MASTER LOCK

MODEL: 180

WEIGHT: 24,250 LB

HEIGHT: 20 FT

DEPTH: 18 IN

APPROXIMATE WEIGHT PER LINEAL FOOT: 1,212.5 LB/FT

24" x 18" MAX WEIGHT PER ALL BATTERY BAY (18" DEPTH)

Use 1/2" diameter S 5 HR: Kw: Bolt IT (3-1/4" min embed) of each cabinet corner



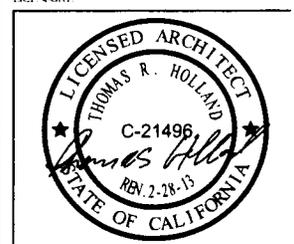
PROJECT INFORMATION:
 NETWORK VISION MMR15A UNK II
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:
 01/04/13

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REV	DATE	DESCRIPTION	INITIAL
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3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

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SHEET TITLE:
 CABINET STRUCTURAL CALCULATIONS DETAIL

SHEET NUMBER: RIVISION:

A-12 4

CABINET STRUCTURAL CALCULATIONS DETAIL



Last Revision - 9/12/2011

1. Appendix A - Coaxial Cable Color Scheme

All cables shall be marked at the top and bottom with 2" colored tape, stencil tag colored tape, or colored heat shrink tubing. Colored tape may be obtained from Graybar Electronic. UV stabilized tape or heat shrink are preferred. The first ring shall be closest to the end of the cable, and 1" space between each ring. The cable color code shall be applied in accordance to table 1-1. Table 1-1 only shows 3 sectors but additional sectors are easily supported by adding the appropriate number of colored rings to the cable color code.

After the cable color code is applied the frequency color code, table 1-2, must be applied for the specific frequency band in use on a given line. A 2" gap shall separate the cable color code from the frequency color code. The 2" color rings for the frequency code shall be placed next to each other with no spaces.

Examples of the application of the cable and frequency color codes are shown in figure 1-1 and 1-2. Wrap 2" colored tape a minimum of 3 times around the circumference of the coax, keeping the tape in the same area as much as possible. This will allow the removal of tape that will be faded or discolored due to weather.



Last Revision - 9/12/2011

Table 1-1: Coaxial Cable Color Code

Sector	Cable	First Ring	Second Ring	Third Ring
1 Alpha	1		No Tape	No Tape
	1	2	No Tape	No Tape
	1	3	No Tape	No Tape
	1	4	White	No Tape
	1	5	No Tape	No Tape
	1	6	No Tape	No Tape
	1	7	No Tape	No Tape
	1	8	No Tape	No Tape
2 Beta	1			No Tape
	2	2		No Tape
	2	3		No Tape
	2	4	White	White
	2	5		No Tape
	2	6		No Tape
	2	7		No Tape
	2	8		No Tape
3 Gamma	1			
	3	2		
	3	3		
	3	4	White	White
	3	5		White
	3	6		
	3	7		
	3	8		



PROJECT INFORMATION:

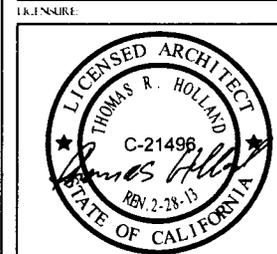
NETWORK VISION MMBTS LAUNCH
JAMUL WATER TANK
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 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

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REVISIONS				
REV	DATE	DESCRIPTION	INITIALS	CHK
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1	07/16/12	REVISED 90% CONSTRUCTION		AF
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3	10/17/12	CONDITION OF APPROVAL		RLD
4	01/04/13	REVISED CONSTRUCTION		AF

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SHEET TITLE: CABLE COLOR CODING REQUIREMENTS

SHEET NUMBER: A-13

REVISION: 4



Last Revision - 9/12/2011

Table 1-2: Frequency Color Code

Frequency	Indicator	ID
800 #1	Yellow	
1900 #1	Yellow	
1900 #2	Yellow	
Reserved	Yellow	White
1600 #1	Yellow	

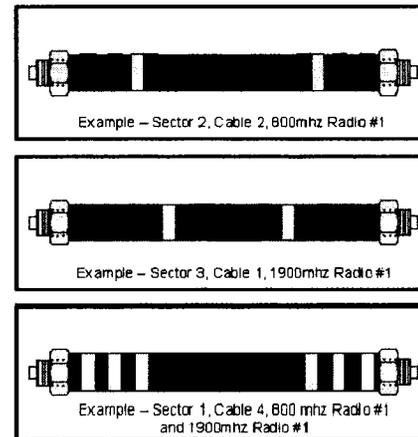
Official SprintNextel_Ant_and_Line_color_coding_V1.docx

3



Last Revision - 9/12/2011

Figure 1-1: Coax Cable Color Code Example



Official SprintNextel_Ant_and_Line_color_coding_V1.docx

4



PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
JAMUL WATER TANK
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 13619-13639 BEAR MOUNTAIN WAY
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4	01/04/13	REVISED CONSTRUCTION	AF

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REFERENCE:



SHEET TITLE:

CABLE COLOR CODING REQUIREMENTS

SHEET NUMBER:

A-14

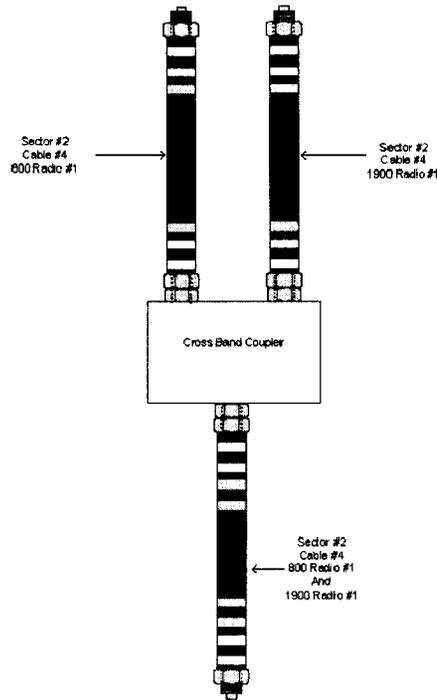
REVISION:

4



Last Revision - 9/12/2011

Figure 1-2: Coax Cable Color Coding Cross Band Coupler Example



Official Sprint/Nextel_Ant_and_Line_color_coding_V1.docx

5



Last Revision - 9/12/2011

2. Appendix B - Hybrid Cable Color Scheme

Hybrid cable will be marked in a similar manner as coax cable described in the previous section. The main "trunk" of the hybrid cable will NOT be marked with the frequency code as the hybrid cable can contain all frequencies. The individual power pairs and fiber cables will be labeled with both the cable AND frequency markings. See Figure 2-1 as one example. The fiber and copper counts are just a representative of one possible configuration. Other fiber and power count combinations are possible.

Official Sprint/Nextel_Ant_and_Line_color_coding_V1.docx

6



PROJECT INFORMATION:

NETWORK VISION MMBITS LAUNCH

JAMUL WATER TANK

SD34XC522

13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUE TYPE:

REVISED CONSTRUCTION

REVISIONS

REV	DATE	DESCRIPTION	INITIAL
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3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

ENCLOSURE:



SHEET TITLE:

CABLE COLOR CODING REQUIREMENTS

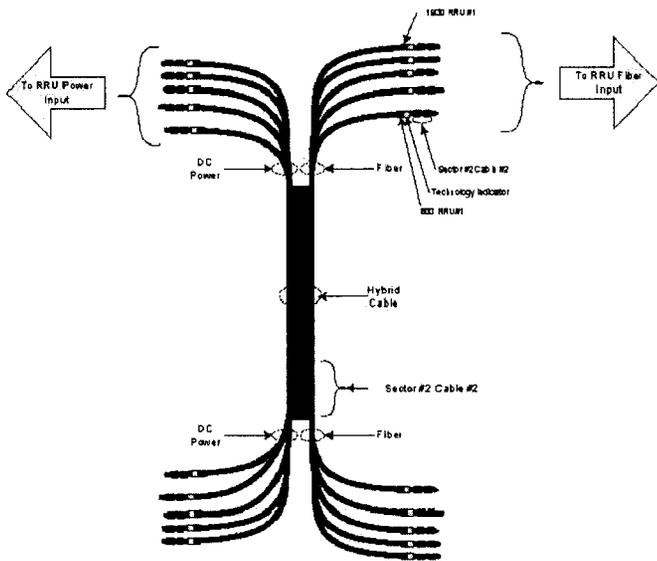
SHEET NUMBER

REVISION

A-15

4

Figure 2-1. Hybrid Cabled Color Code Example



3. Appendix C - RRU and Combiner Cabling

Coax jumpers connecting between remote radio units, combiners, and antenna at the tower top will not use a color code labeling scheme. These jumpers will use an appropriate weather proof label on both ends near the connectors. The labeling scheme will be determined by the OEM installation team. Each label will uniquely identify each jumper/cable.

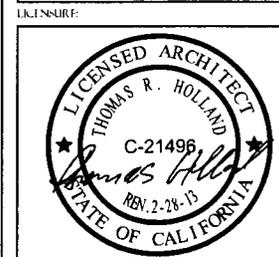
NETWORK VISION MMB15LAUN.H
JAMUL WATER TANK
 SL034XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:
 01/04/13

ISSUED FOR:
 REVISED CONSTRUCTION

REVISIONS				
REV	DATE	DESCRIPTION	INITIAL	STATUS
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK	
1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

NOT FOR CONSTRUCTION UNLESS
 LABELED AS CONSTRUCTION SET

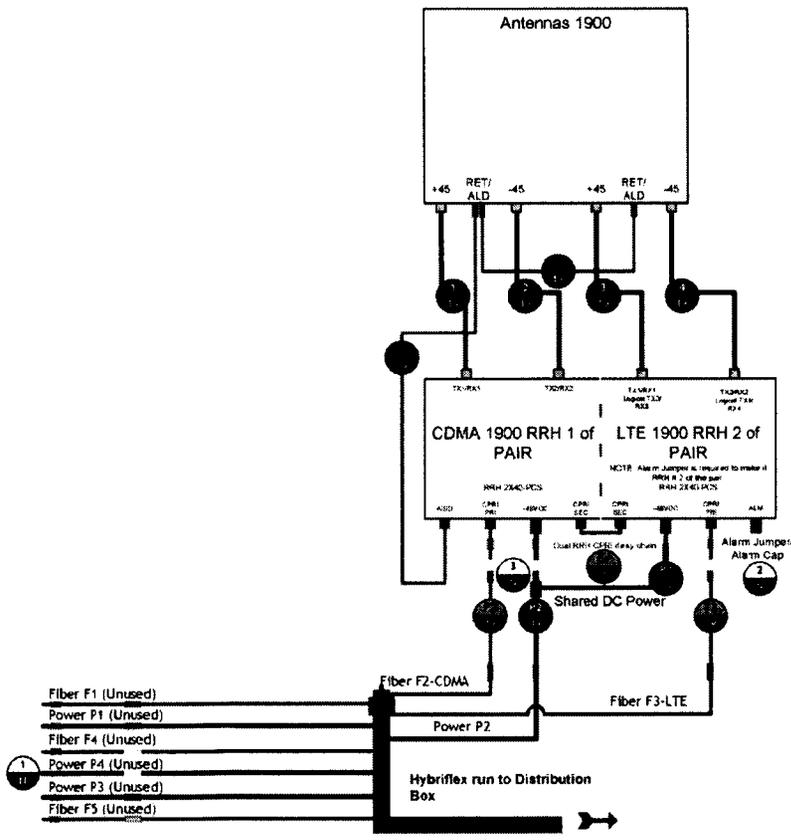


SHEET TITLE:
 CABLE COLOR CODING REQUIREMENTS

SHEET NUMBER: A-16
 REVISION: 4

TOWER TOP SCENARIO 6

SINGLE 1900 RRH PAIR with no 800 RRH Equipped



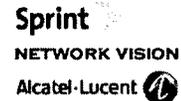
Power Feed Polarity Definition:
 Black = -48VDC Feed (Battery)
 Black/White Stripe = Return

NOTE: For power feed use the same Hybriflex OEM color designator as the fiber.

- MM Pair 1 = F1 = Green = P1 (Green)
- MM Pair 2 = F2 = Blue = P2 (Blue)
- MM Pair 3 = F3 = Red = P3 (Red)
- MM Pair 4 = F4 = Yellow = P4 (Yellow)
- MM Pair 5 = F5 = Orange = (No P5 power feed)

OEM COLOR CODE
 HYBRIFLEX

J. STEVE WILSON
 STEVE.WILSON@NCSYSTEMS.NET
 PH: 9122460527



DRAWING LEGEND

- COAX
- POWER
- NOTES
- FIBER

SEE CONNECTION LEGEND FOR MORE DETAILS

SCENARIO 6 V1.6.VSD

SHEET DESCRIPTION
TOWER TOP

SHEET NUMBER
S6-TT



PROJECT INFORMATION:

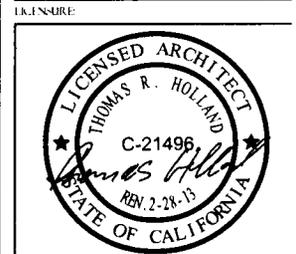
NETWORK VISION MMBIS LAUNCH
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE:
 01/04/13

ISSUE FOR:
 REVISED CONSTRUCTION

REVISIONS				
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0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK	
1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



SHEET TITLE:
 PLUMBING DIAGRAMS

SHEET NUMBER: **A-17** / REVISION: **4**



PROJECT INFORMATION:

NETWORK VISION MMRIS LAUNCH
JAMUL WATER TANK
 SD34XC522
 13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

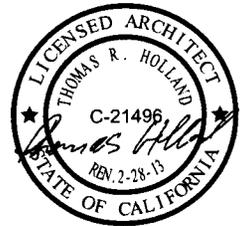
ISSUE DATE:
 01/04/13

ISSUE WORK:
 REVISED CONSTRUCTION

REVISIONS			
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1	07/16/12	REVISED 90% CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD
3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS
 LABELED AS CONSTRUCTION SET

LICENSEE:



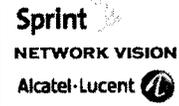
SHEET TITLE:
 PLUMBING DIAGRAMS

SHEET NUMBER: REVISION:

A-18

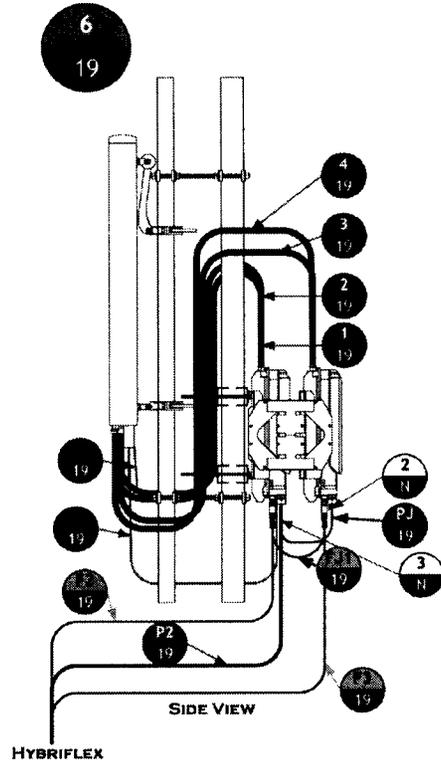
4

I. STEVE WILSON
 STEVE.WILSON@NCS1TECH.NET
 PH: 9122460227



**SITE CONNECTIONS
 AND IDENTIFICATION
 DIAGRAMS**

SHEET DESCRIPTION
TOWER TOP DETAIL
 SHEET NUMBER
S6-TTD





PROJECT INFORMATION

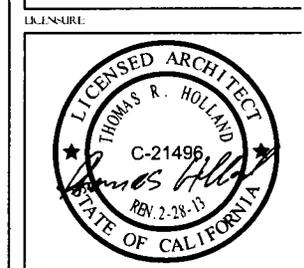
NETWORK VISION MMBIS LAUNCH
JAMUL WATER TANK
 SD34XC522
 13619 - 13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

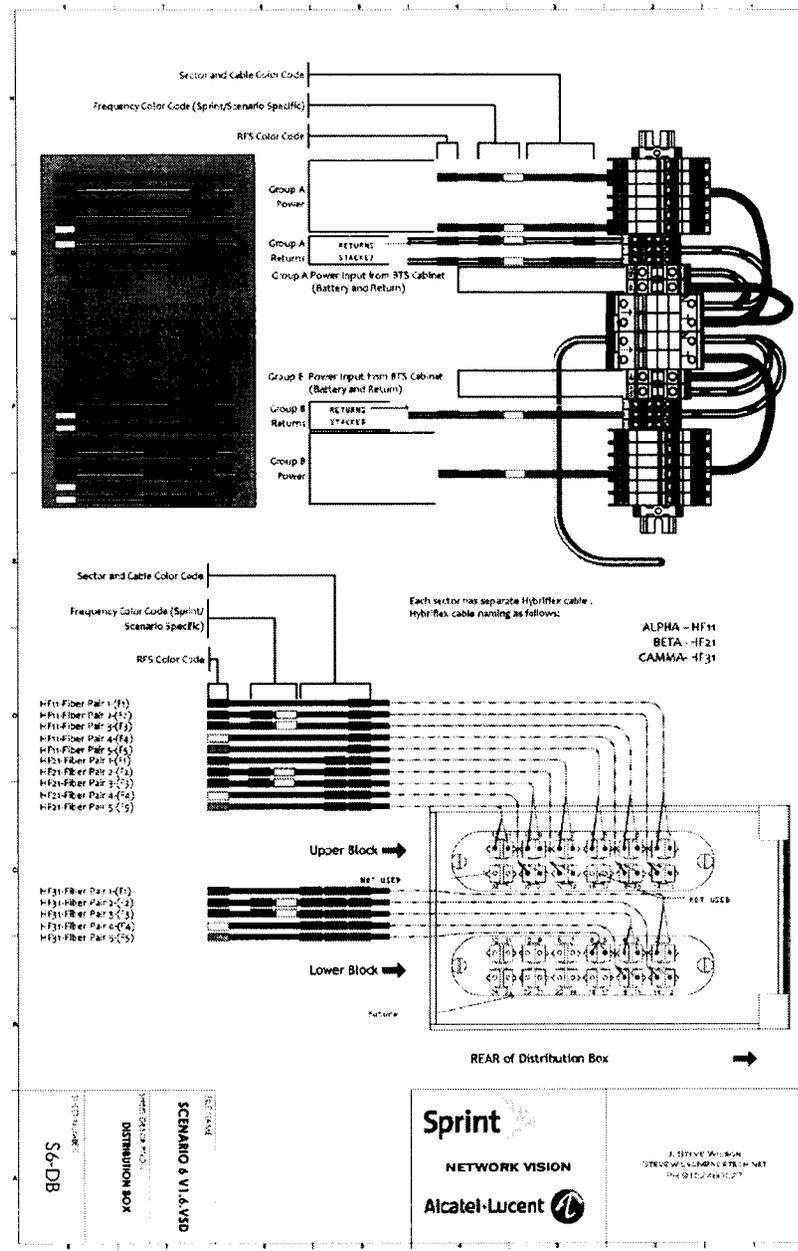
INDUSTRY: REVISED CONSTRUCTION

REVISIONS				
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1	07/16/12	REVISED 90% CONSTRUCTION	AF	
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD	
3	10/17/12	CONDITION OF APPROVAL	RLD	
4	01/04/13	REVISED CONSTRUCTION	AF	

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



SHEET TITLE: PLUMBING DIAGRAMS
 SHEET NUMBER: A-19
 REVISION: 4





PROJECT INFORMATION:

NETWORK VISION MMIBS LAUNCH II

JAMUL WATER TANK

SD34XC522

13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUED FOR:

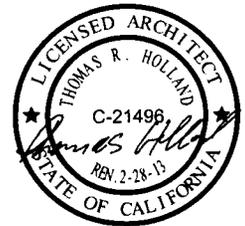
REVISED CONSTRUCTION

REVISIONS

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1	07/16/12	REVISED SD34 CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLO
3	10/17/12	CONDITION OF APPROVAL	RLO
4	01/04/13	REVISED CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSEE:



SHEET TITLE:

PLUMBING DIAGRAMS

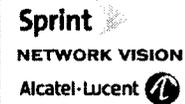
SHEET NUMBER:

A-21

REVISION:

4

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STEVE.WILSON@NCS.TECH.NET
PH 9122450227



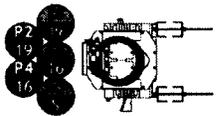
SCENARIO 6 V1.6.VSD

SHEET DESCRIPTION
NOTES 1

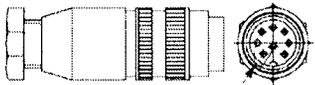
SHEET NUMBER
S6-N1

REVISIONS/CHANGES

12/16/11 V1.3
Initial release
01/19/12 V1.4 Draft
Removed revision blocks on drawings.
01/25/12 V1.5
Changed Distribution Box diagrams. Spares do not get terminated to breakers



1 SPARE FIBER AND POWER CABLE MANAGEMENT
SCALE: 1:1.5



2 8 Pin DIN MALE Connector with Pins 3-8 Shorted

ALARM CAP
SCALE: N.T.S.



3 DC-Y JUMPER
SCALE: N.T.S.



PROJECT INFORMATION:

NETWORK VISION A/V/BTS LAUNCH

JAMUL WATER TANK

SD34XC522

13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY

ISSUE DATE:
01/04/13

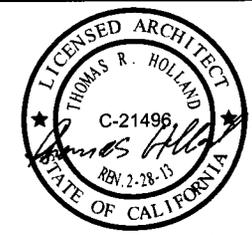
ISSUE TYPE:
REVISED CONSTRUCTION

REVISIONS

REV.	DATE	DESCRIPTION	INITIAL
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1	07/16/12	REVISED 90% CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD
3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

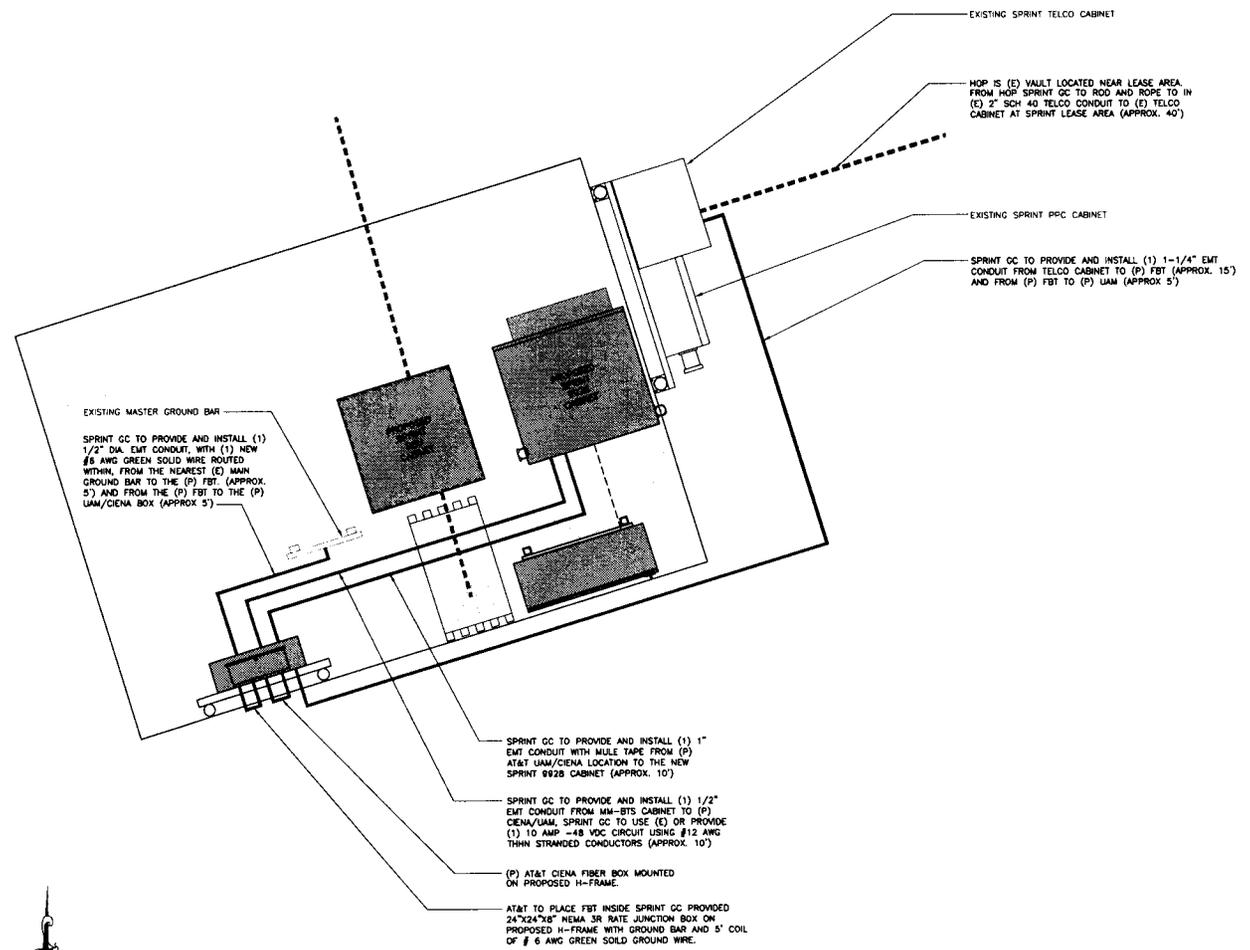
NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSE:



SHEET TITLE:
FIBER PLAN

SHEET NUMBER	REVISION
F-1	4



SCOPE OF WORK:

ACCESS NOTE: NO ACCESS RESTRICTIONS WATER TANKS ARE ON HILL. ROAD GATE COMBO IS *2207. COMBO LOCK IS 9168.

AVG HOP/FIBER PATH: HOP IS (E) VAULT LOCATED NEAR LEASE AREA FROM HOP SPRINT GC TO ROD AND ROPE TO IN (E) 2" SCH 40 TELCO CONDUIT TO (E) TELCO CABINET AT SPRINT LEASE AREA (APPROX. 40').

AT&T FIBER PATH: SPRINT GC TO PROVIDE AND INSTALL (1) 1-1/4" EMT CONDUIT FROM TELCO CABINET TO (P) FBT (APPROX. 15') AND FROM (P) FBT TO (P) UAM (APPROX. 5').

FBT LOCATION: AT&T TO PLACE FBT INSIDE SPRINT GC PROVIDED 24"x24"x6" NEMA 3R RATE JUNCTION BOX W/ PLYWOOD BACKBOARD WITH GROUND BAR AND 5' COIL OF # 6 AWG GREEN SOLID GROUND WIRE MOUNTED ON (P) H-FRAME BELOW CIENA/UAM.

EQUIPMENT: SPRINT GC TO PROVIDE AND INSTALL THE PROPOSED H-FRAME. SPRINT GC TO INSTALL THE AT&T SUPPLIED UAM AND BRACKET ON (P) H-FRAME. AT&T TO PROVIDE AND INSTALL CIENA BOX ON SPRINT GC PROVIDED AND INSTALLED H-FRAME.

POWER: SPRINT GC TO PROVIDE AND INSTALL (1) 1/2" EMT CONDUIT FROM MM-BTS CABINET TO (P) CIENA/UAM, SPRINT GC TO USE (E) OR PROVIDE (1) 10 AMP -48 VDC CIRCUIT USING #12 AWG THIN STRANDED CONDUCTORS (APPROX. 10').

GROUNDING: SPRINT GC TO PROVIDE AND INSTALL (1) 1/2" DIA. EMT CONDUIT WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN, FROM THE NEAREST (E) MAIN GROUND BAR TO THE (P) FBT (APPROX. 5') AND FROM THE (P) FBT TO THE (P) UAM/CIENA BOX (APPROX. 5').

CUSTOMER FIBER PATH: SPRINT GC TO PROVIDE AND INSTALL (1) 1" EMT CONDUIT WITH MULE TAPE, FROM (P) AT&T UAM/CIENA LOCATION TO THE (E) SPRINT MM-BTS CABINET (APPROX. 10').

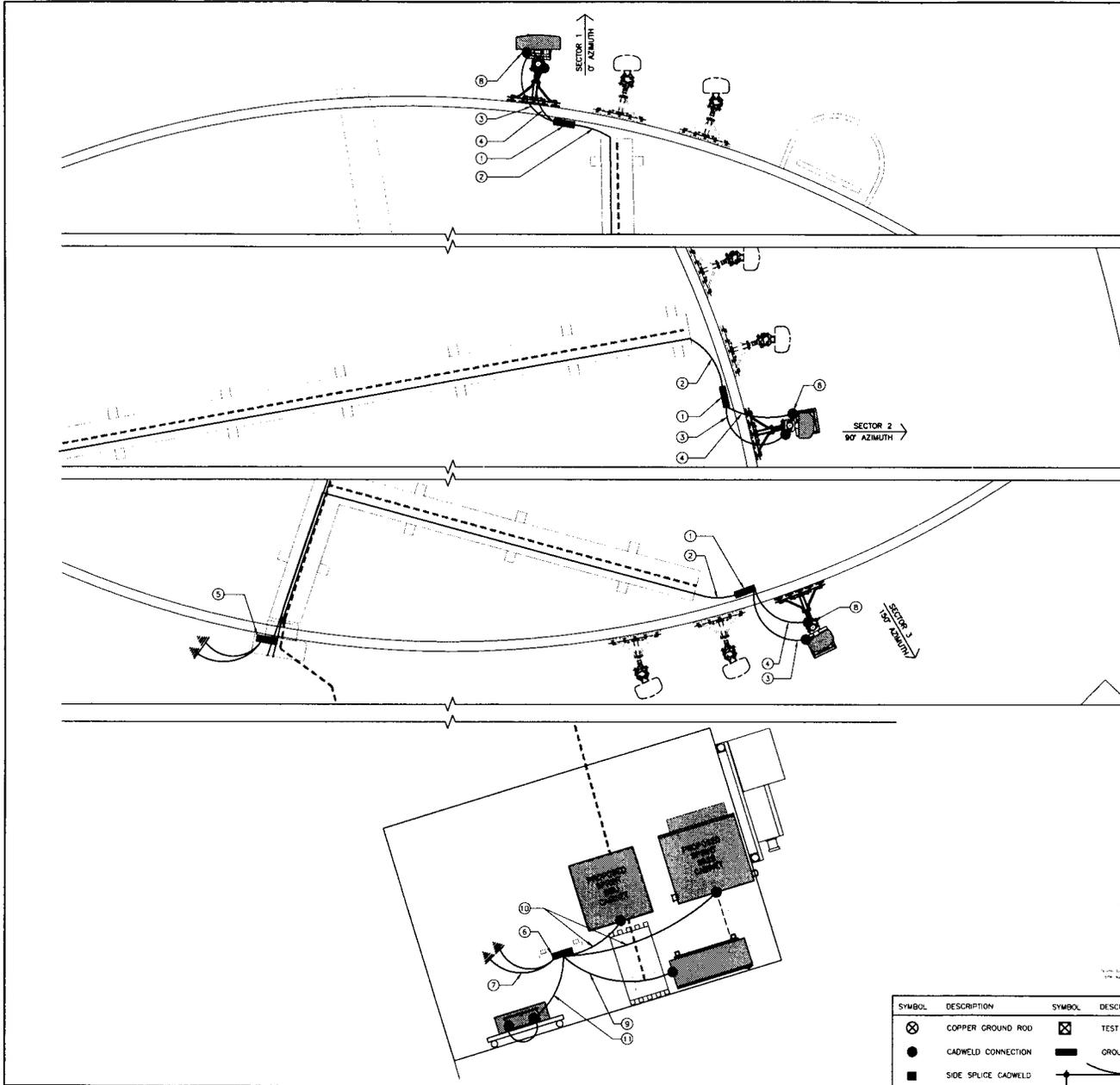
At all new services & grounding trenches, provide "WARNING" tape at 12" below grade.

DIG ALERT
"CALL BEFORE YOU DIG"
1-800-227-2600
UTILITY NOTIFICATION CENTER OF SOUTHERN CALIFORNIA

24"x36" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

FIBER PLAN | 1



SCHEMATIC GROUNDING PLAN

24"x36" SCALE: 1/2" = 1'-0"
 11"x17" SCALE: 1/4" = 1'-0"

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO CARRIER SERVICES IS STRICTLY PROHIBITED.

- GROUNDING KEYED NOTES:**
- ANTENNA GROUND BUS BAR NEAR ANTENNA MOUNTS. SEE DETAIL 2/E-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 2/E-2 FOR GROUND WIRE CONNECTIONS.
 - #6 AWG GROUND FROM ANTENNA GROUND BUS BAR TO EXISTING GROUND BUS BAR NEAR GRADE (TYP OF 2 PLACES)
 - #6 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUS BAR (TYP OF 3). SEE DETAIL 2/E-2
 - #6 AWG GROUND FROM RRH UNITS TO ANTENNA GROUND BUS BAR. SEE DETAIL 2/E-2
 - EXISTING TOWER GROUND BUS BAR GROUND BUS BAR NEAR GRADE. SEE 2/E-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 2/E-2 FOR GROUND WIRE INSTALLATION
 - EXISTING GROUND BUS BAR NEAR EQUIPMENT. SEE DETAIL 2/E-2 FOR GROUND BAR CONSTRUCTION. SEE DETAIL 2/E-2 FOR GROUND WIRE CONNECTIONS.
 - #6 AWG GROUND FROM EXISTING GROUND BUS BAR TO THE INTO EXISTING GROUNDING SYSTEM (TYP OF 2 PLACES)
 - CAD WELD (TYP), SEE DETAIL 1/E-2
 - #6 AWG GROUND FROM FIBER JUNCTION BOX TO THE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/E-2
 - #6 AWG GROUND FROM 992B CABINET AND BBU CABINET TO THE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/E-2
 - #6 AWG GROUND FROM CIENA FIBER BOX TO JUNCTION BOX FROM JUNCTION BOX TO THE INTO EXISTING GROUND BUS BAR. SEE DETAIL 2/A-2

GROUNDING NOTES & LEGEND

GENERAL GROUNDING NOTES

- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
- GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND ITS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING NER'S PRACTICES.
- SOME GROUND CONNECTIONS SHALL BE CADWELDED. ALL WIRES SHALL BE COPPER THIN/THIN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY SPRINT WIRELESS, LLC REPRESENTATIVE.
- REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS. ELECTRICAL CONTRACTOR SHALL OBTAIN, REVIEW, PROVIDE TRAINING AND FULLY IMPLEMENT ALL GUIDELINES & REQUIREMENTS ASSOCIATED WITH SPRINT STANDARD GROUNDING METHODS FOR ROOF TOP INSTALLATIONS. INCLUDING METHOD FOR CONNECTIVITY FROM ROOF TOP MGB TO BUILDING GROUND SYSTEM (SPRINT STANDARD GROUNDING METHODS MOST RECENT REVISIONS SHALL BE REFERENCED)
- ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED SPRINT MOBILITY REPRESENTATIVE. PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING
- NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE CONDITIONS.

GROUNDING ROD NOTES
 (WHERE APPLICABLE)

- ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED. A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
- 2 POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFORE MENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
⊗	COPPER GROUND ROD	⊠	TEST WELL
●	CADWELD CONNECTION	▬	GROUND BAR
■	SIDE SPLICE CADWELD	⊕	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM



PROJECT INFORMATION:

NETWORK VISION MMBTSLAUN11

JAMUL WATER TANK
 SD34XC522

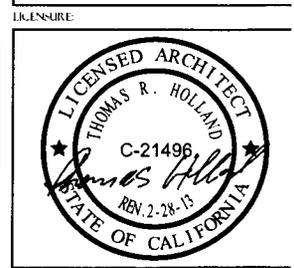
13619-13639 BEAR MOUNTAIN WAY
 JAMUL, CA 91935
 SAN DIEGO COUNTY

ISSUE DATE: 01/04/13

ISSUE FOR: REVISED CONSTRUCTION

REVISIONS			
REV.	DATE	DESCRIPTION	INITIAL
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK
1	07/16/12	REVISED 90% CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD
3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



SHEET TITLE: SCHEMATIC GROUNDING PLAN

SHEET NUMBER: E-1

4



PROJECT INFORMATION:

NETWORK VISION WMBIS-LAMPULH

JAMUL WATER TANK SD34XC522

13619-13639 BEAR MOUNTAIN WAY
JAMUL, CA 91935
SAN DIEGO COUNTY

ISSUE DATE:

01/04/13

ISSUE NO.:

REVISED CONSTRUCTION

REVISIONS

REV	DATE	DESCRIPTION	INITIAL
0	05/21/12	ISSUED FOR 90% CD REVIEW	CBK
1	07/16/12	REVISED 90% CONSTRUCTION	AF
2	08/31/12	ISSUED FOR REVISED CONSTRUCTION	RLD
3	10/17/12	CONDITION OF APPROVAL	RLD
4	01/04/13	REVISED CONSTRUCTION	AF

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

EXPIRES:



SHEET TITLE:

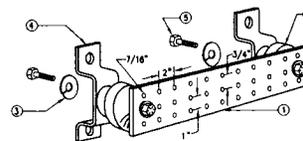
GROUNDING DETAILS

SHEET NUMBER

REVISION

E-2

4



NOTE:

1. GALVANIZED STEEL GROUND BAR. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION (ACTUAL GROUND BAR SIZE WILL VARY BASED ON NUMBER OF GROUND CONNECTIONS)
2. INSULATORS, NEWTON INSTRUMENT CAT NO 3061-A OR APPROVED EQUAL
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO., CAT. NO. 3015-B OR APPROVED EQUAL
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO., CAT NO A-6056 OR APPROVED EQUAL
5. 5/8"-11 X 1" HHCS BOLTS, NEWTON INSTRUMENT CO., CAT NO 3012-1 OR APPROVED EQUAL
6. INSULATORS SHALL BE ELIMINATED WHEN BONDING DIRECTLY TO TOWER/MONOPOLE STRUCTURE. CONNECTION TO TOWER/MONOPOLE STRUCTURE SHALL BE PER MANUFACTURERS RECOMMENDATIONS
7. NETWORK VISION WMBIS DEPLOYMENTS INSTALLED AT LEGACY CDMA OR IDEN SITES SHALL USE THE EXISTING COPPER GROUND BARS IF THEY ARE PRESENT. IF THE COPPER GROUND BARS HAVE BEEN STOLEN THEY SHALL BE REPLACED WITH THE STAINLESS STEEL BAR AF000063 - MIN 010326 FOR WMBIS OUTDOOR AND AF000063 - MIN 010330 FOR LEGACY SHELTER CELL SITES

NOT USED

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

10

GROUND BAR (IF REQUIRED)

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

9

NOT USED

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

8

NOT USED

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

7

NOT USED

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

6

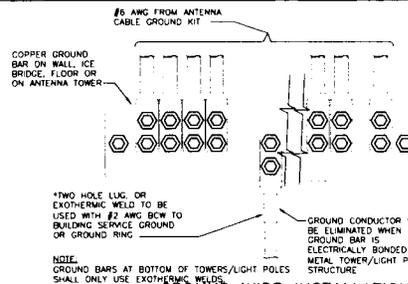
ELECTRICAL NOTE

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

5

NOTE(S):

1. EXISTING SINGLE PHASE, 120/240 VAC, 60HZ SERVICE WILL PROVIDE SUFFICIENT POWER REQUIREMENTS FOR NEW PROPOSED SPRINT EQUIPMENT, CABLES & ANTENNA UPGRADES



GROUND WIRE INSTALLATION

NOT USED

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

4

NOT USED

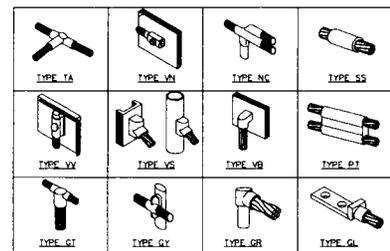
24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

3

CADWELD GROUNDING CONNECTIONS

24" x 36" SCALE: NOT TO SCALE
11" x 17" SCALE: NOT TO SCALE

1



FIRST AMENDMENT TO LEASE

This First Amendment to Lease (the "First Amendment") is made this day of ____, 2013, ("Effective Date") by and between Otay Water District ("OTAY") and Sprint PCS Assets, L.L.C., a Delaware limited liability company ("TENANT"), with reference to the facts set forth in the Recitals below:

RECITALS

- A. OTAY is the owner of that certain real property and facility known as the "Singing Hills" (803-3) Reservoir Site (the "Property").
- B. OTAY and TENANT are parties to that certain Lease dated December 8, 2000 (the "Lease" or "Agreement") pursuant to which TENANT is leasing from OTAY land at the Property, together with the right of access to and from the nearest public right-of-way and the right to install utilities (collectively, the "Premises").
- C. Tenant has requested a modification to the type and mounting of the Improvements currently on the Premises (the "New Improvements").
- D. OTAY and TENANT have agreed to amend the Agreement to memorialize the addition of the New Improvements to the Premises.

AGREEMENT

NOW, THEREFORE, in consideration of the facts contained in the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **New Improvements.** OTAY consents to TENANT construction and installation of new communications facilities, as more particularly described and depicted on Exhibit "B-1" which is attached hereto and made a part hereof. The parties acknowledge and agree that the attached Exhibit "B-1" is intended to supplement the Exhibit "B" attached to the Agreement.
2. **Governmental Approvals.** Any required permits for the use or operation of the New Improvements shall be obtained by TENANT at TENANT's sole expense. Furthermore, it is understood and agreed that TENANT's ability to install the New Improvements is contingent upon its obtaining all of the certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit TENANT to install and operate the New Improvements within the Premises. OTAY agrees, at no expense to OTAY, to reasonably cooperate with TENANT in making application for and obtaining all governmental licenses, permits and approvals that may be required for TENANT'S intended use of the Premises.
3. **Amended Provisions.** The following provisions shall be amended as follows:
 - 3a. Section 5; Rent shall be replaced with the following:

5.1 Tenant agrees to pay all costs and expenses incurred by Otay in connection with the Facilities and this Agreement, including negotiation and processing hereof, plan checking and inspection of Tenant facilities, costs of inspection, repairs or replacement of any Otay facilities affected or damaged, and all other costs or expenses of Otay attributable to the matters herein contemplated, plus a reasonable amount for Otay's overhead costs in connection therewith.

a. **Deposit.** Tenant has made a deposit, concurrent with its application, and has agreed to make any additional deposits required in connection with Otay's review of the application, negotiation of this Agreement, including legal review, site visits, review of drawings and other costs relating such matters incurred by Otay up to the time this Agreement is executed. Tenant forfeits any claim to such deposits except to the extent Otay determines after this Agreement is executed that amounts in excess of the District's costs and expenses have been paid. Any such excess amounts may, at the sole discretion of the District, be credited toward administrative fees or any other costs then due by Tenant, if any. If no amounts are due, excess deposits will be reimbursed to Tenant.

b. **Administrative Fees.** Administrative fees may be charged at Otay's discretion during the Term to recover costs and expenses incurred by Otay, including but not limited to attorneys and consultant's fees, review, processing of Tenant's conditional use permits, inspection of the Facilities during construction and other related costs if any, in connection with any Tenant activity that requires Otay staff to spend time in supervision, inspection, investigation or other review; such costs include but are not limited to any amendments to this Agreement, any default or any failure of Tenant to secure or renew any permit, approval, license or easement and any investigation Otay deems reasonably required in connection with the Premises or the Facilities, including without limitation any investigation of a potential contamination of any portion of the Property due to any Tenant activity or improvement.

c. **Security Deposit.** Concurrently upon execution of this Agreement, Tenant shall pay to Otay a sum equal to two months' rent as a deposit ("Security Deposit") to secure the Tenant's performance of the covenants contained herein. Tenant shall maintain the Security Deposit balance equal to the amount established herein over the life of the agreement. If Otay applies any portion of the Security Deposit, Tenant shall within 30 days after demand by Otay, deposit an amount sufficient to restore the Security Deposit to its original amount. No part of the Security Deposit is to be considered as an advance payment of rent, including last months' rent, nor is it to be used or refunded prior to the leased premises being permanently and totally vacated by the Tenant. After the Tenant has vacated the premises, Otay shall furnish Tenant with an itemized written statement of the basis for, and the amount of, any of the security deposit retained by Otay. Otay may withhold that portion of Tenant's security deposit necessary (a) to remedy any default by Tenant in the payment of rent or any other provision

of this Agreement, (b) to repair damages to the premises or any expense, loss, or damage that Otay may suffer because of Tenant's default, (c) to restore the premises to meet Otay's standards, (d) any amount that Otay may incur or become obligated to spend in exercising Otay's rights under this Agreement or available at law. The unused portion of this deposit shall be returned to the Tenant without interest no later than 60 days after termination of this Agreement.

Tenant waives the provisions of California Civil Code §1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Agreement, that provide that Otay may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of accrued Rent, to repair damage caused by Tenant, or to clean the Premises. Otay and Tenant agree that Otay may, in addition, claim those sums reasonably necessary to compensate Otay for any other foreseeable or unforeseeable loss or damage caused by the act or omission of Tenant or Tenant's officers, agents, employees, Independent contractors, or invitees, including future rent payments.

d. None of the deposits or other payment of costs or administrative fees constitutes or shall be considered Rent (defined below).

5.2 Beginning on the Commencement Date, Tenant shall pay Otay as rent the sum of \$2,000.00 per month ("Rent") payable on the first day of each month in advance. If the Commencement Date is prior to the fifteenth day of the month of commencement, the full month's Rent will be due on the Commencement Date. If the Commencement Date is on or after the fifteenth day of the month of commencement, payment of Rent will begin the first day of the following month.

Tenant may make Rent payments up to 5 days past due date without penalty, unless continual late payments for two consecutive months occur. A fee shall be imposed after the 5th day and shall be 20% of the amount currently due. Failure to pay Rent within ten (10) calendar days of the first of the month shall be an Event of Default as provided by Section 13.2. Failure to pay Rent on the due date for more than two (2) consecutive months or four (4) times over any twelve (12) month period shall be a non-curable Event of Default without the necessity of any notice or cure period. At District's sole discretion, immediately following such a non-curable Event of Default, District may terminate the Agreement and seek any remedy available by this Agreement or at law. If Tenant tenders a check, which is dishonored by a banking institution, then the Tenant shall tender cash or cashier's check only for all future payments, which shall continue until such time as written consent is obtained from Otay. In addition, Tenant shall be liable in the sum of \$25 for each dishonored check that is returned to Otay.

a. Rent Increases. The Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater. CPI shall be the average percentage increases in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100)

(the "CPI") for "All Items – All Urban Consumers" for the San Diego Metropolitan Statistical Area.

3b. Section 7; Improvements, and Section 8; Installation of Equipment shall be replaced with the following:

7. Installation and Maintenance of Improvements. Tenant is authorized to install, maintain and operate on the Premises only the Facilities described and depicted on Exhibit B; provided that all permits and zoning approvals shall have first been obtained by Tenant and shall at all times while the Facilities operate remain in full force and effect.

a. Installation of the Improvements. Tenant's design and installation of all portions of the Facilities shall be done, at no cost to Otay, according to plans approved by Otay, provided that such approval shall not be unreasonably withheld. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay of the method of attachment at Otay's sole discretion. If such Facilities are to be attached or mounted to a water tank, Tenant shall use an installation method such as a magnetic mount or other, non-destructive alternative. The Tenant shall be responsible for painting its antennas and/or equipment to match Otay's facility. Otay will provide Tenant with specifications regarding paint type, color and application method to accomplish this requirement. Painting/coating submittals shall be provided to Otay by the Tenant prior to receiving permission to begin painting. Otay may specify a camouflage design if not inconsistent with requirements of the city or county within which the Facilities are located. These camouflage designs may include but are not limited to faux palm trees, pine trees, cypress trees, broadleaf trees, and flag poles, unipoles, and other camouflaged antenna and antenna supports.

b. Record Drawings. Within thirty (30) days after completion of the Facilities, Tenant shall provide Otay with "record" (also called "as-built") drawings of the Facilities showing and identifying all the equipment and improvements installed on the Premises. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, including without limitation all personal property and antennas located on the Premises and any such property of Tenant located in the Easement. No property of Tenant other than such identified property shall be located on the Premises or the Property at any time. Upon acceptance by Otay of Tenant's record drawings, in form and content satisfactory to Otay, such drawings shall replace and supersede any similar drawings contained in any exhibit attached hereto.

c. Alterations. Tenant shall not alter or change its Improvements in a material manner without the prior approval of Otay, such approval not to be unreasonably withheld. "Material" refers to any physical change that could affect the building structure, antenna support, interconnecting facilities or its appearance

or any change that requires access to the Premises for installation of new equipment, removal of old equipment, trenching or digging or that could disrupt Otay's workplace or communications in any way or any change that requires a renewed or amended easement, permit or approval. All of Tenant's construction and installation work shall be performed at Tenant's sole cost and expense in a good and workmanlike manner and fully compliant with all government permit and code requirements. Tenant shall have the right to remove all Improvements it installs at its sole expense on or before the expiration or termination of this Agreement, but must at such time restore the ground and surface underlying the removed Improvements to its pre-installation condition, wear and tear excepted, and to the reasonable satisfaction of Otay.

d. Alterations to Improvements / Additional Space. If, at any time during the Term, Tenant requests permission from Otay to add improvements requiring construction to its then existing Improvements, the then current Administrative Fees shall be paid to Otay before any such changes are negotiated. In addition, if the requested Tenant improvements include additional area, a new agreement or, at Otay's discretion, an amendment for the additional lease space must be executed prior to start of construction and Tenant shall comply with Otay's requirements then in effect, including payment of additional rent, if any, for the additional area.

e. Permits and Compliance with Applicable Laws. During the Term, and prior to commencing any construction or installation of any improvements or equipment, as applicable, Tenant shall obtain all necessary approvals, permits and access easements or licenses, all of which shall be maintained in full force and effect at all times in accordance with all applicable laws, rules and regulations.

i. Prior to commencing construction, Tenant shall deliver to Otay copies of all executed licenses, approvals and permits required by local, state or federal agency in connection with the Improvements, which permits shall be attached hereto as Exhibit B.

ii. From time to time, as required by law or regulation in connection with the normal operation of the Improvements or as needed due to improvements or alterations to the same, Tenant shall provide Otay with updated permits, licenses and/or approvals, including without limitation written evidence, satisfactory to Otay, of all FCC approvals and other governmental permits and approvals, including but not limited to compliance with the FCC's electromagnetic radiation rules, set forth at 47 C.F.R. § 1.1307 et seq. and FCC Office of Engineering and Technology Bulletin 65, each as hereafter amended.

iii. Otay agrees, at no expense to Otay, to reasonably cooperate with Tenant in making application for and obtaining all governmental licenses,

permits and approvals that may be required for Tenant's intended use of the Premises.

f. Utilities. Tenant shall be authorized to install utilities for the Premises and the Improvements at Tenant's expense and to improve the present utilities on or near the Premises (including, but not limited to the installation of an emergency back-up power) subject to Otay's approval of the location, route, design and capacity, which approval shall not be unreasonably withheld. Tenant shall fully and promptly pay for all utilities furnished to the Premises for the use, operation and maintenance of Tenant's Improvements. If inadequate electrical power is available to provide for the Improvements, or additional electrical power is required to be installed on the Premises by Otay in its sole discretion, such installation shall be at Tenant's sole expense. The location, route, design and capacity of the additional power facility shall be approved by Otay, which shall not be unreasonably withheld.

g. Repair of Otay's Improvements/Systems. Any damage done to the Property or to any Otay improvement, facility or system in connection with the construction, installation, maintenance, repair, improvement, replacement or operation of the Improvements shall be repaired or replaced immediately at Tenant's expense and to Otay's reasonable satisfaction by Otay staff or contractors approved by Otay. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay. Tenant shall pay all costs and expenses in relation to maintaining the integrity of Otay's facilities, improvements and systems affected in any way by Tenant's Improvements or its use of the Property or the Premises.

h. Maintenance and Repair. At all time during the Term, Tenant shall maintain the Premises and the Improvements in a manner acceptable to Otay. Tenant's use of its Improvements shall not at any time or in any way adversely impact, impede or interfere with Otay's access to, use or operation of, its improvements, equipment or systems.

i. Liens. Tenant shall not encumber or allow the Premises or the Property to be encumbered in any manner other than as expressly authorized herein.

j. Security. Tenant recognizes and agrees that the Premises and the Reservoir Site are a sensitive area and that Otay's operations and services are highly sensitive and regulated. Tenant shall provide for the proper supervision of all Tenant Parties assigned or allowed by Tenant to enter and do work at the Premises. Tenant also agrees, holding Otay harmless for any cost or expense, to comply with any and all security measures instituted by Otay from time to time.

8. Maintenance, Repair or Replacement of Otay's Improvements. At any time while this Agreement remains in effect, Otay may, at its option and upon One Hundred Eighty (180) days prior written notice to Tenant, remove or cause

Tenant to remove all or any portion of its Facilities at Tenant's expense, in order for Otay to paint, repair, or make replacements to any or all its improvements on the Premises (the "Maintenance or Replacement Work"), as deemed necessary by Otay in its sole discretion. Tenant agrees to fully cooperate with Otay's efforts in connection with any Maintenance or Replacement Work, including without limitation timely, and at Tenant's cost, removing and re-installing any portion of the Facilities, as requested by Otay.

a. Temporary Facilities. During the Maintenance or Replacement Work, Tenant may, holding Otay harmless from any cost or expense, install temporary antennas on the Premises subject to Otay's approval of the location and type of replacement facilities, such approval shall not be unreasonably withheld or delayed. Once the Maintenance or Replacement Work is completed by Otay, Tenant agrees to promptly dismantle any temporary facilities and to relocate the facilities to their original location or to any other location approved by Otay. All work related to the removal of any portion of the Facilities, installation of temporary facilities, dismantling, relocation to their original location and any related work, shall be done at Tenant's sole cost and expense and in good and workmanlike manner.

b. Repair of damage. Tenant shall repair any damage caused by Tenant in connection with the installation, maintenance, operation or removal of any temporary facilities or the Facilities, and Tenant shall restore any distributed portions of the Property to their condition immediately prior to the installation of the temporary facilities.

c. Otay's option to remove temporary facilities. If any temporary facilities are not removed within sixty (60) days from the date the Maintenance or Replacement Work is completed, Otay shall have the right, but not the duty, to remove the temporary facilities at Tenant's cost and expense.

d. Painting of the Facilities. If the Maintenance or Replacement Work includes the painting, or any work affecting the surface of Otay's improvements, the Tenant shall be responsible for repainting or performing other surface treatment of its antennas and equipment to match Otay's. Otay will provide specifications to the Tenant regarding the treatment, paint type, color and application method to accomplish this requirement. The Tenant shall be required to obtain approval of specifications from Otay prior to commencing work on this requirement. Subject to Otay's prior written consent, Tenant may substitute an alternate treatment, paint type and application method if it reasonably determines that Otay's selection will adversely affect or otherwise degrade Tenant's wireless signal from the Reservoir Site.

3c. Section 9; Co-Location shall be replaced with the following:

9.1. Co-Location by Otay. Tenant agrees that Otay may enter into leases or other types of agreements with other communication carriers, wireless communications carriers and other utilities for use of any portion of the "Reservoir Site" as long as said leases do not result in unreasonable interference with Tenant's use of or access to the Premises. Tenant shall reasonably cooperate with Otay's efforts in this regard including, at Otay's request, the relocation of, or changes to, the Facilities; provided that any alterations or relocation needed to accommodate the new carrier or utility shall be performed at the expense of Otay or the new carrier or utility.

9.2. Co-Location by Tenant - Subleasing/Encumbrance. Tenant shall not sub-lease or sub-license or otherwise encumber the Premises or any portion of the Facilities without Otay's prior written consent, which may be granted or denied at Otay's sole discretion. Any sub-lease or other encumbrance shall require an amendment to this Agreement and shall specify the terms and conditions, including making provision for rent and increases thereto for the sub-lease or other encumbrance.

3d. Section 13; Termination shall be replaced with the following:

13.1 Termination.

(a) This Agreement may be terminated by Tenant without further liability if:

(i) Tenant delivers to Otay 30-day written notice at any time prior to commencing any work at the Premises in connection with the installation of any Facilities, for any reason or no reason;

(ii) Tenant gives Otay sixty (60) days' notice of Tenant's determination that a governmental or non-governmental license, permit, consent, approval, easement or waiver necessary to enable Tenant to construct, install or operate the Facilities cannot be obtained or renewed at reasonable expense or in reasonable time period for wireless sites at water reservoirs in metropolitan areas within San Diego County. If this notice is given, Tenant must immediately cease any and all transmissions through and from the Premises and shall promptly remove, within a period of time not to exceed sixty (60) days, any and all Tenant's personal property and improvements from the Property. This Agreement and any related easements shall automatically expire upon the earlier of removal of the Tenant's improvements or the 60th day from the notice; excepting only Tenant's indemnities and liabilities hereunder, including the obligation to pay Rent for any holdover period. Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated.

(iii) Tenant determines at any time after the Commencement Date that the Premises are not appropriate or suitable for its operations for economic, environmental or technological reasons, including without limitation, any ruling or directive of the FCC or other governmental or regulatory agency, or problems with signal strength or interference not encompassed by subsection (iv) below; provided that the right to terminate under this subsection (iii) is exercisable only upon payment by Tenant, as a termination fee, of the lesser of twelve monthly installments of rent or the balance of the rent due for the then current Initial Term, Extension Term or Additional Term, as applicable; and Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated;

(iv) Otay commits a default under this Agreement and fails to cure pursuant to Section 13.2, below;

(v) The Property or the Premises are totally or partially destroyed by fire or other casualty (not caused by Tenant) so as to hinder Tenant's normal operations and Otay does not provide to Tenant within thirty (30) days after the casualty occurs a suitable temporary relocation site for Tenant's facility pending repair and restoration of the Premises; or

(vi) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

(b) This Agreement may be terminated by Otay without further liability if:

(i) Tenant commits a default under this Agreement and fails to cure such default pursuant to Section 13.2, below;

(ii) Otay determines that continuing the Agreement or continuing to allow the Tenant to construct, install, maintain or operate the Facilities in any way violates a law, rule or regulation; or

(iii) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

13.2 Default.

a. Event of Default. The parties covenant and agree that a default or breach of this Agreement (an "Event of Default") shall occur and be deemed to exist if, after notice and opportunity to cure as provided below:

(i) Tenant shall default in the payment of Rent, or any other amounts due Otay hereunder, and said default shall continue for ten (10) business days after the same becomes due; or

(ii) Either party shall default in the performance or observance of any other covenant or condition of this Agreement to be performed or observed if such failure persists for a period of thirty (30) days after the non-defaulting party provides written notice of the default to the defaulting party.

b. Rights upon Default. Upon the occurrence of an Event of Default, in addition to any other rights or remedies available to the non-defaulting party under any law, the non-defaulting party shall have the right to terminate the Agreement.

c. Cure Rights. An Event of Default shall not exist unless written notice has been given in accordance with this Agreement, and the defaulting party has had the opportunity to cure as provided herein. The defaulting party shall cure the alleged default within the manner provided herein; provided however, that if the nature of an alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the defaulting party shall not be in breach of this Agreement if it diligently commences a cure within such period, and thereafter diligently proceeds with the actions necessary to complete such cure.

3e. Section 17; Indemnity, shall be replaced with the following:

Tenant specifically agrees that it shall hold harmless, defend (with counsel, and if needed experts, reasonably acceptable to Otay), indemnify and otherwise protect Otay and each Otay Party, from and against all claims, suits or actions of any kind and description relating to (a) Tenant's obligations under this Agreement and any amendment hereto or (b) Tenant or Tenant Parties use of, and access to, the Premises, the Facilities or the Property. These obligations extend to and include without limitation any and all costs and expenses (including attorney's fees and court costs) incurred by Otay or the Otay Parties in connection with (i) damage to property (including the Premises, the Property or any personal property of Otay or any third party), (ii) any action or proceeding (including an enforcement action or criminal proceeding) related in any way to any permit (governmental or otherwise), approval or easement obtained by or required of Tenant in connection with this Agreement or the Facilities; and (iii) personal injury or death, except to the extent that such claims, suits or actions directly arise from the gross negligence or willful misconduct of Otay or an Otay Party. This indemnification clause in no way limits any other specific indemnities given by Tenant under other provisions of this Agreement.

Nothing contained herein shall prohibit Otay, in its sole discretion, from participating in the defense of any demand, claim, action, proceeding, or litigation. In no event shall Otay's participation in the defense of any demand

claim, action, proceeding, or litigation affect the obligations imposed upon Tenant herein.

This and all other Tenant indemnities shall survive the termination of this Agreement and shall remain in effect for as long as the underlying claim or action remains viable.

3f. Section 19; Assignment, shall be replaced with the following:

Tenant shall not assign this Agreement or any portion of its rights or obligations hereunder without Otay's prior written consent, except to an affiliated parent entity, subsidiary, purchaser of at least 50% of the aggregate of the assets of Tenant ("assets" means and includes without limitation any and all real, personal or financial property or thing owned or controlled by Tenant or over which Tenant has an interest) or holder of Tenant's FCC license.

a. If during the Term hereof, Tenant requests the written consent of Otay to any assignment, and upon demonstration satisfactory to Otay of the proposed assignee's legal, financial, and technical qualifications to assume all of the Tenant's duties and obligations herein, Otay's consent thereto shall not unreasonably be withheld. Consent to one assignment shall not be deemed consent to any subsequent assignment.

b. Any attempted assignment not permitted under the first paragraph of this Section 19, without Otay's prior consent as set forth in Section 19(a), shall be void and, at Otay's option, shall constitute a termination of this Agreement for which a termination fee as described in Section 13.1.a(iii) shall be immediately due.

c. Any assignment of this Agreement shall require an executed "Assignment of Lease" whether or not the Consent of Otay is required pursuant to this section 19 or any other provision of this Agreement. A sample form of the "Assignment of Lease" is attached to this Agreement as Exhibit F which may be amended or modified in Otay's sole discretion.

4. **Continued Effect.** Except as specifically modified by this First Amendment, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between any term or provision of the Agreement and this First Amendment, the terms and provisions of this First Amendment shall control. In addition, except as otherwise stated in this First Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Agreement. All captions are for reference purposes only and shall not be used in the construction or interpretation of this First Amendment.

5. **Administrative Fees.** TENANT shall pay OTAY the amount of \$4,500 within (30) days of the date of execution of this Amendment by OTAY and TENANT.

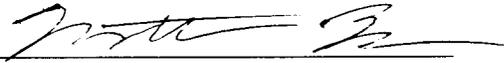
6. **Current Rent.** The current monthly Rent amount at the Effective Date of this First Amendment is \$2,735.93.

IN WITNESS WHEREOF, OTAY and TENANT have caused this First Amendment to be executed by each party's duly authorized representative effective as of the date first above written.

OTAY WATER DISTRICT:

Sprint PCS Assets, L.L.C.,
a Delaware limited liability company, :

By: _____
Name: Mark Watton
Title: General Manager
Date: _____

By: 
Name: Matthew Bell
Title: Manager Real Estate
Date: 5/29/2013

Approved as to Form:

By: _____
OWD General Counsel

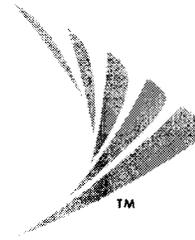
Approved as to Form:

By: _____
Its: _____

Exhibit B-1

NEW IMPROVEMENTS

Sprint



SAN DIEGO MARKET

SITE NUMBER: SD34XC555
SITE NAME: SINGING HILLS RESERVOIR
SITE TYPE: OUTDOOR

CITY: EL CAJON
COUNTY: SAN DIEGO
REFERENCE: TBD

APPLICANT:

SPRINT PCS
 SAN DIEGO, CALIFORNIA

PROJECT DESCRIPTION:

FIBER UPGRADE WITH AT&T BACKHAUL
 INSTALLATION TO EXISTING SPRINT
 WIRELESS TELECOMMUNICATIONS CELL SITE

ZONING CLASSIFICATION: CM-1
 CONSTRUCTION TYPE: TBD
 CURRENT OCCUPANCY: TBD

SITE INFORMATION:

2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019
 LATITUDE: 32.734885
 LONGITUDE: -116.89135

PARCEL NUMBERS:

515-051-07

PROPERTY OWNER:

OTAY WATER DISTRICT
 2524 SWEETWATER SPRINGS BOULEVARD
 SPRING VALLEY, CA 91978
 CONTACT: MARY SUTTON
 PHONE: (619) 670-2269

PROJECT SUMMARY

CLIENT:

SPRINT PCS
 SAN DIEGO, CALIFORNIA

FIBER VENDOR:

CONTACT: BLAKE STATION
 PH: (858) 886-1688

DESIGN CONSULTANT:

ALCATEL-LUCENT
 CONTACT: TOM FANALE
 PH: (760) 809-1140

PROJECT ARCHITECT:

JEFFREY ROME & ASSOCIATES
 1 SAN JOAQUIN PLAZA
 NEWPORT BEACH, CALIFORNIA 92660
 CONTACT: JEFFREY ROME
 PHONE: (949) 780-3929
 EMAIL: J.ROME@AOL.COM

PROJECT TEAM

SHEET DESCRIPTION

T-1 TITLE SHEET
 T-2 SITE PHOTOS
 A-1 SITE PLAN
 A-2 DETAILS

SHEET INDEX

ACCESS:

GENERAL ACCESS: NEED TO PASS THROUGH 4 GATES AND ALL COMBOS ARE 9127

AAV HOP / FIBER PATH:

THE HOP WILL BE THE EXISTING PNEUMATIC LOCATED 800' FROM (E) SPRINT LEASE AREA AT&T TO PLACE FIBER FROM EXISTING PNEUMATIC THROUGH (E) TELCO CONDUIT TO (E) TELCO CABINET TO (N) FBT JUNCTION BOX LOCATED INSIDE (E) SPRINT LEASE AREA.

INNERDUCT:

SPRINT GC TO RIG AND PLACE APPROXIMATELY 60% OF 1-1/4" INNERDUCT WITH MALE TAPE FROM (E) PNEUMATIC THROUGH (E) TELCO CONDUIT TO (E) TELCO CABINET TO (N) FBT JUNCTION BOX LOCATED IN (E) SPRINT LEASE AREA.

FBT LOCATION:

SPRINT GC TO INSTALL (N) FBT EQUIPMENT IN (N) 24"x24"x8" NEMA 3R RATED JUNCTION BOX WITH PLYWOOD BACKBOARD AND GROUND BAR WITH #6 SOLID GREEN GROUND WIRE (1" CO.) PROVIDED BY AT&T.

EQUIPMENT:

SPRINT TO WALL MOUNT. AT&T PROVIDED UAM/C/DNA EQUIPMENT USING (N) UNISTRUT (SEE PHOTOS FOR LOCATION)

POWER:

SPRINT GC TO PROVIDE AND INSTALL (1) 8" EMT CONDUIT FROM THE (E) MM-BITS CABINET TO (N) UAM/C/DNA CABINET, (1) 30 AMP -80V DC CIRCUIT USING #12 AWG THIN STRANDED CONDUCTORS; APPROXIMATELY 15'-0" CONDUIT RUN.

GROUNDING:

SPRINT GC TO PROVIDE AND INSTALL (N) (2) 1/2" DIA. EMT CONDUITS WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN FROM (E) GROUND BAR LOCATED INSIDE EXISTING TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN. RUN TO (N) AT&T UAM/C/DNA AND (N) FBT JUNCTION BOX.

CUSTOMER FIBER PATH:

SPRINT GC TO PROVIDE AND INSTALL (1) 1" EMT CONDUIT FROM (N) UAM/C/DNA CABINET TO SPRINT UAM-BITS CABINET; APPROXIMATELY 15'-0" CONDUIT RUN.

SCOPE OF WORK

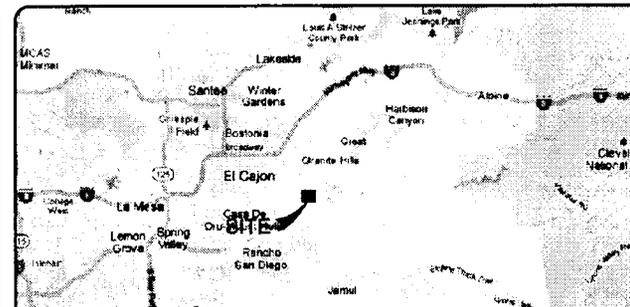
CONTRACTOR & CREWS SHALL ABIDE BY SPRINT CONSTRUCTION STANDARDS/REQUIREMENTS AS DESCRIBED IN THE A&T SPRINT SAFETY HANDBOOK. OSHA REGULATIONS/STANDARDS SHALL BE REVIEWED & FOLLOWED BY ALL EQUIPMENT INSTALLERS & TOWER/ROOF TOP CONTRACTORS/SUBCONTRACTORS DURING CONSTRUCTION.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR AND/OR UNSUITABLE MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE AND ACCEPTED UNDER CONTRACT. UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR. (EXCEPTION: THE RESPONDING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ANY WORK DONE, CONSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATER-TIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.)

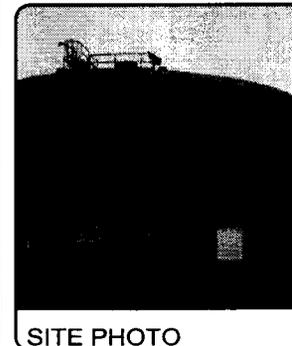
THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.

THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY PERMITS AND/OR FEES WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL OBTAIN PERMIT AND MAKE FINAL PAYMENT FOR SAID DOCUMENT.

GENERAL NOTES



VICINITY MAP



SITE PHOTO

FROM THE ALU OFFICES AT: 8605 SCRANTON ROAD, SAN DIEGO, CALIFORNIA 92121

- HEAD SOUTH ON SCRANTON ROAD TOWARD MIRA SORRENTO PLACE (0.3 MILES)
- TURN RIGHT ONTO MIRA MESA BOULEVARD (0.2 MILES)
- CONTINUE ONTO SORRENTO VALLEY ROAD (0.1 MILE)
- TAKE THE RAMP ONTO I-805 SOUTH (9.4 MILES)
- TAKE EXIT 176 TO MERGE ONTO I-8 EAST TOWARD EL CENTRO (13.2 MILES)
- TAKE EXIT 19 FOR 2ND STREET (0.2 MILES)
- TURN RIGHT ONTO NORTH 2ND STREET (0.5 MILES)
- CONTINUE ONTO JAMACHA ROAD (0.7 MILES)
- TURN LEFT ONTO EAST WASHINGTON AVENUE (0.6 MILES)
- CONTINUE ONTO DESHA ROAD (0.7 MILES)
- TURN RIGHT ONTO VISTA GRANDE ROAD (0.5 MILES)
- TAKE THE 2ND LEFT ONTO SANTA LOMAS (0.2 MILES)
- TURN RIGHT ONTO PENCE DRIVE (0.5 MILES)
- ARRIVE AT 2568 PENCE DRIVE

DRIVING DIRECTIONS

Sprint

Alcatel-Lucent

JRA

Jeffrey Rome & Associates, Inc.
 1 SAN JOAQUIN PLAZA
 NEWPORT BEACH, CALIFORNIA 92660
 PHONE: (949) 780-3929
 FAX: (949) 780-3929
 EMAIL: J.ROME@AOL.COM

PROJECT INFORMATION:

ANTENNA MODIFICATION PROJECT

SINGING HILLS RESERVOIR
 SD34XC555

2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:

04/27/12

ISSUED FOR:

100% ISSUED FOR CONSTRUCTION

REVISIONS

REV.	DATE	DESCRIPTION	INIT.
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSE:



SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

REVISION:

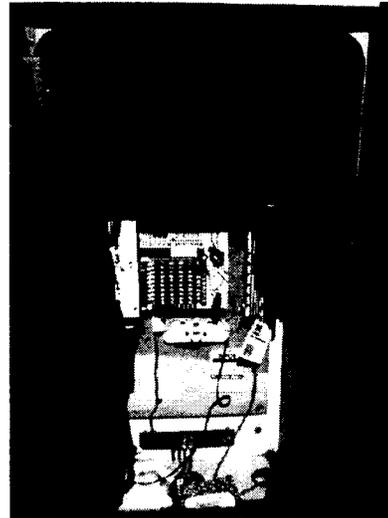
1



HOP/MEET POINT



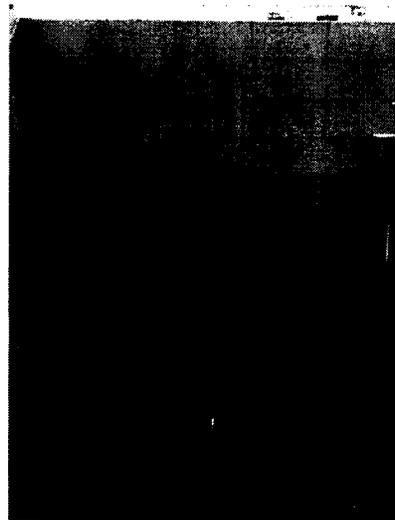
EXISTING EQUIPMENT AREA



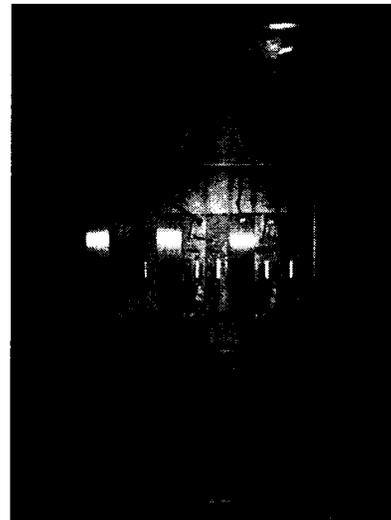
EXISTING TELCO BOX & MPOE



EXISTING GROUND BAR



PROPOSED CIENA BOX & CONDUIT RUNS



EXISTING POWER CABINET



NEW CONDUIT ROUTING

Sprint

Alcatel-Lucent

JRA
Jeffrey Rome & Associates, Inc.
1500 Wilshire Blvd., Suite 200
Santa Monica, CA 90401
Phone: (310) 390-2222
Fax: (310) 390-2222

PROJECT INFORMATION

ANTENNA MODIFICATION PROJECT

SINGING HILLS
RESERVOIR

SD34XC555

2565 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

04/27/12

ISSUED FOR:

100% ISSUED FOR
CONSTRUCTION

REVISIONS

REV.	DATE	DESCRIPTION	INIT
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

LICENSURE



SHEET TITLE:

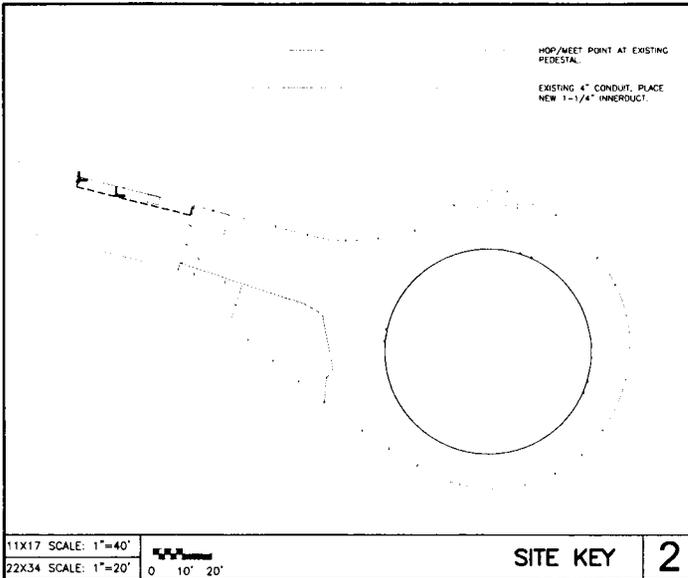
SITE PHOTOS
(AT&T)

SHEET NUMBER

T-2

REVISION:

1



SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (N) UAM/OIENA CABINET, APPROXIMATELY 5'-0" CONDUIT RUN.

(E) AT&T 4" CONDUIT WITH SPRINT GC TO ROD AND PLACE (N) 1-1/4" INNERDUCT WITH WALK TAPE FROM EXISTING PEDESTAL LOCATED ON WEST FROM (E) SPRINT LEASE AREA APPROXIMATELY 60'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) (2) 3/4" DIA. EMT CONDUITS WITH (1) NEW #8 AWG GREEN SOLID WIRE ROUTED WITHIN FROM (E) GROUND BAR LOCATED INSIDE EXISTING TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN; RUN TO (N) AT&T UAM/OIENA AND (N) FBT JUNCTION BOX.

SPRINT GC TO PROVIDE AND INSTALL (1) 3/4" EMT CONDUIT FROM THE (E) UAM-BTS CABINET TO (N) UAM/OIENA CABINET, (1) 20 AMP -48V DC CIRCUIT USING #12 AWG THIN-STRANDED CONDUCTORS, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) 1" EMT CONDUIT FROM (N) AT&T UAM/OIENA CABINET TO SPRINT'S UAM-BTS CABINET, APPROXIMATELY 15'-0" CONDUIT RUN.

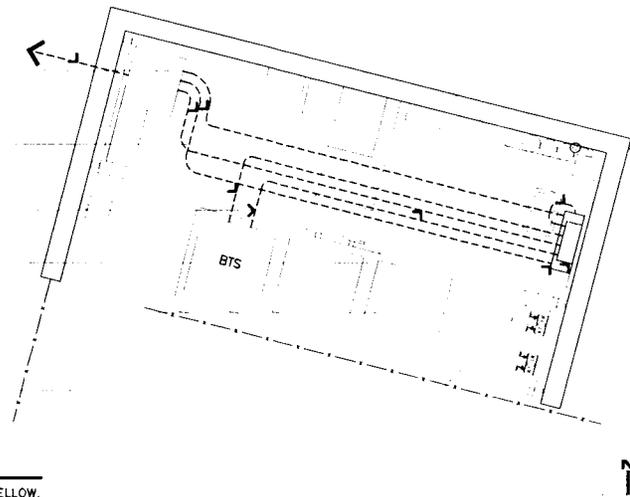
SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (E) TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) 24"x24"x38" NEMA 3R JUNCTION BOX WITH 3/4" PLYWOOD AND GROUND BAR WITH SET SCREWS PROVIDE 3'-0" COIL OF #8 AWG SOLID GREEN WIRE. (N) WALL MOUNTED UNISTRUT.

SPRINT GC TO INSTALL AT&T PROVIDED (N) UAM/OIENA CABINET MOUNTED ON (N) UNISTRUT, SEE DETAIL 2/A-2.

GENERAL NOTES:

PAINT ALL CONDUITS MOUNTED ON GROUND YELLOW.



Sprint

Alcatel-Lucent

JRA
 Jeffrey Rome & Associates, Inc.
 1 San Diego Plaza, Suite 200
 San Diego, California 92108
 Phone: (619) 594-2222
 Fax: (619) 594-2222

PROJECT INFORMATION:

ANTENNA MODIFICATION PROJECT

SINGING HILLS RESERVOIR

SD34XC555

2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:

04/27/12

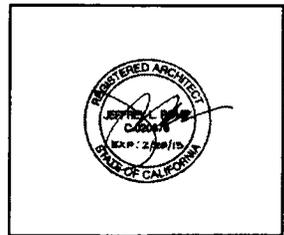
ISSUED FOR:

100% ISSUED FOR CONSTRUCTION

REVISIONS			
REV.	DATE	DESCRIPTION	INT.
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:



SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A-1

REVISION:

1



PROJECT INFORMATION

ANTENNA MODIFICATION PROJECT

SINGING HILLS RESERVOIR

SD34XC555

2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

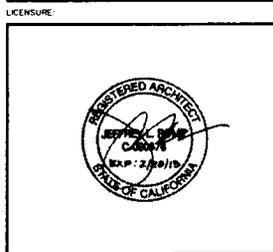
04/27/12

ISSUED FOR:

100% ISSUED FOR CONSTRUCTION

REVISIONS			
REV.	DATE	DESCRIPTION	INIT.
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

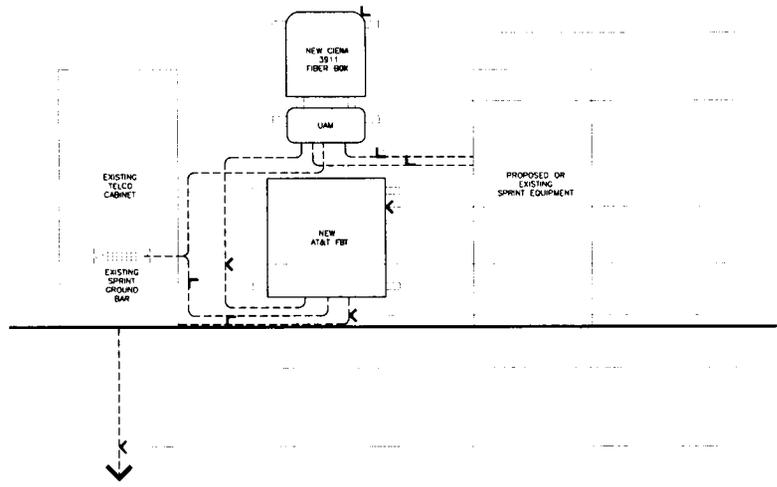


SHEET TITLE:

DETAILS (AT&T)

SHEET NUMBER: **A-2** REVISION: **1**

GENERAL NOTES:
PAINT ALL CONDUITS MOUNTED ON GROUND YELLOW.
EQUIPMENT VIEW ADJUSTED FOR CLARITY.



- (N) CIENA 3911 FIBER BOX AND (N) UNISTRUT. SEE DETAILS 1/A-2. AT&T TO INSTALL (N) AT&T CIENA 3911.
- SPRINT GC TO PROVIDE AND INSTALL (1) 1" EMT CONDUIT FROM (N) UAM/CIENA CABINET TO SPRINT MM-BTS, APPROXIMATELY 15'-0" CONDUIT RUN.
- SPRINT GC TO PROVIDE AND INSTALL (1) AT EMT CONDUIT FROM THE (E) MM-BTS CABINET TO (N) UAM/CIENA CABINET. (1) 20 AMP - 48V DC CIRCUIT USING #12 AWG THIN STRANDED CONDUCTORS. APPROXIMATELY 15'-0" CONDUIT RUN.
- SPRINT GC TO PROVIDE AND INSTALL (N) 24"x24"x1/2" MEDIA 36 JUNCTION BOX WITH 1/2" PLYWOOD AND GROUND BAR WITH SET SCREWS. PROVIDE 5'-0" COIL OF #6 AWG SOLID GREEN WIRE.
- SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (N) UAM/CIENA CABINET. APPROXIMATELY 5'-0" CONDUIT RUN.
- SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (E) TELCO CABINET. APPROXIMATELY 15'-0" CONDUIT RUN.
- SPRINT GC TO PROVIDE AND INSTALL (N) (2) 3/8" DIA. EMT CONDUITS WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN FROM (E) GROUND BAR LOCATED INSIDE EXISTING TELCO CABINET. APPROXIMATELY 15'-0" CONDUIT RUN. RUN TO (N) AT&T UAM/CIENA AND (N) FBT JUNCTION BOX.
- (E) AT&T 4" CONDUIT WITH SPRINT GC TO ROD AND PLACE (N) 1-1/4" INNERDUCT WITH MULE TAPE FROM (E) PEDESTAL. APPROXIMATELY 60'-0" CONDUIT RUN.

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

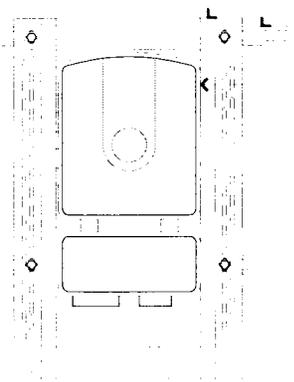
NOT USED **4**

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

ROUTING DIAGRAM **3**

H-FRAME MOUNT ASSEMBLY (PER MANUFACTURER):

- SELECT AN APPROXIMATE H-FRAME STRUCTURE THAT WILL SUPPORT APPROXIMATELY 200 POUNDS OR 90 KILOGRAMS WITH A MINIMUM HEIGHT OF 4' ABOVE GRADE.
NOTE: THE H-FRAME MOUNT KIT IS REQUIRED TO CONNECT WITH AT LEAST 2 HORIZONTAL SUPPORT CHANNELS OF YOUR H-FRAME STRUCTURE. THE CHANNELS SHOULD BE SPACED BETWEEN 15" AND 25" APART. THE PREFERRED SPACING IS 18".
- REMOVE AND SET ASIDE THE SCREWS THAT HOLD THE H-FRAME MOUNT KIT TOGETHER FOR SHIPMENT. THESE SCREWS WILL BE USED LATER IN STEP #3.
- LOOSELY ASSEMBLE THE HORIZONTAL SUPPORT BRACKET TO THE 2 VERTICAL SUPPORT BRACKETS USING THE SCREWS FROM STEP #2.
- FIRMLY ATTACH THE H-FRAME ASSEMBLY TO THE H-FRAME STRUCTURE. THE MAXIMUM OVERHANG OF THE VERTICAL SUPPORT BRACKETS SHOULD BE NO MORE THAN 6" PAST THE H-FRAME STRUCTURE.
- TIGHTEN ALL H-FRAME MOUNTING HARDWARE.
- REFERENCE THE SECTION ENTITLED H-FRAME MOUNT ILLUSTRATION.



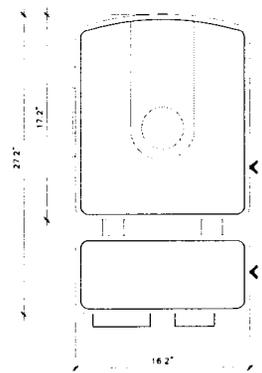
- (N) H-FRAME MOUNTING ASSEMBLY (BY CIENA).
- (N) UNISTRUT TO WALL.
- (N) CIENA 3911 OUTDOOR RATED FIBER BOX (SECURED TO MOUNTING ASSEMBLY PER MANUFACTURER INSTRUCTIONS).

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

FIBER BOX H-FRAME MOUNTING **2**

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

FIBER BOX SPECIFICATIONS **1**



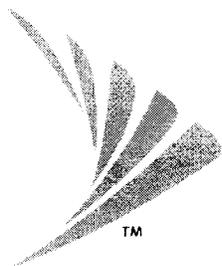
PLAN VIEW

MANUFACTURER: CIENA
MODEL: 3911 W/ UN ACCESS MODULE (UAM)
DIMENSIONS: 27.2"(H) X 16.2"(W) X 6.4"(D)
WEIGHT: APPROX 32.8 LBS

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE



SAN DIEGO MARKET



NETWORK VISION MMBTS LAUNCH SINGING HILLS (7 RESERVOIR (7 O)) SD34XC555

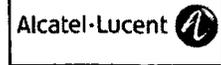
WATER TANK

2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

LATITUDE: 32.77357 (32° 46' 24.85" N)
LONGITUDE: -116.89131 (116° 53' 28.71" W)

SHEET	DESCRIPTION
T-1	TITLE SHEET
T-2	SPECIFICATIONS AND NOTES
T-3	SKINAGE AND NOTES
A-1	SITE PLAN
A-1.1	ENLARGED SITE PLAN
A-2	EQUIPMENT PLAN
A-3	ANTENNA LAYOUT PLAN
A-4	NORTH ELEVATION
A-4.1	SOUTH ELEVATION
A-4.2	EAST ELEVATION
A-4.3	WEST ELEVATION
A-5	EQUIPMENT DETAILS
A-5.1	EQUIPMENT DETAILS
A-6	ANTENNA AND RRH DETAILS
A-6.1	ANTENNA AND RRH DETAILS
E-1	GROUNDING SCHEMATICS
E-2	ANTENNA LINE COLOUR CODING
E-3	HYBRIFLEX SPECIFICATIONS AND ELECTRICAL NOTES
D-1	DETAILS
D-2	DETAILS
D-3	DETAILS
D-4	DETAILS
D-5	DETAILS
AAV SHEETS	
T-1	TITLE SHEET
T-2	SITE PHOTOS
A-1	SITE PLAN
A-2	DETAILS

SHEET INDEX



PROJECT INFORMATION

NETWORK VISION
MMBTS LAUNCH

SINGING HILLS (7
RESERVOIR (7 O))

SD34XC555

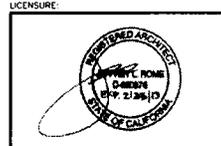
2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE: 01/24/13

ISSUED FOR: 100% FINAL CD'S

REVISIONS				
REV	DATE	DESCRIPTION	INIT	
0	05/12/12	90% CD'S REVIEW	FR	
1	11/26/12	100% CD'S REVIEW	FR	
2	01/24/13	100% FINAL CD'S	FR	

NOT FOR CONSTRUCTION UNLESS
LABELLED AS CONSTRUCTION SET



SHEET TITLE: TITLE SHEET

SHEET NUMBER	REVISION
T-1	2

CALIFORNIA STATE CODE COMPLIANCE

SPRINT PROPOSES THAT ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- CALIFORNIA FIRE CODE, 2010 EDITION
- CALIFORNIA BUILDING CODE, 2010 EDITION
- CALIFORNIA PLUMBING CODE, 2010 EDITION
- CALIFORNIA MECHANICAL CODE, 2010 EDITION
- CALIFORNIA ELECTRICAL CODE, 2010 EDITION
- CALIFORNIA GREEN BUILDING CODE, 2010 EDITION

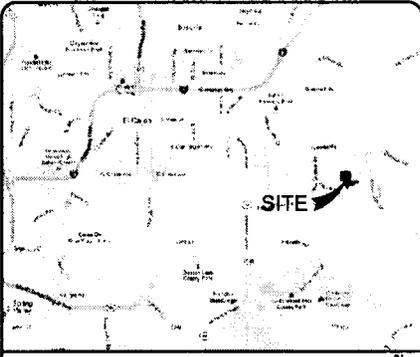
IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

ACCESSIBILITY REQUIREMENTS

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.



CODE BLOCK



VICINITY MAP

SCOPE OF WORK

- SPRINT PROPOSES TO MODIFY ITS EXISTING ANTENNA AND EQUIPMENT IN AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY
- INSTALL (9) (N) PANEL ANTENNAS
 - REMOVE (6) (E) PANEL ANTENNAS
 - INSTALL (3) (N) RRH'S
 - REMOVE ALL (E) COAX COAX
 - INSTALL (3) (N) FIBER OPTIC CABLE USING EXISTING COAX ROUTE.
 - REMOVE (1) (E) BTS CABINET
 - INSTALL (1) (N) BTS CABINET
 - INSTALL (1) (N) JUNCTION BOX
 - REMOVE (1) (E) POWER CABINET
 - INSTALL (1) (N) 600V2 BBU CABINET

LEGEND

PROPERTY LINE	1/4" = 1'	DETAIL REFERENCE
FENCE LINE		
HOLLOW METAL FENCE		ELEVATION REFERENCE
COAXIAL CABLE	BTS	BASE TRANSCIVER STATION
CABLE TRAY	COAX	CODE DIVISION MULTIPLE ACCESS
CABLE BRIDGE	RRH	REMOTE RADIO HEADS
	GPS	GLOBAL POSITIONING SYSTEM

LEGEND

APPROVAL	SIGNATURE	DATE
PROJECT MANAGER		
CONSTRUCTION MANAGER		
RF ENGINEER		
SITE ACQUISITION		
PLANNING CONSULTANT		
PROPERTY OWNER		
SPRINT REPRESENTATIVE		

SIGNATURE BLOCK

- FROM THE SAN DIEGO INTERNATIONAL AIRPORT:
- HEAD WEST ON AIRPORT TERMINAL ROAD (420 FEET)
 - SLIGHT LEFT TO STAY ON AIRPORT TERMINAL (1.3 MILES)
 - KEEP RIGHT AT THE FORK (143 FEET)
 - TURN LEFT ONTO NORTH HARBOR DRIVE (1.4 MILES)
 - TURN LEFT ONTO WEST GRAPE STREET (4 MILES)
 - TAKE THE INTERSTATE 5 SOUTH RAMP (2 MILES)
 - MERGE ONTO I-5 SOUTH (1.0 MILES)
 - TAKE EXIT 15B TO MERGE ONTO CA-94 EAST (13.9 MILES)
 - TURN RIGHT ONTO CA-94 EAST/CAMPO ROAD (8 MILES)

DRIVING DIRECTIONS

APPLICANT:
NATION GROUP CONSULTING ON BEHALF OF
ALCATEL-LUCENT FOR SPRINT PCS
9605 SCRANTON ROAD, SUITE 400
SAN DIEGO, CALIFORNIA 92121

PROPERTY OWNER:
OTAY WATER DISTRICT
2534 SWEETWATER SPRINGS BOULEVARD
SPRING VALLEY, CALIFORNIA 91977

PROPERTY INFORMATION:
2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ZONING CLASSIFICATION: RV
CALIFORNIA BUILDING CODE, 2010 EDITION
EXISTING CONSTRUCTION TYPE: TBD
PROPOSED CONSTRUCTION TYPE: TBD
EXISTING OCCUPANCY: WATER TANK
PROPOSED OCCUPANCY: TELECOMMUNICATIONS FACILITY
JURISDICTION: COUNTY OF SAN DIEGO
EXISTING USE: TELECOMMUNICATIONS
PROPOSED USE: TELECOMMUNICATIONS
NO OF STORES: NOT APPLICABLE - WATER TANK
PROPOSED USE: NOT APPLICABLE - WATER TANK

PARCEL NUMBER:
515-051-07

LEASE AREA:
NO INCREASE IN EXISTING LEASE AREA.

PROJECT SUMMARY

PROJECT ARCHITECT

JEFFREY ROME & ASSOCIATES
1 SAN JOAQUIN PLAZA
SUITE 250
NEWPORT BEACH, CALIFORNIA 92660
CONTACT: JEFFREY ROME
PHONE: (949) 760-3929
EMAIL: J.ROME@AOL.COM

STRUCTURAL ENGINEER

S.E. PEYTON-TOMITA & ASSOCIATES STRUCTURAL ENGINEERS
954 TOWN & COUNTRY ROAD
ORANGE, CALIFORNIA 92668
CONTACT: MARK S. TOMITA
PHONE: (714) 245-4931
EMAIL: peytontomita@aol.com

SITE ACQUISITION MANAGER

ALCATEL-LUCENT
CONTACT: FELICIA PHILIPS
PHONE: (714) 791-8643
EMAIL: FELICIA.PHILIPS@ALCATEL-LUCENT.COM

CONSTRUCTION MANAGER

ALCATEL-LUCENT
9605 SCRANTON ROAD, SUITE 400
SAN DIEGO, CALIFORNIA 92121
CONTACT: ROBERT GUAGE
PHONE: (858) 320-3191
EMAIL: ROBERT.GUAGE@ALCATEL-LUCENT.COM

PLANNING CONSULTANT

NATION GROUP CONSULTING, LTD.
CONTACT: DANIELLE GOLDMAN
PH: (619) 972-4944
EMAIL: DANIELLE.GOLDMAN@NATIONTELECOM.COM

TELCO COMPANY:

AT&T
PH: (888) 944-0447

POWER COMPANY:

SDG&E
PH: (800) 336-7343

RF ENGINEER:

DARRIN MAH
EMAIL: DARRIN.MAH@ALCATEL-LUCENT.COM

PROJECT TEAM

THE DRAWING SCALES SHOWN IN THIS SET REPRESENT THE CORRECT SCALE ONLY WHEN THESE DRAWINGS ARE PRINTED IN A 11"x17" OR 22"x34" FORMAT. IF THIS DRAWING SET IS NOT 11"x17" OR 22"x34", THIS SET IS NOT TO SCALE.

DRAWING SCALE

GENERAL GUIDELINES

1. THE LATEST EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS DOCUMENT A201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" ARE INCLUDED IN THESE SPECIFICATIONS AS IF COMPLETELY REPRODUCED HEREIN.
2. THIS FACILITY IS AN UNLICENSED PCS TELECOMMUNICATIONS SITE AND IS EXEMPT FROM DISABLED ACCESS REQUIREMENTS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS PARTICIPATING SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL FIELD CONDITIONS AFFECTING THE PROPOSED PROJECT INCLUDING GEOTECHNICAL, ELECTRICAL, MECHANICAL AND STRUCTURAL INSTALLATIONS, AS WELL AS WITH THE SPRINT CONSTRUCTION CONTRACT DOCUMENTS AND SHALL CONFIRM THAT THE PROJECT CAN BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. SHOULD ANY ERRORS, OMISSIONS, OR DISCREPANCIES BE FOUND, THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY SPRINT CONSTRUCTION MANAGER AND THE ARCHITECT IN WRITING. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY OR EXTENSIVE WORK IN THE BID, UNLESS SPECIFICALLY DIRECTED OTHERWISE. A DISCREPANCY EXISTS AND THE PROJECT MANAGER AND ARCHITECT ARE NOT NOTIFIED, THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR OR CORRECT ALL PROBLEMS THAT RESULT.
4. DRAWINGS SHALL NOT BE SCALED. THESE DRAWINGS ARE INTENDED TO BE DIMENSIONAL ONLY. REQUIRED DIMENSIONS HAVE PRECEDENCE OVER DRAWING SCALE AND DETAIL DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS. CONTRACTOR SHALL CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD UNLESS SPECIFICALLY NOTED. DO NOT FABRICATE ANY MATERIALS, OR BEGIN ANY CONSTRUCTION UNTIL THE CONTRACTOR DRAWING DIMENSIONS HAS BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.
5. THE CONTRACTOR SHALL INCLUDE IN HIS OR HER BID ALL MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE THE WORK AS INDICATED OR IMPLIED BY THESE DRAWINGS.
6. CONTRACTOR SHALL NOTIFY THE SPRINT CONSTRUCTION MANAGER, THE PROPERTY OWNER AND THE ARCHITECT IF ANY DETAILS ARE CONSIDERED IMPRACTICAL, UNUSABLE, UNOBTAINABLE, OR NOT BEING INSTALLED. CUSTOMER TRADE PRACTICE, IF WORK IS PERFORMED, IT WILL BE CONSIDERED THAT THERE IS NO DISCREPANCY. THE CONTRACTOR SHALL BE RESPONSIBLE TO SHOW THE END RESULT OF THE DESIGN. WORK MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.
7. EXISTING ELEVATIONS AND LOCATIONS TO BE JOINED SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. IF THEY DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE SPRINT CONSTRUCTION MANAGER AND THE ARCHITECT SO THAT NECESSARY MODIFICATIONS CAN BE MADE BEFORE PROCEEDING WITH THE WORK.
8. THE CONTRACTOR SHALL VERIFY ALL TELEPHONE & RADIO EQUIPMENT LOCATIONS, SPECIFICATIONS, PERFORMANCE, INSTALLATION AND FINAL LOCATIONS WITH SPRINT CONSTRUCTION MANAGER PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH ENCISSION RADIO SYSTEMS.
9. ALL SYMBOLS & ABBREVIATIONS USED ON THE DRAWINGS ARE CONDENSED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONING REGARDING THE EXACT MEANING, THE SPRINT CONSTRUCTION MANAGER AND THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK.
10. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK AND INCLUDE THOSE IN THE COST OF THE WORK TO SPRINT.
11. THE CONTRACTOR SHALL PROVIDE CONTINUOUS SUPERVISION WHILE ANY SUBCONTRACTORS OR WORKMEN ARE IN THE SITE. THE CONTRACTOR SHALL DIRECT ALL WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE FULLY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
12. WORKMANSHIP THROUGHOUT SHALL BE OF THE BEST QUALITY OF THE TRADE INVOLVED, AND SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REFERENCE STANDARDS FOR QUALITY AND PROFESSIONAL CONSTRUCTION PRACTICE:
 - MICA NATIONAL ROOFING CONTRACTORS ASSOCIATION O-ARE INTERNATIONAL CENTER 10255 W. HIGGINS ROAD, SUITE 600 ROSEMONT, IL 60018
 - SMAOMA SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION 4201 LAVAYETTE CENTER DRIVE CHANTILLY, VA 20111-1206
 - IPLP INTERNATIONAL INSTITUTE FOR LATH AND PLASTER 820 BROWNSER ROAD ST. PAUL, MN 55114-1406
13. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
14. THE CONTRACTOR SHALL VERIFY, COORDINATE AND PROVIDE ALL NECESSARY BLOCKING, BRACING, FRAMING, HANGARS AND OTHER SUPPORTS FOR ALL ITEMS SHOWN ON THESE DRAWINGS.
15. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL GIVE ALL NOTICES AND SHALL COMPLY WITH ALL APPLICABLE LOCAL CODES, REGULATIONS, LAWS AND ORDINANCES AS WELL AS STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (DISA) REQUIREMENTS.
16. THE CONTRACTOR SHALL PROTECT THE PROPERTY OWNERS AND SPRINT PROPERTY FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO EXISTING FINISHES, CONSTRUCTION, STRUCTURE, LANDSCAPING, CURBS, STAIRS, OR EQUIPMENT, ETC. SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF SPRINT AND THE PROPERTY OWNER'S REPRESENTATIVE, AT THE EXPENSE OF THE CONTRACTOR.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL REPLACE OR REPAIR, ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR THE REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONNECTION WITH THE EXECUTION OF WORK.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT SITE WHILE THE JOB IS IN PROGRESS AND UNTIL THE JOB IS COMPLETED AND ACCEPTED BY SPRINT.

20. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER POWER AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER, SPRINT, AND THE CITY OR GOVERNING AGENCY.
21. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR RELOCATING THE CONSTRUCTION DOCUMENTS TO ILLUSTRATE THE AS-BUILT CONDITION OF THE SITE. THIS SHALL BE DONE AFTER THE SITE HAS BEEN AWARDED FINAL INSPECTION BY THE RESPONSIBLE BUILDING AGENCY. ONE SET OF REQUIRED DRAWINGS SHALL BE PROVIDED TO THE SPRINT CONSTRUCTION MANAGER.
22. THE LATEST EDITION OF ALL PERMITTED AND APPROVED PLANS PERTAINING TO THIS PROJECT SHALL BE POSTED IN A PLAIN BOX AND SHALL NOT BE USED BY WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDITIONS AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT.
23. THE CONTRACTOR SHALL REMOVE ALL RUBBISH AND WASTE MATERIALS ON A DAILY BASIS, EXCEPT FOR THAT SPECIFIED AS REMAINING THE PROPERTY OF THE BUILDING OR PROPERTY OWNER AND SHALL EXERCISE STRICT CONTROL OVER JOB CLEANUP THROUGHOUT CONSTRUCTION, INCLUDING FINAL CLEANUP. UPON COMPLETION OF WORK, ALL AREAS ARE TO BE LEFT IN A BROOM CLEAN CONDITION AT THE END OF EACH DAY AND MAINTAIN CLEAN CONDITION FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE AT COMPLETION OF WORK.
24. THE GENERAL CONTRACTOR MUST PERFORM WORK DURING PROPERTY OWNER'S PREFERRED HOURS TO AVOID DISRUPTION OF NORMAL ACTIVITY.
25. ALL EXPOSED METAL SHALL BE HOT-DIPPED GALVANIZED.
26. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH UL LISTED OR FIRE MARSHALL APPROVED MATERIALS AND WHERE APPLICABLE TO THE CITY AND PRIVATE CODES.
27. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-ABC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA CONSTRUCTION.
28. ELECTRICAL POWER AND SYSTEMS CHECKED BELOW:
 - ARTICLES 250 AND 810
29. ALL NEW OPENINGS IN THE EXTERIOR ENVELOPE OF CONDITIONED SPACES SUCH AS AT WALL AND ROOF PENETRATIONS SHALL BE CALKED OR SEALED TO PREVENT INFILTRATION OF AIR AND MOISTURE.
30. UPON COMPLETION OF CONSTRUCTION, SPRINT CONSTRUCTION MANAGER SHALL CONDUCT A WALK-THRU WITH PROPERTY OWNER OR REPRESENTATIVE OF PROPERTY OWNER.
31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SYSTEM EQUIPMENT IN A CLEAN WORKING ORDER. UNLESS OTHERWISE ACCEPTED BY THE PROJECT BY SPRINT.
32. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
33. NOTIFY SPRINT PRIOR TO ANY RF OR SITE CONCERNS - 1-866-400-8040

ROOFING & WATERPROOFING NOTES

1. CONTRACTOR SHALL CONTACT BUILDING OWNER TO DETERMINE IF ROOF IS UNDER WARRANTY. CONTRACTOR SHALL GUARANTEE THAT ANY AND ALL NEW ROOFING WORK MEETS THE SPECIFICATION OF ANY EXISTING ROOFING WARRANTIES. SUCH THAT THE WARRANTY IS NOT MADE INVALID AS A RESULT OF THIS WORK. IF IT IS DETERMINED THAT THE ARCHITECT'S DETAILING IS INADEQUATE OR IMPROPER OR IF ANY OTHER DISCREPANCY IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE SPRINT PROJECT MANAGER. IN WRITING. ULTIMATELY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIING WITH THE ORIGINAL ROOF MANUFACTURER'S SPECIFICATIONS.
2. CONTRACTOR SHALL USE METHODS AND MATERIALS SIMILAR AND COMPATIBLE WITH EXISTING MATERIALS & CONDITIONS FOR ROOF PATCHING, NEW PENETRATIONS, ETC.
3. THE CONTRACTOR SHALL PROPERLY SEAL ALL NEW ROOF & BUILDING ENVELOPE PENETRATIONS SUCH THAT THE INTEGRITY OF THE ORIGINAL BUILDING ASSEMBLY AND ALL APPLICABLE WARRANTIES ARE MAINTAINED.
4. IF IT DEEMED NECESSARY TO REMOVE EXISTING FINISHES AND/OR MATERIALS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECONSTRUCTING FINISHES AND MATERIALS TO LIKE-NEW CONDITION. CONTRACTOR SHALL MAINTAIN THE ORIGINAL COLORS, TEXTURES & FINISHES UNLESS SPECIFICALLY NOTED TO THE CONTRARY OR APPROVED BY THE SPRINT CONSTRUCTION MANAGER IN ADVANCE.

PENETRATION AT FIRE RATED ASSEMBLIES

1. AT THE SPRINT PROJECT MANAGER'S DIRECTION, THE CONTRACTOR SHALL PROVIDE "HEAT" HIGH PERFORMANCE FIRE STOP SYSTEM #55601 AT ALL FIRE RATED PENETRATIONS INSTALLED PER MANUFACTURER'S LATEST INSTALLATION INSTRUCTIONS.
2. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE CONSTRUCTED SO AS TO MAINTAIN AN EQUAL OR GREATER FIRE RATING UNDER THIS CONTRACT.

WORK ENVIRONMENT

1. CONTRACTOR AND CREW SHALL ABIDE BY THE UNITED STATES DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS (OSHA) AS DESCRIBED IN OSHA'S HANDBOOK OF GUIDELINES.
2. CONTRACTOR AND CREW SHALL ABIDE BY SPRINT SAFETY STANDARDS AS DESCRIBED IN SPRINT'S SAFETY HANDBOOK.

PAINTING NOTES & SPECIFICATIONS

1. ALL PAINT PRODUCT LINES SHALL BE SHERWIN WILLIAMS UNLESS SPECIFICALLY NOTED OTHERWISE.
 2. CONTRACTOR SHALL PREPARE ALL SURFACES AND APPLY ALL FINISHES PER LATEST EDITION OF MANUFACTURER'S SPECIFICATIONS.
 3. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS REGARDING SUFFICIENT DRYING TIME BETWEEN COATS WITH PROVISIONS AS RECOMMENDED BY MANUFACTURER FOR EXISTING WEATHER CONDITIONS.
 4. FINISH COLOR AND TEXTURE OF ALL PAINTED SURFACES SHALL MATCH EXISTING ADJACENT SURFACES UNLESS OTHERWISE NOTED.
 5. ALL PAINT MATERIAL DATA SHEETS SHALL BE PROVIDED TO THE SPRINT CONSTRUCTION MANAGER.
 6. PREPARE PREVIOUSLY PAINTED SURFACE BY LIGHT SANDING WITH 400 GRIT SANDPAPER AND NON-HYDROCARBON WASH. PREPARE GALVANIZED SURFACES BY ACID ETCH OR SOLVENT CLEANING IN ACCORDANCE WITH SSPC-SP-1.
 7. FURNISH DROP CLOTHES, SHIELDS, MASKING AND PROTECTIVE METHODS TO PREVENT SPRAY OR DROPPINGS FROM DAMAGING ADJACENT SURFACES AND FACILITIES.
 8. APPLY PAINT BY AIRLESS SPRAY, SANDING LIGHTLY BETWEEN EACH SUCCEEDING ENAMEL COAT ON FLAT SURFACES. APPLY MATERIAL TO ACHIEVE A COATING NO THINNER THAN THE DRY FILM THICKNESS INDICATED.
 9. APPLY BLOCK FLOOR TO CONCRETE BLOCK CONSTRUCTION AT A RATE TO ENSURE COMPLETE COVERAGE WITH PROPERLY COMPLETELY FILLED.
 10. CONTRACTOR SHALL CORRECT RUNS, SACS, MISSES AND OTHER DEFECTS INCLUDING INADEQUATE COVERAGE AS DIRECTED BY THE SPRINT CONSTRUCTION MANAGER. REPAIR AS NECESSARY TO ACHIEVE SURFACES WHICH ARE SMOOTH, EVENLY COATED WITH UNIFORM SHEEN AND FREE FROM BLEMISHES.
- B. PAINTING SCOPE**
1. PAINT THE FOLLOWING MATERIALS AND SYSTEMS CHECKED BELOW WITH THE COATING SYSTEM INDICATED.
- | NO. | DESCRIPTION | COATING SYSTEM | THICKNESS | NO. OF COATS |
|-----|-------------|----------------|-----------|--------------|
| 1 | CONCRETE | PRIMER | 1/16" | 1 |
| 2 | CONCRETE | PRIMER | 1/16" | 1 |
| 3 | CONCRETE | PRIMER | 1/16" | 1 |
| 4 | CONCRETE | PRIMER | 1/16" | 1 |
| 5 | CONCRETE | PRIMER | 1/16" | 1 |
| 6 | CONCRETE | PRIMER | 1/16" | 1 |
| 7 | CONCRETE | PRIMER | 1/16" | 1 |
| 8 | CONCRETE | PRIMER | 1/16" | 1 |
| 9 | CONCRETE | PRIMER | 1/16" | 1 |
| 10 | CONCRETE | PRIMER | 1/16" | 1 |
| 11 | CONCRETE | PRIMER | 1/16" | 1 |
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| 98 | CONCRETE | PRIMER | 1/16" | 1 |
| 99 | CONCRETE | PRIMER | 1/16" | 1 |
| 100 | CONCRETE | PRIMER | 1/16" | 1 |
- C. PAINTING SYSTEM SPECIFICATIONS**
1. 100% ACRYLIC LATEX COATING (SERIES 866) BY SHERWIN WILLIAMS CO. 1/16" DFT PER COAT APPLIED IN TWO COATS OVER DTM BONDING PRIMER (BR640).
 1. 100% ACRYLIC LATEX COATING EQUIVALENT TO 1-100 (SERIES A-82) BY SHERWIN WILLIAMS CO. 1/16" DFT PER COAT APPLIED IN TWO COATS OVER SPECIFIED PRIMER & PRIMER.
- D. ANTENNAS**
- PRIMER - KEM AQUA E61-W525
 - TOPCOAT - CORDTHANE II B65W200/B60V22
- BITS CABINET**
- PRIMER - KEM AQUA E61-W525
 - TOPCOAT - CORDTHANE II B65W200/B60V22
- COAXIAL CABLES**
- AS REQUIRED FOR ADHESION, APPLY ONE COAT OF KEM AQUA WATER REDUCIBLE PRIMER E61W20 REDUCED 25%
 - TOPCOAT - 2 COATS CORDTHANE II POLYURETHANE B65W200/B60V22
- RAW STEEL**
- PRIMER - KEM BOND HS B50W24, DMT ACRYLIC PRIMER
 - TOPCOAT - 2 COATS CORDTHANE II POLYURETHANE B65W200/B60V22
- GALVANIZED METAL**
- ACID ETCH WITH COMMERCIAL ETCH OR WINEGAR PRIMER COAT AND FINISH COAT (GALVITE HIGH SOLIDS OR DTM PRIMER/FINISH)
- STAINLESS STEEL**
- PRIMER - OTM WASH PRIMER, B7111
 - TOPCOAT - 2 COATS CORDTHANE II POLYURETHANE B65W200/B60V22
- PRE-PRIMED STEEL**
- TOUCH-UP ANY RUST OR UN-PRIMED STEEL WITH KEM BOND HS, 550W24
- ALUMINUM & COPPER**
- PRIMER - OTM WASH PRIMER, B7111
 - TOPCOAT - 2 COATS CORDTHANE II POLYURETHANE B65W200/B60V22
- CONCRETE MASONRY**
- PRIMER - PRO MAR EXTERIOR BLOCK FILLER
 - TOPCOAT - 2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH
- CONCRETE STUCCO/CEMENTING**
- 2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH
- STUCCO**
- PRIMER - PRO MAR MASONRY CONDITIONER B-46-W12000
 - TOPCOAT - SUPER PAINT A-B0 SERIES A-89 SATIN A-84 GLOSS
- WOOD**
- PRIMER - A-100 EXTERIOR ALKYL WOODS PRIMER Y-24W20
 - TOPCOAT - 2 COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH ADJACENT SURFACES
- FIELD CUTS/DAMAGE (PRIOR TO PRIME & PAINT)**
- FIRST & SECOND COAT - CURING CLEAR WOOD PRESERVATIVE #158-0356
 - ALL PENETRATIONS INTO FINISHED CLU-LAMS SHALL BE CALKED WITH "SIKAFLEX" SEALANT
- STEEL TOUCH UP**
- STEEL THAT HAS BEEN WELDED, CUT OR SCRATCHED IN THE FIELD SHALL BE TOUCHED UP WITH COLD GALVANIZED PAINT

STRUCTURAL SPECIFICATIONS

1. PRECEDENCE UNLESS OTHERWISE SHOWN OR SPECIFIED, THE FOLLOWING GENERAL NOTES SHALL APPLY. INFORMATION ON THESE DRAWINGS SHALL HAVE THE FOLLOWING PRECEDENCE:
 - A. ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS.
 - B. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
 - C. MATERIAL NOTES AND SPECIFICATIONS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE SPECIFICATIONS.
2. OTHER TRADES: SEE THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
3. GENERAL DETAILS AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.
4. SHORING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ALL TEMPORARY BRACING AND SHORING TO INSURE THE SAFETY OF THE WORK UNTIL IT IS FULLY COMPLETED. THIS INCLUDES UNSUPPORTING EXISTING FOOTINGS WHERE APPLICABLE.
5. SAFETY: THESE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE UNLESS OTHERWISE INDICATED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
6. WATERPROOFING, WATERPROOFING AND DRAINAGE DETAILS AND SPECIFICATIONS, ALTHOUGH SOMETIMES SHOWN ON STRUCTURAL DRAWING ARE OF GENERAL INFORMATION PURPOSES ONLY. WATERPROOFING AND DRAINAGE ARE SOLELY THE DESIGN RESPONSIBILITY OF THE ARCHITECT.
7. STEEL:
 - 1. ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS SHALL CONFORM TO ASTM B570 AND BE FABRICATED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE AISC.
 - 2. ALL BOLTS SHALL CONFORM TO ASTM A-307 UNLESS OTHERWISE NOTED ON PLANS. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A-325.
 - 3. STEEL PIPE COLUMNS SHALL BE GRADE "B" CONFORMING TO ASTM A53.
 - 4. STEEL TUBING SHALL BE GRADE "B" CONFORMING TO ASTM A500.
 - 5. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC METHOD. ALL WELDERS SHALL BE PROPERLY QUALIFIED AND BE PRE-APPROVED SURPLUS METAL SHALL BE DRESSED OFF TO SMOOTH, EVEN SURFACES WHERE WELDS ARE NOT EXPOSED TO VIEW. ALL WELDING SHALL COMPLY WITH THE LATEST A.W.S. SPECIFICATIONS.
8. ALL WELDING EQUIPMENT MUST BE USED:
 - B. R00 OWENS
 - C. GRINDERS.
9. NO BUZZ BOXES SHALL BE USED.
10. ALL STRUCTURAL STEEL SHALL BE CERTIFICATION. MILL CERTIFICATION SHALL BE KEPT ON THE JOB SITE FOR EXAMINATION BY THE DESIGN ENGINEER AND THE CITY INSPECTOR.
11. ALL HIGH STRENGTH BOLTS SHALL HAVE MILL CERTIFICATION. MILL CERTIFICATION SHALL BE KEPT ON THE JOB SITE FOR EXAMINATION BY THE INSPECTOR.
12. STEEL THAT HAD BEEN WELDED, CUT OR SCRATCHED IN THE FIELD SHALL BE TOUCHED UP WITH COLD GALVANIZING PAINT.
13. WELDING INDICATED IN THESE DRAWINGS IS DESIGNED FOR ONE HALF OF ALLOWABLE CODE STRESSES UNLESS SPECIFICALLY NOTED "FULL STRESS" AT END OF WELD SYMBOL.
14. CONCRETE:
 - 1. STRENGTH: CONCRETE FOR THE PROJECT SHALL HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AT AGE OF 28 DAYS:

LOCATION	STRENGTH	WT. SUMP	ADMIXTURE
SLAB/ROOFING 2500psi	150psi	4"	NONE
 - 2. INSPECTION: CONCRETE WITH SPECIFIED STRENGTH GREATER THAN 2500psi SHALL BE CONTINUOUSLY INSPECTED DURING PLACEMENT AT A DEPUTY INSPECTOR EMPLOYED BY A TESTING LABORATORY APPROVED BY THE BUILDING DEPT.
 - 3. REBAR GRIDS: REINFORCING STEEL SHALL BE CLEAN PERFORMED BARS CONFORMING TO ASTM A615 AS FOLLOWS:
 - #4 & SMALLER BARS: GRADE 40
 - #5 & LARGER BARS: GRADE 60
 - ALL BARS AT CAISSON FOOTING: GRADE 50
 - 4. CEMENT: FOUNDATIONS & SLABS: TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150
 - 5. PER/CAISSON FOOTINGS: TYPE V, LOW ALKALI, CONFORMING TO ASTM C-150.
15. AGGREGATE: USED IN THE CONCRETE SHALL CONFORM TO ASTM C-33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE SEGREGATION, SHIRING, OR BLENDS. THE MAXIMUM SIZE AGGREGATE IN CONCRETE WORK SHALL BE THE FOLLOWING:
 - A. FOUNDATIONS & SLABS "9" OR LESS: 3/4" GRAVEL
 - B. PER/CAISSON FOOTING: 1" GRAVEL
16. WATER SHALL BE CLEAN AND FREE FROM DELETERIOUS AMOUNT OF ACIDS, ALKALIS, ORGANIC MATERIALS AND SHALL BE SUITABLE FOR HUMAN CONSUMPTION.
17. MIXING: PREPARATION OF CONCRETE SHALL CONFORM TO ASTM C-34. NO MORE THAN 60 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY A TESTING AGENCY.
18. SEGREGATION OF AGGREGATES: CONCRETE SHALL NOT BE FLOPPED THROUGH REINFORCING STEEL, GAS IN WALLS, COLUMNS, CAISSON, AND OTHER CAPITALS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE HOPPERS, CHUTES, TRUNKS OR PUMP HOSE SO THAT THE FREE UNCOMPACTED FALL OF CONCRETE SHALL NOT EXCEED 5 FT.
19. SPACES OF REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 DIAMETERS AND SECURELY WROTE TOGETHER. SPICES OF ADJACENT REINFORCING BARS SHALL BE STAGGERED WHEREVER POSSIBLE.
20. REAR CLEARANCE: MINIMUM COVERAGE FOR JOISTS, BEAMS, GIRDERS AND COLUMNS SHALL BE TO FACE OF STIRRUPS OR TIES. UNLESS OTHERWISE NOTED, CONCRETE COVERAGE FOR REINFORCING BARS TO FACE OF BAR SHALL BE AS FOLLOWS:
 - A. CONCRETE IN CONTACT WITH EARTH, UNFORMED 3"
 - B. CONCRETE IN CONTACT WITH FORMED 2"
 - C. WALL, EXTERIOR FACE 1-1/2"
 - D. WALL, INTERIOR FACE 1"
 - E. STRUCTURAL SLABS 3/4"
 - F. JOISTS 3/4"
 - G. BEAMS, GIRDERS & COLUMNS 1-1/2"
21. PENETRATIONS: NO SLEEVES OR CHASSES SHALL BE PLACED IN BEAMS, SLABS, WALLS AND COLUMNS, EXCEPT THOSE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR INSTALLATIONS OF ANY ADDITIONAL SLEEVES OR CHASSES. ALL EXISTING ELECTRICAL PENETRATIONS SHALL BE REPAIRED. SLEEVES, CORING IS NOT ALLOWED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
22. EMBEDDED ITEMS: CONDUIT PLACED IN A CONCRETE SLAB SHALL NOT HAVE AN OUTSIDE DIAMETER GREATER THAN 1/4 THE THICKNESS OF THE SLAB. CONDUIT SHALL

BATTERY INFORMATION/ NOTES:

BATTERY MFG	EAST PENN MANUFACTURING	A. QUANTITIES OF 50 GALLONS OR LESS ARE EXEMPT PER TABLE 3-E OF THE 2010 C.F.C.
MODEL NUMBER	12AVR-145L	B. SINGLE VESSEL CAPACITIES OF 10 GALLONS OR LESS, AND AGGREGATE QUANTITIES NOT IN EXCESS OF 100 GALLONS ARE EXEMPT PER ARTICLE 64 OF THE 2010 C.F.C.
ELECTROLYTE STORED PER BATTERY	2.18 GALLONS	C. QUANTITIES LESS THAN 50 GALLONS ARE EXEMPT FROM C.F.C. ARTICLE 80, AND SHALL NOT REQUIRE REMIT.
ELECTROLYTE HAZARD CLASSIFICATION PER 2010 C.F.C. ELECTROLYTE (PER BATTERY)	23.68 LBS CORROSIVE	D. ANY CHANGES OR ADDITIONS TO BACK-UP BATTERIES MUST COMPLY WITH 2010 C.F.C. ARTICLE 64, AND SHALL NOT CONTAIN ELECTROLYTE QUANTITIES IN EXCESS OF 50 GALLONS.
PURE ACID (PER BATTERY)	5.6X SULFURIC ACID CORROSIVE	E. BATTERIES SPECIFICATIONS : BATTERIES ARE APPROXIMATELY 6.97"W X 16.82"L X 10.10"H WEIGHT: 100 LBS
NUMBER OF BATTERIES TO BE INSTALLED	20 PER CABINET	
TOTAL ELECTROLYTE CONTAINED ON SITE (2.18 X 20)	43.6 GALLONS MAX	
TYPE OF BATTERIES: GEL; ABSORBED ELECTROLYTE SEALED; VALVE-REGULATED NON-SPILLABLE BATTERY		

FIRE DEPARTMENT NOTES:

1. FIRE DEPARTMENT FINAL INSPECTION REQUIRED. SCHEDULE INSPECTION 2 DAYS IN ADVANCE.
2. A CFC PERMIT TO OPERATE BATTERY SYSTEMS WITH STATIONARY LEAD-ACID BATTERIES IS NOT REQUIRED FOR THE QUANTITIES ON SITE.
3. A CFC PERMIT MAY BE REQUIRED FOR THE HAZARDOUS MATERIALS ON SITE.
4. A HAZARDOUS MATERIALS IDENTIFICATION SIGN IS REQUIRED FOR ALL ENTRANCES INTO BATTERY STORAGE AREAS. LETTERS MUST BE AT LEAST 1" IN HEIGHT AND IN A COLOR WHICH CONTRASTS TO THE BACKGROUND OF THE SIGN AND LIST THE FOLLOWING:

CLASS 1 WATER REACTIVE LIQUID
TOXIC LIQUID
CORROSIVE LIQUID
OTHER HEALTH HAZARDOUS LIQUID

5. AN APPROVED METHOD TO NEUTRALIZE SUPPLIED ELECTROLYTE SHALL BE PROVIDED IN THE BATTERY ROOM.
6. BATTERIES SHALL BE PROVIDED WITH SAFETY VENTING CAPS.
7. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE UNIFORM FIRE CODE STANDARD 10-1 AND PLACEMENT IS SUBJECT TO APPROVAL OF THE INSPECTOR.
8. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS.
9. EXIST DOORS SHALL BE ABLE TO OPEN FROM THE INSIDE WITHOUT THE USE OF KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
10. ADDRESS NUMBERS SHALL BE A MINIMUM 6 INCHES HIGH AND PLAINLY VISIBLE FROM ROADWAY BUILDING IS ADDRESSED ON.
11. REQUIRED SIGNAGE SHALL INCLUDE LETTERING HEIGHT OF AT LEAST ONE INCH, IN A COLOR THAT CONTRASTS TO THE SIGN BACKGROUND, AND SHALL BE PROMINENTLY DISPLAYED.
12. REQUIRED SIGNAGE SHALL INCLUDE BUT MAY NOT BE LIMITED TO, APPLICABLE TYPES FROM EXAMPLES SHOWN HEREIN: SEE DETAILS 1, 2, AND 3.



REQUIRED NFPA SIGNAGE

**IN CASE OF
EMERGENCY
— CALL —
1-866-400-6040**

SITE NUMBER: SD34XC555
SITE NAME: SINGING HILLS (7 RESERVOIR (7 0))

EMERGENCY CONTACT SIGNAGE

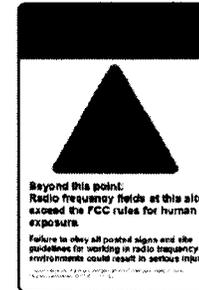
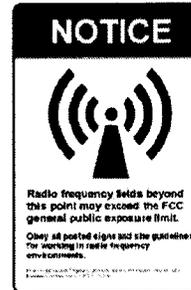
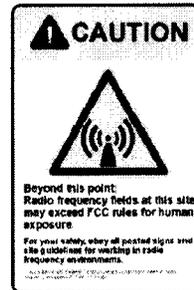
SITE IDENTIFICATION SIGNAGE

3



HAZARDOUS MATERIAL SIGNAGE

2



SITE IDENTIFICATION SIGNAGE

4

RF SIGNAGE

1



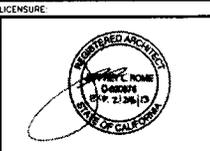
PROJECT INFORMATION:
NETWORK VISION
MMBTS LAUNCH
SINGING HILLS (7
RESERVOIR (7 0)
SD34XC555
2568 FENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
01/24/13

ISSUED FOR:
100% FINAL CD'S

REVISIONS			
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1	11/26/12	100% CD'S REVIEW	FR
2	01/24/13	100% FINAL CD'S	FR

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET



SHEET TITLE:
**SIGNAGE AND
NOTES**

SHEET NUMBER: REVISION:

T-3 2

JPA JOB NUMBER: T-0519

SITE PLAN GENERAL NOTES

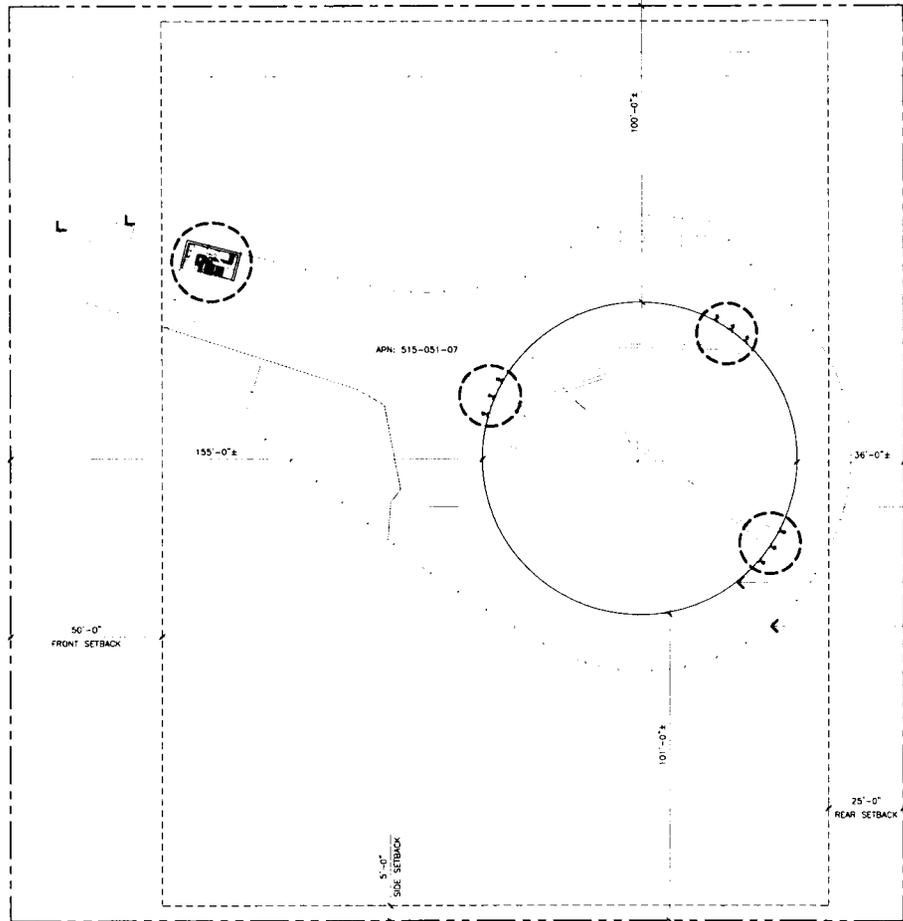
- SETBACKS
 FRONT YARD = 50'-0"
 BACK YARD = 25'-0"
 SIDE YARDS = 5'-0"
1. SITE CONTRACTOR TO CALL DIG ALERT (1-800-227-2600) TO LOCATE ANY AND ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
 2. ALL FACILITIES TO BE INSTALLED ARE UNMANNED; NO EXISTING PARKING SPACES WILL BE IMPACTED BY THE NEW USE.
 3. PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMITS, THE APPLICANT SHALL INCORPORATE ANY CONSTRUCTION BEST MANAGEMENT PRACTICES NECESSARY.
 4. PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMITS, THE APPLICANT SHALL SUBMIT A WATER POLLUTION CONTROL PLAN (WPCP). THE WPCP SHALL BE PREPARED IN ACCORDANCE WITH THE CITY'S STORM WATER STANDARDS.

STORM WATER QUALITY NOTES CONSTRUCTION BMP'S

- THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD.
- NOTES 1-6 BELOW REPRESENT KEY MINIMUM REQUIREMENTS FOR CONSTRUCTION BMP'S
1. SUFFICIENT BMP'S MUST BE INSTALLED TO PREVENT SILT, MUD OR OTHER CONSTRUCTION DEBRIS FROM BEING TRACKED INTO THE ADJACENT STREET(S) OR STORM WATER CONVEYANCE SYSTEMS DUE TO CONSTRUCTION VEHICLES OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY SUCH DEBRIS THAT MAY BE IN THE STREET AT THE END OF EACH WORK DAY OR AFTER A STORM EVENT THAT CAUSES A BREACH IN THE INSTALLED CONSTRUCTION BMP'S.
 2. ALL STOCK PILES OF UNCOMPACTED SOIL AND/OR BUILDING MATERIALS THAT ARE INTENDED TO BE LEFT UNPROTECTED FOR A PERIOD GREATER THAN SEVEN CALENDAR DAYS ARE TO BE PROVIDED WITH EROSION AND SEDIMENT CONTROLS. SUCH SOIL MUST BE PROTECTED EACH DAY WHEN THE PROBABILITY OF RAIN IS X40 OR GREATER.
 3. A CONCRETE WASHOUT SHALL BE PROVIDED ON ALL PROJECTS WHICH PROPOSE THE CONSTRUCTION OF ANY CONCRETE IMPROVEMENTS THAT ARE TO BE POURED IN PLACE ON THE SITE.
 4. ALL EROSION/SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN WORKING ORDER AT ALL TIMES.
 5. ALL SLOPES THAT ARE CREATED OR DISTURBED BY CONSTRUCTION ACTIVITY MUST BE PROTECTED AGAINST EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.
 6. THE STORAGE OF ALL CONSTRUCTION MATERIALS AND EQUIPMENT MUST BE PROTECTED AGAINST ANY POTENTIAL RELEASE OF POLLUTANTS INTO THE ENVIRONMENT.

STATEMENT OF SPECIAL INSPECTION

- NOTICE TO THE APPLICANT/OWNER/OWNER'S AGENT/ARCHITECT OR ENGINEER OF RECORD:
1. BY USING THIS PERMITTED CONSTRUCTION DRAWING FOR CONSTRUCTION / INSTALLATION OF WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF CITY OF SAN DIEGO FOR SPECIAL INSPECTIONS: STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION AND, AS REQUIRED BY THE STATE OF CALIFORNIA CODES.
- NOTICE TO THE CONTRACTOR/BUILDER/INSTALLER/SUB-CONTRACTOR/OWNER-BUILDER
2. BY USING THIS PERMITTED CONSTRUCTION DRAWING FOR CONSTRUCTION / INSTALLATION OF WORK SPECIFIED HEREIN, YOU ACKNOWLEDGE AND ARE AWARE OF THE REQUIREMENTS OF CITY OF SAN DIEGO FOR SPECIAL INSPECTIONS: STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION AND, AS REQUIRED BY THE STATE OF CALIFORNIA CODES.
 3. THE SPECIAL INSPECTOR MUST BE CERTIFIED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES, IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
 4. THE CONSTRUCTION MATERIAL TESTING LABORATORY MUST BE APPROVED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES, FOR TESTING MATERIALS, SYSTEMS, COMPONENTS AND EQUIPMENT.
 5. THE SPECIAL INSPECTION IDENTIFIED ON THE PLANS ARE, IN ADDITION TO, AND NOT A SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A CITY'S BUILDING INSPECTOR.
- SPECIAL INSPECTION REQUIRED:
 SEE DETAIL 1/A-5
 SEE DETAIL 3/A-5.1



EXISTING ACCESS ROUTE.

EXISTING SPRINT METER LOCATED INSIDE ELECTRICAL CABINET.

EXISTING SPRINT LEASE AREA. SEE SHEET A-1.1.

AREA OF PROPOSED WORK IN EXISTING SPRINT LEASE AREA. SEE SHEET A-1.1.

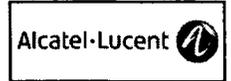
AREA OF PROPOSED WORK IN EXISTING SPRINT LEASE AREA. SEE SHEET A-1.1.

AREA OF PROPOSED WORK IN EXISTING SPRINT LEASE AREA. SEE SHEET A-1.1.

EXISTING WATER TANK

EXISTING CHAIN LINK FENCE

EXISTING PROPERTY LINE.



PROJECT INFORMATION

NETWORK VISION
 MMBTS LAUNCH

SINGING HILLS (7
 RESERVOIR (7 0)

SD34XC555

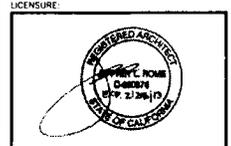
2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
 01/24/13

ISSUED FOR:
 100% FINAL CD'S

REVISIONS				
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SHEET TITLE:
 SITE PLAN

SHEET NUMBER:
 A-1

REVISION:
 2

SITE PLAN

11X17 SCALE: 1"=40'
 24X36 SCALE: 1"=20'

0 10' 20' 40'

1

JRA JOB NUMBER: 11038

NOTES TO CONTRACTOR:

1. REMOVE ALL EXISTING CDMA COAX AND ANTENNAS FROM SITE.
2. NEW ANTENNAS AND HARDWARE TO BE PAINTED TO MATCH EXISTING BUILDING.
3. CONTRACTOR TO SET ELECTRICAL TILT.

SECTOR	ANTENNA	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	ANTENNA MODEL	ELECTRICAL TILT	MECHANICAL TILT	RRH	RRH MODEL	FIBER OPTIC MODEL	FIBER OPTIC LENGTH (±5')
1		1900	0°	24'	1	APXVSPPIB-C-A20	0	-	1900 NV 4X45W	(1) HYBRIFLEX 1-1/4" HB114-1-DBU4-MSU	252'
2		1900	90°	32'	1	APXVSPPIB-C-A20	0	-	1900 NV 4X45W	(1) HYBRIFLEX 1-1/4" HB114-1-DBU4-MSU	252'
3		1900	280°	32'	1	APXVSPPIB-C-A20	0	-	1900 NV 4X45W	(1) HYBRIFLEX 1-1/4" HB114-1-DBU4-MSU	151'
4									N/A		

IMPORTANT NOTE: INSTALLERS TO VERIFY LATEST RF DATA SHEET AND PLUMBING/WIRING DIAGRAMS, PRIOR TO INSTALLATION.

ANTENNA SCHEDULE

SCALE: NONE

2



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 Architecture & Telecommunications
 1 San Joaquin Plaza, Suite 250
 Newport Beach, California 92660
 Phone: (949) 760-3825
 Fax: (949) 760-3831

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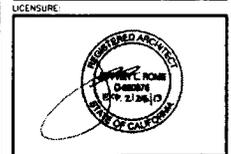
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SHEET TITLE:
ENLARGED SITE PLAN

SHEET NUMBER: **A-1.1** REVISION: **2**

NV SECTOR "1"
 0°

NV SECTOR "3"
 280°

NV SECTOR "2"
 90°

ENLARGED SITE PLAN

11x17 SCALE: 1/32"=1'-0"
 22x34 SCALE: 1/16"=1'-0"
 0' 4' 8' 16' 32'

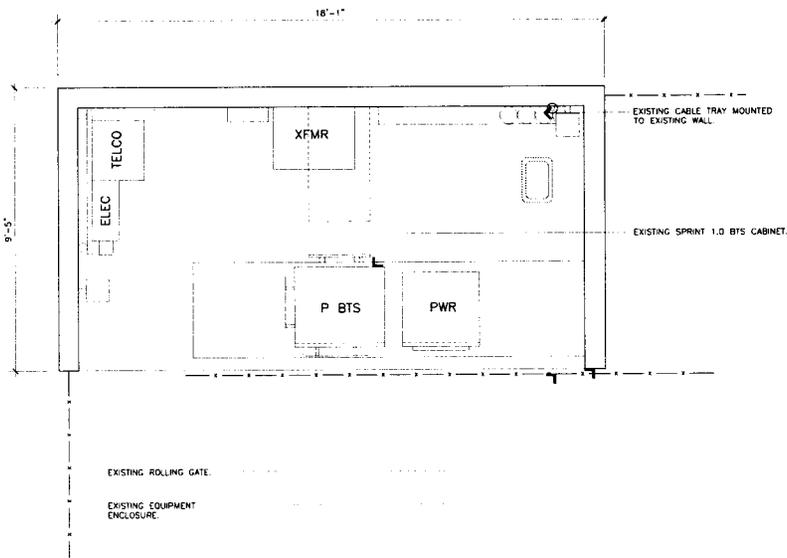
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1

JRA JOB NUMBER: 1-10219

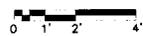
EQUIPMENT PLAN SYMBOL LEGEND

- EXISTING SPRINT TELCO CABINET.
- EXISTING ELECTRICAL PANEL.
- EXISTING SPRINT BATTERY CABINET.
- EXISTING SPRINT POWER CABINET.
- EXISTING SPRINT PRIMARY BTS CABINET.
- EXISTING ELECTRICAL TRANSFORMER.
- EXISTING SPRINT SITE LIGHT.
- EXISTING SPRINT MAIN GROUND BUS BAR.
- EXISTING SPRINT ELECTRICAL METER.
- EXISTING SPRINT GPS ANTENNA.



EXISTING EQUIPMENT PLAN

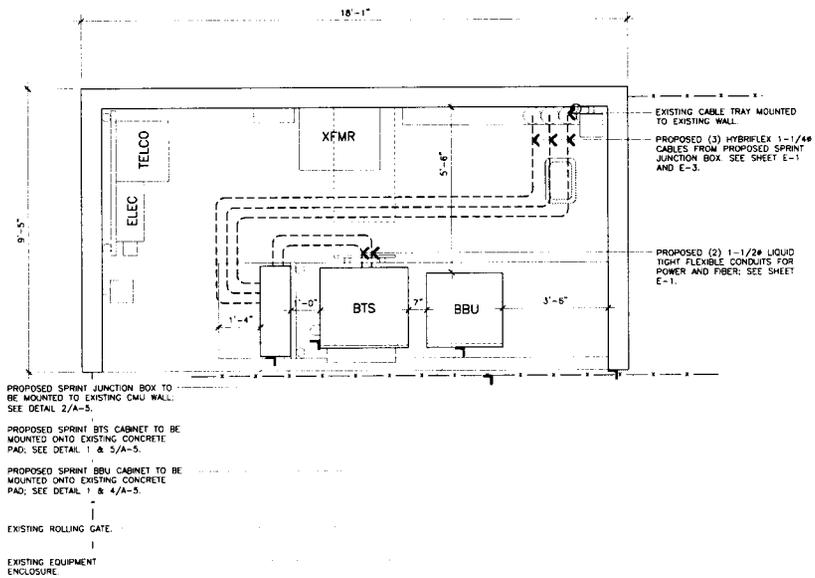
11X17 SCALE: 1/4"=1'-0"
22X34 SCALE: 1/2"=1'-0"



2

EQUIPMENT PLAN SYMBOL LEGEND

- EXISTING SPRINT TELCO CABINET.
- EXISTING ELECTRICAL PANEL.
- EXISTING SPRINT BATTERY CABINET.
- EXISTING SPRINT POWER CABINET.
- EXISTING SPRINT PRIMARY BTS CABINET.
- EXISTING ELECTRICAL TRANSFORMER.
- EXISTING SPRINT SITE LIGHT.
- EXISTING SPRINT MAIN GROUND BUS BAR.
- EXISTING SPRINT ELECTRICAL METER.
- EXISTING SPRINT GPS ANTENNA.
- PROPOSED SPRINT BTS CABINET.
- PROPOSED SPRINT BATTERY BACKUP CABINET.
- PROPOSED FIBER AND DC DISTRIBUTION BOX.
- PROPOSED FIBER AND DC CONDUIT.



PROPOSED EQUIPMENT PLAN

11X17 SCALE: 1/4"=1'-0"
22X34 SCALE: 1/2"=1'-0"



1



Alcatel-Lucent 

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PROJECT INFORMATION

NETWORK VISION
MMBTS LAUNCH
SINGING HILLS (7
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LICENSURE



SHEET TITLE: EQUIPMENT PLAN

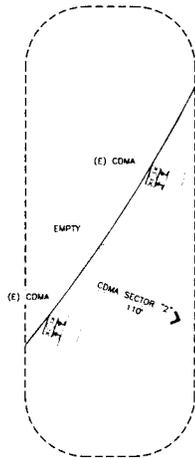
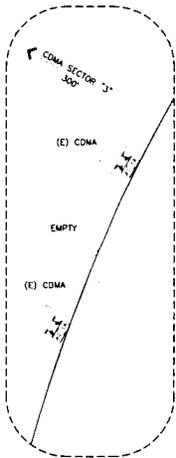
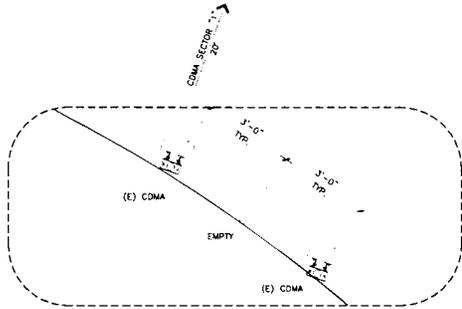
SHEET NUMBER: A-2 REVISION: 2

JPA JOB NUMBER: 1-0319

ANTENNA LAYOUT PLAN NOTES

1. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.

(E) EXISTING ANTENNA
(N) PROPOSED ANTENNA

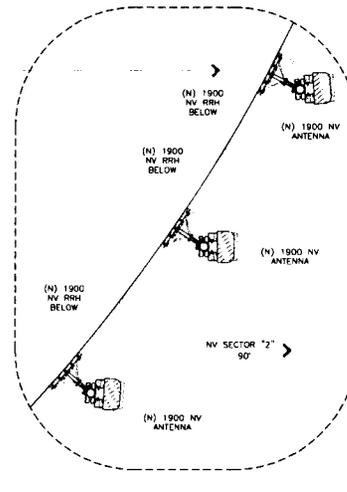
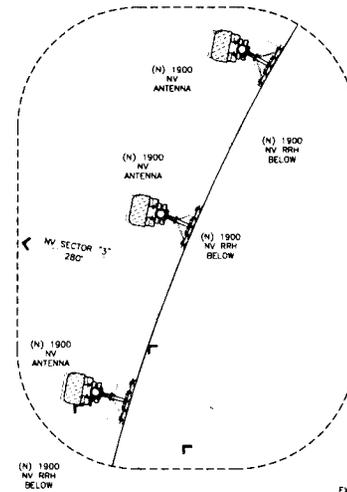
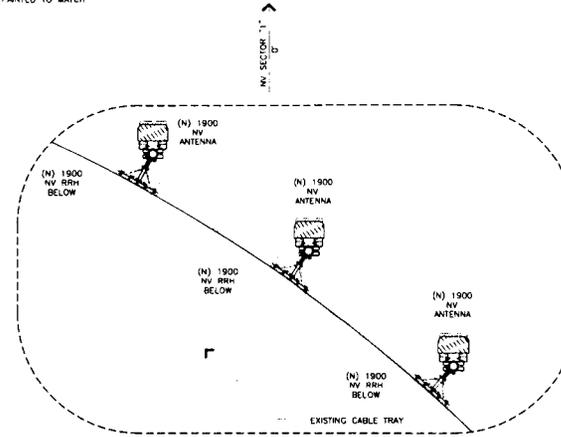


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1. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.

(E) EXISTING ANTENNA
(N) PROPOSED ANTENNA

2. ALL ANTENNAS MUST BE PAINTED TO MATCH EXISTING WATER TANK



EXISTING WATER TANK

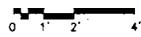
EXISTING CABLE TRAY

PROPOSED SPRINT 1900 NV RRH: (3) PER SECTOR, (9) TOTAL. SEE DETAIL: 3/A-6

PROPOSED SPRINT 1900 NV ANTENNA: (3) PER SECTOR, (9) TOTAL. SEE DETAIL: 4/A-6

EXISTING ANTENNA LAYOUT PLAN

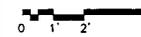
11x17 SCALE: 1/4"=1'-0"
22x34 SCALE: 1/2"=1'-0"



2

PROPOSED ANTENNA LAYOUT PLAN

11x17 SCALE: 1/4"=1'-0"
22x34 SCALE: 1/2"=1'-0"



1



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MMBTS LAUNCH
SINGING HILLS (7
RESERVOIR (7 0)
SDJ4XC555

2568 FENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

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ISSUED FOR:

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LICENSURE:



SHEET TITLE:

ANTENNA LAYOUT PLAN

SHEET NUMBER:

A-3

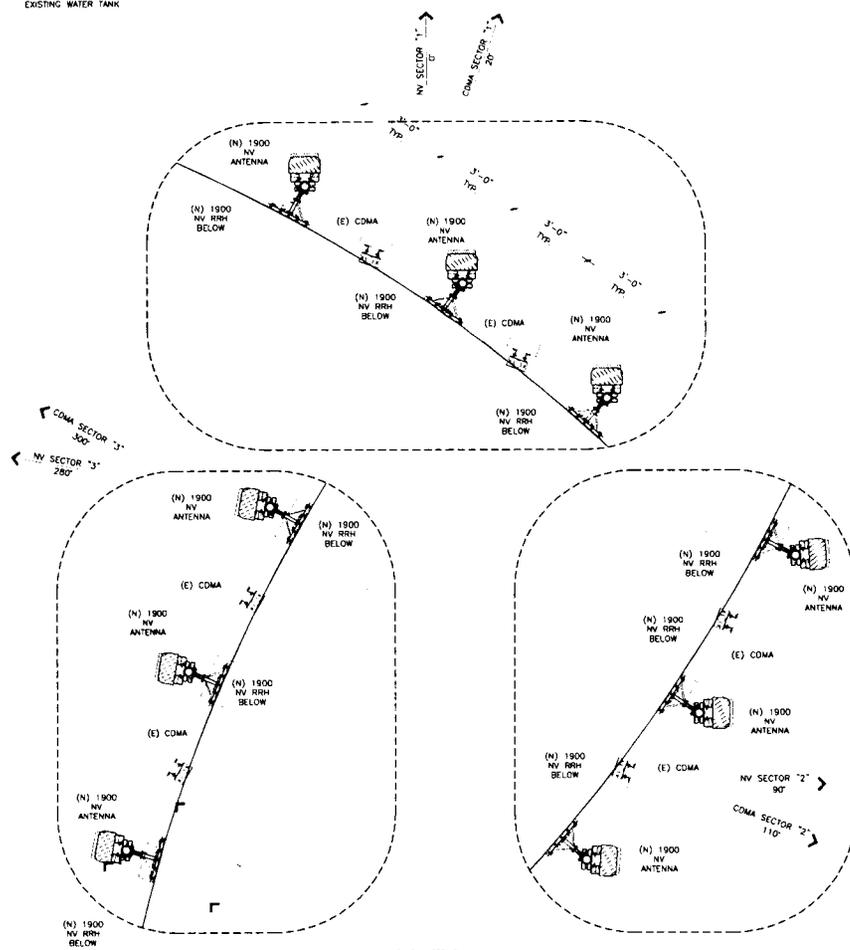
REVISION:

2

ANTENNA LAYOUT PLAN NOTES

1. ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND BE DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.
2. ALL ANTENNAS MUST BE PAINTED TO MATCH EXISTING WATER TANK

(E) EXISTING ANTENNA
(N) PROPOSED ANTENNA

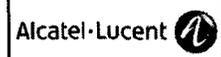


EXISTING WATER TANK

EXISTING CABLE TRAY

PROPOSED SPRINT 1900 NV RRH:
(3) PER SECTOR, (9) TOTAL, SEE DETAIL 3/A-6

PROPOSED SPRINT 1900 NV ANTENNA: (3) PER SECTOR, (9) TOTAL, SEE DETAIL 4/A-6



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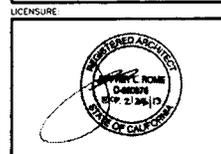
PROJECT INFORMATION:
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RESERVOIR (7 0)
SD34XC555
2588 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
01/24/13

ISSUED FOR:
100% FINAL CD'S

REVISIONS				
REV	DATE	DESCRIPTION	UNIT	
0	05/12/12	90% CD'S REVIEW	FR	
1	11/26/12	100% CD'S REVIEW	FR	
2	01/24/13	100% FINAL CD'S	FR	

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SHEET TITLE:
ANTENNA LAYOUT PLAN

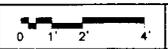
SHEET NUMBER: REVISION:

A-3.1 2

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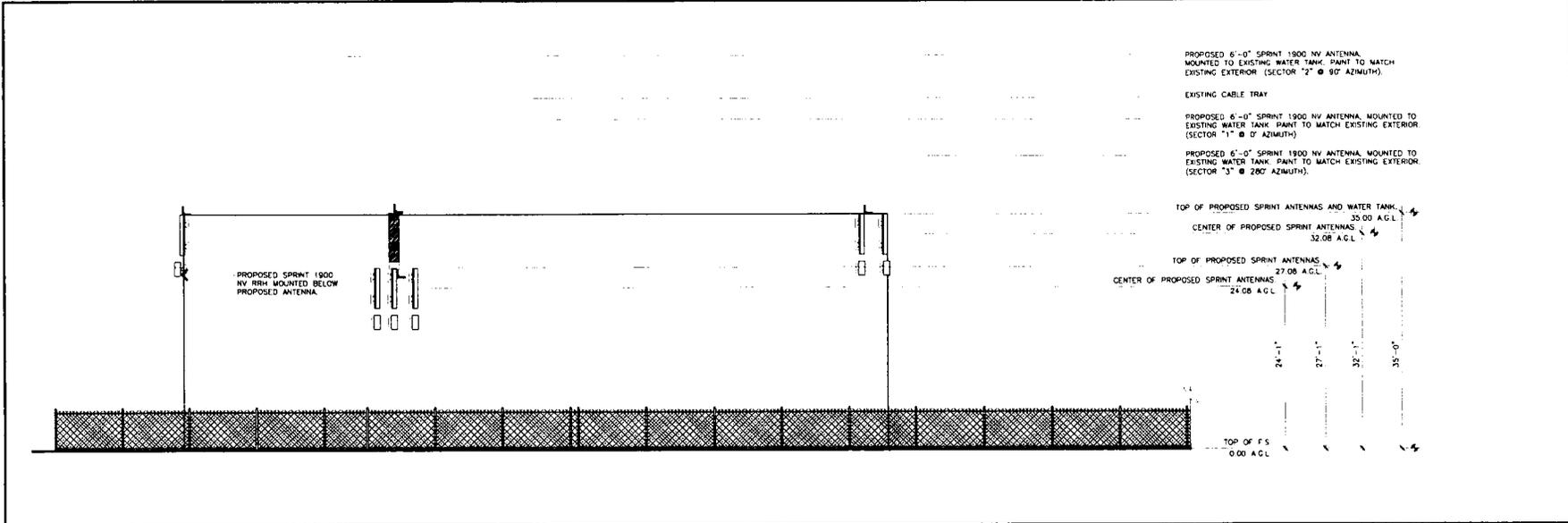
2 INTERIM ANTENNA LAYOUT PLAN

11X17 SCALE: 1/4"=1'-0"
22X34 SCALE: 1/2"=1'-0"



1

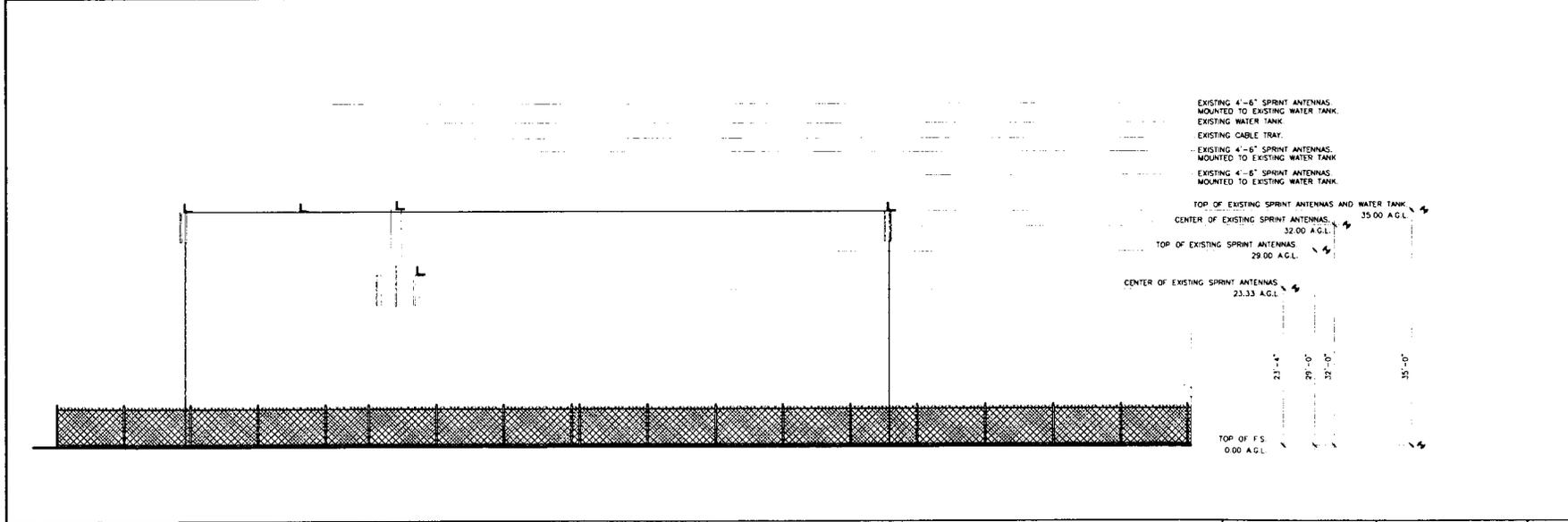
JRA JOB NUMBER: 1-0213



PROPOSED NORTH ELEVATION

11x17 SCALE: 1/16"=1'-0"
 24x36 SCALE: 1/8"=1'-0" 0 2' 4' 8' 16'

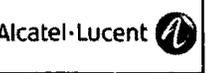
2



EXISTING NORTH ELEVATION

11x17 SCALE: 1/16"=1'-0"
 24x36 SCALE: 1/8"=1'-0" 0 2' 4' 8' 16'

1



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 Jeffrey Rome & Associates, Inc.
 Architecture & Telecommunications
 1 San Joaquin Plaza, Suite 2300
 Newport Beach, California 92660
 Phone: (949) 780-3829
 Fax: (949) 760-3831

PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555
 2368 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
 01/24/13

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 100% FINAL CD'S

REVISIONS

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2	01/24/13	100% FINAL CD'S	FR

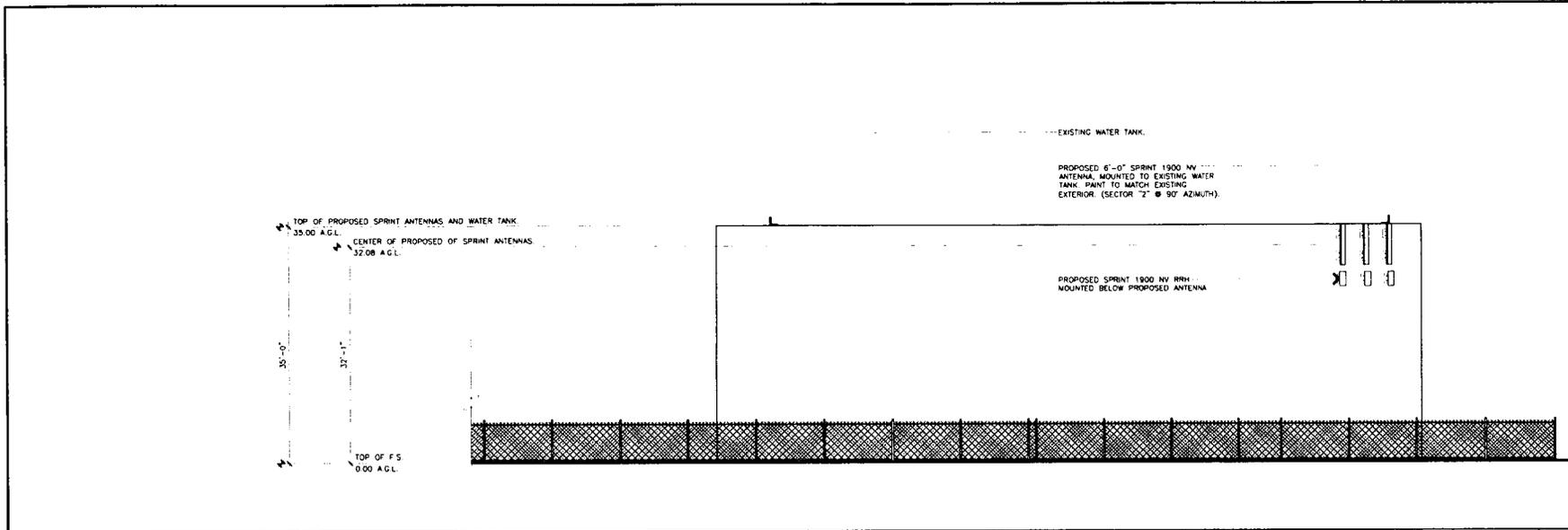
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SHEET TITLE:
 SHEET NUMBER:
 REVISION:

A-4 2

JRA JOB NUMBER: 13019

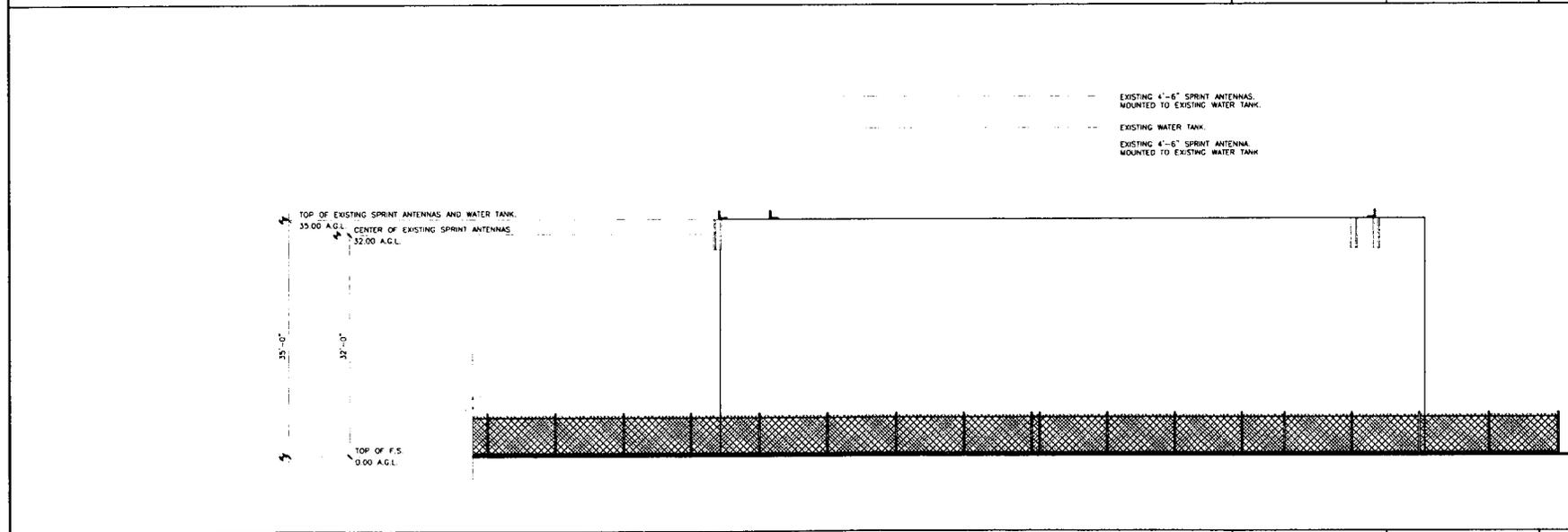


PROPOSED SOUTH ELEVATION

11x17 SCALE: 1/16"=1'-0"
24x36 SCALE: 1/8"=1'-0"



2

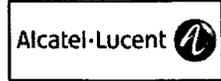


EXISTING SOUTH ELEVATION

11x17 SCALE: 1/16"=1'-0"
24x36 SCALE: 1/8"=1'-0"



1



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PROJECT INFORMATION:
NETWORK VISION
MMBTS LAUNCH
SINGING HILLS (7
RESERVOIR (7 0)
SD34XC555
2588 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
01/24/13

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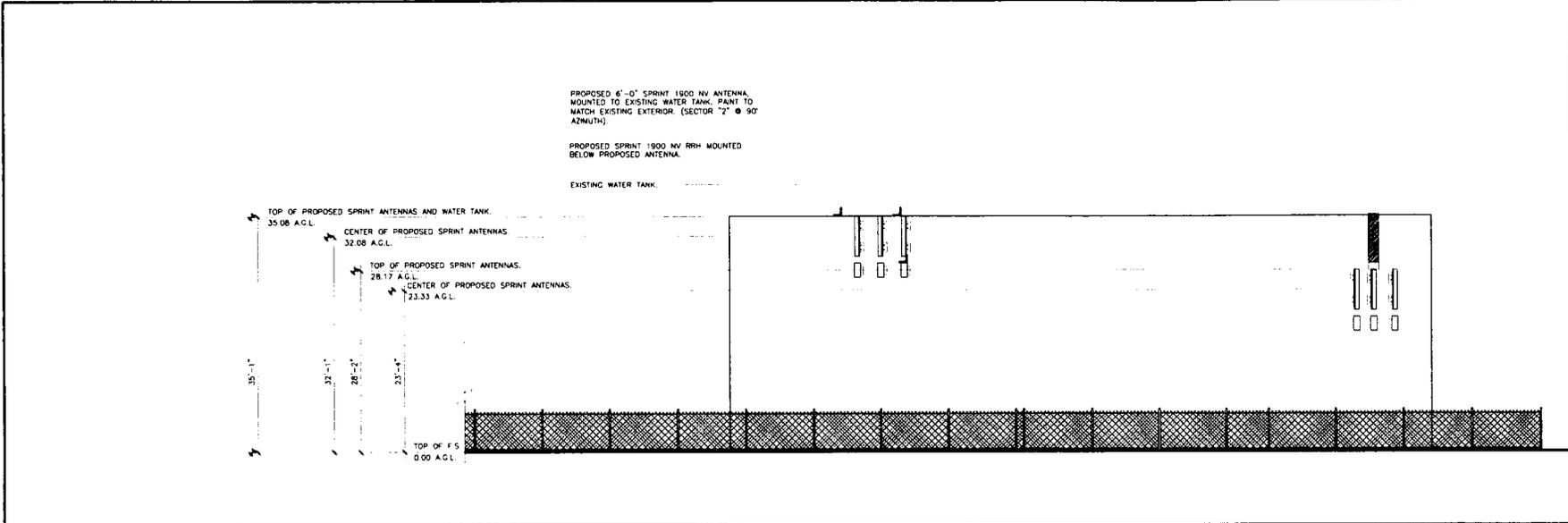
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1	11/26/12	100% CD'S REVIEW	FR	
2	01/24/13	100% FINAL CD'S	FR	

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SHEET TITLE: ELEVATION
ELEVATION

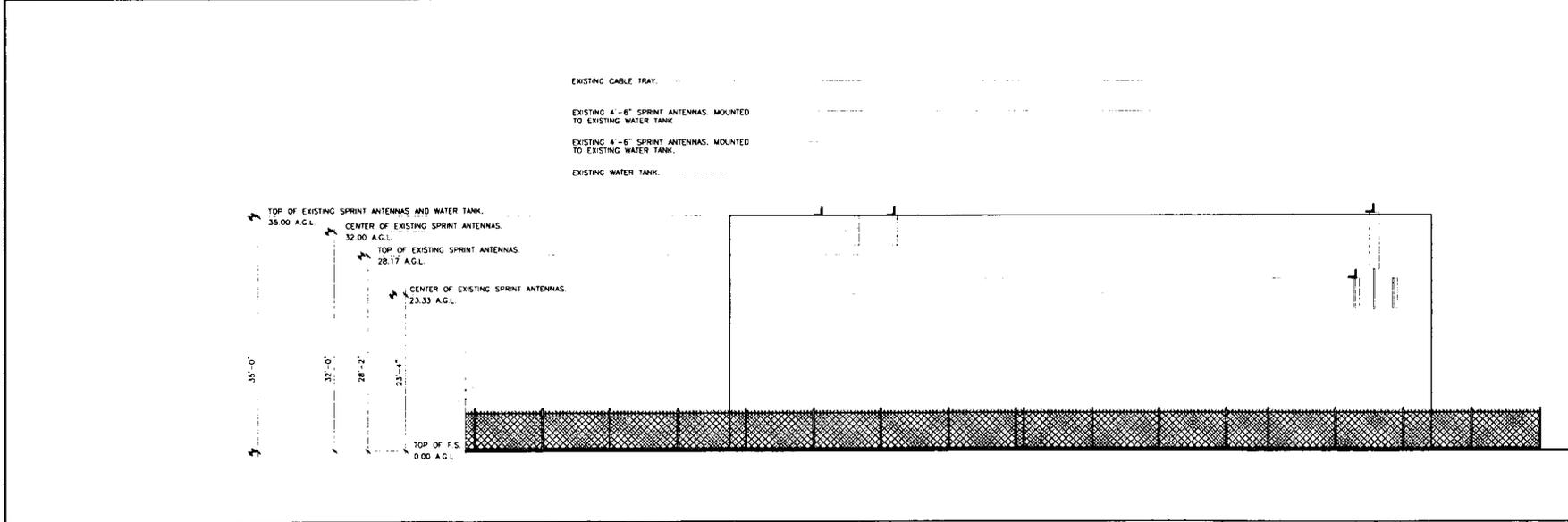
SHEET NUMBER: A-4.1
REVISION: 2



PROPOSED EAST ELEVATION

11x17 SCALE: 1/16"=1'-0"
 24x36 SCALE: 1/8"=1'-0"
 0' 2' 4' 8' 16'

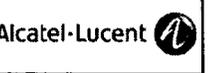
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EXISTING EAST ELEVATION

11x17 SCALE: 1/16"=1'-0"
 24x36 SCALE: 1/8"=1'-0"
 0' 2' 4' 8' 16'

1



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PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555
 2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

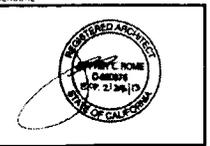
ISSUED DATE:
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REVISIONS

REV	DATE	DESCRIPTION	INIT.
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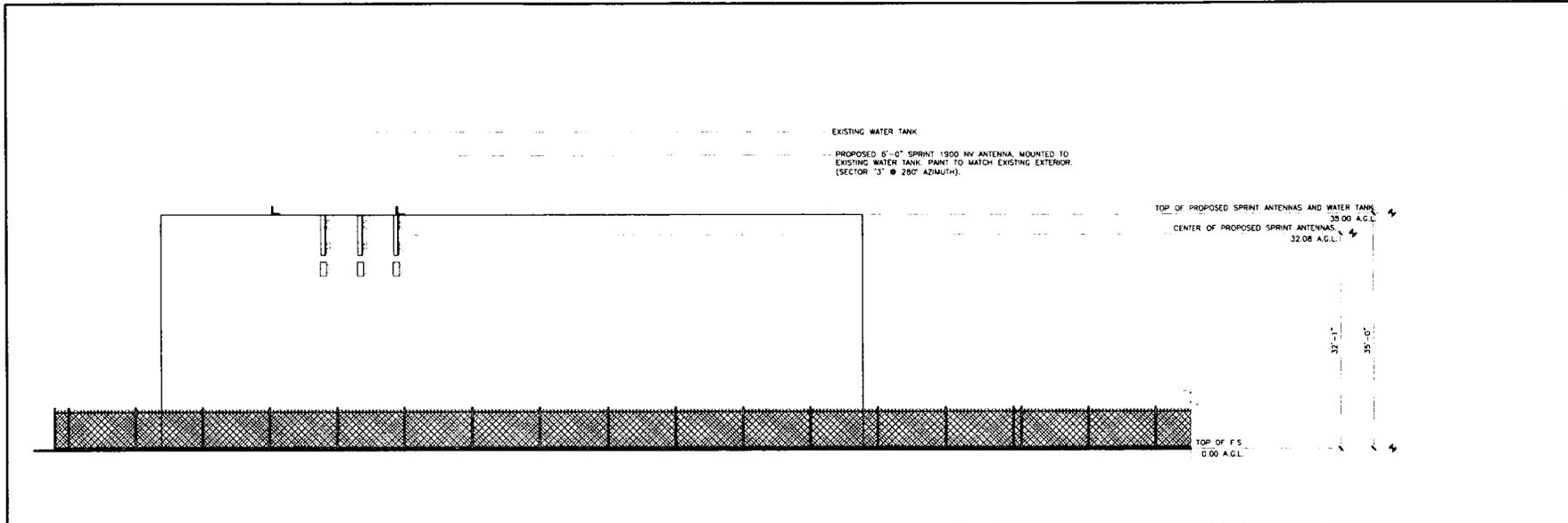
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SHEET TITLE:
 ELEVATION

SHEET NUMBER: A-4.2
 REVISION: 2

1/24/13

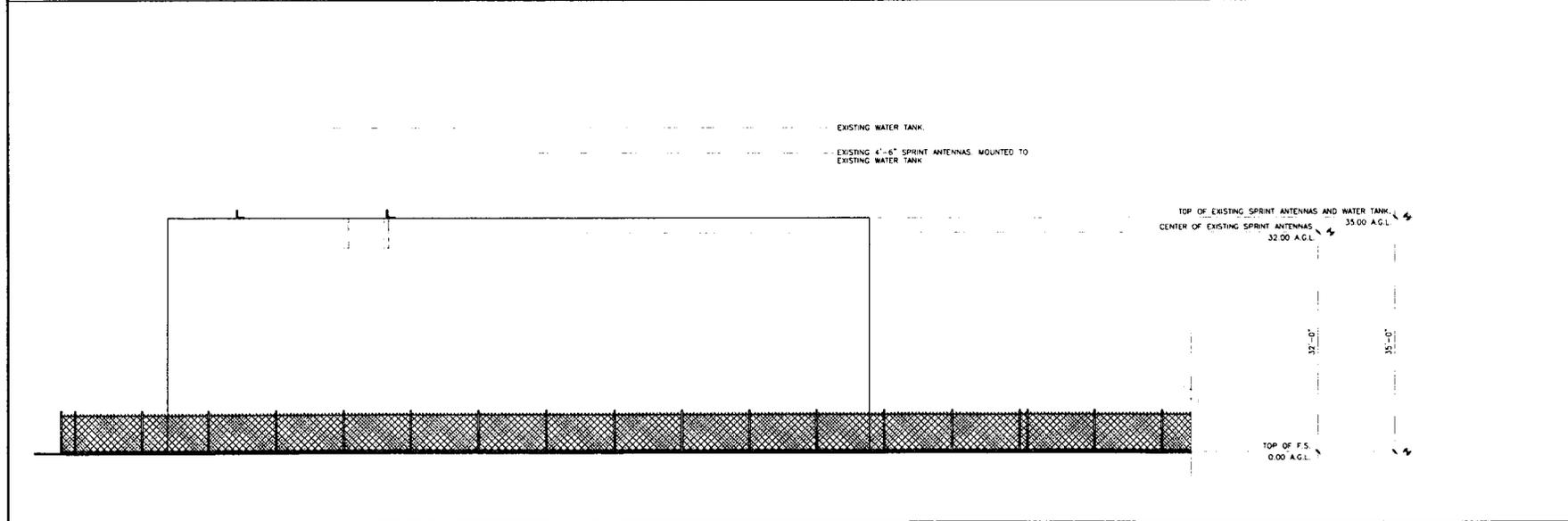


PROPOSED WEST ELEVATION

11x17 SCALE: 1/16"=1'-0"
24x36 SCALE: 1/8"=1'-0"

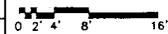


2



EXISTING WEST ELEVATION

11x17 SCALE: 1/16"=1'-0"
24x36 SCALE: 1/8"=1'-0"



1



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PROJECT INFORMATION:
NETWORK VISION
MMBTS LAUNCH
SINGING HILLS (7
RESERVOIR (7 0)
SD34XC555
2560 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
01/24/13

ISSUED FOR:
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REVISIONS

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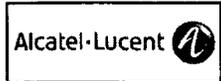
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SHEET TITLE:
ELEVATION

SHEET NUMBER: A-4.3
REVISION: 2

JRA JOB NUMBER: 112019



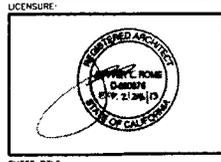
PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555
 2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
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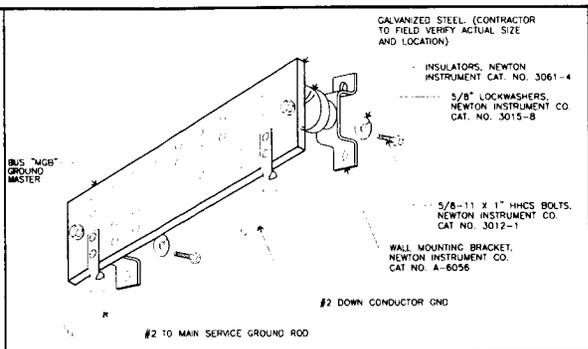
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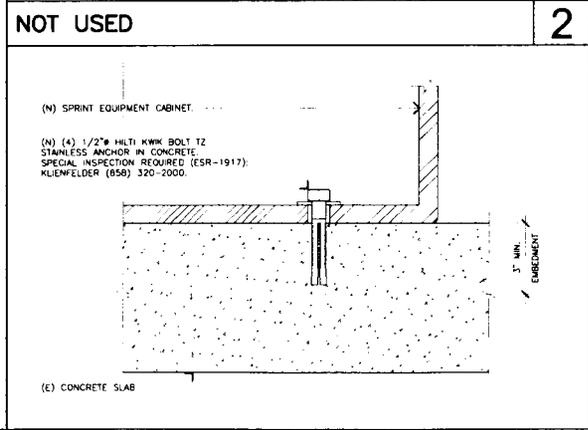
SHEET TITLE:
 EQUIPMENT DETAILS

SHEET NUMBER: A-5
 REVISION: 2

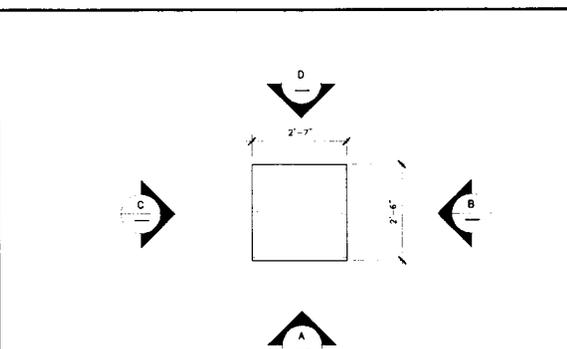


GROUND BAR (IF REQUIRED) SCALE: NONE 3

NOT USED 2

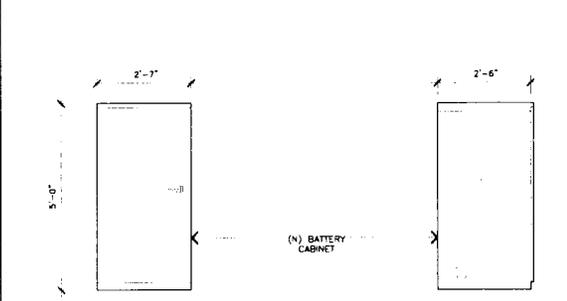


EQUIPMENT ANCHORAGE SCALE: NONE 1

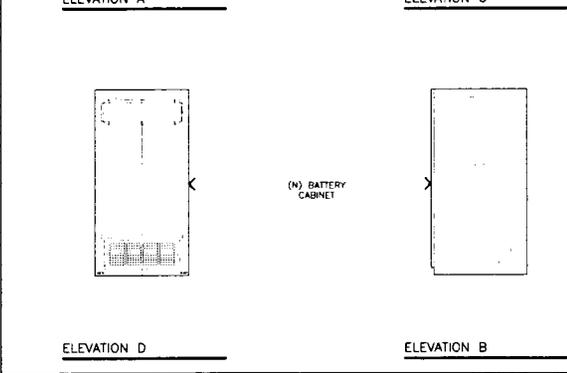


BATTERY CABINET - NEW

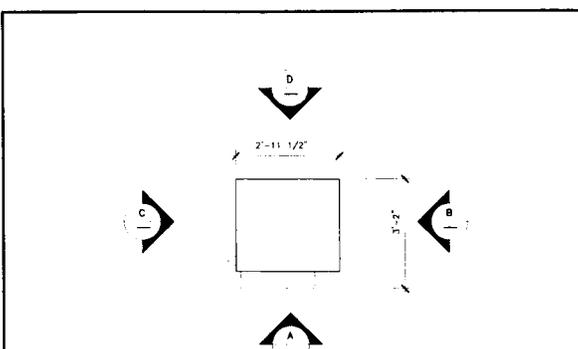
MODEL: ALU 60ECV2
 WEIGHT: 2,830 LBS
 DIMENSIONS (WxDxH): 31" x 30" x 60"



BATTERY CABINET - NEW

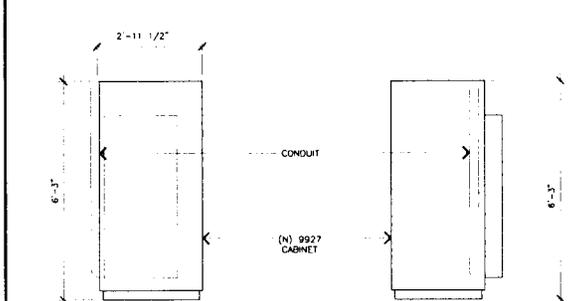


BATTERY CABINET SCALE: NONE 4

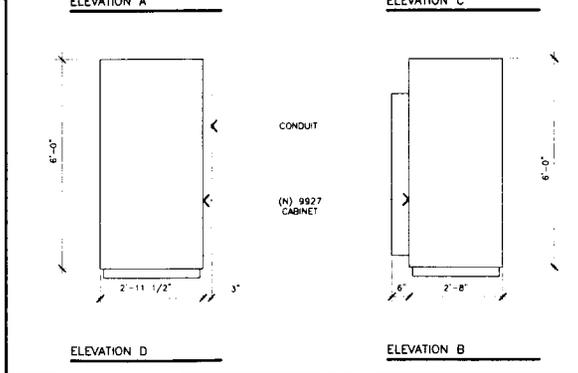


BTS CABINET - NEW

MODEL: ALU 9927
 WEIGHT: 1074 LBS
 DIMENSIONS (WxDxH): 35.4" x 37.8" x 75.8"

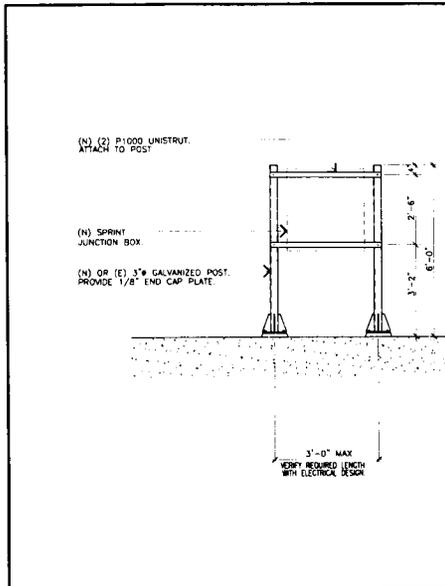


BTS CABINET - NEW



BTS CABINET SCALE: NONE 5

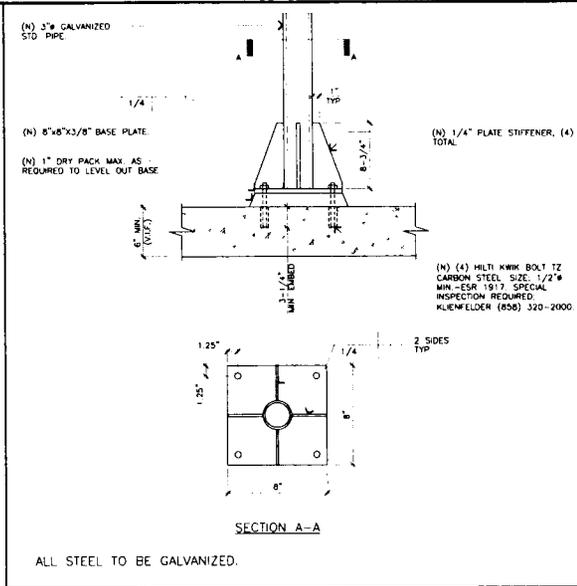
SHEET NUMBER: A-5



H-FRAME UTILITY RACK

SCALE: NONE

5

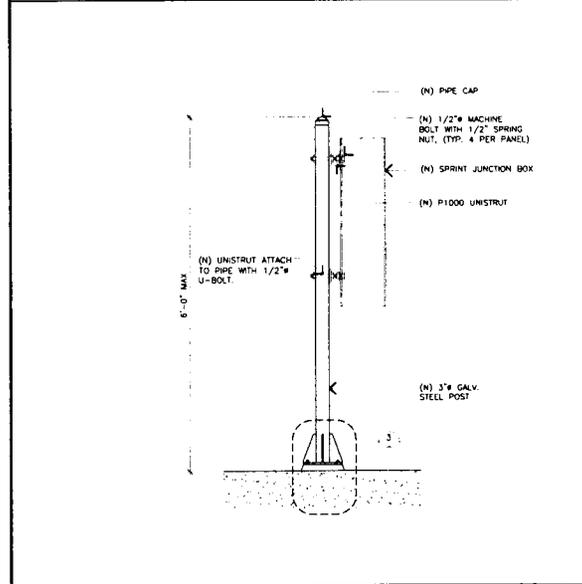


BASE PLATE DETAIL

SCALE: NONE

3

NOT USED



H-FRAME MOUNT

SCALE: NONE

4

NOT USED

2



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PROJECT INFORMATION:

NETWORK VISION
MMBTS LAUNCH

SINGING HILLS (7
RESERVOIR (7 0)

SD34XC555

2588 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

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REVISIONS				
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SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER: REVISION:

A-5.1 2

JRA - JOB NUMBER: 11-0313

1900 APXVSP18-C-A20

ANTENNA COLOR: LIGHT GREY RAL7035

DIMENSIONS, HxWxD: 72" x 11.8" x 7"

WEIGHT: 57 LBS

CONNECTOR: (6) 7/16 DIN FEMALE

SIDE VIEW

FRONT VIEW

REAR VIEW

(N) PANEL ANTENNA, SEE DETAIL 4/A-6

(N) DOWNTILT ANTENNA MOUNTING BRACKET & HARDWARE BY ANTENNA MANUFACTURER.

(N) NON-PENETRATING MAGMOUNT.

(N) MAGMOUNT MAGNET, (24) PER SUPPORT TOP AND BOTTOM, (48) IN TOTAL.

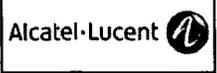
(N) 5"x6"-0" LONG GALVANIZED STD. PIPE TO REPLACE (E).

(E) WATER TANK CONSTRUCTION TO BE VERIFIED.

(N) 1/2" A307 GALVANIZED U-BOLTS, TYP.

(N) ANTENNA MOUNTING KIT BY ANTENNA MANUFACTURER.

(N) JUMPER CABLE



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PROJECT INFORMATION:

NETWORK VISION
MMBTS LAUNCH

SINGING HILLS (7
RESERVOIR (7 0)

SD34XC555

2568 PINCH DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
01/24/13

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100% FINAL CD'S

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LICENSURE:



SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER: REVISION:

A-6 2

NOT USED 6

1900 NV ANTENNA SCALE: NONE 4

1900 NV ANTENNA MOUNT DETAIL SCALE: NONE 2

(N) 3" SHARED ANTENNA MOUNT.

(N) MAST MOUNT BRACKET (ALCATEL-LUCENT #849033713), (2) PER RRH

(N) RRH

1900 NV RRH

MANUFACTURER: ALCATEL-LUCENT

MODEL: 1900 NV, 4x45w

WEIGHT: 60 LBS

TOP VIEW

SIDE VIEW

FRONT VIEW

SIDE VIEW

FRONT VIEW

REAR VIEW

(N) NON-PENETRATING MAGMOUNT

(N) 1/2" A307 GALVANIZED U-BOLTS, TYP

(N) 1900 NV RRH, SEE DETAIL 3/A-6

(N) MOUNTING PIPE, SEE DETAIL 5/A-6

(N) MAGMOUNT MAGNET, (24) PER SUPPORT.

(N) JUMPER CABLE

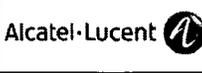
TYPICAL RRH MOUNTING TO NEW PIPE MOUNT.

RRH MOUNTING DETAIL SCALE: NONE 5

1900 NV RRH SCALE: NONE 3

1900 NV RRH MOUNT DETAIL SCALE: NONE 1

JRA JOB NUMBER: 1-0319



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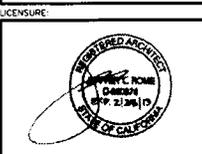
PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
**SINGING HILLS (7
 RESERVOIR (7 0)**
 SD34XC555
 2568 FENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
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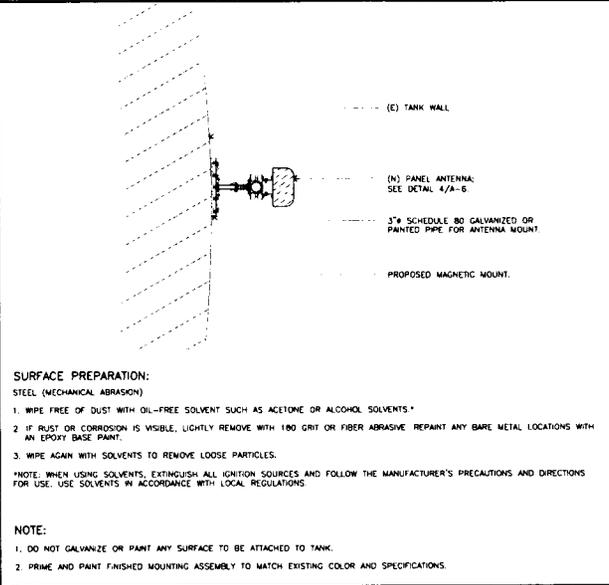
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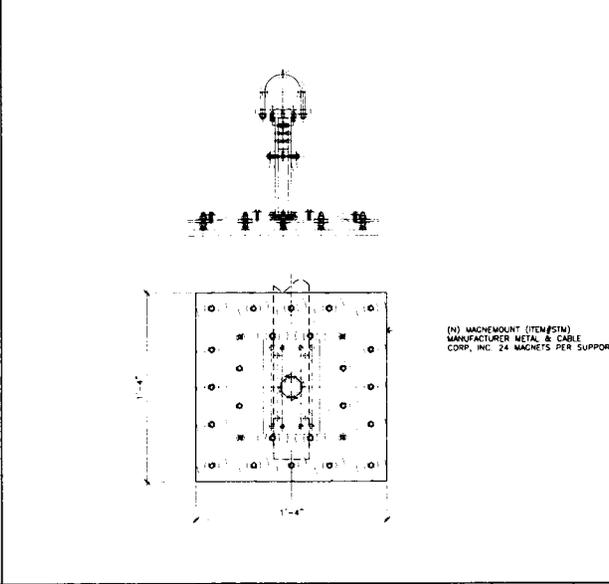


SHEET TITLE:
EQUIPMENT DETAILS

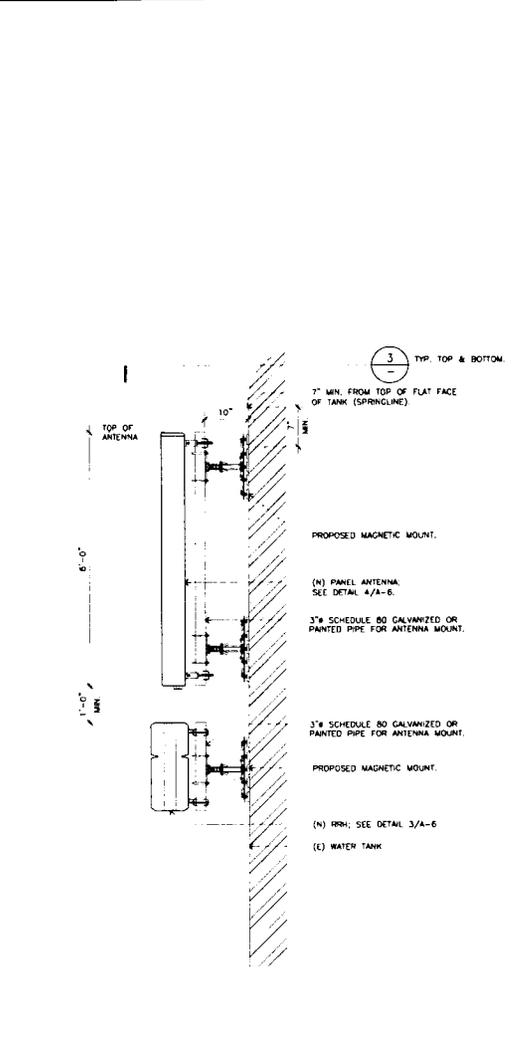
SHEET NUMBER: **A-6.1** REVISION: **2**



TANK ANTENNA DETAIL SCALE: NONE **3**



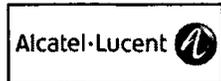
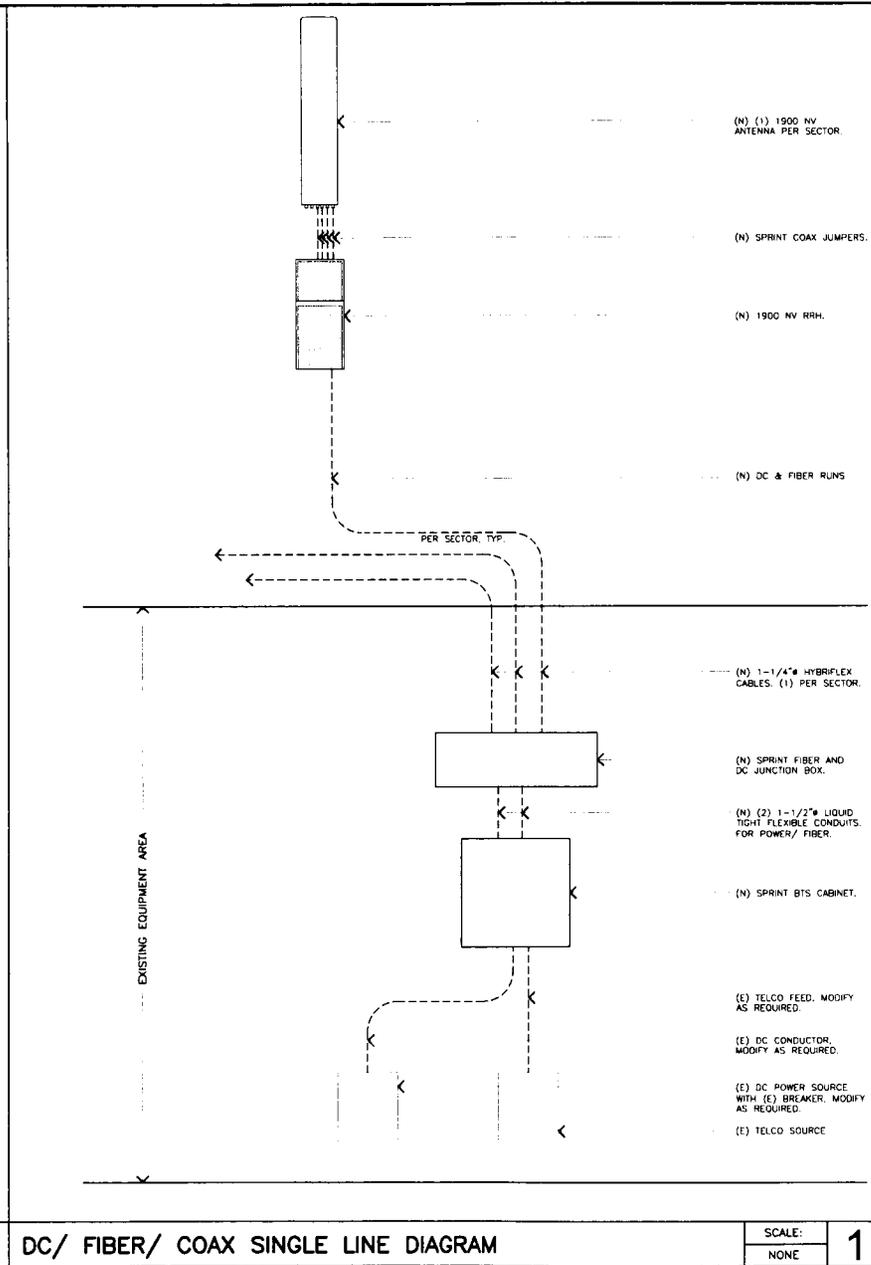
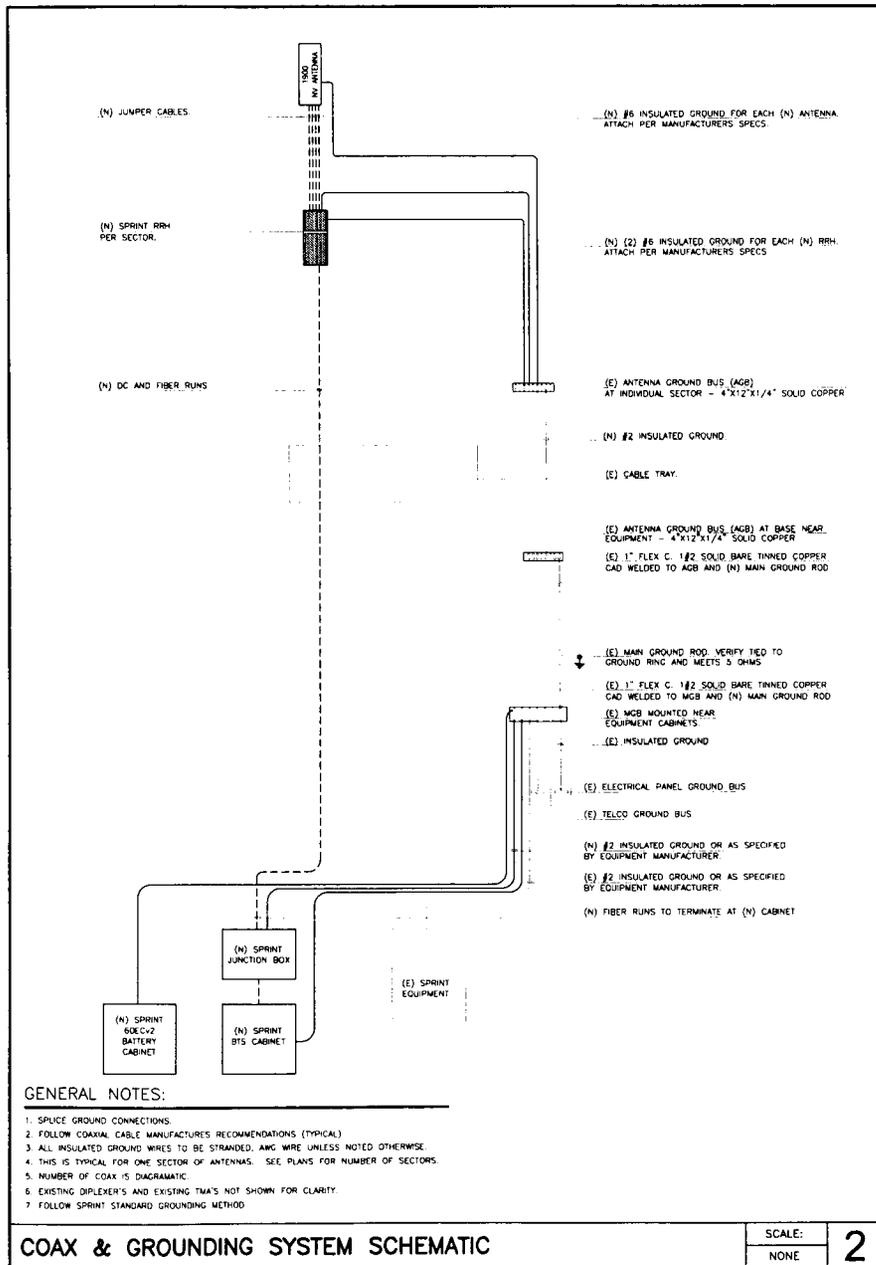
4 MAGNETIC MOUNTS SCALE: NONE **2**



ANTENNA SECTION SCALE: NONE **1**

NOT USED

JRA JOB NUMBER 1-0319



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PROJECT INFORMATION

NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555

2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

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SHEET TITLE
 GROUNDING SCHEMATICS

SHEET NUMBER: E-1
 REVISION: 2

PVA JOB NUMBER: 13019

GENERAL ELECTRICAL NOTES

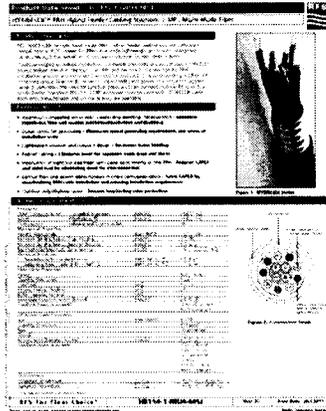
1. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL LOCAL AND STATE CODE, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
2. CONTRACTOR SHALL COORDINATE WITH LOCAL POWER COMPANY FOR REQUIREMENTS OF POWER SERVICE LINE TO THE METER BASE. POWER SERVICE REQUIREMENT IS COMMERCIAL AC NOMINAL 120/208 VOLT OR 120/240 VOLT, SINGLE PHASE WITH 200 AMP RATING.
3. CONTRACTOR SHALL COORDINATE WITH LOCAL TELEPHONE COMPANY FOR REQUIREMENTS OF "T1" SERVICE LINE TO TERMINATE AT THE PPC CABINET.
4. UNDERGROUND POWER AND TELCO SERVICE LINES SHALL BE ROUTED IN A COMMON TRENCH. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 AND CONDUIT EXPOSED ABOVE GROUND SHALL BE RIGID GALVANIZED STEEL UNLESS OTHERWISE INDICATED.
5. ALL TELCO CONDUIT LINES SHALL BE 4" SCH. 40 PVC CONDUIT UNLESS OTHERWISE INDICATED. THE TELCO CONDUIT FROM THE PPC SHALL BE ROUTED AND TERMINATED AT DESIGNATED TELCO DEMARCATION OR 2'-FEET OUTSIDE FENCED AREA, NEAR UTILITY POLE (IN FENCED AREA), OR END CAP OFF AND PROVIDE MARKER STAKE PAINTED BRIGHT ORANGE WITH DESIGNATION FOR TELCO SERVICE.
6. CONDUITS INSTALLED AT PCS EQUIPMENT ENDS PRIOR TO THE EQUIPMENT INSTALLATION SHALL BE SUBBED AND CAPPED AT 6" ABOVE GRADE OR PLATFORM. IF SERVICE LINES CAN'T BE INSTALLED INITIALLY, PROVIDE NYLON FULL GORD IN CONDUITS.
7. THE SPRINT CABINET, INCLUDING 200 AMP LOAD PANEL AND TELCO PANEL, SHALL BE PROVIDED BY OWNER AND INSTALLED BY THE CONTRACTOR. CONTRACTOR IS TO INSTALL BREAKER(S) NOT PROVIDED BY MANUFACTURER. SEE PANEL SCHEDULE ON THIS SHEET FOR BREAKER REQUIREMENTS.
8. LOCATION OF ELECTRIC METER AND DISCONNECT SWITCH TO BE COORDINATED BY ELECTRICAL CONTRACTOR AND FIELD CONSTRUCTION MANAGER.
9. #2 WIRE TO BE UTILIZED IN ELECTRIC SERVICE RUNS EXCEEDING 100'.
10. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION. NOT AFTER THE CONTRACT HAS BEEN AWARDED.
11. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO ROUGH-IN.
12. THE CONDUIT RUNS AS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ROUTING SHALL BE PER EXISTING FIELD CONDITIONS.
13. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
14. ALL CONDUITS SHALL BE MET WITH BENDS MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
15. ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUNDING BUSHINGS.
16. ALL WIRE SHALL BE TYPE THWN, SOLID, ANNEALED COPPER UP TO SIZE #10 AWG (#8 AND LARGER SHALL BE CONCENTRIC STRANDED) 75 DEGREE C, (157 DEGREE F), 98% CONDUCTIVITY, MINIMUM #12.
17. ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS, ACTION CRAFT, BRADY, OR APPROVED EQUAL.
18. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
19. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION TO CONFLICTS, VERIFY WITH MECHANICAL CONTRACTOR AND COMPLY AS REQUIRED.
20. ALL PANEL DIRECTORIES SHALL BE TYPED/WRITTEN NOT HAND WRITTEN.
21. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
22. THE CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS, DOCUMENT ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. SUBMIT AT SUBSTANTIAL COMPLETION.
23. ALL DISCONNECT SWITCHES AND OTHER CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM (NO EXCEPTIONS).
24. ALL ELECTRICAL DEVICES AND INSTALLATIONS OF THE DEVICES SHALL COMPLY WITH (ACA) AMERICANS WITH DISABILITIES ACT AS ADOPTED BY THE APPLICABLE STATE.
25. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS OR RISERS THROUGH BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS WITHOUT CONSTRUCTION MANAGERS APPROVAL. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE PACKED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FILL FOR FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.
26. ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT (NEW AND EXISTING) SHALL BE FIELD VERIFIED WITH THE OWNER'S REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN OF CONDUIT AND WIRE. ALL EQUIPMENT SHALL BE PROPERLY CONNECTED ACCORDING TO THE NAMEPLATE DATA FURNISHED ON THE EQUIPMENT (THE DESIGN OF THESE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN AND SOME EQUIPMENT CHARACTERISTICS MAY VARY FROM DESIGN AS SHOWN ON THESE DRAWINGS).
27. LOCATION OF ALL OUTLET, BOXES, ETC., AND THE TYPE OF CONNECTION (PLUG OR DIRECT) SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
28. SPLIT BREAKERS SHALL BE USED ON 120V LOADS IN THE EVENT THAT ADDITIONAL CIRCUIT SPACE IS REQUIRED FOR PROPOSED EQUIPMENT.
29. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENT ON DETAIL 2/E-1 REFLECTS MIGRATION PERIOD CIRCUMSTANCES. REFER TO DETAIL 1/E-1 FOR POST-MIGRATION PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENT IN WHICH EXISTING LEGACY EQUIPMENT HAS BEEN REMOVED.

ELECTRICAL NOTES

4

NOT USED

2

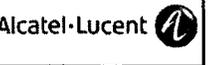


HYBRIFLEX 1 1/4" SPEC

3

NOT USED

1



PROJECT INFORMATION:
**NETWORK VISION
MMBTS LAUNCH
SINGING HILLS (7
RESERVOIR (7 0)
SD34XC555**
2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
01/24/13

ISSUED FOR:
100% FINAL CD'S

REVISIONS

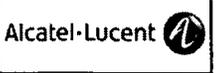
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1	11/26/12	100% CD'S REVIEW	FR
2	01/24/13	100% FINAL CD'S	FR

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET



SHEET TITLE:
**HYBRIFLEX SPECIFICATIONS
AND ELECTRICAL NOTES**

SHEET NUMBER: **E-3**
REVISION: **2**



PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
**SINGING HILLS (7
 RESERVOIR (7 0)**
 SD34XC555
 2568 PINCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
 01/24/13
 ISSUED FOR:
 100% FINAL CD'S

REVISIONS

REV	DATE	DESCRIPTION	INT.
0	05/12/12	90% CD'S REVIEW	FR
1	11/26/12	100% CD'S REVIEW	FR
2	01/24/13	100% FINAL CD'S	FR

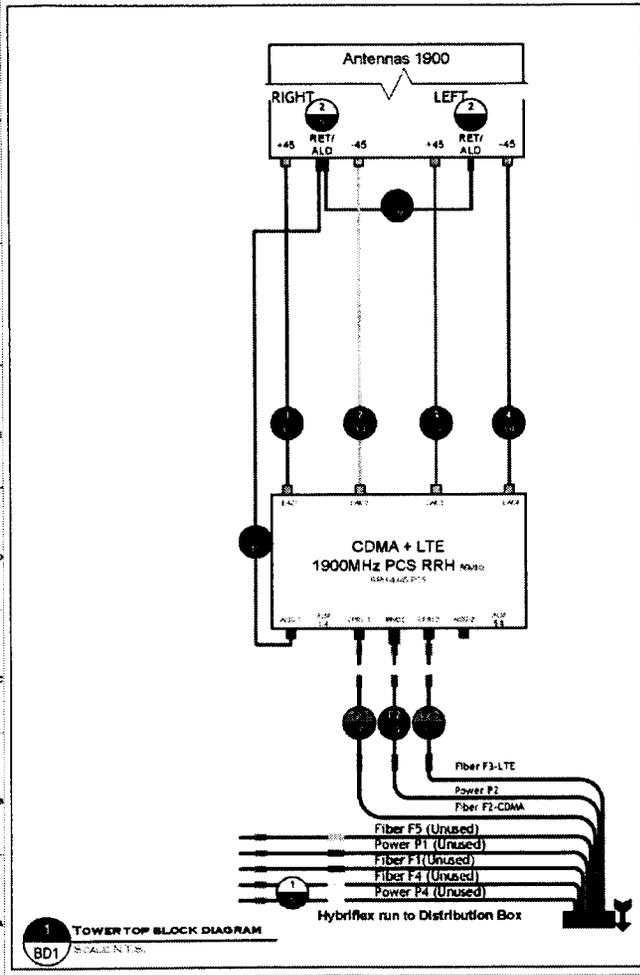
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 LABELED AS CONSTRUCTION SET



SHEET TITLE:
DETAILS

SHEET NUMBER:
D-1

REVISION:
 2



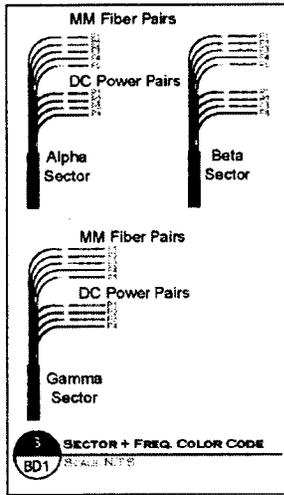
Power Feed Polarity Definition:
 IF wires are BLACK AND BLACK/
 WHITE STRIPE:
 ■ Black= -48VDC Feed (Battery)
 ■ Black/White Stripe= Return

IF wires are RED AND BLACK:
 ■ Red= -48VDC Feed (Battery)
 ■ Black= Return

NOTE: For power feed use the same Hybriflex OEM color designator as the fiber.

- MM Pair 1= F1= Green= P1(Green)
- MM Pair 2= F2= Blue= P2(Blue)
- MM Pair 3= F3= Red= P3(Red)
- MM Pair 4= F4= Yellow= P4(Yellow)
- MM Pair 5= F5= Orange= (No P5 power feed)

2 HYBRIFLEX OEM COLOR CODE
 SCALE: NTS
 BD1



J. STEVE WALSON
 SYSTEMS ENGINEER/PROJECT MANAGER
 PH: 913.264.6222



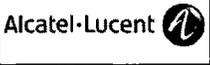
BACK TO TITLE SHEET

SCENARIO 130_V1.7.V0D

SHEET DESCRIPTION:
 TOWER TOP BLOCK DIAGRAM

SHEET NUMBER:
 BD1

TOWER TOP BLOCK DIAGRAM



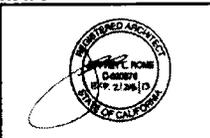
PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555
 2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
 01/24/13

ISSUED FOR:
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REVISIONS				
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SHEET TITLE:
 DETAILS

SHEET NUMBER: D-2
 REVISION: 2

J. STEVE WILSON
 STEVE.WILSON@NCSTECH.NET
 PH: 912246C227

Sprint
 NETWORK VISION
 Alcatel-Lucent

COAX
 POWER
 NOTES

1
 2
 EC1

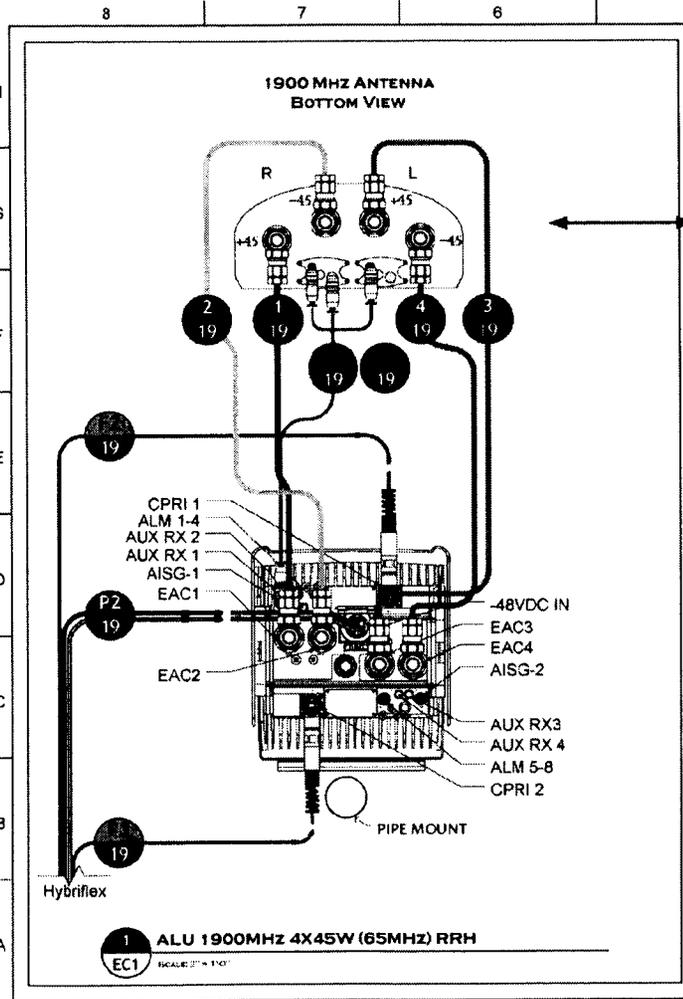
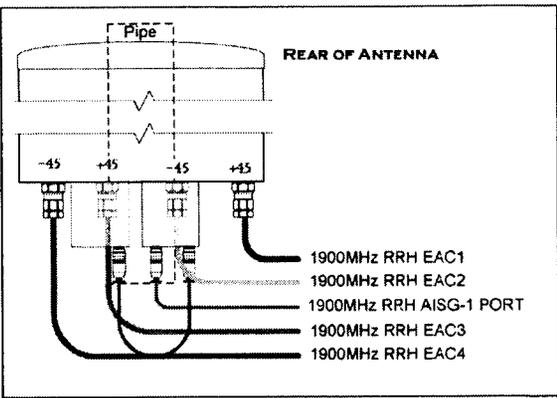
DIAGRAM LEGEND
 SCALE: N.T.S.

BACK TO TITLE SHEET

SCENARIO
 130_V1.7.v8d

SHEET DESCRIPTION
 1900MHZ TOWER MOUNTED
 RRH CONNECTIONS

SHEET NUMBER
 EC1



1900 NV TOWER MOUNTED RRH CONNECTIONS



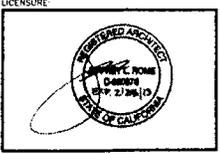
JRA
 Jeffrey Rome & Associates, Inc.
 Architecture & Telecommunications
 1 San Joaquin Plaza, Suite 230
 Newport Beach, California 92660
 Phone: (949) 780-3929
 Fax: (949) 780-3931

PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555
 2568 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
 01/24/13
 ISSUED FOR:
 100% FINAL CD'S

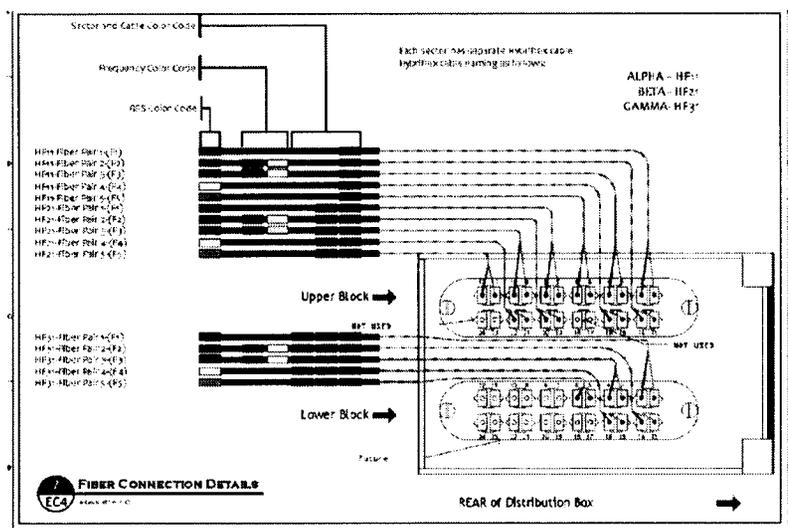
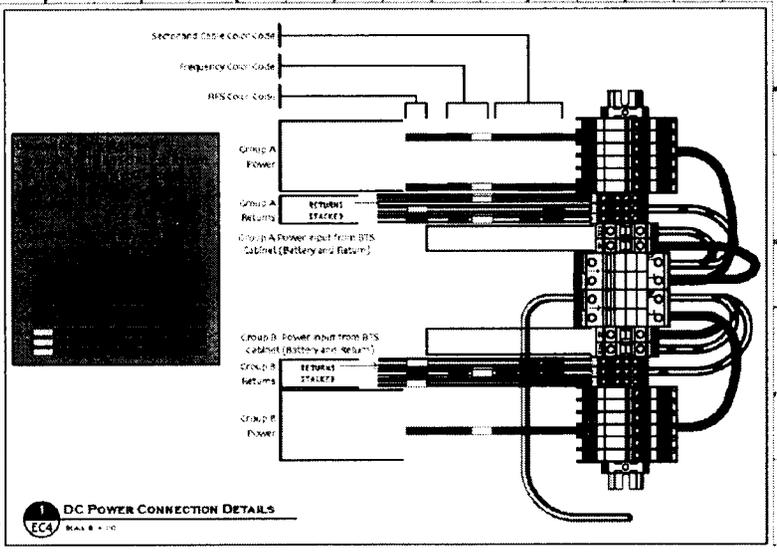
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SHEET TITLE:
DETAILS

SHEET NUMBER: **D-3** REVISION: **2**



Sprint

Alcatel-Lucent

JRA

Jeffrey Roma & Associates, Inc.

Architecture & Telecommunications
1 San Jacinto Plaza, Suite 1300
Newport Beach, California 92660
Phone: (949) 760-3828
Fax: (949) 760-3831

PROJECT INFORMATION:

NETWORK VISION
MMBTS LAUNCH

SINGING HILLS (7
RESERVOIR (7 0)

SD34XC555

2568 FENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

01/24/13

ISSUED FOR:

100% FINAL CD'S

REVISIONS

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LICENSEURE



SHEET TITLE:

DETAILS

SHEET NUMBER

REVISION:

D-4

2

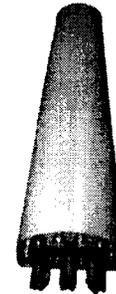
Product Data Sheet APXV5PP18-C

RFS

Triple Band Dual Polarized Antenna, 806-1995, 65deg, 16-18dBi, 1.8m, VET, 0-10deg, 0.5m AISG Cable

Product Description

This antenna is an ideal choice for dual band site upgrade for high traffic areas. It features 4 ports in 1900 MHz and 2 ports in 800 MHz.



Features/Benefits

- Variable electrical downtilt – provides enhanced precision in controlling intercell interference. The tilt is in-field adjustable 0-10 deg.
- High suppression of all upper sidelobes (Typically < 18 dB)
- Independent control of electrical downtilt for 800 and PCS bands
- Low profile for low visual impact
- Quick and easy to adjust
- High front-to-back ratio
- AISG compatible remote tilt available – Add suffix -A20 to the model number

Technical Specifications

Electrical Specifications	806-809	1903-1991	1850-1995
Frequency Range, MHz	806	850	850
Bandwidth, MHz	17.5	17.5	17.5
Vertical Beamwidth, dB	16	16	16
Electrical Downtilt, deg	0-10	0-10	0-10
Gain, dBi (typ)	15.5 (13.5 d)	18.0 (15.7)	18.0 (15.7)
1st Upper Side-lobe Suppression, dB typ. @ 10° & 15°	>18	>18	>18
Front to Back Ratio, dB @ 180° & 15°	>20	>20	>20
Isolation	Dual CS, >40dB		
Return Loss, dB	>12		
Isolation between Ports, dB	>20		
3rd Order IMD @ 2.3 dB offset @ 7 min. duration	>110		
Carrier Power Discrimination (CPD) @ 48 dB	>25		
Group Delay Discrimination (GDD) @ 50 dB	>11		
MEW Specifications (see hand page)	>15		
Impedance, Ohms	50		
Maximum Power Input, W	250		
Lightning Protection	Direct Ground		
Connectors Type	SMA 2.92 GHz Version		

Mechanical Specifications

Dimensions - HxWxD, mm (in)	1829 x 302 x 178 (72.8 x 11.8 x 7)
Wind Load, kg/m ² (lb/ft ²)	21.8 (15.2)
Rated Wind Speed, km/h (mph)	127 (79)
Roofing Material	A-5
Wind Load	1200 (500) lbs/ft ²
Mounting Hardware Material	See ANSI Standards and Local Building Code

Ordering Information

Mounting Hardware	479440-1, Datasheet K1
AISG System Cable	0.5 m, included
Dimensions, See Drawing (mm/in)	621.1 x 114.1 x 17.5
Mounting Hardware Weight, kg (lb)	1.1 (2.5)

RFS The Clear Choice®

APXV5PP18-C

Rev: P5

Print Date: 2.11.2011

Please visit us on the internet at <http://www.rfsworld.com>

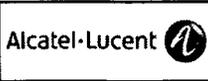
Radio Frequency Systems

ANTENNA SPECIFICATIONS

1

JPA JOB NUMBER: 11-0319

Market San Diego		San Diego		
Cascade ID		SD34XC555		
		SECTOR 1	SECTOR 2	SECTOR 3
Split sector present		No	No	No
1900MHz_Azimuth		0	90	280
1900MHz_No_of_Antennas		1	1	1
1900MHz_RADCenter(ft)		24.1	32.1	32.1
1900MHz_Antenna_Make		RFS	RFS	RFS
1900MHz_Antenna_Model		APXVSP18-C-A20	APXVSP18-C-A20	APXVSP18-C-A20
1900MHz_Horizontal_Beamwidth		65	65	65
1900MHz_Vertical_Beamwidth		5.5	5.5	5.5
1900MHz_AntennaHeight(ft)		6	6	6
1900MHz_AntennaGain(dBd)		15.9	15.9	15.9
1900MHz_E_Tilt		0	0	-4
1900MHz_M_Tilt		0	0	0
1900MHz_Carrier_Forecast_Year_2013		2	2	2
1900MHz_RRH_Manufacturer		ALU	ALU	ALU
1900MHz_RRH_Model		RRH 1900 4x45 65MHz	RRH 1900 4x45 65MHz	RRH 1900 4x45 65MHz
1900MHz_RRH_Count		1	1	1
1900MHz_RRH_Location		Top of the Pole/Tower	Top of the Pole/Tower	Top of the Pole/Tower
1900MHz_Combiner_Model		No Combiner Required	No Combiner Required	No Combiner Required
1900MHz_Top_Jumper #1_Length (RRH or Combiner-to-Antenna for TT or Main Coax to)		10	10	10
1900MHz_Top_Jumper #1_Cable_Model (RRH or Combiner-to-Antenna for TT or Main)		LCF12-50J	LCF12-50J	LCF12-50J
1900MHz_Top_Jumper #2_Length (RRH to Combiner for TT if applicable, ft)		N/A	N/A	N/A
1900MHz_Top_Jumper #2_Cable_Model (RRH to Combiner for TT if applicable)		N/A	N/A	N/A
1900MHz_Main_Coax_Cable_Length (ft)		N/A	N/A	N/A
1900MHz_Main_Coax_Cable_Model		N/A	N/A	N/A
1900MHz_Bottom_Jumper #1_Length (Ground based RRH to Combiner-OR-Main Coax, ft)		N/A	N/A	N/A
1900MHz_Bottom_Jumper #1_Cable_Model (Ground based RRH to Combiner-OR-Main)		N/A	N/A	N/A
1900MHz_Bottom_Jumper #2_Length (Ground based-Combiner to Main Coax, ft)		N/A	N/A	N/A
1900MHz_Bottom_Jumper #2_Cable_Model (Ground based-Combiner to Main Coax)		N/A	N/A	N/A
800MHz_Azimuth		N/A	N/A	N/A
800MHz_No_of_Antennas		0	0	0
800MHz_RADCenter(ft)		N/A	N/A	N/A
800MHz_AntennaMake		N/A	N/A	N/A
800MHz_Antenna_Model		N/A	N/A	N/A
800MHz_Horizontal_Beamwidth		N/A	N/A	N/A
800MHz_Vertical_Beamwidth		N/A	N/A	N/A
800MHz_AntennaHeight(ft)		N/A	N/A	N/A
800MHz_AntennaGain(dBd)		N/A	N/A	N/A
800MHz_E_Tilt		N/A	N/A	N/A
800MHz_M_Tilt		N/A	N/A	N/A
800MHz_RRH_Manufacturer		N/A	N/A	N/A
800MHz_RRH_Model		N/A	N/A	N/A
800MHz_RRH_Count		0	0	0
800MHz_RRH_Location		N/A	N/A	N/A
800_Top_Jumper #1_Length (RRH to Antenna for TT or Main Coax to Antenna for GW)		N/A	N/A	N/A
800_Top_Jumper #1_Cable_Model (RRH to Antenna for TT or Main Coax to Antenna for GW)		N/A	N/A	N/A
800MHz_Main_Coax_Cable_Length (ft)		N/A	N/A	N/A
800MHz_Main_Coax_Cable_Model		N/A	N/A	N/A
800_Bottom_Jumper #1_Length (Ground based RRH to Main Coax)		N/A	N/A	N/A
800_Bottom_Jumper #1_Cable_Model (Ground based RRH to Main Coax)		N/A	N/A	N/A
Plumbing Scenario		130	130	130
Comments	* If plumbing scenario does not match the material received, please contact your Construction Manager			
	11/9/2012			



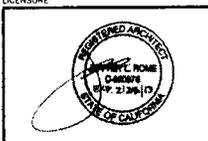
PROJECT INFORMATION:
 NETWORK VISION
 MMBTS LAUNCH
 SINGING HILLS (7
 RESERVOIR (7 0)
 SD34XC555
 2558 PENCE DRIVE
 EL CAJON, CALIFORNIA 92019

ISSUED DATE:
 01/24/13

ISSUED FOR:
 100% FINAL CD'S

REVISIONS			
REV	DATE	DESCRIPTION	INT.
0	05/12/12	90% CD'S REVIEW	FR
1	11/26/12	100% CD'S REVIEW	FR
2	01/24/13	100% FINAL CD'S	FR

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 DETAILS

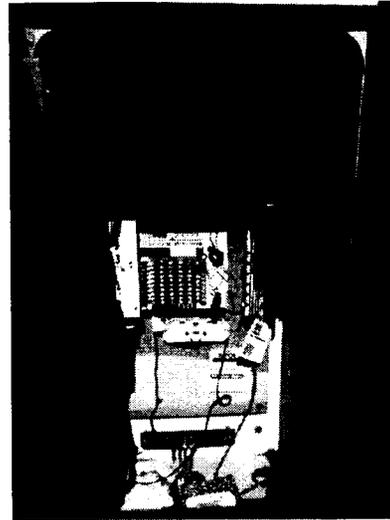
SHEET NUMBER: D-5
 REVISION: 2



HOP/MEET POINT



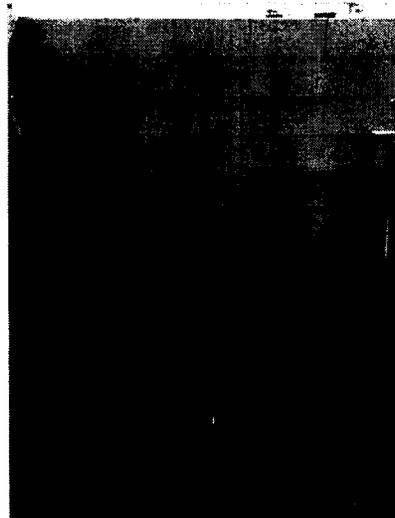
EXISTING EQUIPMENT AREA



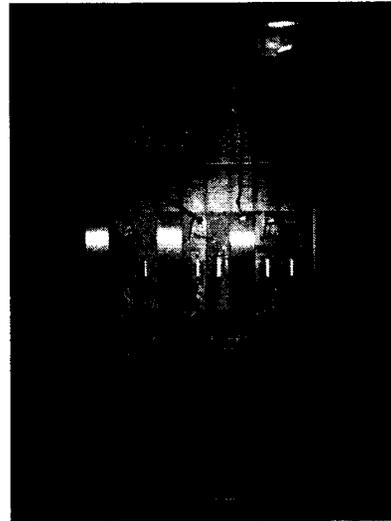
EXISTING TELCO BOX & MPOE



EXISTING GROUND BAR



PROPOSED CIENA BOX & CONDUIT RUNS



EXISTING POWER CABINET



NEW CONDUIT ROUTING

Sprint

Alcatel-Lucent

JRA

Jeffrey Rome & Associates, Inc.

12000 Wilshire Blvd., Suite 1000
Beverly Hills, California 90210
(310) 206-2000
Fax: (310) 206-2001

PROJECT INFORMATION:

ANTENNA MODIFICATION PROJECT

SINGING HILLS
RESERVOIR

S034XC555

2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

04/27/12

ISSUED FOR:

100% ISSUED FOR
CONSTRUCTION

REVISIONS

REV.	DATE	DESCRIPTION	INT.
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

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SHEET TITLE:

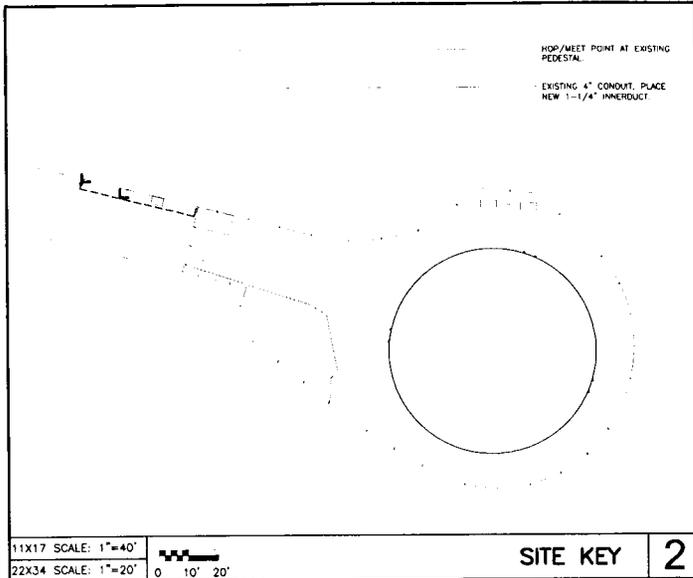
SITE PHOTOS
(AT&T)

SHEET NUMBER

REVISION:

T-2

1



SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (N) UAM/OENA CABINET, APPROXIMATELY 5'-0" CONDUIT RUN.

(E) AT&T 4" CONDUIT WITH SPRINT GC TO ROD AND PLACE (N) 1-1/4" INNERDUCT WITH MULE TAPE FROM EXISTING PEDESTAL LOCATED ON WEST FROM (E) SPRINT LEASE AREA APPROXIMATELY 60'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) (2) 3/8" DIA EMT CONDUITS WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN FROM (E) GROUND BARS LOCATED INSIDE EXISTING TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN. RUN TO (N) AT&T UAM/OENA AND (N) FBT JUNCTION BOX.

SPRINT GC TO PROVIDE AND INSTALL (S) 3" EMT CONDUIT FROM THE (E) MM-BTS CABINET TO (N) UAM/OENA CABINET, (1) 20 AMP -8V DC CIRCUIT USING #12 AWG THIN STRANDED CONDUCTORS, APPROXIMATELY 15'-0" CONDUIT RUN.

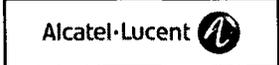
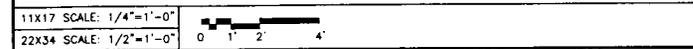
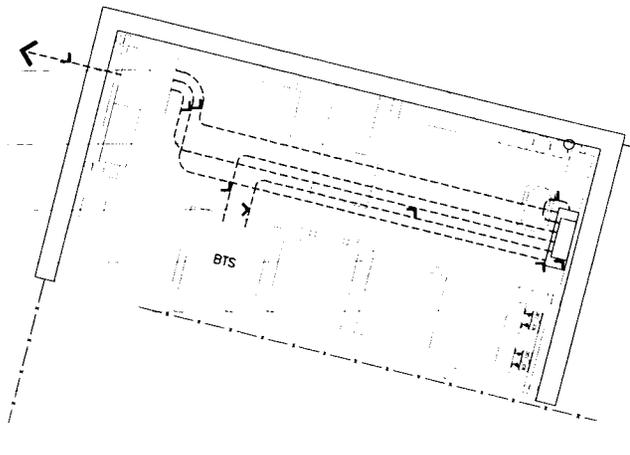
SPRINT GC TO PROVIDE AND INSTALL (N) 1" EMT CONDUIT FROM (N) AT&T UAM/OENA CABINET TO SPRINT'S MM-BTS CABINET, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (E) TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) 24"x24"x8" NEMA 3R JUNCTION BOX WITH 1/2" PLYWOOD AND GROUND BAR WITH SET SCREWS PROVIDE 3'-0" COIL OF #6 AWG SOLID GREEN WIRE. (N) WALL MOUNTED UNISTRUT.

SPRINT GC TO INSTALL AT&T PROVIDED (N) UAM/OENA CABINET MOUNTED ON (N) UNISTRUT. SEE DETAIL 2/A-2.

GENERAL NOTES:
PAINT ALL CONDUITS MOUNTED ON GROUND YELLOW.



PROJECT INFORMATION

ANTENNA MODIFICATION PROJECT

SINGING HILLS RESERVOIR

SD34XC555

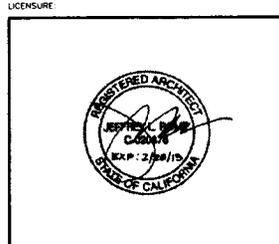
2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:
04/27/12

ISSUED FOR:
100% ISSUED FOR CONSTRUCTION

REVISIONS			
REV	DATE	DESCRIPTION	INIT
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



SHEET TITLE:
SITE PLAN

SHEET NUMBER: **A-1**

REVISION: 1



PROJECT INFORMATION:

ANTENNA MODIFICATION PROJECT

SINGING HILLS RESERVOIR
SD34XC555

2568 PENCE DRIVE
EL CAJON, CALIFORNIA 92019

ISSUED DATE:

04/27/12

ISSUED FOR:

100% ISSUED FOR CONSTRUCTION

REVISIONS

REV.	DATE	DESCRIPTION	INT.
1	04/27/12	100% ISSUED FOR CONSTRUCTION	UC

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

LICENSURE:



SHEET TITLE:

DETAILS (AT&T)

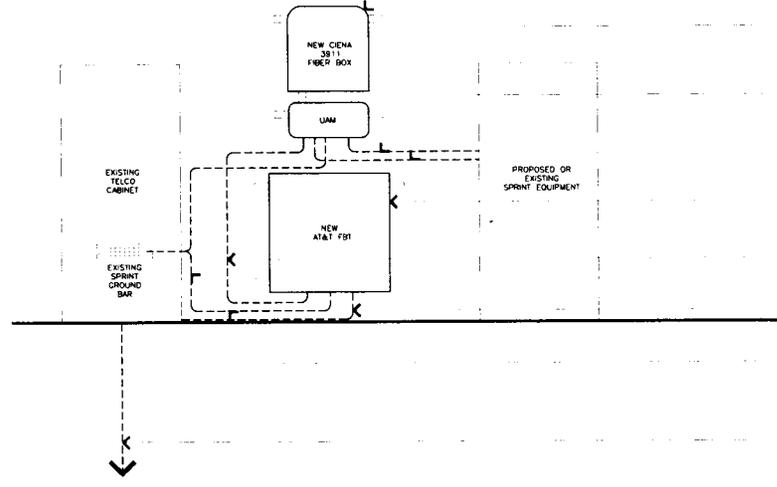
SHEET NUMBER:

A-2

REVISION:

1

GENERAL NOTES:
PAINT ALL CONDUITS MOUNTED ON GROUND YELLOW.
EQUIPMENT VIEW ADJUSTED FOR CLARITY.



(N) CIENA 3911 FIBER BOX AND (N) UNISTRUT. SEE DETAILS 1/A-2 AT&T TO INSTALL (N) AT&T CIENA 3911.

SPRINT GC TO PROVIDE AND INSTALL (1) 1" EMT CONDUIT FROM (N) UAM/CIENA CABINET TO SPRINT MM-BTS, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (1) 3" EMT CONDUIT FROM THE (E) MM-BTS CABINET TO (N) UAM/CIENA CABINET, (1) 20 AMP -48V DC CIRCUIT USING #12 AWG THHN STRANDED CONDUCTORS, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) 24"x24"x3/8" FEMA 39 JUNCTION BOX WITH X-PLYWOOD AND GROUND BAR WITH SET SCREWS, PROVIDE 5'-0" COIL OF #6 AWG SOLID GREEN WIRE.

SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (N) UAM/CIENA CABINET, APPROXIMATELY 5'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) (1) 1-1/4" EMT CONDUIT FROM (N) FBT JUNCTION BOX TO (E) TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN.

SPRINT GC TO PROVIDE AND INSTALL (N) (2) 3/8" DA EMT CONDUITS WITH (1) NEW #6 AWG GREEN SOLID WIRE ROUTED WITHIN FROM (E) GROUND BAR LOCATED INSIDE EXISTING TELCO CABINET, APPROXIMATELY 15'-0" CONDUIT RUN. RUN TO (N) AT&T UAM/CIENA AND (N) FBT JUNCTION BOX.

(E) AT&T 4" CONDUIT WITH SPRINT GC TO ROD AND PLACE (N) 1-1/4" INERDUCT WITH WULF TAP FROM (E) PEDESTAL, APPROXIMATELY 60'-0" CONDUIT RUN.

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

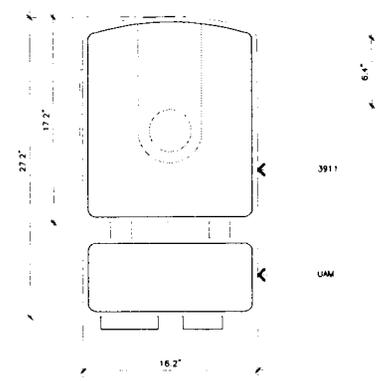
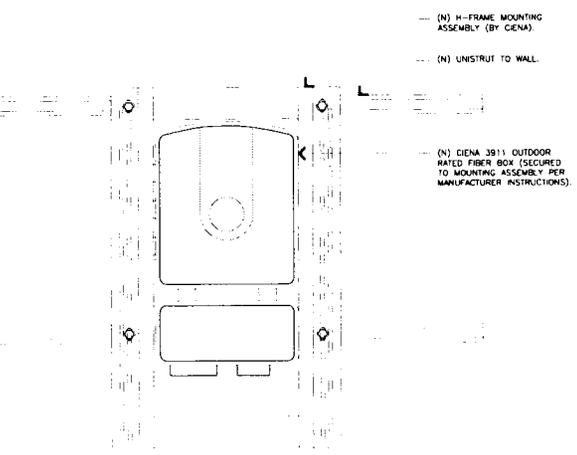
NOT USED 4

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

ROUTING DIAGRAM 3

H-FRAME MOUNT ASSEMBLY (PER MANUFACTURER)

- SELECT AN APPROXIMATE H-FRAME STRUCTURE THAT WILL SUPPORT APPROXIMATELY 200 POUNDS OR 30 HOLEGRIDS WITH A MINIMUM HEIGHT OF 4' ABOVE GRADE.
NOTE: THE H-FRAME MOUNT KIT IS REQUIRED TO CONNECT WITH AT LEAST 2 HORIZONTAL SUPPORT CHANNELS OF YOUR H-FRAME STRUCTURE. THE CHANNELS SHOULD BE SPACED BETWEEN 13" AND 23" APART. THE PREFERRED SPACING IS 18".
- REMOVE AND SET ASIDE THE SCREWS THAT HOLD THE H-FRAME MOUNT KIT TOGETHER FOR SHIPMENT. THESE SCREWS WILL BE USED LATER IN STEP #3.
- LOOSELY ASSEMBLE THE HORIZONTAL SUPPORT BRACKET TO THE 2 VERTICAL SUPPORT BRACKETS USING THE SCREWS FROM STEP #2.
- FIRMLY ATTACH THE H-FRAME ASSEMBLY TO THE H-FRAME STRUCTURE. THE MAXIMUM OVERHANG OF THE VERTICAL SUPPORT BRACKETS SHOULD BE NO MORE THAN 6" PAST THE H-FRAME STRUCTURE.
- TIGHTEN ALL H-FRAME MOUNTING HARDWARE.
- REFERENCE THE SECTION ENTITLED H-FRAME MOUNT ILLUSTRATION.



PLAN VIEW
MANUFACTURER: CIENA
MODEL: 3911 W/ UAM ACCESS MODULE (UAM)
DIMENSIONS: 29.2"(H) x 16.2"(W) x 6.4"(D)
WEIGHT: APPROX 32.8 LBS.

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

FIBER BOX H-FRAME MOUNTING 2

11x17 SCALE: NOT TO SCALE
22x34 SCALE: NOT TO SCALE

FIBER BOX SPECIFICATIONS 1

FIRST AMENDMENT TO LEASE

This First Amendment to Lease (the "First Amendment") is made this day of ____, 2013, ("Effective Date") by and between Otay Water District ("OTAY") and Nextel of California, Inc., a Delaware corporation ("TENANT"), with reference to the facts set forth in the Recitals below:

RECITALS

- A. OTAY is the owner of that certain real property and facilities known as the "2-1" Site, at 12118 Campo Road, Spring Valley, California, a Reservoir Site (the "Property").
- B. OTAY and TENANT are parties to that certain Lease dated August 14, 1998 (the "Lease" or "Agreement") pursuant to which TENANT is leasing from OTAY land at the Property, together with the right of access to and from the nearest public right-of-way and the right to install utilities (collectively, the "Premises").
- C. Tenant has requested a modification to the type and mounting of the Improvements currently on the Premises (the "New Improvements").
- D. OTAY and TENANT have agreed to amend the Agreement to memorialize the addition of the New Improvements to the Premises.

AGREEMENT

NOW, THEREFORE, in consideration of the facts contained in the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **New Improvements.** OTAY consents to TENANT construction and installation of new communications facilities, as more particularly described and depicted on Exhibit "B-1" which is attached hereto and made a part hereof. The parties acknowledge and agree that the attached Exhibit "B-1" is intended to supplement the Exhibit "B" attached to the Agreement.
2. **Governmental Approvals.** Any required permits for the use or operation of the New Improvements shall be obtained by TENANT at TENANT's sole expense. Furthermore, it is understood and agreed that TENANT's ability to install the New Improvements is contingent upon its obtaining all of the certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit TENANT to install and operate the New Improvements within the Premises. OTAY agrees, at no expense to OTAY, to reasonably cooperate with TENANT in making application for and obtaining all governmental licenses, permits and approvals that may be required for TENANT'S intended use of the Premises.
3. **Amended Provisions.** The following provisions shall be amended as follows:
 - 3a. Section 5; Rent shall be replaced with the following:

5.1 Tenant agrees to pay all costs and expenses incurred by Otay in connection with the Facilities and this Agreement, including negotiation and processing hereof, plan checking and inspection of Tenant facilities, costs of inspection, repairs or replacement of any Otay facilities affected or damaged, and all other costs or expenses of Otay attributable to the matters herein contemplated, plus a reasonable amount for Otay's overhead costs in connection therewith.

a. Deposit. Tenant has made a deposit, concurrent with its application, and has agreed to make any additional deposits required in connection with Otay's review of the application, negotiation of this Agreement, including legal review, site visits, review of drawings and other costs relating such matters incurred by Otay up to the time this Agreement is executed. Tenant forfeits any claim to such deposits except to the extent Otay determines after this Agreement is executed that amounts in excess of the District's costs and expenses have been paid. Any such excess amounts may, at the sole discretion of the District, be credited toward administrative fees or any other costs then due by Tenant, if any. If no amounts are due, excess deposits will be reimbursed to Tenant.

b. Administrative Fees. Administrative fees may be charged at Otay's discretion during the Term to recover costs and expenses incurred by Otay, including but not limited to attorneys and consultant's fees, review, processing of Tenant's conditional use permits, inspection of the Facilities during construction and other related costs if any, in connection with any Tenant activity that requires Otay staff to spend time in supervision, inspection, investigation or other review; such costs include but are not limited to any amendments to this Agreement, any default or any failure of Tenant to secure or renew any permit, approval, license or easement and any investigation Otay deems reasonably required in connection with the Premises or the Facilities, including without limitation any investigation of a potential contamination of any portion of the Property due to any Tenant activity or improvement.

c. Security Deposit. Concurrently upon execution of this Agreement, Tenant shall pay to Otay a sum equal to two months' rent as a deposit ("Security Deposit") to secure the Tenant's performance of the covenants contained herein. Tenant shall maintain the Security Deposit balance equal to the amount established herein over the life of the agreement. If Otay applies any portion of the Security Deposit, Tenant shall within 30 days after demand by Otay, deposit an amount sufficient to restore the Security Deposit to its original amount. No part of the Security Deposit is to be considered as an advance payment of rent, including last months' rent, nor is it to be used or refunded prior to the leased premises being permanently and totally vacated by the Tenant. After the Tenant has vacated the premises, Otay shall furnish Tenant with an itemized written statement of the basis for, and the amount of, any of the security deposit retained by Otay. Otay may withhold that portion of Tenant's security deposit necessary (a) to remedy any default by Tenant in the payment of rent or any other provision of this Agreement, (b) to repair damages to the premises or any expense, loss, or

damage that Otay may suffer because of Tenant's default, (c) to restore the premises to meet Otay's standards, (d) any amount that Otay may incur or become obligated to spend in exercising Otay's rights under this Agreement or available at law. The unused portion of this deposit shall be returned to the Tenant without interest no later than 60 days after termination of this Agreement.

Tenant waives the provisions of California Civil Code §1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Agreement, that provide that Otay may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of accrued Rent, to repair damage caused by Tenant, or to clean the Premises. Otay and Tenant agree that Otay may, in addition, claim those sums reasonably necessary to compensate Otay for any other foreseeable or unforeseeable loss or damage caused by the act or omission of Tenant or Tenant's officers, agents, employees, Independent contractors, or invitees, including future rent payments.

d. None of the deposits or other payment of costs or administrative fees constitutes or shall be considered Rent (defined below).

5.2 Beginning on the Commencement Date, Tenant shall pay Otay as rent the sum of \$1,500.00 per month ("Rent") payable on the first day of each month in advance. If the Commencement Date is prior to the fifteenth day of the month of commencement, the full month's Rent will be due on the Commencement Date. If the Commencement Date is on or after the fifteenth day of the month of commencement, payment of Rent will begin the first day of the following month.

Tenant may make Rent payments up to 5 days past due date without penalty, unless continual late payments for two consecutive months occur. A fee shall be imposed after the 5th day and shall be 20% of the amount currently due. Failure to pay Rent within ten (10) calendar days of the first of the month shall be an Event of Default as provided by Section 13.2. Failure to pay Rent on the due date for more than two (2) consecutive months or four (4) times over any twelve (12) month period shall be a non-curable Event of Default without the necessity of any notice or cure period. At District's sole discretion, immediately following such a non-curable Event of Default, District may terminate the Agreement and seek any remedy available by this Agreement or at law. If Tenant tenders a check, which is dishonored by a banking institution, then the Tenant shall tender cash or cashier's check only for all future payments, which shall continue until such time as written consent is obtained from Otay. In addition, Tenant shall be liable in the sum of \$25 for each dishonored check that is returned to Otay.

a. Rent Increases. The Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater. CPI shall be the average percentage increases in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100)

(the "CPI") for "All Items - All Urban Consumers" for the San Diego Metropolitan Statistical Area.

3b. Section 7; Improvements, and Section 8; Installation of Equipment shall be replaced with the following:

7. Installation and Maintenance of Improvements. Tenant is authorized to install, maintain and operate on the Premises only the Facilities described and depicted on Exhibit B; provided that all permits and zoning approvals shall have first been obtained by Tenant and shall at all times while the Facilities operate remain in full force and effect.

a. Installation of the Improvements. Tenant's design and installation of all portions of the Facilities shall be done, at no cost to Otay, according to plans approved by Otay, provided that such approval shall not be unreasonably withheld. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay of the method of attachment at Otay's sole discretion. If such Facilities are to be attached or mounted to a water tank, Tenant shall use an installation method such as a magnetic mount or other, non-destructive alternative. The Tenant shall be responsible for painting its antennas and/or equipment to match Otay's facility. Otay will provide Tenant with specifications regarding paint type, color and application method to accomplish this requirement. Painting/coating submittals shall be provided to Otay by the Tenant prior to receiving permission to begin painting. Otay may specify a camouflage design if not inconsistent with requirements of the city or county within which the Facilities are located. These camouflage designs may include but are not limited to faux palm trees, pine trees, cypress trees, broadleaf trees, and flag poles, unipoles, and other camouflaged antenna and antenna supports.

b. Record Drawings. Within thirty (30) days after completion of the Facilities, Tenant shall provide Otay with "record" (also called "as-built") drawings of the Facilities showing and identifying all the equipment and improvements installed on the Premises. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, including without limitation all personal property and antennas located on the Premises and any such property of Tenant located in the Easement. No property of Tenant other than such identified property shall be located on the Premises or the Property at any time. Upon acceptance by Otay of Tenant's record drawings, in form and content satisfactory to Otay, such drawings shall replace and supersede any similar drawings contained in any exhibit attached hereto.

c. Alterations. Tenant shall not alter or change its Improvements in a material manner without the prior approval of Otay, such approval not to be unreasonably withheld. "Material" refers to any physical change that could affect the building structure, antenna support, interconnecting facilities or its appearance

or any change that requires access to the Premises for installation of new equipment, removal of old equipment, trenching or digging or that could disrupt Otay's workplace or communications in any way or any change that requires a renewed or amended easement, permit or approval. All of Tenant's construction and installation work shall be performed at Tenant's sole cost and expense in a good and workmanlike manner and fully compliant with all government permit and code requirements. Tenant shall have the right to remove all Improvements it installs at its sole expense on or before the expiration or termination of this Agreement, but must at such time restore the ground and surface underlying the removed Improvements to its pre-installation condition, wear and tear excepted, and to the reasonable satisfaction of Otay.

d. Alterations to Improvements / Additional Space. If, at any time during the Term, Tenant requests permission from Otay to add improvements requiring construction to its then existing Improvements, the then current Administrative Fees shall be paid to Otay before any such changes are negotiated. In addition, if the requested Tenant improvements include additional area, a new agreement or, at Otay's discretion, an amendment for the additional lease space must be executed prior to start of construction and Tenant shall comply with Otay's requirements then in effect, including payment of additional rent, if any, for the additional area.

e. Permits and Compliance with Applicable Laws. During the Term, and prior to commencing any construction or installation of any improvements or equipment, as applicable, Tenant shall obtain all necessary approvals, permits and access easements or licenses, all of which shall be maintained in full force and effect at all times in accordance with all applicable laws, rules and regulations.

i. Prior to commencing construction, Tenant shall deliver to Otay copies of all executed licenses, approvals and permits required by local, state or federal agency in connection with the Improvements, which permits shall be attached hereto as Exhibit B.

ii. From time to time, as required by law or regulation in connection with the normal operation of the Improvements or as needed due to improvements or alterations to the same, Tenant shall provide Otay with updated permits, licenses and/or approvals, including without limitation written evidence, satisfactory to Otay, of all FCC approvals and other governmental permits and approvals, including but not limited to compliance with the FCC's electromagnetic radiation rules, set forth at 47 C.F.R. § 1.1307 et seq. and FCC Office of Engineering and Technology Bulletin 65, each as hereafter amended.

iii. Otay agrees, at no expense to Otay, to reasonably cooperate with Tenant in making application for and obtaining all governmental licenses,

permits and approvals that may be required for Tenant's intended use of the Premises.

f. Utilities. Tenant shall be authorized to install utilities for the Premises and the Improvements at Tenant's expense and to improve the present utilities on or near the Premises (including, but not limited to the installation of an emergency back-up power) subject to Otay's approval of the location, route, design and capacity, which approval shall not be unreasonably withheld. Tenant shall fully and promptly pay for all utilities furnished to the Premises for the use, operation and maintenance of Tenant's Improvements. If inadequate electrical power is available to provide for the Improvements, or additional electrical power is required to be installed on the Premises by Otay in its sole discretion, such installation shall be at Tenant's sole expense. The location, route, design and capacity of the additional power facility shall be approved by Otay, which shall not be unreasonably withheld.

g. Repair of Otay's Improvements/Systems. Any damage done to the Property or to any Otay improvement, facility or system in connection with the construction, installation, maintenance, repair, improvement, replacement or operation of the Improvements shall be repaired or replaced immediately at Tenant's expense and to Otay's reasonable satisfaction by Otay staff or contractors approved by Otay. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay. Tenant shall pay all costs and expenses in relation to maintaining the integrity of Otay's facilities, improvements and systems affected in any way by Tenant's Improvements or its use of the Property or the Premises.

h. Maintenance and Repair. At all time during the Term, Tenant shall maintain the Premises and the Improvements in a manner acceptable to Otay. Tenant's use of its Improvements shall not at any time or in any way adversely impact, impede or interfere with Otay's access to, use or operation of, its improvements, equipment or systems.

i. Liens. Tenant shall not encumber or allow the Premises or the Property to be encumbered in any manner other than as expressly authorized herein.

j. Security. Tenant recognizes and agrees that the Premises and the Reservoir Site are a sensitive area and that Otay's operations and services are highly sensitive and regulated. Tenant shall provide for the proper supervision of all Tenant Parties assigned or allowed by Tenant to enter and do work at the Premises. Tenant also agrees, holding Otay harmless for any cost or expense, to comply with any and all security measures instituted by Otay from time to time.

8. Maintenance, Repair or Replacement of Otay's Improvements. At any time while this Agreement remains in effect, Otay may, at its option and upon One Hundred Eighty (180) days prior written notice to Tenant, remove or cause

Tenant to remove all or any portion of its Facilities at Tenant's expense, in order for Otay to paint, repair, or make replacements to any or all its improvements on the Premises (the "Maintenance or Replacement Work"), as deemed necessary by Otay in its sole discretion. Tenant agrees to fully cooperate with Otay's efforts in connection with any Maintenance or Replacement Work, including without limitation timely, and at Tenant's cost, removing and re-installing any portion of the Facilities, as requested by Otay.

a. Temporary Facilities. During the Maintenance or Replacement Work, Tenant may, holding Otay harmless from any cost or expense, install temporary antennas on the Premises subject to Otay's approval of the location and type of replacement facilities, such approval shall not be unreasonably withheld or delayed. Once the Maintenance or Replacement Work is completed by Otay, Tenant agrees to promptly dismantle any temporary facilities and to relocate the facilities to their original location or to any other location approved by Otay. All work related to the removal of any portion of the Facilities, installation of temporary facilities, dismantling, relocation to their original location and any related work, shall be done at Tenant's sole cost and expense and in good and workmanlike manner.

b. Repair of damage. Tenant shall repair any damage caused by Tenant in connection with the installation, maintenance, operation or removal of any temporary facilities or the Facilities, and Tenant shall restore any distributed portions of the Property to their condition immediately prior to the installation of the temporary facilities.

c. Otay's option to remove temporary facilities. If any temporary facilities are not removed within sixty (60) days from the date the Maintenance or Replacement Work is completed, Otay shall have the right, but not the duty, to remove the temporary facilities at Tenant's cost and expense.

d. Painting of the Facilities. If the Maintenance or Replacement Work includes the painting, or any work affecting the surface of Otay's improvements, the Tenant shall be responsible for repainting or performing other surface treatment of its antennas and equipment to match Otay's. Otay will provide specifications to the Tenant regarding the treatment, paint type, color and application method to accomplish this requirement. The Tenant shall be required to obtain approval of specifications from Otay prior to commencing work on this requirement. Subject to Otay's prior written consent, Tenant may substitute an alternate treatment, paint type and application method if it reasonably determines that Otay's selection will adversely affect or otherwise degrade Tenant's wireless signal from the Reservoir Site.

3c. Section 9; Co-Location shall be replaced with the following:

9.1. Co-Location by Otay. Tenant agrees that Otay may enter into leases or other types of agreements with other communication carriers, wireless communications carriers and other utilities for use of any portion of the "Reservoir Site" as long as said leases do not result in unreasonable interference with Tenant's use of or access to the Premises. Tenant shall reasonably cooperate with Otay's efforts in this regard including, at Otay's request, the relocation of, or changes to, the Facilities; provided that any alterations or relocation needed to accommodate the new carrier or utility shall be performed at the expense of Otay or the new carrier or utility.

9.2. Co-Location by Tenant - Subleasing/Encumbrance. Tenant shall not sub-lease or sub-license or otherwise encumber the Premises or any portion of the Facilities without Otay's prior written consent, which may be granted or denied at Otay's sole discretion. Any sub-lease or other encumbrance shall require an amendment to this Agreement and shall specify the terms and conditions, including making provision for rent and increases thereto for the sub-lease or other encumbrance.

3d. Section 13; Termination shall be replaced with the following:

13.1 Termination.

(a) This Agreement may be terminated by Tenant without further liability if:

(i) Tenant delivers to Otay 30-day written notice at any time prior to commencing any work at the Premises in connection with the installation of any Facilities, for any reason or no reason;

(ii) Tenant gives Otay sixty (60) days' notice of Tenant's determination that a governmental or non-governmental license, permit, consent, approval, easement or waiver necessary to enable Tenant to construct, install or operate the Facilities cannot be obtained or renewed at reasonable expense or in reasonable time period for wireless sites at water reservoirs in metropolitan areas within San Diego County. If this notice is given, Tenant must immediately cease any and all transmissions through and from the Premises and shall promptly remove, within a period of time not to exceed sixty (60) days, any and all Tenant's personal property and improvements from the Property. This Agreement and any related easements shall automatically expire upon the earlier of removal of the Tenant's improvements or the 60th day from the notice; excepting only Tenant's indemnities and liabilities hereunder, including the obligation to pay Rent for any holdover period. Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated.

(iii) Tenant determines at any time after the Commencement Date that the Premises are not appropriate or suitable for its operations for economic, environmental or technological reasons, including without limitation, any ruling or directive of the FCC or other governmental or regulatory agency, or problems with signal strength or interference not encompassed by subsection (iv) below; provided that the right to terminate under this subsection (iii) is exercisable only upon payment by Tenant, as a termination fee, of the lesser of twelve monthly installments of rent or the balance of the rent due for the then current Initial Term, Extension Term or Additional Term, as applicable; and Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated;

(iv) Otay commits a default under this Agreement and fails to cure pursuant to Section 13.2, below;

(v) The Property or the Premises are totally or partially destroyed by fire or other casualty (not caused by Tenant) so as to hinder Tenant's normal operations and Otay does not provide to Tenant within thirty (30) days after the casualty occurs a suitable temporary relocation site for Tenant's facility pending repair and restoration of the Premises; or

(vi) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

(b) This Agreement may be terminated by Otay without further liability if:

(i) Tenant commits a default under this Agreement and fails to cure such default pursuant to Section 13.2, below;

(ii) Otay determines that continuing the Agreement or continuing to allow the Tenant to construct, install, maintain or operate the Facilities in any way violates a law, rule or regulation; or

(iii) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

13.2 Default.

a. Event of Default. The parties covenant and agree that a default or breach of this Agreement (an "Event of Default") shall occur and be deemed to exist if, after notice and opportunity to cure as provided below:

(i) Tenant shall default in the payment of Rent, or any other amounts due Otay hereunder, and said default shall continue for ten (10) business days after the same becomes due; or

(ii) Either party shall default in the performance or observance of any other covenant or condition of this Agreement to be performed or observed if such failure persists for a period of thirty (30) days after the non-defaulting party provides written notice of the default to the defaulting party.

b. Rights upon Default. Upon the occurrence of an Event of Default, in addition to any other rights or remedies available to the non-defaulting party under any law, the non-defaulting party shall have the right to terminate the Agreement.

c. Cure Rights. An Event of Default shall not exist unless written notice has been given in accordance with this Agreement, and the defaulting party has had the opportunity to cure as provided herein. The defaulting party shall cure the alleged default within the manner provided herein; provided however, that if the nature of an alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the defaulting party shall not be in breach of this Agreement if it diligently commences a cure within such period, and thereafter diligently proceeds with the actions necessary to complete such cure.

3e. Section 17; Indemnity, shall be replaced with the following:

Tenant specifically agrees that it shall hold harmless, defend (with counsel, and if needed experts, reasonably acceptable to Otay), indemnify and otherwise protect Otay and each Otay Party, from and against all claims, suits or actions of any kind and description relating to (a) Tenant's obligations under this Agreement and any amendment hereto or (b) Tenant or Tenant Parties use of, and access to, the Premises, the Facilities or the Property. These obligations extend to and include without limitation any and all costs and expenses (including attorney's fees and court costs) incurred by Otay or the Otay Parties in connection with (i) damage to property (including the Premises, the Property or any personal property of Otay or any third party), (ii) any action or proceeding (including an enforcement action or criminal proceeding) related in any way to any permit (governmental or otherwise), approval or easement obtained by or required of Tenant in connection with this Agreement or the Facilities; and (iii) personal injury or death, except to the extent that such claims, suits or actions directly arise from the gross negligence or willful misconduct of Otay or an Otay Party. This indemnification

clause in no way limits any other specific indemnities given by Tenant under other provisions of this Agreement.

Nothing contained herein shall prohibit Otay, in its sole discretion, from participating in the defense of any demand, claim, action, proceeding, or litigation. In no event shall Otay's participation in the defense of any demand claim, action, proceeding, or litigation affect the obligations imposed upon Tenant herein.

This and all other Tenant indemnities shall survive the termination of this Agreement and shall remain in effect for as long as the underlying claim or action remains viable.

3f. Section 19; Assignment, shall be replaced with the following:

Tenant shall not assign this Agreement or any portion of its rights or obligations hereunder without Otay's prior written consent, except to an affiliated parent entity, subsidiary, purchaser of at least 50% of the aggregate of the assets of Tenant ("assets" means and includes without limitation any and all real, personal or financial property or thing owned or controlled by Tenant or over which Tenant has an interest) or holder of Tenant's FCC license.

a. If during the Term hereof, Tenant requests the written consent of Otay to any assignment, and upon demonstration satisfactory to Otay of the proposed assignee's legal, financial, and technical qualifications to assume all of the Tenant's duties and obligations herein, Otay's consent thereto shall not unreasonably be withheld. Consent to one assignment shall not be deemed consent to any subsequent assignment.

b. Any attempted assignment not permitted under the first paragraph of this Section 19, without Otay's prior consent as set forth in Section 19(a), shall be void and, at Otay's option, shall constitute a termination of this Agreement for which a termination fee as described in Section 13.1.a(iii) shall be immediately due.

c. Any assignment of this Agreement shall require an executed "Assignment of Lease" whether or not the Consent of Otay is required pursuant to this section 19 or any other provision of this Agreement. A sample form of the "Assignment of Lease" is attached to this Agreement as Exhibit F which may be amended or modified in Otay's sole discretion.

4. **Continued Effect.** Except as specifically modified by this First Amendment, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between any term or provision of the Agreement and this First Amendment, the terms

and provisions of this First Amendment shall control. In addition, except as otherwise stated in this First Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Agreement. All captions are for reference purposes only and shall not be used in the construction or interpretation of this First Amendment.

5. **Administrative Fees.** TENANT shall pay OTAY the amount of \$4,500 within (30) days of the date of execution of this Amendment by OTAY and TENANT.

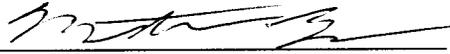
6. **Current Rent.** The current monthly Rent amount at the Effective Date of this First Amendment is \$2,268.87.

IN WITNESS WHEREOF, OTAY and TENANT have caused this First Amendment to be executed by each party's duly authorized representative effective as of the date first above written.

OTAY WATER DISTRICT:

Nextel of California, Inc.,
a Delaware corporation:

By: _____
Name: Mark Watton
Title: General Manager
Date: _____

By: 
Name: Matthew Bell
Title: Manager Real Estate
Date: 5/29/2013

Approved as to Form:

By: _____
OWD General Counsel

Approved as to Form:

By: _____
Its: _____

Exhibit B-1

NEW IMPROVEMENTS

BATTERY INFORMATION /NOTES:

BATTERY MFG: EAST PENN MANUFACTURING
 MODEL No.: 12AVR-145L
 ELECTROLYTE CONTENT PER BATTERY: 2.17 GALLONS
 ELECTROLYTE HAZARD CLASSIFICATION PER 10 C.F.C. (8.7% SULFURIC ACID): CORROSIVE
 No. OF BATTERIES TO BE INSTALLED: 0
 TOTAL ELECTROLYTE CONTAINED ON SITE (1.2 x 12 = 14.4): 24 GALLONS MAX

A. QUANTITIES OF 500 GAL. OR LESS ARE EXEMPT PER TABLE 3.E OF THE 2010 U.B.C.
 B. SINGLE VESSEL CAPACITIES OF 20 GAL. OR LESS, AND AGGREGATE QUANTITIES NOT IN EXCESS OF 100 GAL. ARE EXEMPT PER ARTICLE 84 OF THE 2010 C.F.C.
 C. QUANTITIES LESS THAN 50 GAL. ARE EXEMPT FROM C.F.C. ARTICLE 80 AND SHALL NOT REQUIRE PERMIT.
 D. ANY CHANGES OR ADDITIONS TO BACK-UP BATTERIES MUST COMPLY WITH 2010 C.F.C. ARTICLE 84, AND SHALL NOT CONTAIN ELECTROLYTE QUANTITIES IN EXCESS OF 50

FIRE DEPARTMENT NOTES:

A. FIRE DEPARTMENT FINAL INSPECTION REQUIRED. SCHEDULE INSPECTION 2 DAYS IN ADVANCE.
 B. A CFC PERMIT TO OPERATE BATTERY SYSTEMS WITH STATIONARY LEAD-ACID BATTERIES IS NOT REQUIRED FOR THE QUANTITIES ON SITE.
 C. A CFC PERMIT MAY BE REQUIRED FOR THE HAZARDOUS MATERIALS ON SITE.
 D. A HAZARDOUS MATERIALS IDENTIFICATION SIGN IS REQUIRED FOR ALL ENTRANCES INTO BATTERY STORAGE AREAS. LETTERS MUST BE AT LEAST 1" IN HEIGHT AND IN A COLOR WHICH CONTRASTS TO THE BACKGROUND OF THE SIGN AND LIST THE FOLLOWING:

CLASS 1 WATER REACTIVE LIQUID
 TOXIC LIQUID
 CORROSIVE LIQUID
 OTHER HEALTH HAZARD LIQUID

E. AN APPROVED METHOD TO NEUTRALIZE SPILLED ELECTROLYTE SHALL BE PROVIDED IN THE BATTERY ROOM.
 F. BATTERIES SHALL BE PROVIDED WITH SAFETY VENTING CAPS.
 G. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE UNIFORM FIRE CODE STANDARD 10-1 AND PLACEMENT IS SUBJECT TO APPROVAL OF THE FIRE INSPECTOR.
 H. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS.
 I. EXIST DOORS SHALL BE ABLE TO OPEN FROM THE INSIDE WITHOUT THE USE OF KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
 J. ADDRESS NUMBERS SHALL BE A MINIMUM 8 INCHES HIGH AND PLAINLY VISIBLE FROM ROADWAY BUILDING IS ADDRESSED ON.
 K. REQUIRED SIGNAGE SHALL INCLUDE LETTERING HEIGHT OF AT LEAST ONE INCH. IN A COLOR THAT CONTRASTS TO THE SIGN BACKGROUND, AND SHALL BE PROMINENTLY DISPLAYED.
 L. REQUIRED SIGNAGE SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, APPLICABLE TYPES FROM EXAMPLES SHOWN HEREIN (SEE SIGNAGE)

NOT USED

3

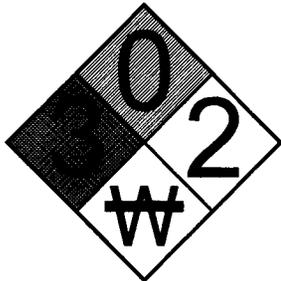


GENERAL NOTES

1

HAZARDOUS MATERIAL SIGNAGE

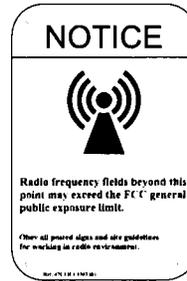
4



REQUIRED NFPA SIGNAGE

IN CASE OF EMERGENCY
CALL
1-818-756-9674
 SITE NUMBER: SD73XC157
 SITE NAME: COTTONWOOD

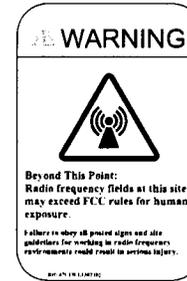
EMERGENCY CONTACT SIGNAGE



NOTICE



CAUTION



WARNING

SITE IDENTIFICATION SIGNAGE

2

RF SIGNAGE

5



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 SAN DIEGO, CA 92123

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COTTONWOOD
 SD73XC157
 12118 CAMPO ROAD
 SPRING VALLEY, CA 92078

ISSUE DATE:
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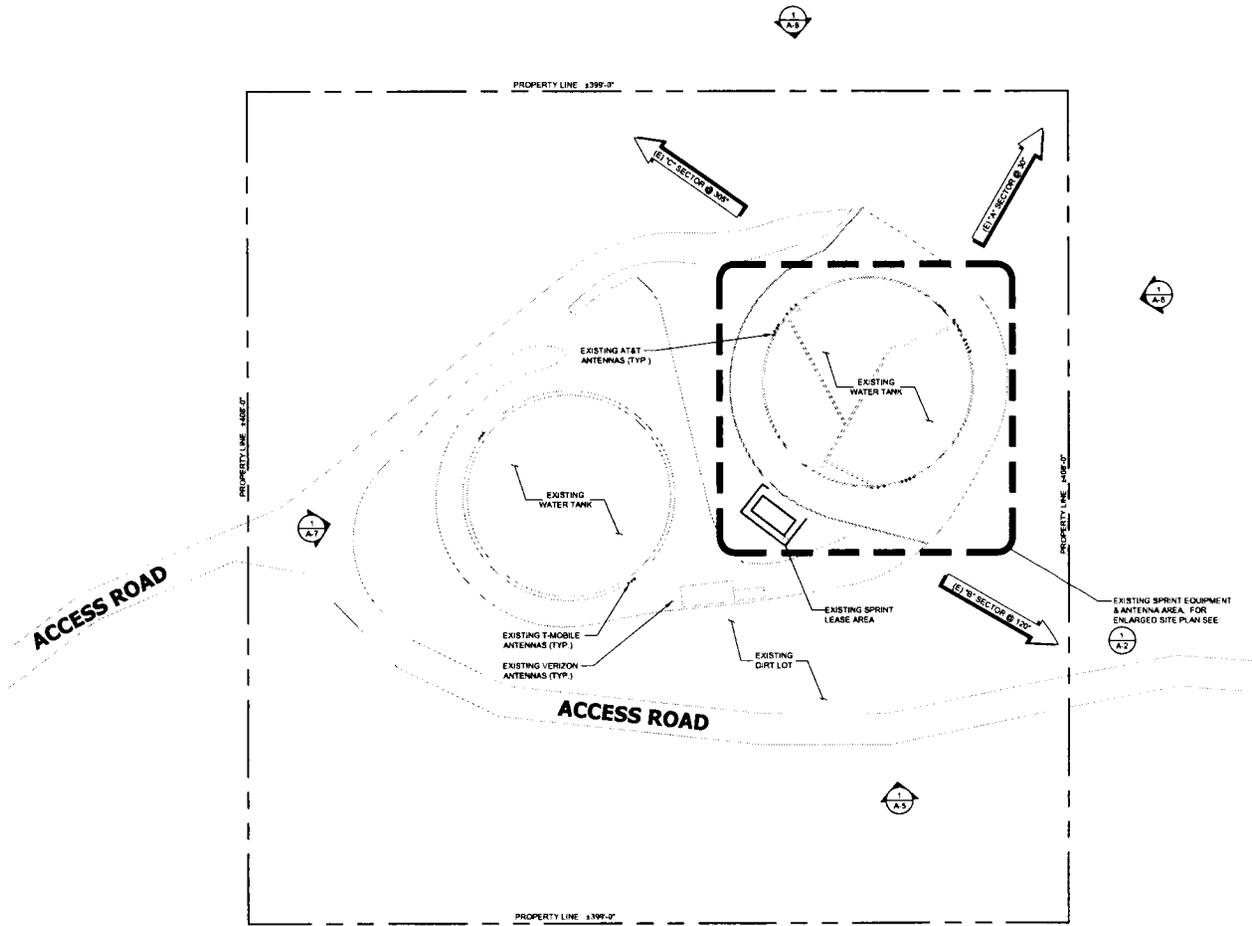
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LICENSURE:
 SHEET TITLE:

SIGNAGE & NOTES

SHEET NUMBER: **T-3** REVISION: **A**

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Alcatel-Lucent
 1605 SCRANTON RD. SUITE 400
 SAN DIEGO, CA 92121

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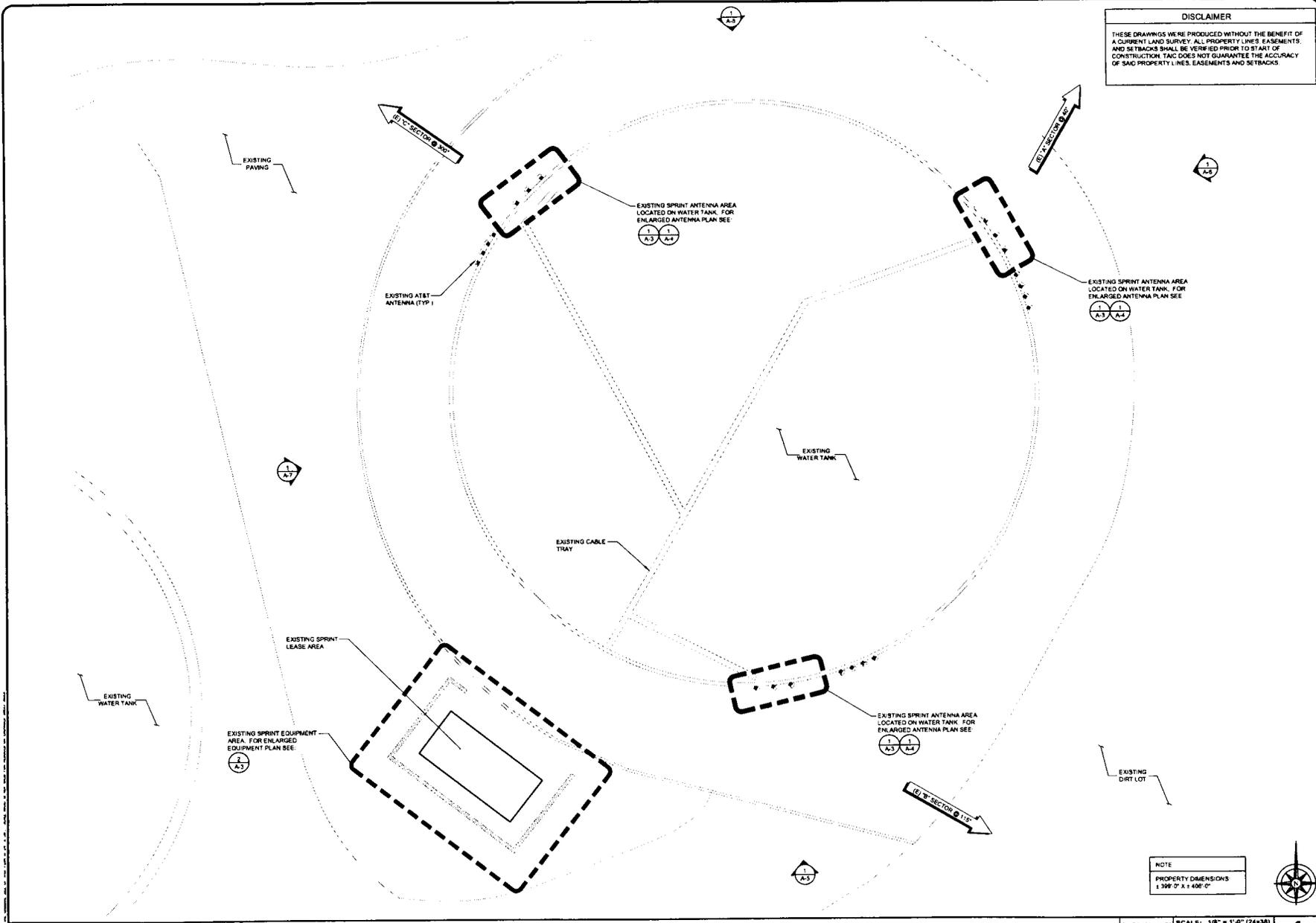
SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER: **A-1** **REVISION:** **A**

OVERALL SITE PLAN

30' 0 15' 30' SCALE: 1" = 30'-0" (24x36) 1
 (OR) 1/2" = 30'-0" (11x17)





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LICENSURE:

SHEET TITLE:
 ENLARGED
 SITE PLAN

SHEET NUMBER: **A-2** **REVISION:** **A**

NOTE
 PROPERTY DIMENSIONS
 ± 3/8" @ ± 1' 400'-0"



ENLARGED SITE PLAN

SCALE: 1/8" = 1'-0" (24x36)
 (OR) 1/16" = 1'-0" (11x17) **1**



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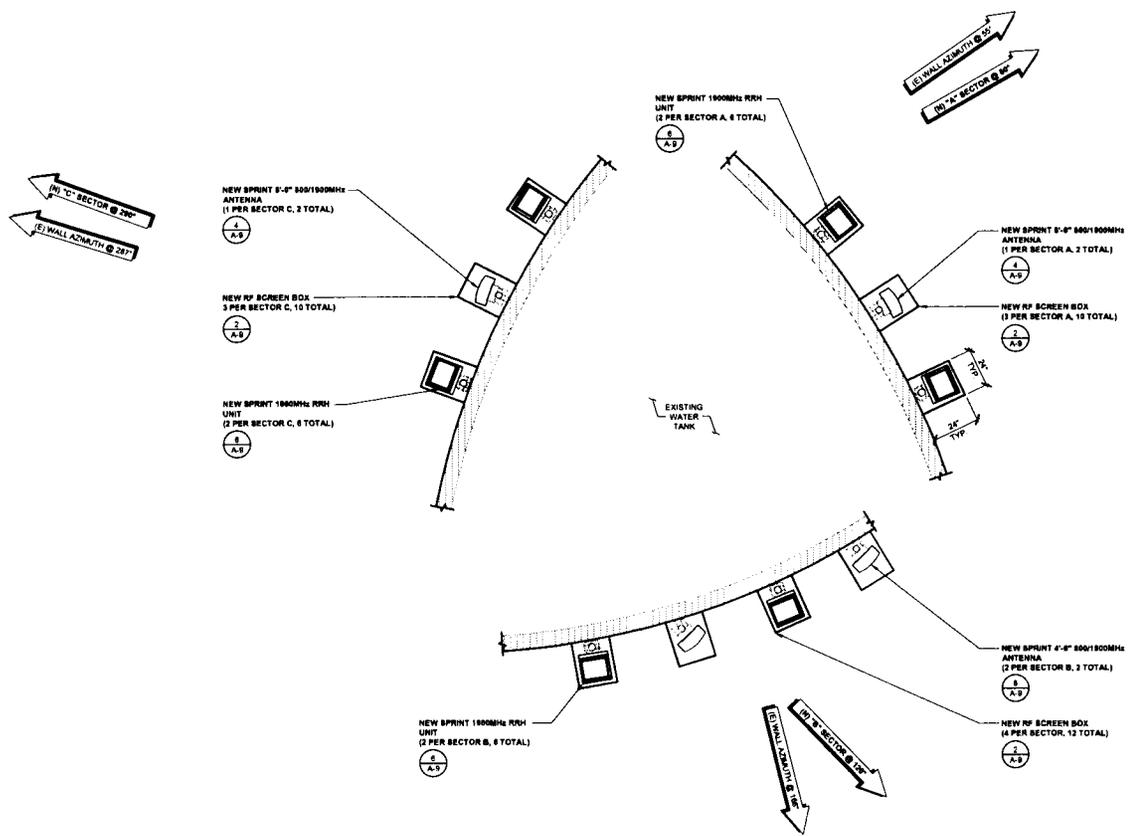
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LICENSURE:

SHEET TITLE:
NEW ANTENNA PLAN

SHEET NUMBER: **A-4** REVISION: **A**

NOTE
 1. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING / WIRING DIAGRAMS, PRIOR TO INSTALLATION
 2. EACH ANTENNA AND RRH TO BE SCREENED BY RF SCREEN BOXES
 3. ANTENNAS, RRHS, & RF BOXES TO BE MOUNTED TO WATER TANK WITH MAGNETS.



NEW ANTENNA PLAN

SCALE: 1/2" = 1'-0" (24x36)
 (OR) 1/4" = 1'-0" (11x17)



1



Alcatel-Lucent
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 SAN DIEGO, CA 92121

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SD73XC157

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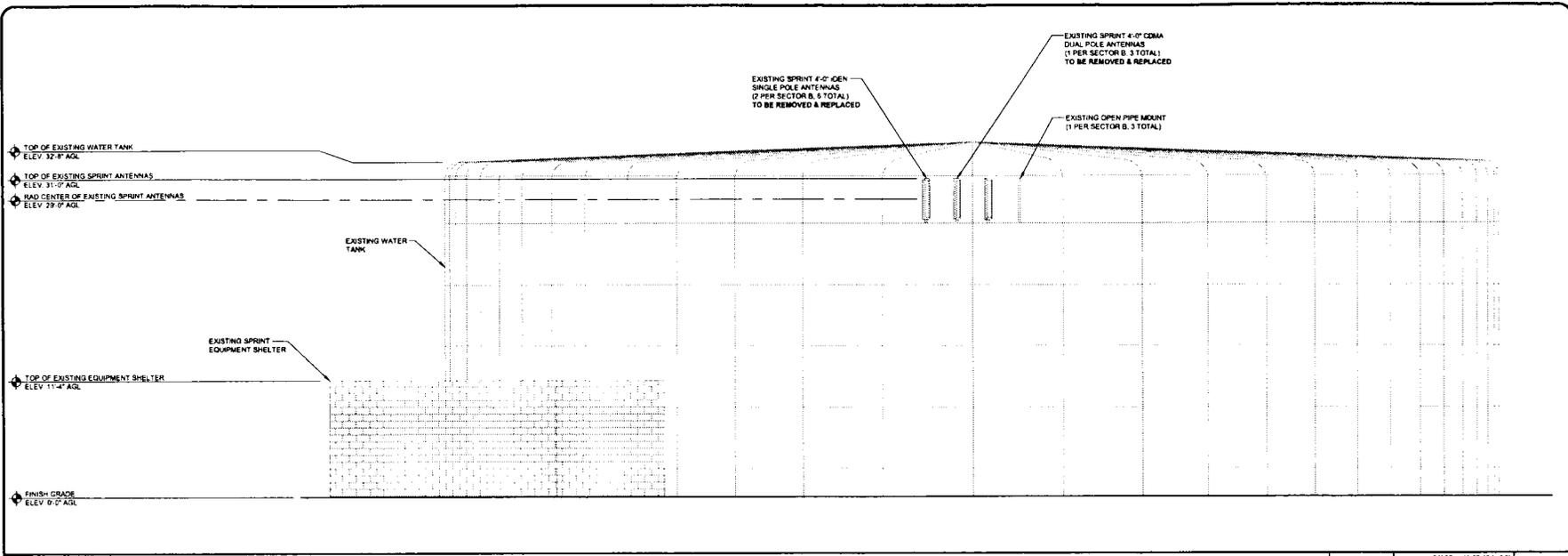
SOUTH ELEVATIONS

SHEET NUMBER:

A-5

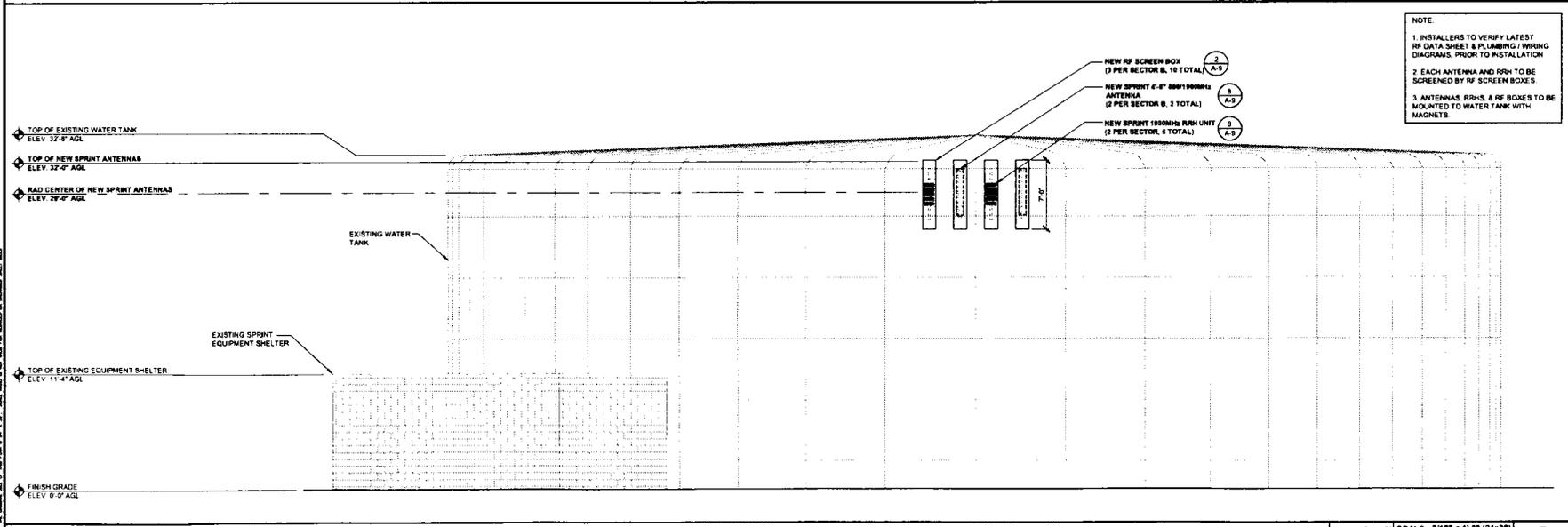
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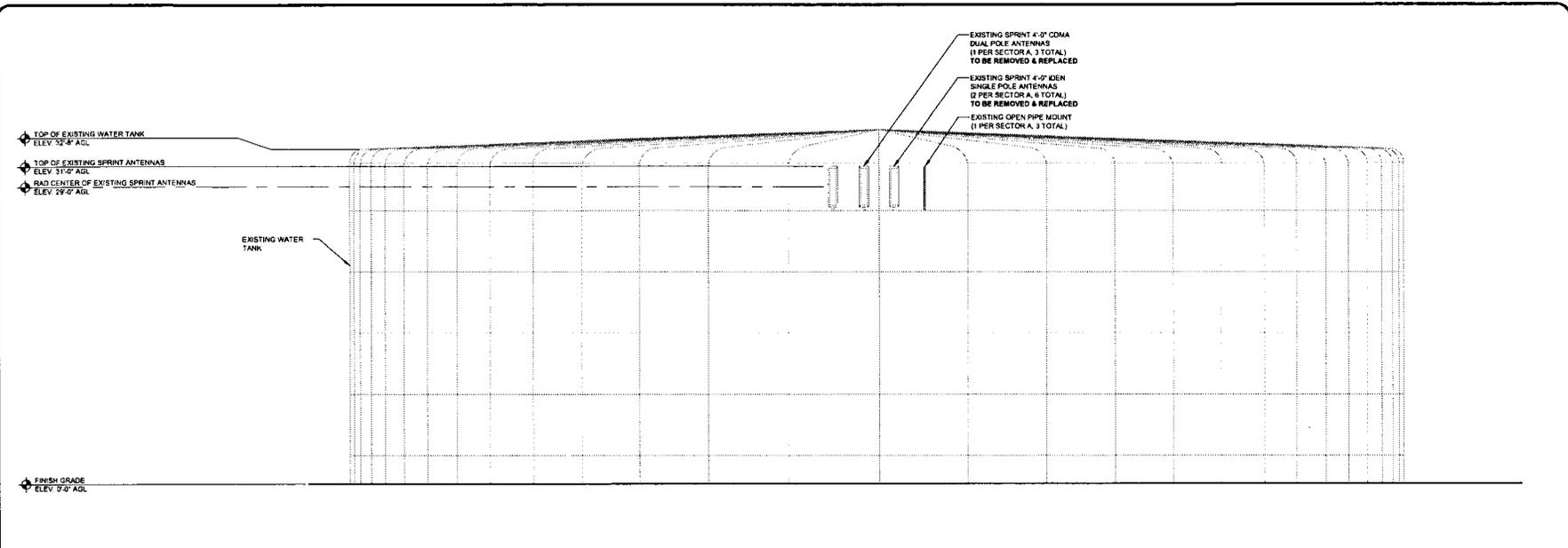
EXISTING SOUTH ELEVATION

0 1.5' 3" 5" SCALE: 3/16" = 1'-0" (24x36)
 (OR) 3/32" = 1'-0" (11x17) **1**



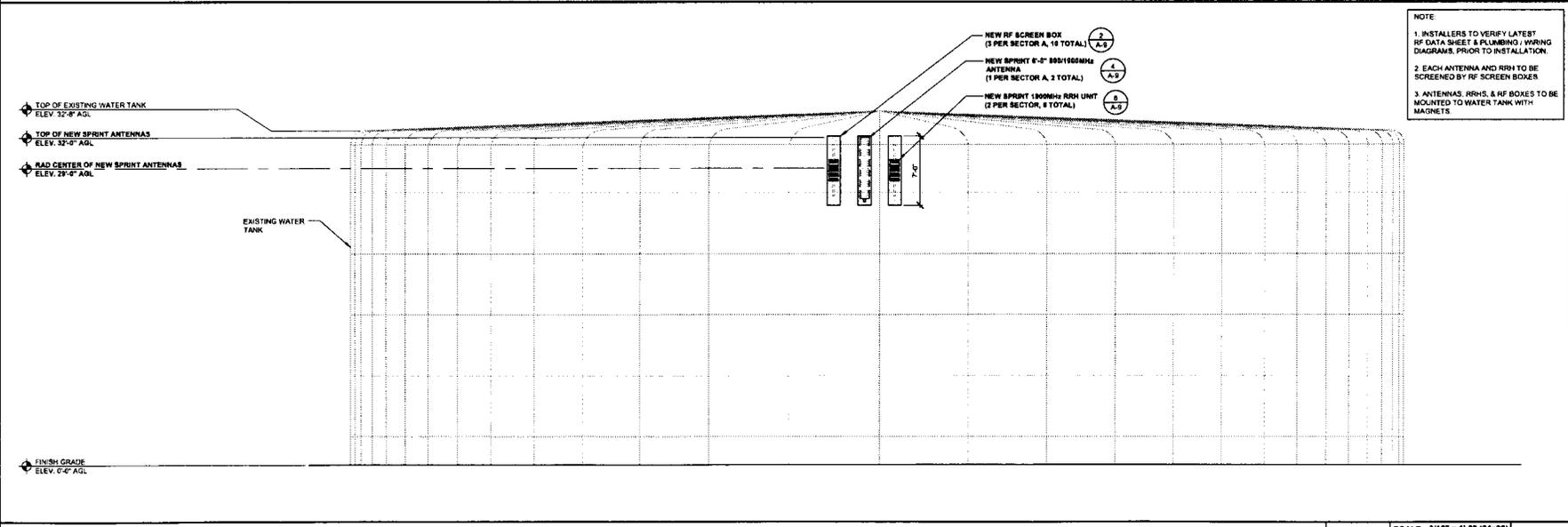
NEW SOUTH ELEVATION

0 1.5' 3" 5" SCALE: 3/16" = 1'-0" (24x36)
 (OR) 3/32" = 1'-0" (11x17) **2**



EXISTING EAST ELEVATION

0 1.5' 3' 5' SCALE: 3/16" = 1'-0" (24x36)
(OR) 3/32" = 1'-0" (11x17) **1**



NEW EAST ELEVATION

0 1.5' 3' 5' SCALE: 3/16" = 1'-0" (24x36)
(OR) 3/32" = 1'-0" (11x17) **2**



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LICENSURE:

SHEET TITLE:
EAST ELEVATIONS

SHEET NUMBER: **A-6** REVISION: **A**



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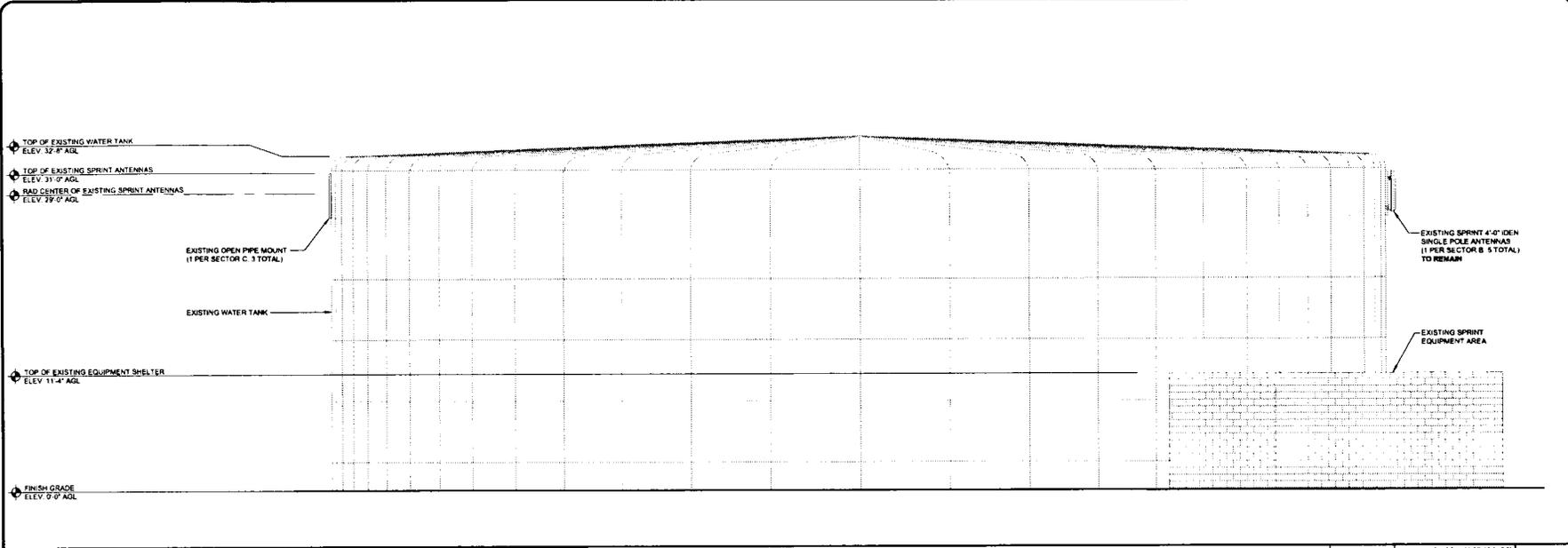
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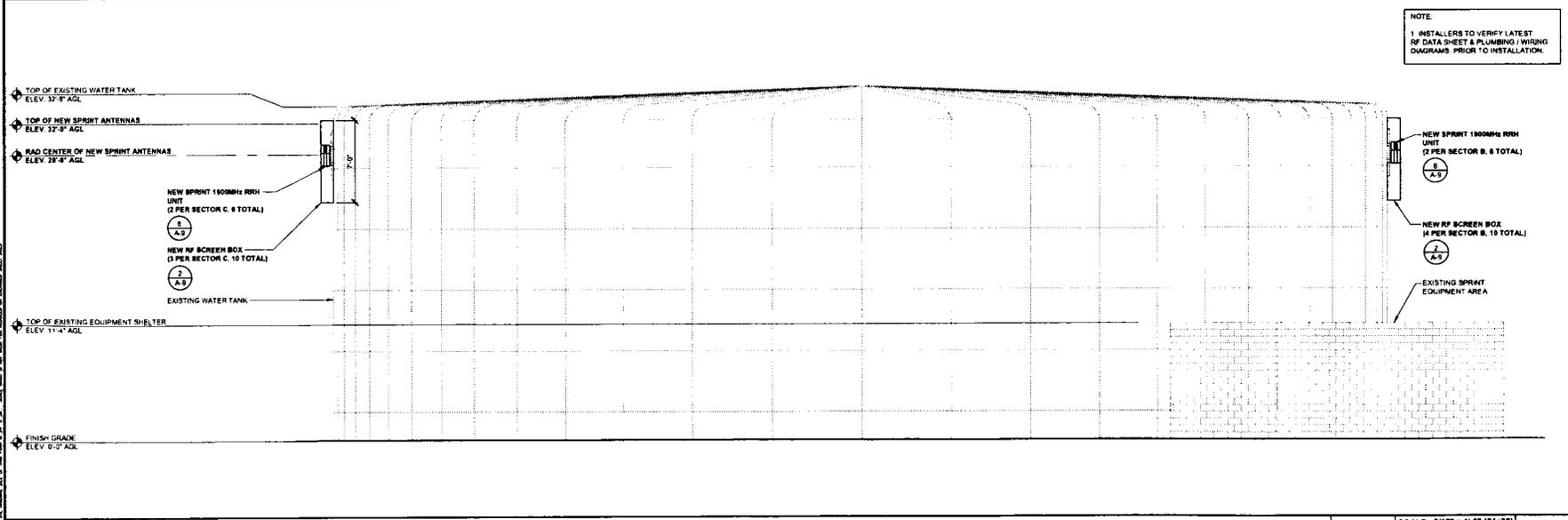
WEST ELEVATIONS
 SHEET NUMBER: **A-7** REVISION: **A**



EXISTING WEST ELEVATION

0 1.5' 3" 5" SCALE: 3/16" = 1'-0" (24x36)
 (OR) 3/32" = 1'-0" (11x17) **1**

NOTE:
 1. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING / WIRING DIAGRAMS PRIOR TO INSTALLATION.



FINAL WEST ELEVATION

0 1.5' 3" 5" SCALE: 3/16" = 1'-0" (24x36)
 (OR) 3/32" = 1'-0" (11x17) **2**



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SD73XC157

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SPRING VALLEY, CA 92078

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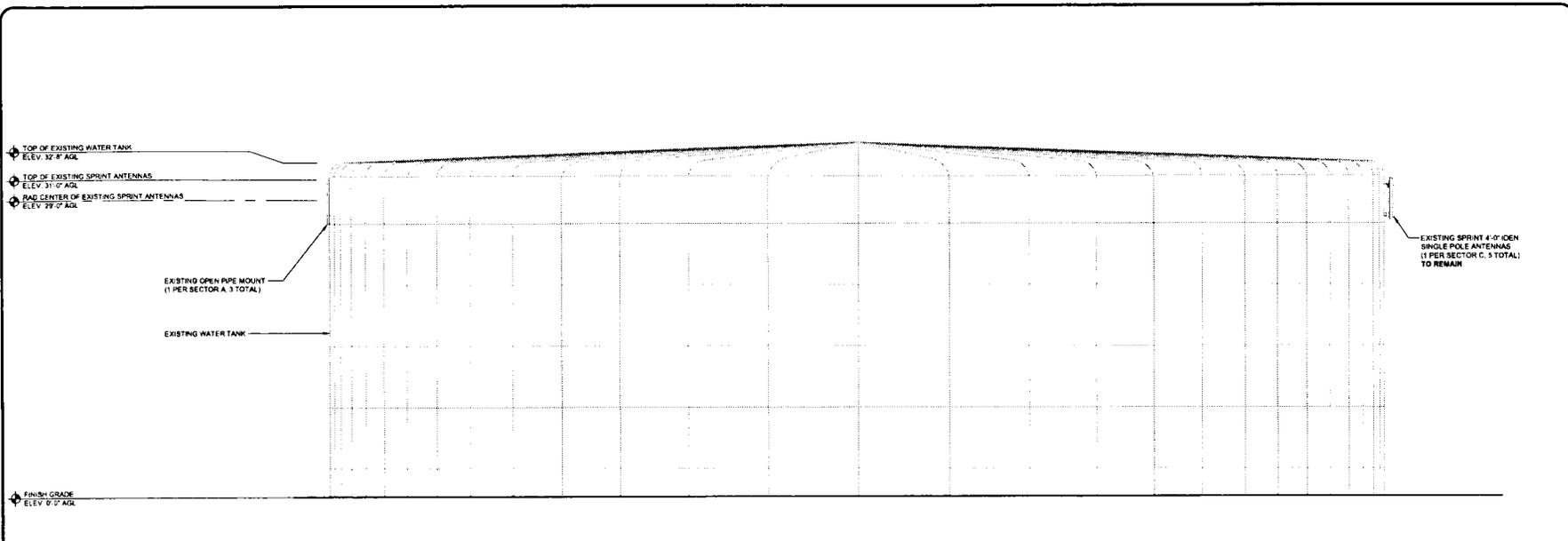
LICENSURE:

SHEET TITLE:

NORTH ELEVATIONS

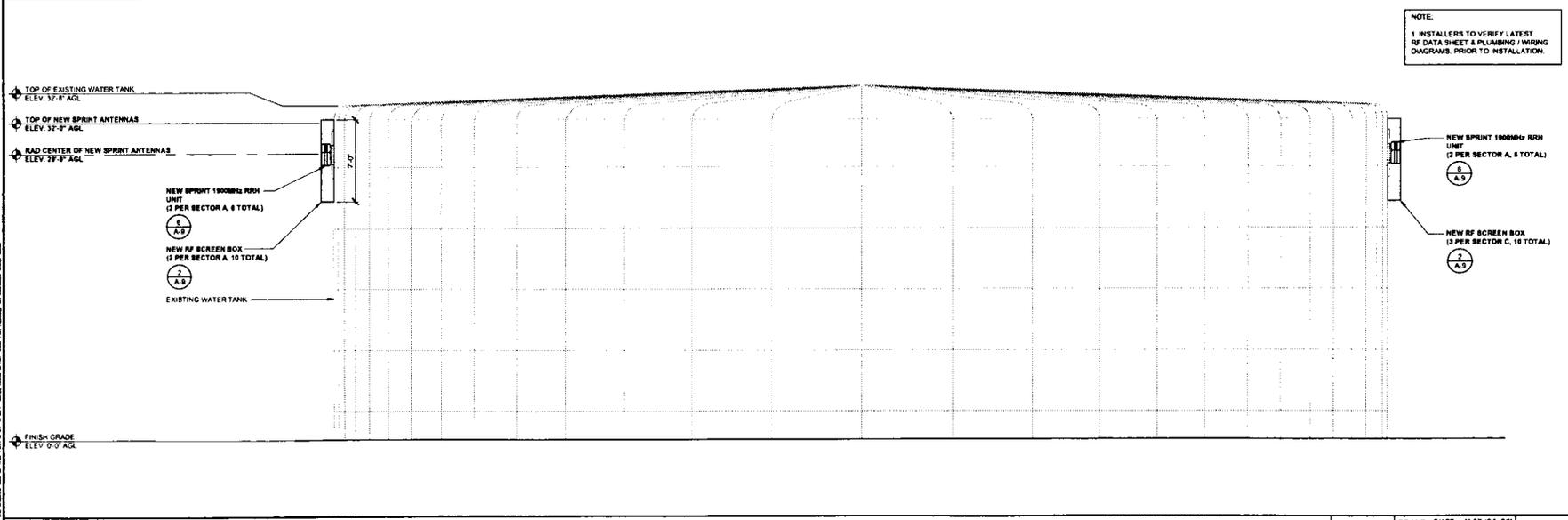
SHEET NUMBER: REVISION:

A-8 A



EXISTING NORTH ELEVATION

0 1.5' 3" 4" SCALE: 3/16" = 1'-0" (24x36)
(OR) 3/32" = 1'-0" (11x17) 1

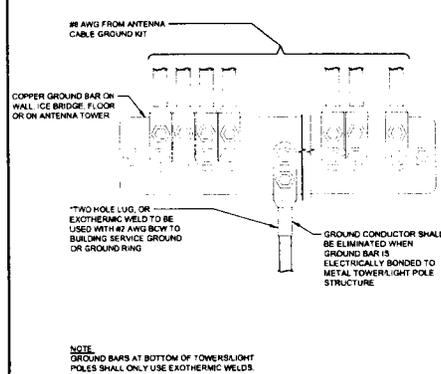
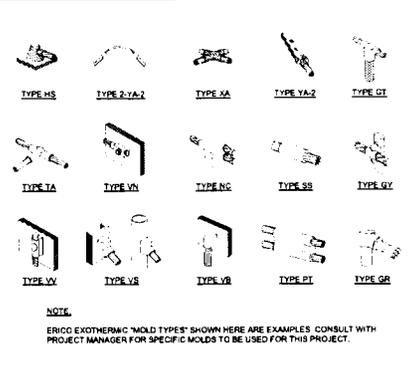


FINAL NORTH ELEVATION

0 1.5' 3" 5" SCALE: 3/16" = 1'-0" (24x36)
(OR) 3/32" = 1'-0" (11x17) 2

ELECTRICAL GROUNDING SPECIFICATIONS

- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE CURRENTLY IN EFFECT FOR THE AUTHORITY HAVING JURISDICTION.
- ALL GROUNDING DEVICES SHALL BE UL LISTED FOR THEIR INTENDED USE.
- GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID COPPER UNLESS OTHERWISE NOTED.
- CONNECTIONS OF ALL GROUND WIRES TO THE GROUND RING SHALL BE EXOTHERMIC (CAD-WELDED) UNLESS OTHERWISE NOTED AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AT WEIRLESS BROADBAND STANDARDS.
- GROUNDING CONDUCTORS SHALL BE ROUTED ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. WHEN REQUIRED, GROUND LEADS SHALL BE BENT TO A MINIMUM OF 6" RADIUS.
- WHERE GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO THE GROUND RING, INSTALL WIRE IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM CONNECTION POINT TO 5' BELOW GRADE AND SEAL THE TOP WITH SILICONE SEALANT.
- ALL GROUND BARS SHALL BE TINNED, 1/4" COPPER, SECTOR BARS 2" COLLECTOR AND MGB BARS 4" OF SUFFICIENT LENGTH TO ACCOMMODATE ALL REQUIRED CONNECTIONS WITHOUT DOUBLING LUGS, AND EACH INSTALLED WITH INSULATORS. WHEN CONNECTING GROUND BARS WITHIN 10 FEET OF GRADE, DIRECTLY TO THE GROUND RING, 2 EA. #2 SOLID DOWNLEADS SHALL BE CAD-WELDED TO THE GROUND BAR, 1 AT EACH OPPOSITE BOTTOM CORNER, AND EACH SHALL RUN IN 1/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM GROUND BAR DOWN TO THE GROUND RING. WHEN CONNECTING SECTOR GROUND BARS, DRAIN CHAIN THE GROUND BARS AND RUN 1 EA. #2 AWG STRANDED COPPER WIRE WITH THIN INSULATION FROM THE MIDDLE GROUND BAR TO THE GROUND RING AND CAD-WELDED TO THE RING.
- WHEN ATTACHING STRANDED GROUND LEADS TO THE GROUND BARS, 2 HOLE COMPRESSION LUGS SHALL BE USED. PROTECT WITH WEATHERPROOF HEAT SHRINK, AND WITH A THIN COAT OF COPPER SHIELD OR EQUIVALENT PROPERLY APPLIED AND ATTACHED ONLY WITH STAINLESS STEEL HARDWARE.
- WHEN GROUNDING EQUIPMENT ENCLOSURES, PANELS, FRAMES, AND OTHER METAL APPARATUS, A #8 AWG STRANDED COPPER WIRE WITH INSULATION SHALL BE ATTACHED UTILIZING A 2 HOLE COMPRESSION TYPE LUG PROTECTED WITH WEATHERPROOF HEAT SHRINK. A CLEAN AND CORROSION FREE METALLIC SURFACE UTILIZING STAINLESS STEEL SELF-TAPPING SCREWS AS NOTED IN NOTE 10 BELOW.
- PREPARE ALL BONDING SURFACES FOR GROUND CONNECTIONS BY REMOVING ANY AND ALL PAINT AND CORROSION TO SHINY METAL. FOLLOWING CAD-WELDED CONNECTIONS TO NON-COPPER SURFACES, APPLY ONE COAT OF ANY ANTI-OXIDIZING PAINT, "COLD GALV" OR EQUIVALENT.
- GROUND RODS SHALL BE COPPER-CLAD STEEL 6#X10, SPACED NO LESS THAN 10' ON CENTER. ERICO BRAND.
- ALL GROUND SYSTEM CONDUCTORS AND CONDUITS SHALL BE SECURED UTILIZING ONLY NONMETALLIC, NON-CONDUCTIVE, UV RATED CLAMPS, BRACKET, AND/OR SUPPORTS.
- WHEN REQUIRED, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT TESTING FIRM TO VERIFY, UTILIZING A MEGGER TEST, THAT THE RESISTANCE TO EARTH OF THE NEW GROUNDING SYSTEM IS EQUAL TO OR LESS THAN 5 OHMS. A COPY OF THE COMPLETE TESTING REPORT SHALL BE PROVIDED TO THE AT&T REPRESENTATIVE.
- ALL MATERIALS AND HARDWARE SHALL BE INSTALLED IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND DESIGNED IN PART 2 AND APPROVED BY A.E.L.
- ALL ANTENNA MOUNTING PIPES MUST BE GROUND TO A BUSS BAR, EACH WITH ITS OWN GROUND LEAD.



NOTES

1 EXOTHERMIC WELDING SCALE N.T.S. **3** **GROUND WIRE CONNECTION** SCALE N.T.S. **4**

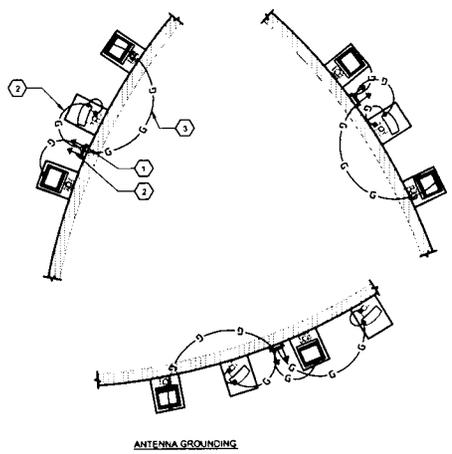
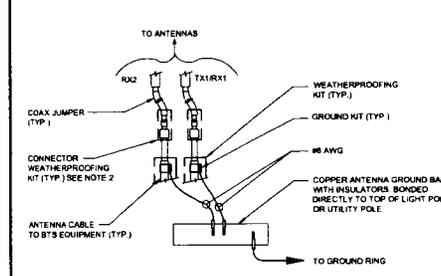
LEGEND:

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COPPER GROUND ROD		TEST WELL
	MECHANICAL CONNECTION		GROUND BAR
	EXOTHERMIC WELD (CADWELDED/OTHERMOWELD)		SIDE SPLICE CADWELD
	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM		

KEY NOTES:

- ANTENNA GROUND BUSS BAR NEAR ANTENNA MOUNTS WITH COAX GROUND KIT. SEE DETAIL 601 FOR GROUND BAR CONSTRUCTION.
- #6 AWG GROUND FROM ANTENNA GROUND BUSS BAR TO THE INTO EXISTING EQUIPMENT GROUNDING SYSTEM (TYP OF (2) PLACES).
- #8 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUSS BAR (TYP OF 1).
- #8 AWG GROUND FROM RRH UNITS TO ANTENNA GROUND BUSS BAR.
- #8 AWG GROUND FROM H-FRAME TO THE INTO EXISTING GROUND BUSS BAR.
- #2 AWG GROUND FROM BBU CABINET TO TIE INTO EXISTING GROUND BUSS BAR.
- EXISTING GROUND BUSS BAR NEAR EQUIPMENT WITH COAX GROUND KIT. SEE DETAIL 601 FOR GROUND BAR CONSTRUCTION.
- #6 AWG GROUND FROM EXISTING GROUND BUSS BAR TO THE INTO EXISTING ANTENNA GROUNDING SYSTEM (TYP OF (2) PLACES).
- CAD WELD (TYP).
- #8 AWG GROUND FROM FIBER JUNCTION BOX TO TIE INTO EXISTING GROUND BUSS BAR.
- QC SHALL VERIFY (2) #8 AWG THREE GROUND LEADS FROM EACH OF TWO REMOTE INDIVIDUAL BUSES TO BE COLLECTED AT ONE MAIN MGB AND FURTHER ROUTED TO EXISTING BUILDING STEEL OR OTHER EXISTING DESIGNATED BUILDING GROUNDING SYSTEM FINAL DESIGNATED POINT OF GROUNDING TO BE COORDINATED BETWEEN CM, GC AND BUILDING OWNER).
- #2 AWG GROUND FROM MODELL CABINET TO TIE INTO EXISTING GROUND BUSS BAR.

ANTENNA GROUND KIT SCALE N.T.S. **5**

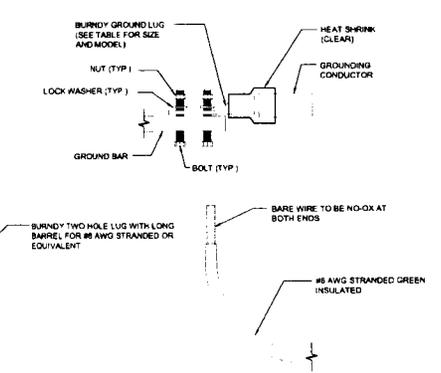


WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#25 AWG STRANDED	YA28-2TC38	3/8" - 16 NC S 2 BOLT
#15 AWG STRANDED	YA26-2N	1/2" - 16 NC S 2 BOLT

NOTES:

- ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT WHERE ALL DISSIMILAR METALS CONNECT.
- COPPER SHIELD, ANTI-OX OR NO-OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
- ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

MECHANICAL LUG CONNECTION SCALE N.T.S. **6**



FINAL ANTENNA GROUNDING PLAN

SCALE: 3/8" = 1'-0" (24x38)
OR: 3/16" = 1'-0" (11x17)

2 MECHANICAL LUG CONNECTION SCALE N.T.S. **6**

Sprint

Arcatel-Lucent
9051 SCRANTON RD. SUITE 400
SAN DIEGO, CA 92121

PLANS PREPARED BY:
**Technology Associates
Engineering Corporation Inc.**
SAN DIEGO MARKET OFFICE
5473 KEARNEY VILLA RD. STE. 300
SAN DIEGO, CA 92123

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO SPRINT ANY USE OR DISCLOSURE WITHOUT THE WRITTEN PERMISSION OF SPRINT IS STRICTLY PROHIBITED.

PROJECT INFORMATION:
NETWORK VISION MMBTS LAUNCH
COTTONWOOD
SD73XC157
12118 CAMPO ROAD
SPRING VALLEY, CA 92078

ISSUE DATE:
04/04/2013
ISSUED FOR:
100% FINAL CD

REVISIONS

REV	DATE	DESCRIPTION	BY
0	03/26/13	ISSUED FOR 90% CD REVIEW	NAB
A	04/04/13	ISSUED FOR 100% FINAL CD	SM5

LICENSURE:

SHEET TITLE:
ANTENNA GROUNDING

SHEET NUMBER: **G-1** **REVISION:** **A**

FIRST AMENDMENT TO LEASE

This First Amendment to Lease (the "First Amendment") is made this day of ____, 2013, ("Effective Date") by and between Otay Water District ("OTAY") and Sprint PCS Assets, L.L.C., a Delaware limited liability company ("TENANT"), with reference to the facts set forth in the Recitals below:

RECITALS

- A. OTAY is the owner of that certain real property located on 2554 Sweetwater Springs Boulevard, Spring Valley, California (the "Property").
- B. OTAY and TENANT are parties to that certain Lease dated August 24, 2000 (the "Lease" or "Agreement") pursuant to which TENANT is leasing from OTAY land at the Property, together with the right of access to and from the nearest public right-of-way and the right to install utilities (collectively, the "Premises").
- C. Tenant has requested a modification to the type and mounting of the Improvements currently on the Premises (the "New Improvements").
- D. OTAY and TENANT have agreed to amend the Agreement to memorialize the addition of the New Improvements to the Premises.

AGREEMENT

NOW, THEREFORE, in consideration of the facts contained in the Recitals above, the mutual covenants and conditions below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

- 1. **New Improvements.** OTAY consents to TENANT construction and installation of new communications facilities, as more particularly described and depicted on Exhibit "B-1" which is attached hereto and made a part hereof. The parties acknowledge and agree that the attached Exhibit "B-1" is intended to supplement the Exhibit "B" attached to the Agreement.
- 2. **Governmental Approvals.** Any required permits for the use or operation of the New Improvements shall be obtained by TENANT at TENANT's sole expense. Furthermore, it is understood and agreed that TENANT's ability to install the New Improvements is contingent upon its obtaining all of the certificates, permits and other approvals that may be required by any Federal, State or Local authorities which will permit TENANT to install and operate the New Improvements within the Premises. OTAY agrees, at no expense to OTAY, to reasonably cooperate with TENANT in making application for and obtaining all governmental licenses, permits and approvals that may be required for TENANT'S intended use of the Premises.
- 3. **Amended Provisions.** The following provisions shall be amended as follows:
 - 3a. Section 5; Rent shall be replaced with the following:

5.1 Tenant agrees to pay all costs and expenses incurred by Otay in connection with the Facilities and this Agreement, including negotiation and processing hereof, plan checking and inspection of Tenant facilities, costs of inspection, repairs or replacement of any Otay facilities affected or damaged, and all other costs or expenses of Otay attributable to the matters herein contemplated, plus a reasonable amount for Otay's overhead costs in connection therewith.

a. **Deposit.** Tenant has made a deposit, concurrent with its application, and has agreed to make any additional deposits required in connection with Otay's review of the application, negotiation of this Agreement, including legal review, site visits, review of drawings and other costs relating such matters incurred by Otay up to the time this Agreement is executed. Tenant forfeits any claim to such deposits except to the extent Otay determines after this Agreement is executed that amounts in excess of the District's costs and expenses have been paid. Any such excess amounts may, at the sole discretion of the District, be credited toward administrative fees or any other costs then due by Tenant, if any. If no amounts are due, excess deposits will be reimbursed to Tenant.

b. **Administrative Fees.** Administrative fees may be charged at Otay's discretion during the Term to recover costs and expenses incurred by Otay, including but not limited to attorneys and consultant's fees, review, processing of Tenant's conditional use permits, inspection of the Facilities during construction and other related costs if any, in connection with any Tenant activity that requires Otay staff to spend time in supervision, inspection, investigation or other review; such costs include but are not limited to any amendments to this Agreement, any default or any failure of Tenant to secure or renew any permit, approval, license or easement and any investigation Otay deems reasonably required in connection with the Premises or the Facilities, including without limitation any investigation of a potential contamination of any portion of the Property due to any Tenant activity or improvement.

c. **Security Deposit.** Concurrently upon execution of this Agreement, Tenant shall pay to Otay a sum equal to two months' rent as a deposit ("Security Deposit") to secure the Tenant's performance of the covenants contained herein. Tenant shall maintain the Security Deposit balance equal to the amount established herein over the life of the agreement. If Otay applies any portion of the Security Deposit, Tenant shall within 30 days after demand by Otay, deposit an amount sufficient to restore the Security Deposit to its original amount. No part of the Security Deposit is to be considered as an advance payment of rent, including last months' rent, nor is it to be used or refunded prior to the leased premises being permanently and totally vacated by the Tenant. After the Tenant has vacated the premises, Otay shall furnish Tenant with an itemized written statement of the basis for, and the amount of, any of the security deposit retained by Otay. Otay may withhold that portion of Tenant's security deposit necessary (a) to remedy any default by Tenant in the payment of rent or any other provision

of this Agreement, (b) to repair damages to the premises or any expense, loss, or damage that Otay may suffer because of Tenant's default, (c) to restore the premises to meet Otay's standards, (d) any amount that Otay may incur or become obligated to spend in exercising Otay's rights under this Agreement or available at law. The unused portion of this deposit shall be returned to the Tenant without interest no later than 60 days after termination of this Agreement.

Tenant waives the provisions of California Civil Code §1950.7, and all other provisions of law now in force or that become in force after the date of execution of this Agreement, that provide that Otay may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of accrued Rent, to repair damage caused by Tenant, or to clean the Premises. Otay and Tenant agree that Otay may, in addition, claim those sums reasonably necessary to compensate Otay for any other foreseeable or unforeseeable loss or damage caused by the act or omission of Tenant or Tenant's officers, agents, employees, Independent contractors, or invitees, including future rent payments.

d. None of the deposits or other payment of costs or administrative fees constitutes or shall be considered Rent (defined below).

5.2 Beginning on the Commencement Date, Tenant shall pay Otay as rent the sum of \$2,000.00 per month ("Rent") payable on the first day of each month in advance. If the Commencement Date is prior to the fifteenth day of the month of commencement, the full month's Rent will be due on the Commencement Date. If the Commencement Date is on or after the fifteenth day of the month of commencement, payment of Rent will begin the first day of the following month.

Tenant may make Rent payments up to 5 days past due date without penalty, unless continual late payments for two consecutive months occur. A fee shall be imposed after the 5th day and shall be 20% of the amount currently due. Failure to pay Rent within ten (10) calendar days of the first of the month shall be an Event of Default as provided by Section 13.2. Failure to pay Rent on the due date for more than two (2) consecutive months or four (4) times over any twelve (12) month period shall be a non-curable Event of Default without the necessity of any notice or cure period. At District's sole discretion, immediately following such a non-curable Event of Default, District may terminate the Agreement and seek any remedy available by this Agreement or at law. If Tenant tenders a check, which is dishonored by a banking institution, then the Tenant shall tender cash or cashier's check only for all future payments, which shall continue until such time as written consent is obtained from Otay. In addition, Tenant shall be liable in the sum of \$25 for each dishonored check that is returned to Otay.

a. Rent Increases. The Rent shall be increased on each calendar anniversary of the Commencement Date at a rate of four percent (4%) per annum or the annual Consumer Price Index change ("CPI"), whichever is greater. CPI shall be the average percentage increases in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100)

(the "CPI") for "All Items – All Urban Consumers" for the San Diego Metropolitan Statistical Area.

3b. Section 7; Improvements, and Section 8; Installation of Equipment shall be replaced with the following:

7. Installation and Maintenance of Improvements. Tenant is authorized to install, maintain and operate on the Premises only the Facilities described and depicted on Exhibit B; provided that all permits and zoning approvals shall have first been obtained by Tenant and shall at all times while the Facilities operate remain in full force and effect.

a. Installation of the Improvements. Tenant's design and installation of all portions of the Facilities shall be done, at no cost to Otay, according to plans approved by Otay, provided that such approval shall not be unreasonably withheld. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay of the method of attachment at Otay's sole discretion. If such Facilities are to be attached or mounted to a water tank, Tenant shall use an installation method such as a magnetic mount or other, non-destructive alternative. The Tenant shall be responsible for painting its antennas and/or equipment to match Otay's facility. Otay will provide Tenant with specifications regarding paint type, color and application method to accomplish this requirement. Painting/coating submittals shall be provided to Otay by the Tenant prior to receiving permission to begin painting. Otay may specify a camouflage design if not inconsistent with requirements of the city or county within which the Facilities are located. These camouflage designs may include but are not limited to faux palm trees, pine trees, cypress trees, broadleaf trees, and flag poles, unipoles, and other camouflaged antenna and antenna supports.

b. Record Drawings. Within thirty (30) days after completion of the Facilities, Tenant shall provide Otay with "record" (also called "as-built") drawings of the Facilities showing and identifying all the equipment and improvements installed on the Premises. Said drawings shall be accompanied by a complete and detailed inventory of all equipment, including without limitation all personal property and antennas located on the Premises and any such property of Tenant located in the Easement. No property of Tenant other than such identified property shall be located on the Premises or the Property at any time. Upon acceptance by Otay of Tenant's record drawings, in form and content satisfactory to Otay, such drawings shall replace and supersede any similar drawings contained in any exhibit attached hereto.

c. Alterations. Tenant shall not alter or change its Improvements in a material manner without the prior approval of Otay, such approval not to be unreasonably withheld. "Material" refers to any physical change that could affect the building structure, antenna support, interconnecting facilities or its appearance

or any change that requires access to the Premises for installation of new equipment, removal of old equipment, trenching or digging or that could disrupt Otay's workplace or communications in any way or any change that requires a renewed or amended easement, permit or approval. All of Tenant's construction and installation work shall be performed at Tenant's sole cost and expense in a good and workmanlike manner and fully compliant with all government permit and code requirements. Tenant shall have the right to remove all Improvements it installs at its sole expense on or before the expiration or termination of this Agreement, but must at such time restore the ground and surface underlying the removed Improvements to its pre-installation condition, wear and tear excepted, and to the reasonable satisfaction of Otay.

d. Alterations to Improvements / Additional Space. If, at any time during the Term, Tenant requests permission from Otay to add improvements requiring construction to its then existing Improvements, the then current Administrative Fees shall be paid to Otay before any such changes are negotiated. In addition, if the requested Tenant improvements include additional area, a new agreement or, at Otay's discretion, an amendment for the additional lease space must be executed prior to start of construction and Tenant shall comply with Otay's requirements then in effect, including payment of additional rent, if any, for the additional area.

e. Permits and Compliance with Applicable Laws. During the Term, and prior to commencing any construction or installation of any improvements or equipment, as applicable, Tenant shall obtain all necessary approvals, permits and access easements or licenses, all of which shall be maintained in full force and effect at all times in accordance with all applicable laws, rules and regulations.

i. Prior to commencing construction, Tenant shall deliver to Otay copies of all executed licenses, approvals and permits required by local, state or federal agency in connection with the Improvements, which permits shall be attached hereto as Exhibit B.

ii. From time to time, as required by law or regulation in connection with the normal operation of the Improvements or as needed due to improvements or alterations to the same, Tenant shall provide Otay with updated permits, licenses and/or approvals, including without limitation written evidence, satisfactory to Otay, of all FCC approvals and other governmental permits and approvals, including but not limited to compliance with the FCC's electromagnetic radiation rules, set forth at 47 C.F.R. § 1.1307 et seq. and FCC Office of Engineering and Technology Bulletin 65, each as hereafter amended.

iii. Otay agrees, at no expense to Otay, to reasonably cooperate with Tenant in making application for and obtaining all governmental licenses,

permits and approvals that may be required for Tenant's intended use of the Premises.

f. Utilities. Tenant shall be authorized to install utilities for the Premises and the Improvements at Tenant's expense and to improve the present utilities on or near the Premises (including, but not limited to the installation of an emergency back-up power) subject to Otay's approval of the location, route, design and capacity, which approval shall not be unreasonably withheld. Tenant shall fully and promptly pay for all utilities furnished to the Premises for the use, operation and maintenance of Tenant's Improvements. If inadequate electrical power is available to provide for the Improvements, or additional electrical power is required to be installed on the Premises by Otay in its sole discretion, such installation shall be at Tenant's sole expense. The location, route, design and capacity of the additional power facility shall be approved by Otay, which shall not be unreasonably withheld.

g. Repair of Otay's Improvements/Systems. Any damage done to the Property or to any Otay improvement, facility or system in connection with the construction, installation, maintenance, repair, improvement, replacement or operation of the Improvements shall be repaired or replaced immediately at Tenant's expense and to Otay's reasonable satisfaction by Otay staff or contractors approved by Otay. Tenant shall not locate or attach any antennas or other equipment to any of Otay's facilities without the prior written approval of Otay. Tenant shall pay all costs and expenses in relation to maintaining the integrity of Otay's facilities, improvements and systems affected in any way by Tenant's Improvements or its use of the Property or the Premises.

h. Maintenance and Repair. At all time during the Term, Tenant shall maintain the Premises and the Improvements in a manner acceptable to Otay. Tenant's use of its Improvements shall not at any time or in any way adversely impact, impede or interfere with Otay's access to, use or operation of, its improvements, equipment or systems.

i. Liens. Tenant shall not encumber or allow the Premises or the Property to be encumbered in any manner other than as expressly authorized herein.

j. Security. Tenant recognizes and agrees that the Premises and the Reservoir Site are a sensitive area and that Otay's operations and services are highly sensitive and regulated. Tenant shall provide for the proper supervision of all Tenant Parties assigned or allowed by Tenant to enter and do work at the Premises. Tenant also agrees, holding Otay harmless for any cost or expense, to comply with any and all security measures instituted by Otay from time to time.

8. Maintenance, Repair or Replacement of Otay's Improvements. At any time while this Agreement remains in effect, Otay may, at its option and upon One Hundred Eighty (180) days prior written notice to Tenant, remove or cause

Tenant to remove all or any portion of its Facilities at Tenant's expense, in order for Otay to paint, repair, or make replacements to any or all its improvements on the Premises (the "Maintenance or Replacement Work"), as deemed necessary by Otay in its sole discretion. Tenant agrees to fully cooperate with Otay's efforts in connection with any Maintenance or Replacement Work, including without limitation timely, and at Tenant's cost, removing and re-installing any portion of the Facilities, as requested by Otay.

a. Temporary Facilities. During the Maintenance or Replacement Work, Tenant may, holding Otay harmless from any cost or expense, install temporary antennas on the Premises subject to Otay's approval of the location and type of replacement facilities, such approval shall not be unreasonably withheld or delayed. Once the Maintenance or Replacement Work is completed by Otay, Tenant agrees to promptly dismantle any temporary facilities and to relocate the facilities to their original location or to any other location approved by Otay. All work related to the removal of any portion of the Facilities, installation of temporary facilities, dismantling, relocation to their original location and any related work, shall be done at Tenant's sole cost and expense and in good and workmanlike manner.

b. Repair of damage. Tenant shall repair any damage caused by Tenant in connection with the installation, maintenance, operation or removal of any temporary facilities or the Facilities, and Tenant shall restore any distributed portions of the Property to their condition immediately prior to the installation of the temporary facilities.

c. Otay's option to remove temporary facilities. If any temporary facilities are not removed within sixty (60) days from the date the Maintenance or Replacement Work is completed, Otay shall have the right, but not the duty, to remove the temporary facilities at Tenant's cost and expense.

d. Painting of the Facilities. If the Maintenance or Replacement Work includes the painting, or any work affecting the surface of Otay's improvements, the Tenant shall be responsible for repainting or performing other surface treatment of its antennas and equipment to match Otay's. Otay will provide specifications to the Tenant regarding the treatment, paint type, color and application method to accomplish this requirement. The Tenant shall be required to obtain approval of specifications from Otay prior to commencing work on this requirement. Subject to Otay's prior written consent, Tenant may substitute an alternate treatment, paint type and application method if it reasonably determines that Otay's selection will adversely affect or otherwise degrade Tenant's wireless signal from the Reservoir Site.

3c. Section 9; Co-Location shall be replaced with the following:

9.1. Co-Location by Otay. Tenant agrees that Otay may enter into leases or other types of agreements with other communication carriers, wireless communications carriers and other utilities for use of any portion of the "Reservoir Site" as long as said leases do not result in unreasonable interference with Tenant's use of or access to the Premises. Tenant shall reasonably cooperate with Otay's efforts in this regard including, at Otay's request, the relocation of, or changes to, the Facilities; provided that any alterations or relocation needed to accommodate the new carrier or utility shall be performed at the expense of Otay or the new carrier or utility.

9.2. Co-Location by Tenant - Subleasing/Encumbrance. Tenant shall not sub-lease or sub-license or otherwise encumber the Premises or any portion of the Facilities without Otay's prior written consent, which may be granted or denied at Otay's sole discretion. Any sub-lease or other encumbrance shall require an amendment to this Agreement and shall specify the terms and conditions, including making provision for rent and increases thereto for the sub-lease or other encumbrance.

3d. Section 13; Termination shall be replaced with the following:

13.1 Termination.

(a) This Agreement may be terminated by Tenant without further liability if:

(i) Tenant delivers to Otay 30-day written notice at any time prior to commencing any work at the Premises in connection with the installation of any Facilities, for any reason or no reason;

(ii) Tenant gives Otay sixty (60) days' notice of Tenant's determination that a governmental or non-governmental license, permit, consent, approval, easement or waiver necessary to enable Tenant to construct, install or operate the Facilities cannot be obtained or renewed at reasonable expense or in reasonable time period for wireless sites at water reservoirs in metropolitan areas within San Diego County. If this notice is given, Tenant must immediately cease any and all transmissions through and from the Premises and shall promptly remove, within a period of time not to exceed sixty (60) days, any and all Tenant's personal property and improvements from the Property. This Agreement and any related easements shall automatically expire upon the earlier of removal of the Tenant's improvements or the 60th day from the notice; excepting only Tenant's indemnities and liabilities hereunder, including the obligation to pay Rent for any holdover period. Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated.

(iii) Tenant determines at any time after the Commencement Date that the Premises are not appropriate or suitable for its operations for economic, environmental or technological reasons, including without limitation, any ruling or directive of the FCC or other governmental or regulatory agency, or problems with signal strength or interference not encompassed by subsection (iv) below; provided that the right to terminate under this subsection (iii) is exercisable only upon payment by Tenant, as a termination fee, of the lesser of twelve monthly installments of rent or the balance of the rent due for the then current Initial Term, Extension Term or Additional Term, as applicable; and Tenant agrees that Otay may, without any liability or recourse against Otay, commit to re-let the Premises to other parties immediately upon receipt of the notice herein contemplated;

(iv) Otay commits a default under this Agreement and fails to cure pursuant to Section 13.2, below;

(v) The Property or the Premises are totally or partially destroyed by fire or other casualty (not caused by Tenant) so as to hinder Tenant's normal operations and Otay does not provide to Tenant within thirty (30) days after the casualty occurs a suitable temporary relocation site for Tenant's facility pending repair and restoration of the Premises; or

(vi) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

(b) This Agreement may be terminated by Otay without further liability if:

(i) Tenant commits a default under this Agreement and fails to cure such default pursuant to Section 13.2, below;

(ii) Otay determines that continuing the Agreement or continuing to allow the Tenant to construct, install, maintain or operate the Facilities in any way violates a law, rule or regulation; or

(iii) If Tenant and Otay cannot reasonably agree on the location of a replacement Easement pursuant to Section 2 herein.

13.2 Default.

a. Event of Default. The parties covenant and agree that a default or breach of this Agreement (an "Event of Default") shall occur and be deemed to exist if, after notice and opportunity to cure as provided below:

(i) Tenant shall default in the payment of Rent, or any other amounts due Otay hereunder, and said default shall continue for ten (10) business days after the same becomes due; or

(ii) Either party shall default in the performance or observance of any other covenant or condition of this Agreement to be performed or observed if such failure persists for a period of thirty (30) days after the non-defaulting party provides written notice of the default to the defaulting party.

b. Rights upon Default. Upon the occurrence of an Event of Default, in addition to any other rights or remedies available to the non-defaulting party under any law, the non-defaulting party shall have the right to terminate the Agreement.

c. Cure Rights. An Event of Default shall not exist unless written notice has been given in accordance with this Agreement, and the defaulting party has had the opportunity to cure as provided herein. The defaulting party shall cure the alleged default within the manner provided herein; provided however, that if the nature of an alleged default is such that it cannot reasonably be cured within such thirty (30) day period, the defaulting party shall not be in breach of this Agreement if it diligently commences a cure within such period, and thereafter diligently proceeds with the actions necessary to complete such cure.

3e. Section 17; Indemnity, shall be replaced with the following:

Tenant specifically agrees that it shall hold harmless, defend (with counsel, and if needed experts, reasonably acceptable to Otay), indemnify and otherwise protect Otay and each Otay Party, from and against all claims, suits or actions of any kind and description relating to (a) Tenant's obligations under this Agreement and any amendment hereto or (b) Tenant or Tenant Parties use of, and access to, the Premises, the Facilities or the Property. These obligations extend to and include without limitation any and all costs and expenses (including attorney's fees and court costs) incurred by Otay or the Otay Parties in connection with (i) damage to property (including the Premises, the Property or any personal property of Otay or any third party), (ii) any action or proceeding (including an enforcement action or criminal proceeding) related in any way to any permit (governmental or otherwise), approval or easement obtained by or required of Tenant in connection with this Agreement or the Facilities; and (iii) personal injury or death, except to the extent that such claims, suits or actions directly arise from the gross negligence or willful misconduct of Otay or an Otay Party. This indemnification clause in no way limits any other specific indemnities given by Tenant under other provisions of this Agreement.

Nothing contained herein shall prohibit Otay, in its sole discretion, from participating in the defense of any demand, claim, action, proceeding, or litigation. In no event shall Otay's participation in the defense of any demand

claim, action, proceeding, or litigation affect the obligations imposed upon Tenant herein.

This and all other Tenant indemnities shall survive the termination of this Agreement and shall remain in effect for as long as the underlying claim or action remains viable.

3f. Section 19; Assignment, shall be replaced with the following:

Tenant shall not assign this Agreement or any portion of its rights or obligations hereunder without Otay's prior written consent, except to an affiliated parent entity, subsidiary, purchaser of at least 50% of the aggregate of the assets of Tenant ("assets" means and includes without limitation any and all real, personal or financial property or thing owned or controlled by Tenant or over which Tenant has an interest) or holder of Tenant's FCC license.

a. If during the Term hereof, Tenant requests the written consent of Otay to any assignment, and upon demonstration satisfactory to Otay of the proposed assignee's legal, financial, and technical qualifications to assume all of the Tenant's duties and obligations herein, Otay's consent thereto shall not unreasonably be withheld. Consent to one assignment shall not be deemed consent to any subsequent assignment.

b. Any attempted assignment not permitted under the first paragraph of this Section 19, without Otay's prior consent as set forth in Section 19(a), shall be void and, at Otay's option, shall constitute a termination of this Agreement for which a termination fee as described in Section 13.1.a(iii) shall be immediately due.

c. Any assignment of this Agreement shall require an executed "Assignment of Lease" whether or not the Consent of Otay is required pursuant to this section 19 or any other provision of this Agreement. A sample form of the "Assignment of Lease" is attached to this Agreement as Exhibit F which may be amended or modified in Otay's sole discretion.

4. **Continued Effect.** Except as specifically modified by this First Amendment, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict between any term or provision of the Agreement and this First Amendment, the terms and provisions of this First Amendment shall control. In addition, except as otherwise stated in this First Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Agreement. All captions are for reference purposes only and shall not be used in the construction or interpretation of this First Amendment.

5. **Administrative Fees.** TENANT shall pay OTAY the amount of \$4,500 within (30) days of the date of execution of this Amendment by OTAY and TENANT.

6. **Current Rent.** The current monthly Rent amount at the Effective Date of this First Amendment is \$2,783.39.

IN WITNESS WHEREOF, OTAY and TENANT have caused this First Amendment to be executed by each party's duly authorized representative effective as of the date first above written.

OTAY WATER DISTRICT:

Sprint PCS Assets, L.L.C.,
a Delaware limited liability company, :

By: _____
Name: Mark Watton
Title: General Manager
Date: _____

By: 
Name: Matthew Bell
Title: Manager Real Estate
Date: 5 / 29 / 2013

Approved as to Form:

Approved as to Form:

By: _____
OWD General Counsel

By: 
Its: _____

Exhibit B-1

NEW IMPROVEMENTS



NETWORK VISION MMBTS LAUNCH OTAY WATER DISTRICT OFFICE

**SD34XC534
ROOFTOP**

2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977
CITY OF SAN DIEGO

LATITUDE: 32° 43' 26.7594" N (32.7241)
LONGITUDE: 116° 58' 4.8" W (-116.968)

SAN DIEGO MARKET



Know what's below.
CALL before you dig.

CALL AT LEAST TWO WORKING
DAYS BEFORE YOU DIG



PLANS PREPARED BY:

Technology Associates

SAN DIEGO MARKET OFFICE
5473 KEARNY VILLA RD. STE. 300
SAN DIEGO, CA 92123

PROPRIETARY INFORMATION

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PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
**OTAY WATER DISTRICT
OFFICE (8P)
SD34XC534**

2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977

ISSUE DATE:

05/14/2013

ISSUED FOR:

FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
0	05/14/13	ISSUED FOR FIELD SET	AC

LICENSURE:



SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

REVISION:

0

CALIFORNIA STATE CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

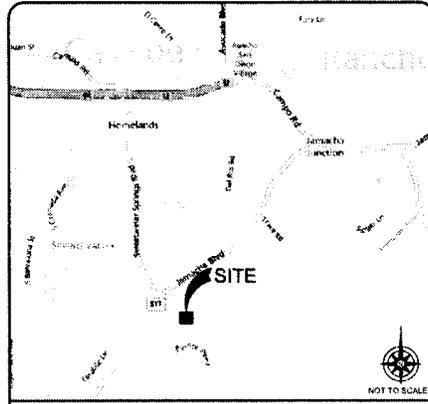
- CALIFORNIA ADMINISTRATIVE CODE (INCLUDING TITLES 24 & 25) 2010
- 2010 CALIFORNIA BUILDING CODE
- CITY/COUNTY ORDINANCES
- BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA)
- 2010 CALIFORNIA MECHANICAL CODE
- ANS/IEA-22.7 LIFE SAFETY CODE NFPA-101
- 2010 CALIFORNIA PLUMBING CODE
- 2010 CALIFORNIA ELECTRICAL CODE
- 2010 LOCAL BUILDING CODE

ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS DO NOT APPLY IN ACCORDANCE WITH THE 2010 CALIFORNIA BUILDING CODE.

FCC NOTE:

THIS WIRELESS COMMUNICATION FACILITY COMPLIES WITH FEDERAL STANDARDS FOR RADIO FREQUENCY IN ACCORDANCE WITH THE TELECOMMUNICATION ACT OF 1996 AND SUBSEQUENT AMENDMENTS AND ANY OTHER REQUIREMENTS IMPOSED BY STATE OR FEDERAL REGULATORY AGENCIES.



VICINITY MAP

STARTING FROM SAN DIEGO AIRPORT, 3228 NORTH HARBOUR DRIVE, SAN DIEGO, CA 92101.

1. HEAD WEST ON AIRPORT TERMINAL RD
2. SLIGHT LEFT TO STAY ON AIRPORT TERMINAL RD
3. KEEP RIGHT AT THE FORK
4. TURN LEFT ONTO N HARBOUR DR
5. TURN LEFT ONTO W COASSE ST
6. TAKE THE INTERSTATE 5 S RAMP
7. MERGE ONTO I-5 S
8. TAKE EXIT 148 TO MERGE ONTO CA-N E
9. TAKE EXIT 11 FOR SWEETWATER SPRINGS BLVD
10. TURN RIGHT ONTO SWEETWATER SPRINGS BLVD

DRIVING DIRECTIONS

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY. THE PROJECT WILL CONSIST OF:

- REMOVE (6) EXISTING PANEL ANTENNAS
- REMOVE ALL RELATED COAX
- INSTALL (2) NEW 6" Ø (1) 4" Ø PANEL ANTENNAS
- INSTALL (3) NEW FIBER OPTICS CABLES USING EXISTING COAX ROUTE
- INSTALL (3) NEW RF SCREEN BOXES
- RETROFIT (1) EXISTING MODELL CABINET WITH NEW RADIO EQUIPMENT
- INSTALL (1) NEW BATTERY BACKUP CABINETS
- INSTALL (1) NEW FIBER JUNCTION BOX
- INSTALL (1) NEW CIENNA UNIT
- INSTALL (3) NEW RRHS
- INSTALL (3) NEW RRHS SLEDS
- PROPOSED SPRINT ALU BASE STATION EQUIPMENT TO BE PLACED WITHIN EXISTING ENTITLED EQUIPMENT FOOTPRINT

EXISTING WIRELESS FACILITIES:

- A TOTAL OF (1) WIRELESS COMMUNICATION FACILITY(S) EXISTING ON SITE

PROJECT DESCRIPTION

APPLICANT:

SPRINT
310 COMMERCE
IRVINE, CA 92602
CONTACT: GLOR JAMES-SUAREZ
PROJECT MANAGER: ALU WEST AREA
NATIONAL SITE DEVELOPMENT
PHONE: (714) 588-0489

PROPERTY INFORMATION:

PROPERTY OWNER: OTAY WATER DISTRICT
ADDRESS: 2554 SWEETWATER SPRINGS BLVD
SPRING VALLEY, CA 91977
CONTACT: THOMAS J HARRON
PH: 619-670-2297

ZONING CLASSIFICATION: M38

BUILDING CODE: CBC

CONSTRUCTION TYPE: V-N

OCCUPANCY: 5-2

JURISDICTION: CITY OF SAN DIEGO

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S):

305-230-18

LEASE AREA:

1,200 SQ. FT.

PROJECT SUMMARY

SHEET NO:	DESCRIPTION:
T-1	TITLE SHEET
T-3	NOTES & LEGAL DESCRIPTION
A-1	OVERALL SITE PLAN
A-3	EXISTING ANTENNA & EQUIPMENT PLANS
A-3A	DURING ANTENNA & EQUIPMENT PLANS
A-4	FINAL ANTENNA PLAN
A-4A	FINAL EQUIPMENT PLAN
A-5	EXISTING & FINAL NORTHEAST ELEVATIONS
A-6	EXISTING & FINAL SOUTHEAST ELEVATIONS
A-7	EXISTING & FINAL NORTHWEST ELEVATIONS
A-8	EXISTING & FINAL SOUTHWEST ELEVATIONS
A-9	ANTENNA DETAILS
A-10	EQUIPMENT DETAILS
A-11	ANTENNA CONNECTION DIAGRAM
A-12	ANTENNA CONNECTION DIAGRAM
A-13	ANTENNA CONNECTION DIAGRAM
A-14	ANTENNA CONNECTION DIAGRAM
F-1	FIBER SITE PLAN
F-2	FIBER EQUIPMENT PLAN
F-3	FIBER DETAILS
G-1	ANTENNA GROUNDING
G-1A	EQUIPMENT GROUNDING

SHEET INDEX

ARCHITECT:

TECHNOLOGY ASSOCIATES
5473 KEARNY VILLA ROAD #300
SAN DIEGO, CA 92123
CONTACT: ALEXANDER G. NAASZ
PH: (858) 300-2346 x 1515
EMAIL: alexander.naasz@tac.net

STRUCTURAL ENGINEER:

TECHNOLOGY ASSOCIATES
5473 KEARNY VILLA ROAD #300
SAN DIEGO, CA 92123
CONTACT: ALEXANDER G. NAASZ
PH: (858) 300-2346 x 1515
EMAIL: alexander.naasz@tac.net

SITE ACQUISITION PROJECT MANAGER:

ALCATEL-LUCENT
CONTACT: ALEX TSATUROV
PH: (858) 472-4048

CONSTRUCTION MANAGER:

ALCATEL-LUCENT
CONTACT: ROBERT OUADE
PHONE: (858) 220-3128

PLANNING CONSULTANT:

TECHNOLOGY ASSOCIATES
5473 KEARNY VILLA ROAD #300
SAN DIEGO, CA 92123
CONTACT: STEPHANIE VALDEZ
PHONE: (858) 300-2346 x 1331

POWER COMPANY:

SDG&E
PH: 1-800-336-7343

TELCO COMPANY:

AT&T
PH: 1-888-544-0447

PROJECT TEAM

CODE BLOCK

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

PROJECT MANAGER:	DATE:
CONSTRUCTION MANAGER:	DATE:
RF ENGINEER:	DATE:
T&E SITE ACQUISITION:	DATE:
ALU SITE ACQUISITION:	DATE:
PLANNING CONSULTANT:	DATE:
PROPERTY OWNER:	DATE:
SPRINT REPRESENTATIVE:	DATE:

SIGNATURE BLOCK

BATTERY INFORMATION /NOTES:

BATTERY MFG MODEL NO ELECTROLYTE CONTENT PER BATTERY ELECTROLYTE HAZARD CLASSIFICATION PER 19 C.F.C. (87% SULFURIC ACID) NO. OF BATTERIES TO BE INSTALLED TOTAL ELECTROLYTE CONTAINED ON SITE (2 x 5.6)	EAST PENN MANUFACTURING 12VH-14N 17 GALLONS CORROSIVE 8 25 GALLONS MAX	A. QUANTITIES OF 500 GAL OR LESS ARE EXEMPT PER TABLE 3 E OF THE 2010 U.S.C. B. SINGLE VESSELS CAPACITIES OF 20 GAL OR LESS, AND AGGREGATE QUANTITIES NOT IN EXCESS OF 100 GAL ARE EXEMPT PER ARTICLE 84 OF THE 2010 C.F.C. C. QUANTITIES LESS THAN 50 GAL ARE EXEMPT FROM C.F.C. ARTICLE 80, AND SHALL NOT REQUIRE TSDRI! D. ANY CHANGES OR ADDITIONS TO BACK-UP BATTERIES MUST COMPLY WITH 2010 C.F.C. ARTICLE 84, AND SHALL NOT CONTAIN ELECTRICAL QUANTITIES IN EXCESS OF 50
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FIRE DEPARTMENT NOTES:

- A. FIRE DEPARTMENT FINAL INSPECTION REQUIRED. SCHEDULED INSPECTION 2 DAYS IN ADVANCE.
- B. A CFC PERMIT TO OPERATE BATTERY SYSTEMS WITH STATIONARY LEAD-ACID BATTERIES IS NOT REQUIRED F.O THE QUANTITIES ON SITE.
- C. A CFC PERMIT MAY BE REQUIRED FOR THE HAZARDOUS MATERIALS ON SITE
- D. A HAZARDOUS MATERIALS IDENTIFICATION SIGN IS REQUIRED FOR ALL ENTRANCES INTO BATTERY STORAGE AREAS. LETTERS MUST BE AT LEAST 1" IN HEIGHT AND IN A COLOR WHICH CONTRASTS TO THE BACKGROUND OF THE SIGN AND LIST THE FOLLOWING:

CLASS 1 WATER REACTIVE LIQUID
TOXIC LIQUID
CORROSIVE LIQUID
OTHER HEALTH HAZARD LIQUID

- E. AN APPROVED METHOD TO NEUTRALIZE SPILLED ELECTROLYTE SHALL BE PROVIDED IN THE BATTERY ROOM
- F. BATTERIES SHALL BE PROVIDED WITH SAFETY VENTING CAPS
- G. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE UNIFORM FIRE CODE STANDARD 10-1 AND PLACEMENT IS SUBJECT TO APPROVAL OF THE FIRE INSPECTOR
- H. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE AND COMBUSTIBLE LIQUIDS, FLAMMABLE AND COMPRESSED GASES, AND OTHER HAZARDOUS MATERIALS SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS
- I. EXIST DOORS SHALL BE ABLE TO OPEN FROM THE INSIDE WITHOUT THE USE OF KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT
- J. ADDRESS NUMBERS SHALL BE A MINIMUM 8 INCHES HIGH AND PLAINLY VISIBLE FROM ROADWAY BUILDING IS ADDRESSED ON
- K. REQUIRED SIGNAGE SHALL INCLUDE LETTERING HEIGHT OF AT LEAST ONE INCH IN A COLOR THAT CONTRASTS TO THE SIGN BACKGROUND, AND SHALL BE PROMINENTLY DISPLAYED
- L. REQUIRED SIGNAGE SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, APPLICABLE TYPES FROM EXAMPLES SHOWN HEREIN (SEE SIGNAGE)

PARCEL 1
THAT PORTION OF SWEETWATER SPRINGS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 576 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JANUARY 15, 1989, DESCRIBED AS FOLLOWS:
BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF SAN DIEGO COUNTY ROAD SURVEY NO. 826 WITH THE CENTERLINE OF SAN DIEGO COUNTY ROAD SURVEY NO. 193 AS SAID INTERSECTION IS SHOWN ON RECORD OF SURVEY MAP NO. 3233 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, THENCE SOUTH 46°09'47" EAST, 136.38 FEET; THENCE SOUTH 41°19'52" EAST, 89.08 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 24°42'27" WEST, 214.41 FEET; THENCE NORTH 15°20'34" WEST, 446.83 FEET; THENCE NORTH 15°43'50" EAST, 413.43 FEET TO ALGUNT WHOSE BEARS NORTH 48°15'57" EAST, 396.45 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 2.95 ACRES, MORE OR LESS.

PARCEL 2
THAT PORTION OF SWEETWATER SPRINGS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 576 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, JANUARY 15, 1989, DESCRIBED AS FOLLOWS:
BEGINNING AT THE INTERSECTION OF THE CENTERLINE OF SAN DIEGO COUNTY ROAD SURVEY NO. 826 WITH THE CENTERLINE OF SAN DIEGO COUNTY ROAD SURVEY NO. 193 AS SAID INTERSECTION IS SHOWN ON RECORD OF SURVEY MAP NO. 3233 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, THENCE SOUTH 07°04'54" EAST, 166.38 FEET; THENCE SOUTH 41°19'52" EAST, 297.86 FEET; THENCE SOUTH 33°43'00" WEST, 160.0 FEET TO THE TRUE POINT OF BEGINNING; CONTAINING SOUTH 33°43'00" WEST, 253.45 FEET; THENCE NORTH 07°04'54" EAST, 70.50 FEET; THENCE NORTH 33°43'00" EAST, 157.88 FEET; THENCE NORTH 80°43'00" EAST, 41.96 TO THE TRUE POINT OF BEGINNING, CONTAINING 3.166 ACRES MORE OR LESS.

LEGAL DESCRIPTION

3

GENERAL NOTES

1

NOT USED

4

NOT USED

2

NOT USED

5



PLANS PREPARED BY:

Technology Associates
SAN DIEGO MARKET OFFICE
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SAN DIEGO, CA 92123

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PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
OTAY WATER DISTRICT
OFFICE (8P)
SD34XC534
2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977

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LICENSURE:



SHEET TITLE:

NOTES & LEGAL DESCRIPTION

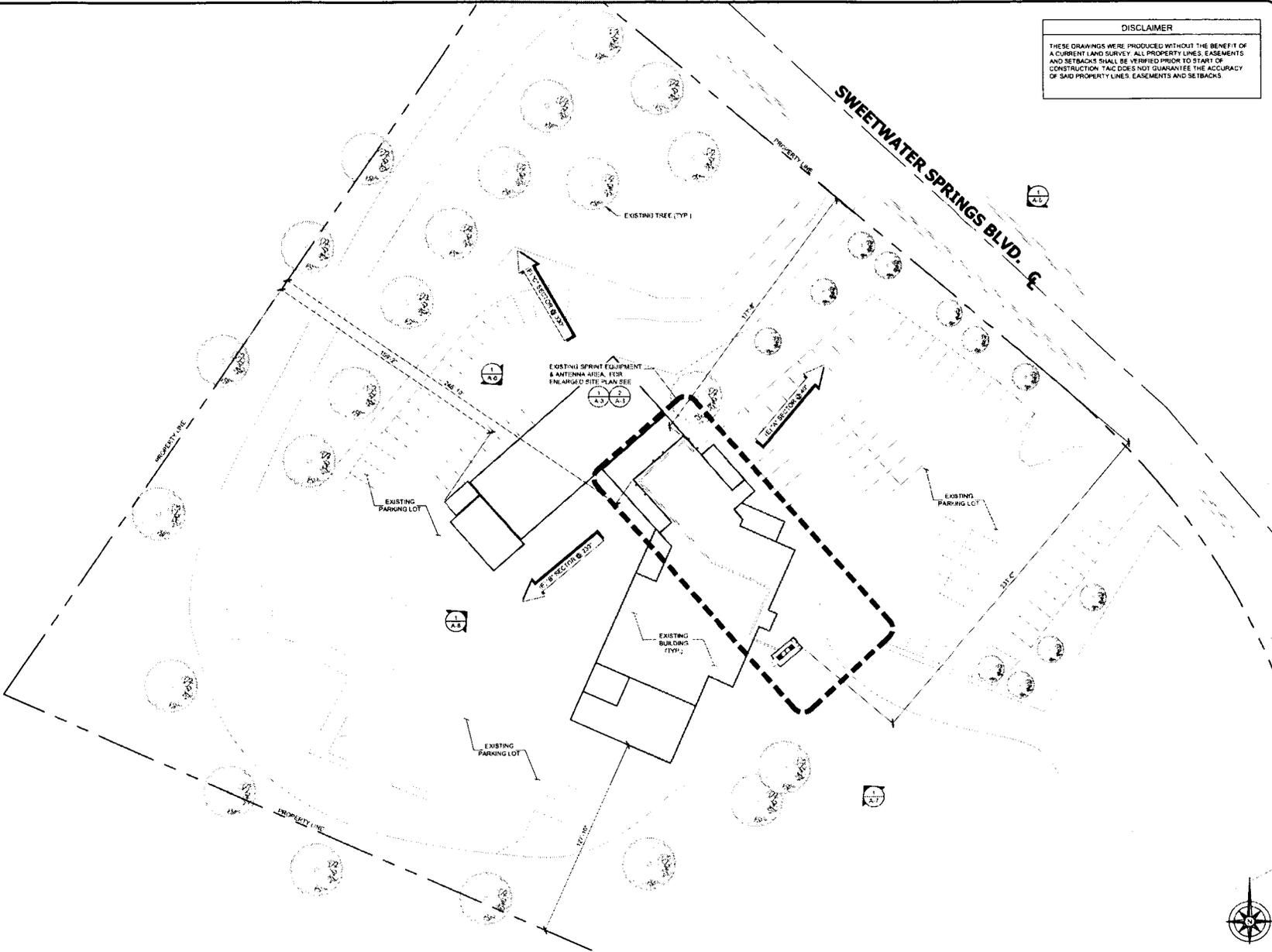
SHEET NUMBER:

REVISION:

T-3

0

DISCLAIMER
 THESE DRAWINGS WERE PRODUCED WITHOUT THE BENEFIT OF A CURRENT LAND SURVEY. ALL PROPERTY LINES, EASEMENTS AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. TAIC DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINES, EASEMENTS AND SETBACKS.



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LICENSURE:



SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

A-1

REVISION:

0

OVERALL SITE PLAN

30' 0 15' 30' SCALE: 1" = 30'-0" (24x36)
 (ORI) 1/2" = 30'-0" (11x17)



1



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SHEET TITLE:

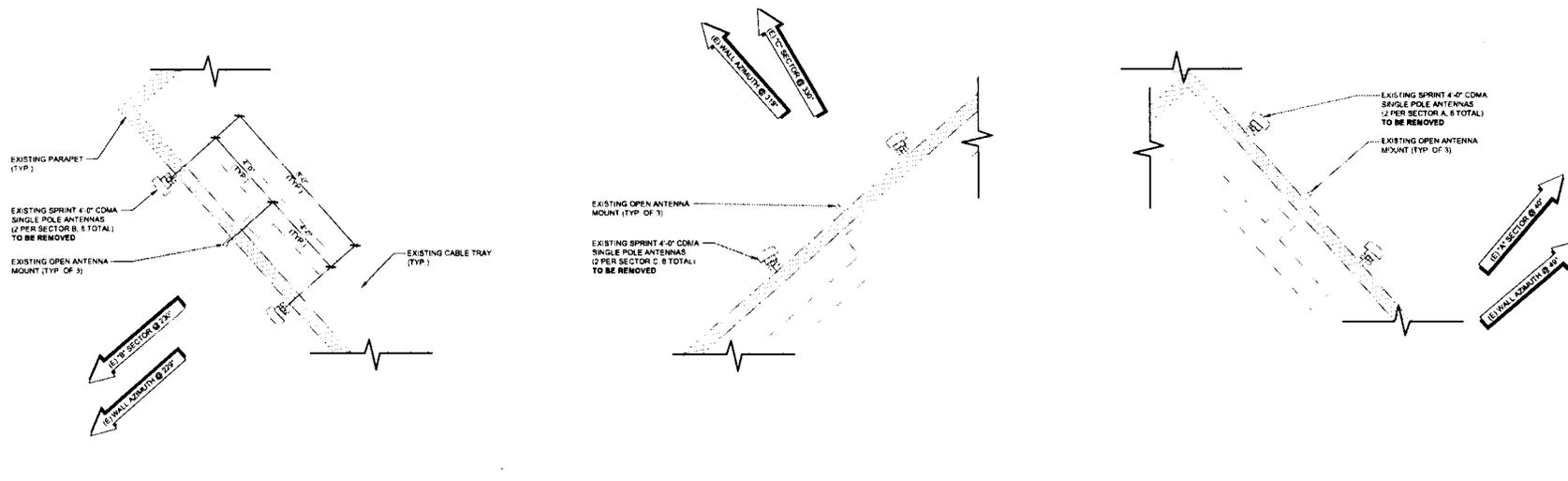
**EXISTING ANTENNA
& EQUIPMENT PLANS**

SHEET NUMBER:

A-3

REVISION:

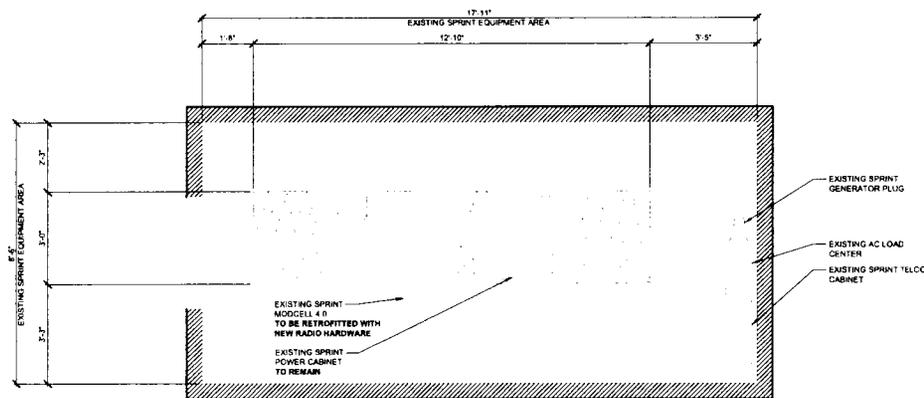
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EXISTING ANTENNA PLAN

0 1' 2" 4" SCALE: 1/4" = 1'-0" (24x36)
(OR) 1/8" = 1'-0" (11x17)

1



EXISTING EQUIPMENT PLAN

0 6" 1" 2" SCALE: 1/2" = 1'-0" (24x36)
(OR) 1/4" = 1'-0" (11x17)

2



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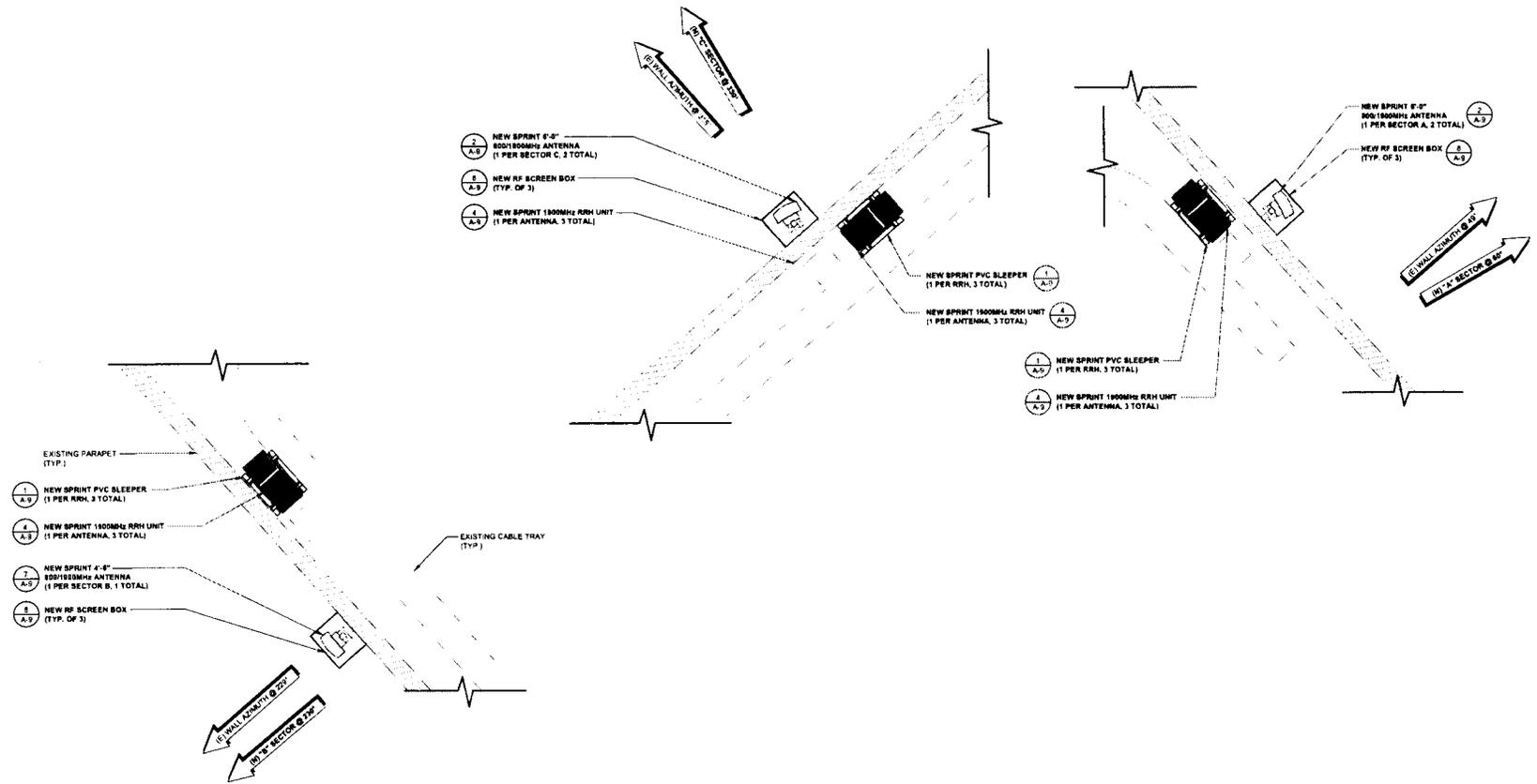
SHEET TITLE:

FINAL ANTENNA PLAN

SHEET NUMBER: REVISION:

A-4 0

NOTE:
1. INSTALLERS TO VERIFY LATEST
RF DATA SHEET & PLUMBING / WIRING
DIAGRAMS, PRIOR TO INSTALLATION



- EXISTING PARAPET (TYP.)
- 1 NEW SPRINT PVC SLEEPER (1 PER RRH, 3 TOTAL)
- 1 NEW SPRINT 1800MHz RRH UNIT (1 PER ANTENNA, 3 TOTAL)
- 2 NEW SPRINT 4'-8" 800/1800MHz ANTENNA (1 PER SECTOR B, 1 TOTAL)
- 1 NEW RF SCREEN BOX (TYP. OF 3)

- 2 NEW SPRINT 4'-8" 800/1800MHz ANTENNA (1 PER SECTOR C, 2 TOTAL)
- 1 NEW RF SCREEN BOX (TYP. OF 3)
- 1 NEW SPRINT 1800MHz RRH UNIT (1 PER ANTENNA, 3 TOTAL)
- 1 NEW SPRINT PVC SLEEPER (1 PER RRH, 3 TOTAL)
- 1 NEW SPRINT 1800MHz RRH UNIT (1 PER ANTENNA, 3 TOTAL)
- 1 NEW SPRINT PVC SLEEPER (1 PER RRH, 3 TOTAL)
- 1 NEW SPRINT 1800MHz RRH UNIT (1 PER ANTENNA, 3 TOTAL)

- 2 NEW SPRINT 4'-8" 800/1800MHz ANTENNA (1 PER SECTOR A, 2 TOTAL)
- 1 NEW RF SCREEN BOX (TYP. OF 3)

- 1 NEW SPRINT PVC SLEEPER (1 PER RRH, 3 TOTAL)
- 1 NEW SPRINT 1800MHz RRH UNIT (1 PER ANTENNA, 3 TOTAL)

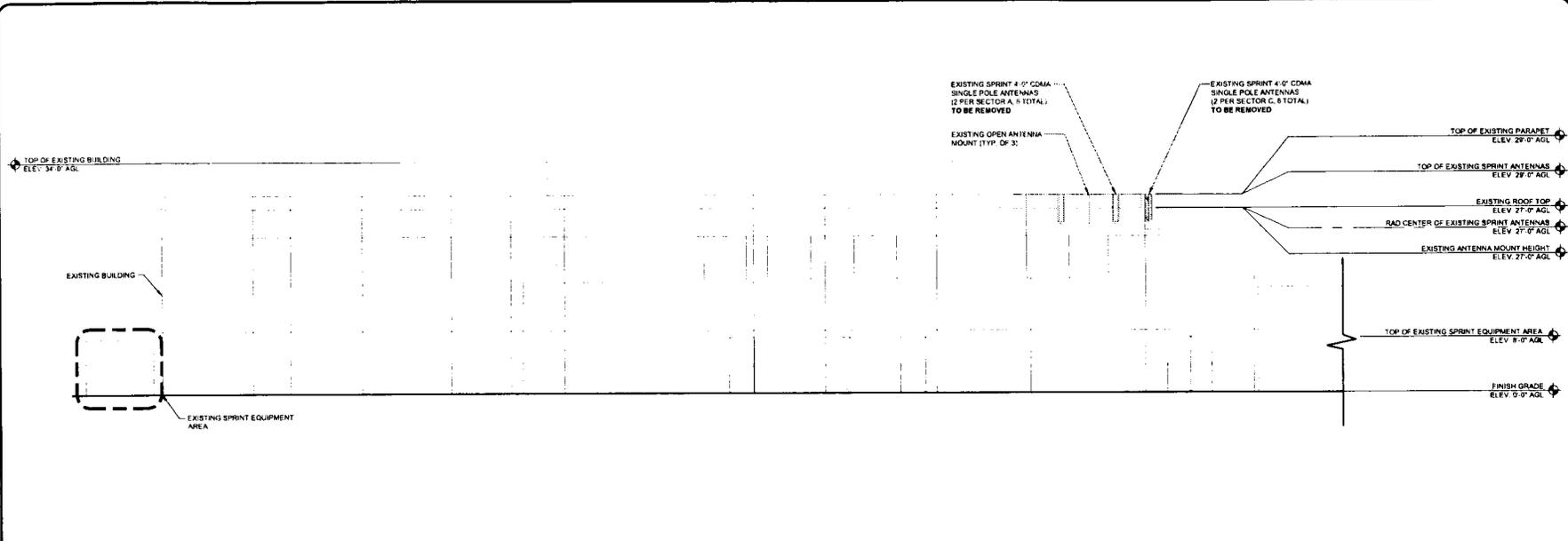
COAX SCHEDULE

	SECTOR A	SECTOR B	SECTOR C	SECTOR D
1 1/2" HYBRIFLEX	± 225'	± 225'	± 225'	N/A
1/2" COAX JUMPER	± 10'	± 10'	± 10'	N/A

FINAL ANTENNA PLAN

SCALE: 1/2" = 1'-0" (24x36)
(OR) 1/4" = 1'-0" (11x17)

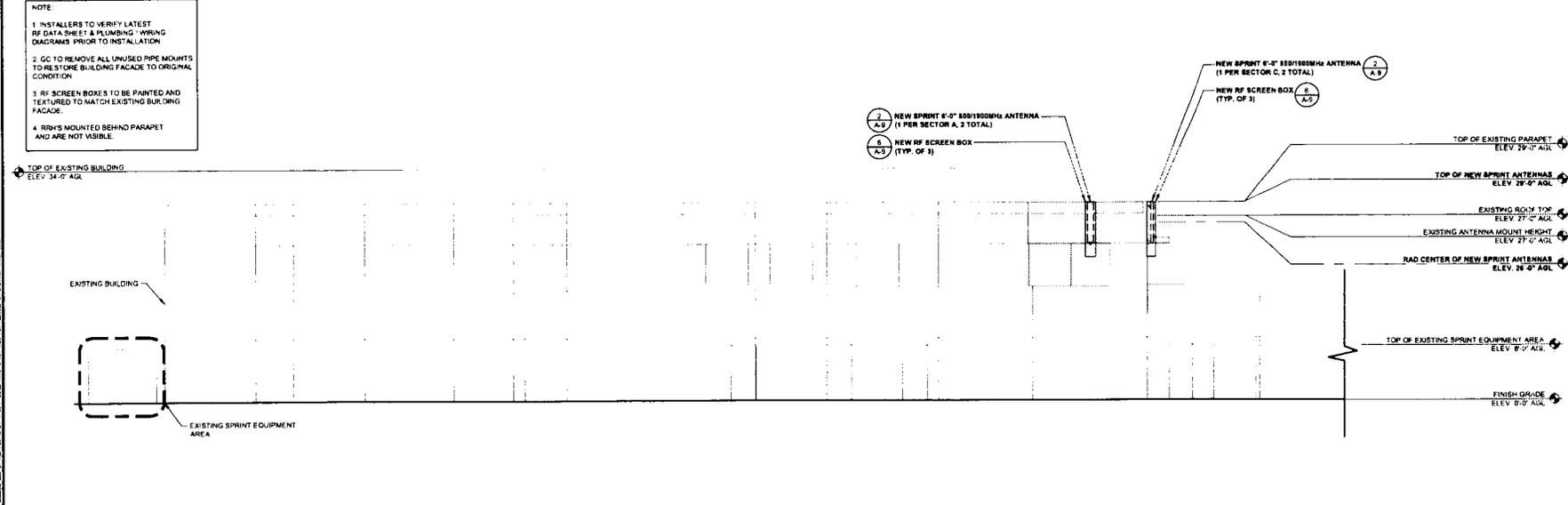




EXISTING NORTHEAST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
 (OR) 1/16" = 1'-0" (11x17) **1**

- NOTE**
1. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING WIRING DIAGRAMS PRIOR TO INSTALLATION
 2. GC TO REMOVE ALL UNUSED PIPE MOUNTS TO RESTORE BUILDING FACADE TO ORIGINAL CONDITION
 3. RF SCREEN BOXES TO BE PAINTED AND TEXTURED TO MATCH EXISTING BUILDING FACADE.
 4. RRHS MOUNTED BEHIND PARAPET AND ARE NOT VISIBLE



FINAL NORTHEAST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
 (OR) 1/16" = 1'-0" (11x17) **2**



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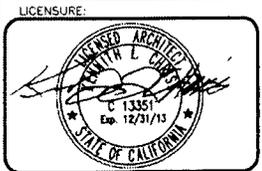
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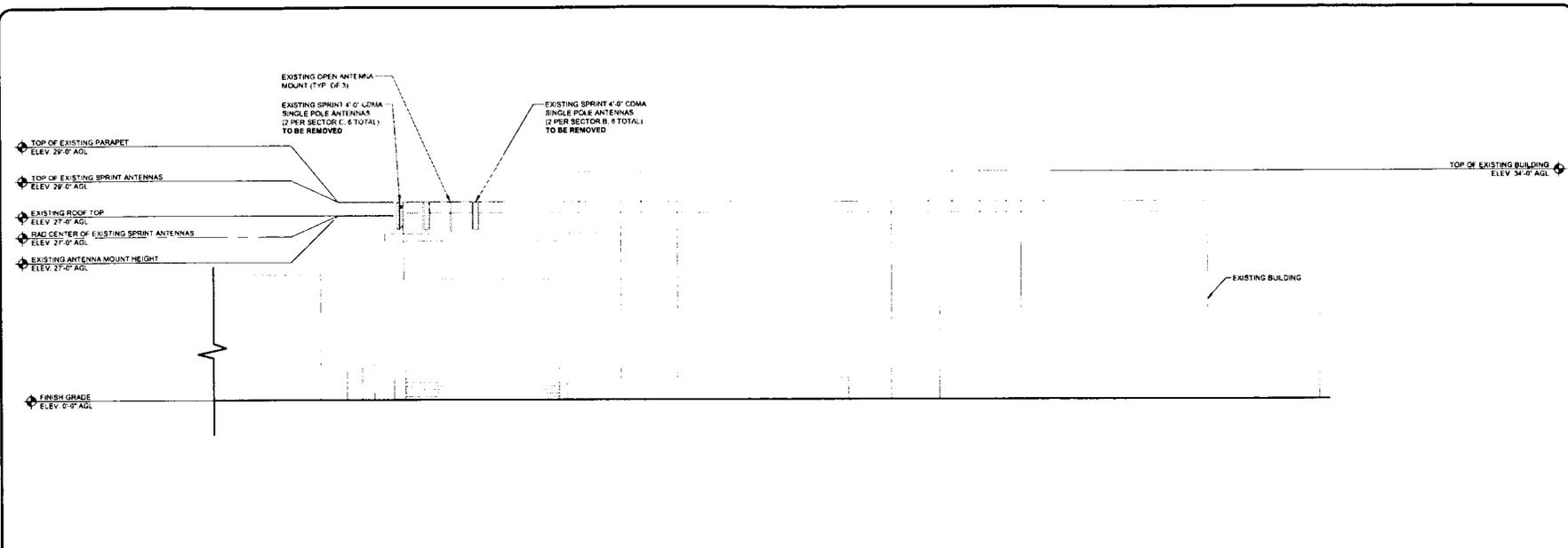
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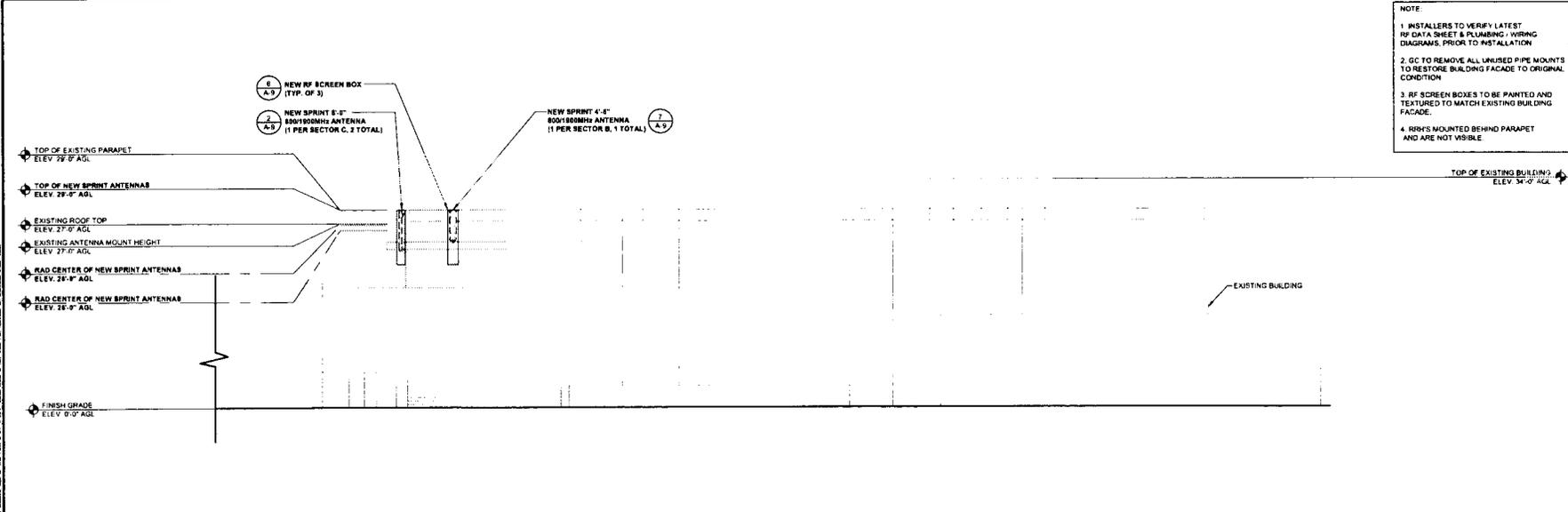
SHEET TITLE:
NORTHEAST ELEVATIONS

SHEET NUMBER: **A-5** **REVISION:** **0**



EXISTING SOUTHWEST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17) **1**



FINAL SOUTHWEST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17) **2**

NOTE:
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3. RF SCREEN BOXES TO BE PAINTED AND TEXTURED TO MATCH EXISTING BUILDING FACADE.
4. SPRINT MOUNTED BEHIND PARAPET AND ARE NOT VISIBLE.



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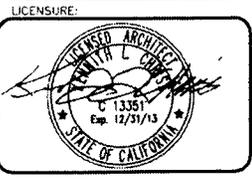
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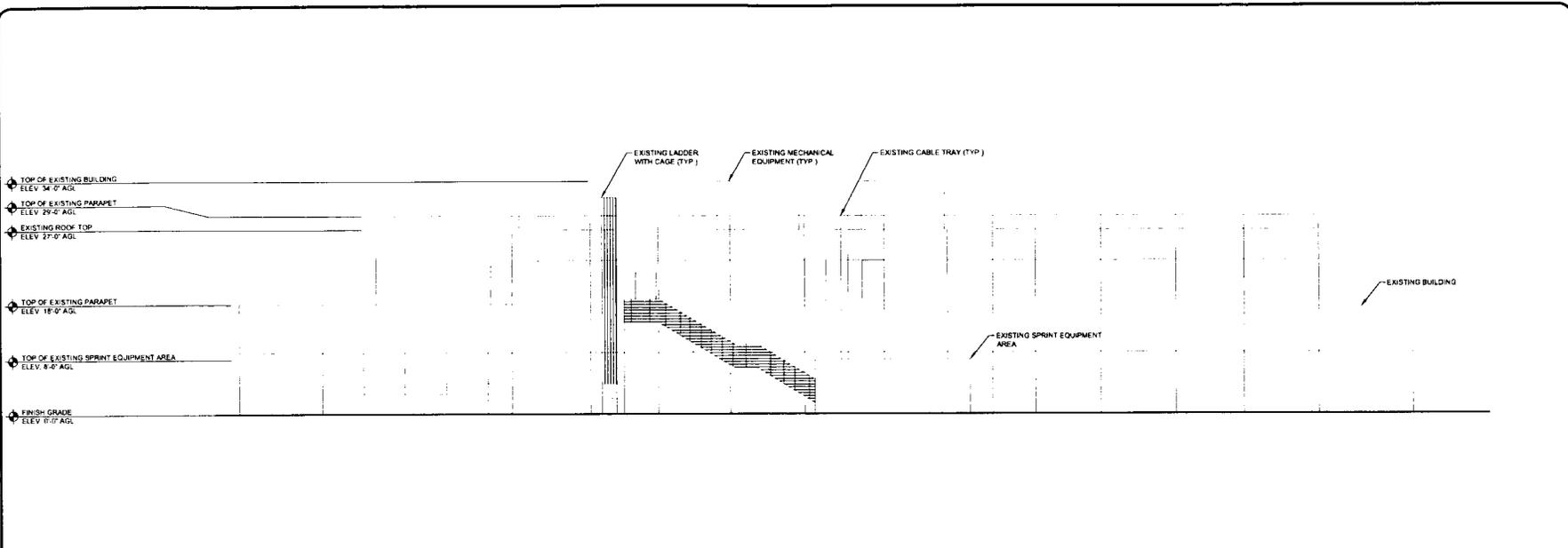
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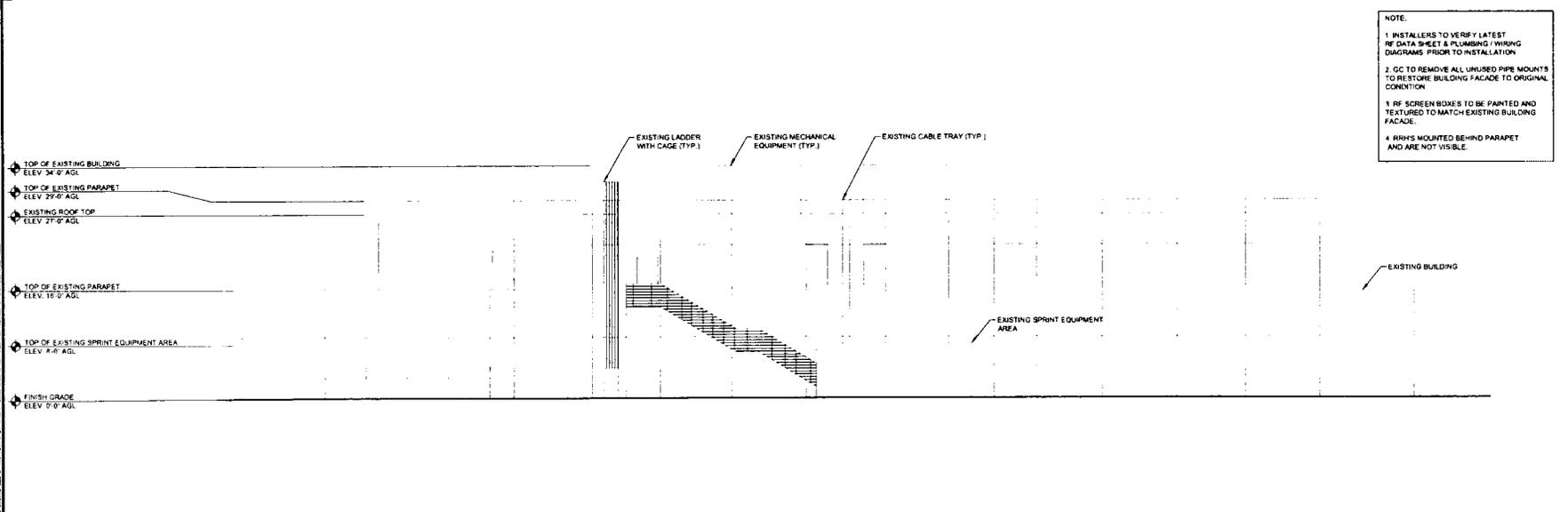


SHEET TITLE:
SOUTHWEST ELEVATIONS

SHEET NUMBER: **A-6** REVISION: **0**



EXISTING SOUTHEAST ELEVATION SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17) **1**



FINAL SOUTHEAST ELEVATION SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17) **2**



PLANS PREPARED BY:



SAN DIEGO MARKET OFFICE
5473 KEARNY VILLA RD. STE. 300
SAN DIEGO, CA 92123

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PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
OTAY WATER DISTRICT OFFICE (8P)
SD34XC534
2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977

ISSUE DATE:

04/11/2013

ISSUED FOR:

FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
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LICENSURE:



SHEET TITLE:

SOUTHEAST ELEVATIONS

SHEET NUMBER:

A-7

REVISION:

0



PLANS PREPARED BY:

Technology Associates

SAN DIEGO MARKET OFFICE
5473 KEARNY VILLA RD. STE. 300
SAN DIEGO, CA 92123

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**OTAY WATER DISTRICT
OFFICE (8P)
SD34XC534**
2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977

ISSUE DATE:

04/11/2013

ISSUED FOR:

FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
0	04/11/13	ISSUED FOR FIELD SET	AC

LICENSURE:



SHEET TITLE:

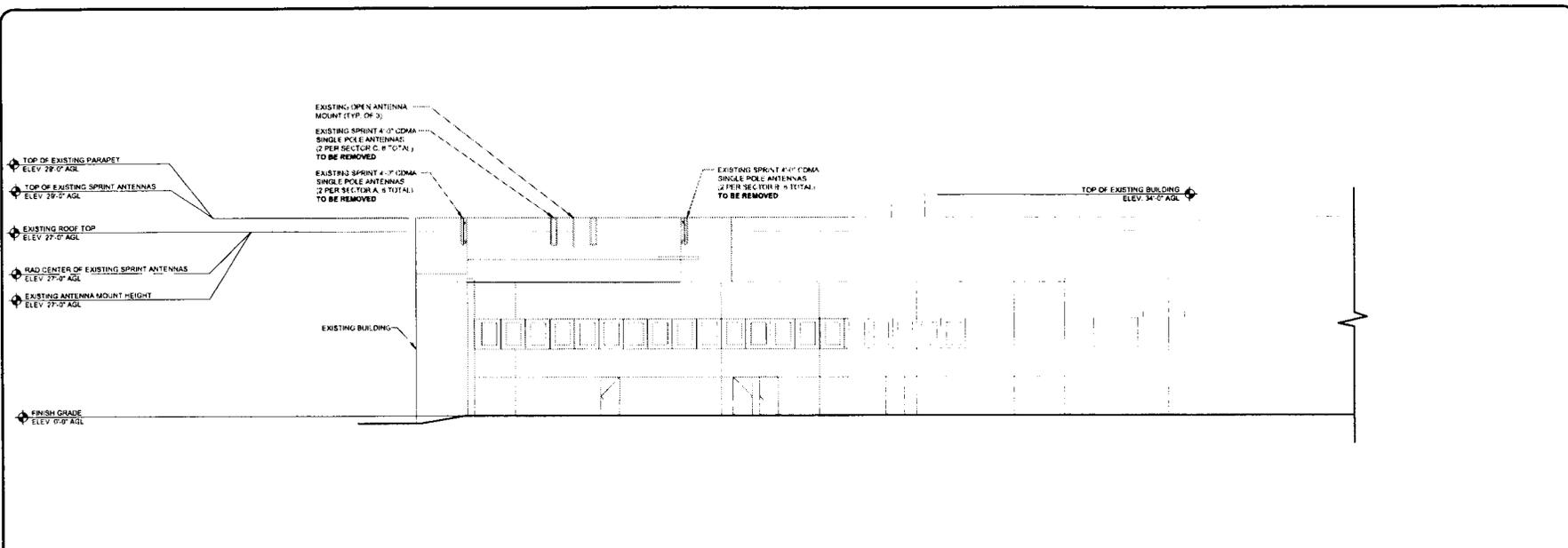
**NORTHWEST
ELEVATIONS**

SHEET NUMBER:

A-8

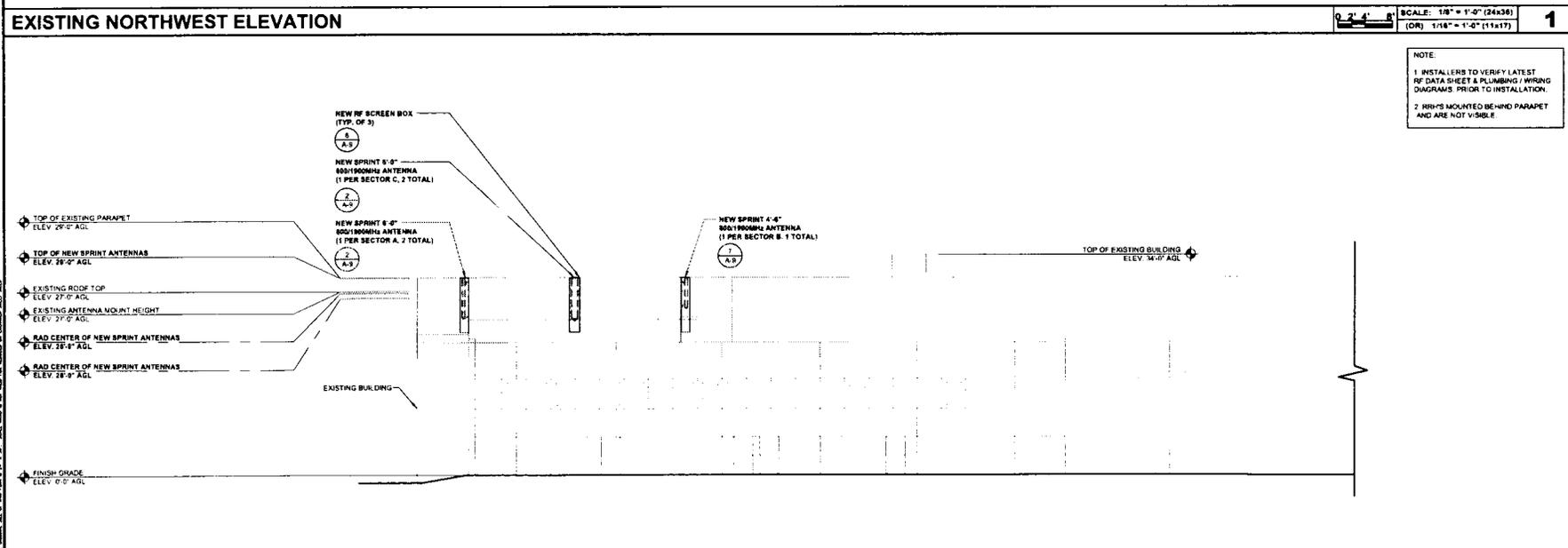
REVISION:

0



SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17)

1



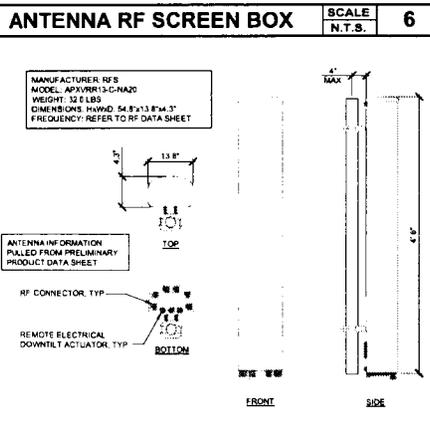
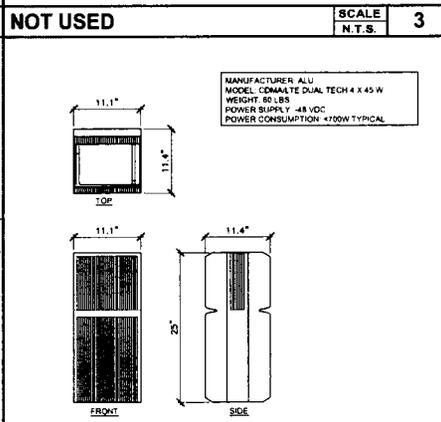
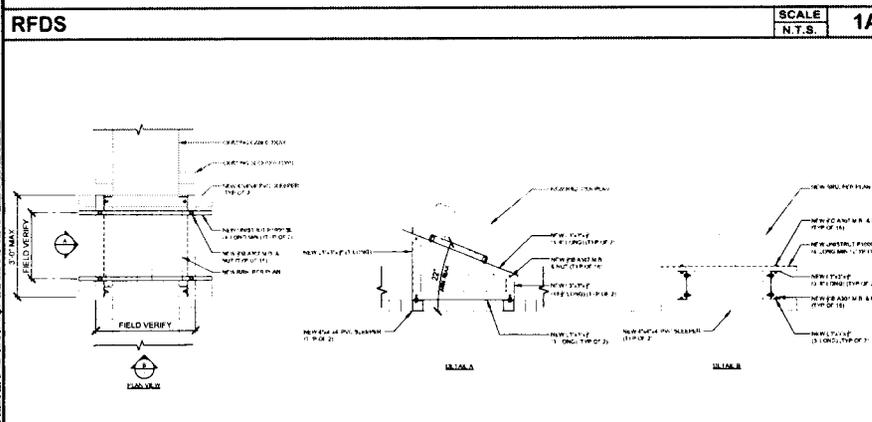
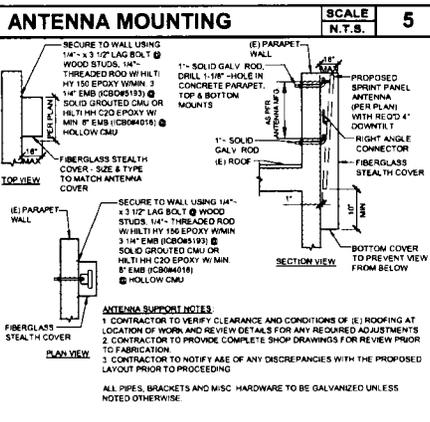
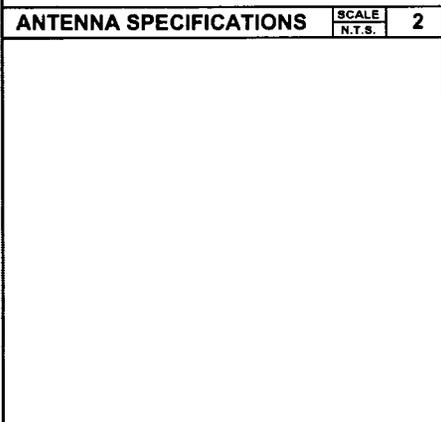
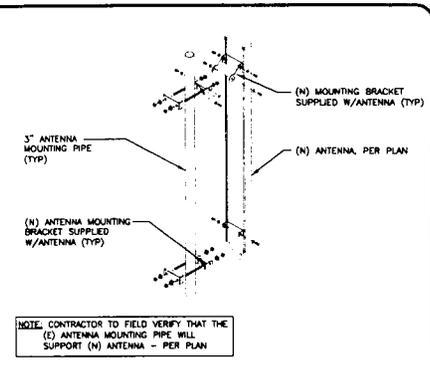
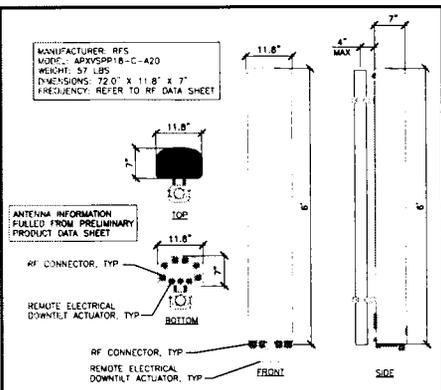
NOTE:

1. INSTALLERS TO VERIFY LATEST RF DATA SHEET & PLUMBING / WIRING DIAGRAMS PRIOR TO INSTALLATION.
2. RINNS MOUNTED BEHIND PARAPET AND ARE NOT VISIBLE.

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17)

2

Market/Site Design Case# 1015034XC534			
	SECTOR 1	SECTOR 2	SECTOR 3
1900MHz Sector Present	No	No	No
1900MHz Adjunct	60	230	330
1900MHz No. of Antennas	1	26.1	26.1
1900MHz Adjunct (ft)	26.1	87.5	26.1
1900MHz Antenna Make	RFS	RFS	RFS
1900MHz Antenna Model	APXVSR18-C-A20	APXVSR13-C-NA20	APXVSR18-C-A20
1900MHz Horizontal Beamwidth	45	67	45
1900MHz Vertical Beamwidth	5.5	7	5.5
1900MHz Antenna Height (ft)	4	4.6	4
1900MHz Antenna Gain (dBi)	15.9	15.4	15.9
1900MHz E-tilt	0	0	0
1900MHz M-Tilt	0	0	0
1900MHz Carrier Forecast Year 2013	3	3	3
1900MHz RRH Manufacturer	ALU	ALU	ALU
1900MHz RRH Model	RRH 1900 4K45 05MHz	RRH 1900 4K45 05MHz	RRH 1900 4K45 05MHz
1900MHz RRH Count	1	1	1
1900MHz RRH Location	Top of the Tower/Pole	Top of the Tower/Pole	Top of the Tower/Pole
1900MHz Combiner Model	No Combiner needed	No Combiner needed	No Combiner needed
1900MHz Top Jumper #1 Length (RRH or Combiner-to-Antenna, ft)	10	10	10
1900MHz Top Jumper #1 Cable Model (RRH or Combiner-to-Antenna)	LCF12-50J	LCF12-50J	LCF12-50J
1900MHz Top Jumper #2 Length (RRH to Combiner, ft)	N/A	N/A	N/A
1900MHz Top Jumper #2 Cable Model (RRH to Combiner)	N/A	N/A	N/A
1900MHz Main Coax Cable Length (ft)	N/A	N/A	N/A
1900MHz Main Coax Cable Model	N/A	N/A	N/A
1900MHz Bottom Jumper #1 Length (Ground-based RRH-OR-Combiner-to-Main-Coax, ft)	N/A	N/A	N/A
1900MHz Bottom Jumper #1 Cable Model (Ground-based RRH-OR-Combiner-to-Main-Coax)	N/A	N/A	N/A
1900MHz Bottom Jumper #2 Length (Ground-based RRH-OR-Combiner-to-Main-Coax)	N/A	N/A	N/A
1900MHz Bottom Jumper #2 Cable Model (Ground-based RRH-OR-Combiner-to-Main-Coax)	N/A	N/A	N/A
800MHz Adjunct	N/A	N/A	N/A
800MHz No. of Antennas	N/A	N/A	N/A
800MHz Adjunct (ft)	N/A	N/A	N/A
800MHz Antenna Make	N/A	N/A	N/A
800MHz Antenna Model	N/A	N/A	N/A
800MHz Horizontal Beamwidth	N/A	N/A	N/A
800MHz Vertical Beamwidth	N/A	N/A	N/A
800MHz Antenna Height (ft)	N/A	N/A	N/A
800MHz Antenna Gain (dBi)	N/A	N/A	N/A
800MHz E-tilt	N/A	N/A	N/A
800MHz M-Tilt	N/A	N/A	N/A
800MHz RRH Manufacturer	N/A	N/A	N/A
800MHz RRH Model	N/A	N/A	N/A
800MHz RRH Count	N/A	N/A	N/A
800MHz RRH Location	N/A	N/A	N/A
800MHz Top Jumper #1 Length (RRH or Combiner-to-Antenna, ft)	N/A	N/A	N/A
800MHz Top Jumper #1 Cable Model (RRH or Combiner-to-Antenna)	N/A	N/A	N/A
800MHz Main Coax Cable Length (ft)	N/A	N/A	N/A
800MHz Main Coax Cable Model	N/A	N/A	N/A
800MHz Bottom Jumper #1 Length (Ground-based RRH-Main-Coax, ft)	N/A	N/A	N/A
800MHz Bottom Jumper #1 Cable Model (Ground-based RRH-Main-Coax)	N/A	N/A	N/A
800MHz Bottom Jumper #2 Length (Ground-based RRH-OR-Combiner-to-Main-Coax)	N/A	N/A	N/A
800MHz Bottom Jumper #2 Cable Model (Ground-based RRH-OR-Combiner-to-Main-Coax)	N/A	N/A	N/A
DATE: 6/26/2012			



RRH ROOF MOUNTING SCALE: N.T.S. 1

1900MHz RRH SPECIFICATIONS SCALE: N.T.S. 4

ANTENNA SPECIFICATIONS SCALE: N.T.S. 7

Sprint

Alcatel-Lucent

PLANS PREPARED BY:

Technology Associates

SAN DIEGO MARKET OFFICE
5473 KEARNY VILLA RD, STE. 300
SAN DIEGO, CA 92123

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OTAY WATER DISTRICT OFFICE (8P)
SD34XC534

2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977

ISSUE DATE:

05/14/2013

ISSUED FOR:

FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
0	05/14/13	ISSUED FOR FIELD SET	AC

LICENSURE:

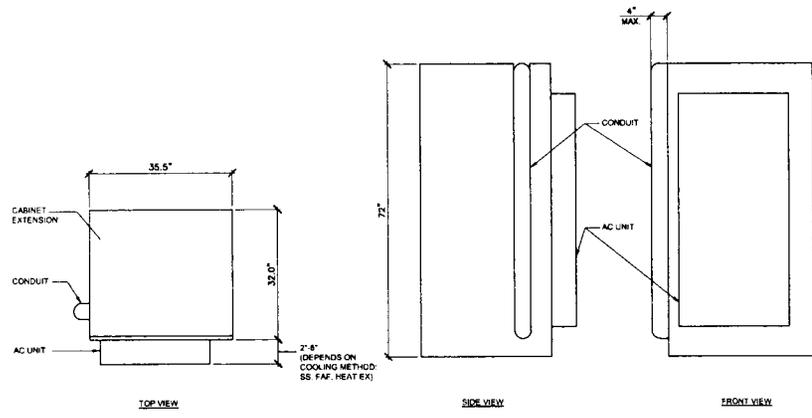
STEVEN L. CHELTON
C 13351
Exp. 12/31/13
STATE OF CALIFORNIA

SHEET TITLE:

ANTENNA DETAILS

SHEET NUMBER: **A-9** REVISION: **0**

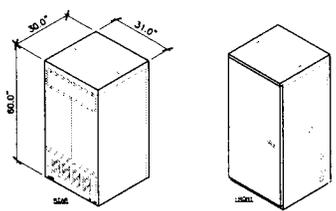
MANUFACTURER: ALCATEL-LUCENT
 MODEL # 9927 & 9928
MAIN CABINET DIMENSIONS:
 HEIGHT: 72"
 WIDTH: 35.5"
 DEPTH: 32"
CABINET EXTENSION DIMENSIONS:
 HEIGHT: 15.5"
 WIDTH: 33.5"
 DEPTH: 25"
ESTIMATED MAX WEIGHT:
 FACTORY: 100 LBS
 UPGRADED: 390 LBS
 FOR MOUNTING SEE:
 (R REF. 1)



9927 & 9928 CABINET

SCALE: N.T.S. 1

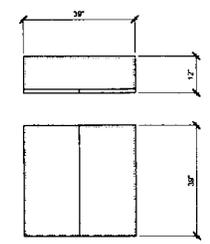
MANUFACTURER: ANDREW (COMMSCOPE)
 MODEL: 80ECV2
CABINET DIMENSIONS:
 HEIGHT: 80 in. (1924 mm)
 WIDTH: 31 in. (787 mm)
 DEPTH: 30 in. (762 mm)
CABINET OPERATING TEMPERATURE RANGE:
 40°C TO 45°C
 FOR MOUNTING SEE:
 (R REF. 1)



BATTERY BACK-UP CABINET

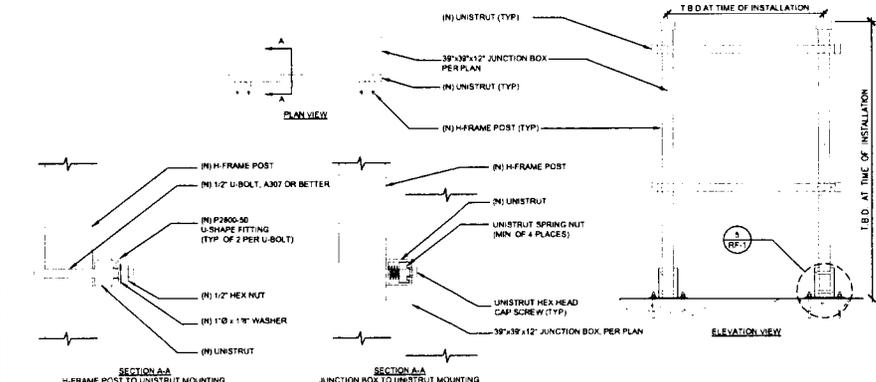
SCALE: N.T.S. 2

MANUFACTURER: TALLEY
 MODEL: TBD
CABINET DIMENSIONS:
 HEIGHT: 29 in.
 WIDTH: 28 in.
 DEPTH: 12 in.
 FOR H-FRAME MOUNTING SEE:
 (R REF. 1)



FIBER JUNCTION BOX

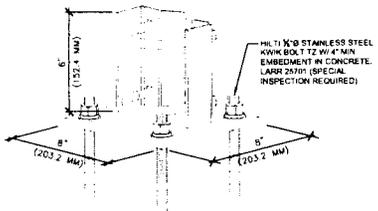
SCALE: N.T.S. 3



(N) JUNCTION BOX MOUNTING TO (N) H-FRAME

SCALE: N.T.S. 4

WB-BS
 BASE SHOE FOR 3-1/2" OD PIPE, HARDWARE INCLUDED
DIMENSIONS:
 WIDTH: 203.2MM | 8.0 IN
 HEIGHT: 152.4MM | 6.0 IN
 LENGTH: 203.2MM | 8.0 IN
 WEIGHT: 8.7KG | 19.2 LB
GENERAL SPECIFICATIONS:
 PRODUCT TYPE: BASE SHOES
 APPLICATION: BASE SHOE
 INCLUDES: HARDWARE | MOUNT
 MATERIAL TYPE: HOT DIP GALVANIZED STEEL
 MOUNTING: PIPE, 88.9 MM (3.5 IN) OD
 PACKAGE QUANTITY: 1



(N) H-FRAME MOUNTING

SCALE: N.T.S. 5



NOTE:
 SPECIAL INSPECTION REQUIRED

CONCRETE BOLTING DETAIL

SCALE: N.T.S. 6

NOT USED

SCALE: N.T.S. 7

NOT USED

SCALE: N.T.S. 8



PLANS PREPARED BY:

Technology Associates
SAN DIEGO MARKET OFFICE
 5473 KEARNY VILLA RD. STE. 300
 SAN DIEGO, CA 92123

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PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
OTAY WATER DISTRICT OFFICE (8P)
SD34XC534
 2554 SWEETWATER SPRINGS BLVD.
 SPRING VALLEY, CA 91977

ISSUE DATE:

04/11/2013

ISSUED FOR:

FIELD SET

REVISIONS

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LICENSURE:



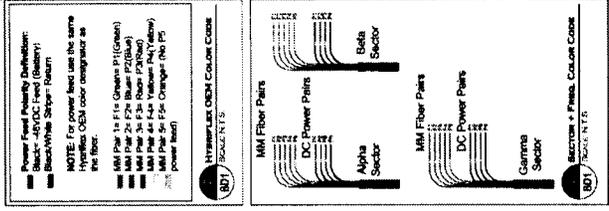
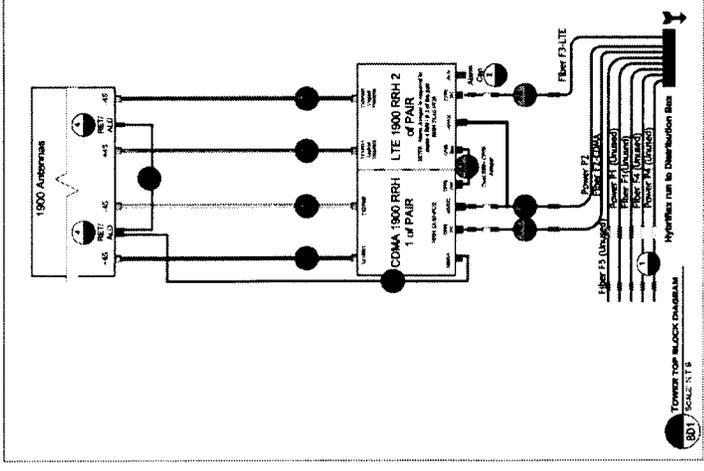
SHEET TITLE:

EQUIPMENT DETAILS

SHEET NUMBER:

REVISION:

A-100



Project Number: 1913240327
 Revision: 1913240327

Sprint
NETWORK VISION
Alcatel-Lucent

NOTES

POWER FEED POLARITY DEFINITION:
 -5S: -48VDC Feed (Battery)
 -5D: Backplane Strip - Return
 -5T: Hydriflex OEM color designator as the fiber.
 -5B: power head

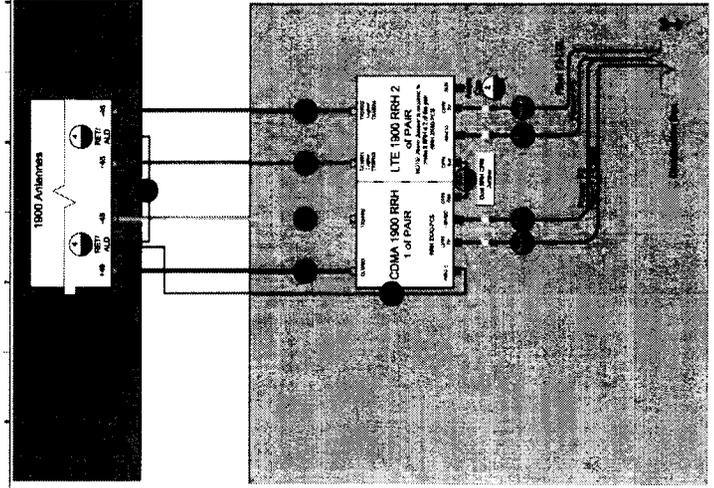
NOTE: For power feed use the same Hydriflex OEM color designator as the fiber.

MM Pair 1a Fits Green: P1 (Green)
 MM Pair 2a Fits Blue: P2 (Blue)
 MM Pair 3a Fits Yellow: P3 (Yellow)
 MM Pair 4a Fits Orange: P4 (Orange)
 MM Pair 5a Fits Red: P5 (Red)

SCENARIO 106, V1.D.V00

SHEET DESCRIPTION: TOWER TOP BLOCK DIAGRAM

SHEET NUMBER: BD1



Project Number: 1913240327
 Revision: 1913240327

Sprint
NETWORK VISION
Alcatel-Lucent

NOTES

POWER FEED POLARITY DEFINITION:
 -5S: -48VDC Feed (Battery)
 -5D: Backplane Strip - Return
 -5T: Hydriflex OEM color designator as the fiber.
 -5B: power head

SCENARIO 106, V1.D.V00

SHEET DESCRIPTION: GROUND MOUNT BLOCK DIAGRAM

SHEET NUMBER: BD2



PLANS PREPARED BY:

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SD34XC534
 2554 SWEETWATER SPRINGS BLVD.
 SPRING VALLEY, CA 91977

ISSUE DATE:

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FIELD SET

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0	04/11/13	ISSUED FOR FIELD SET	AC

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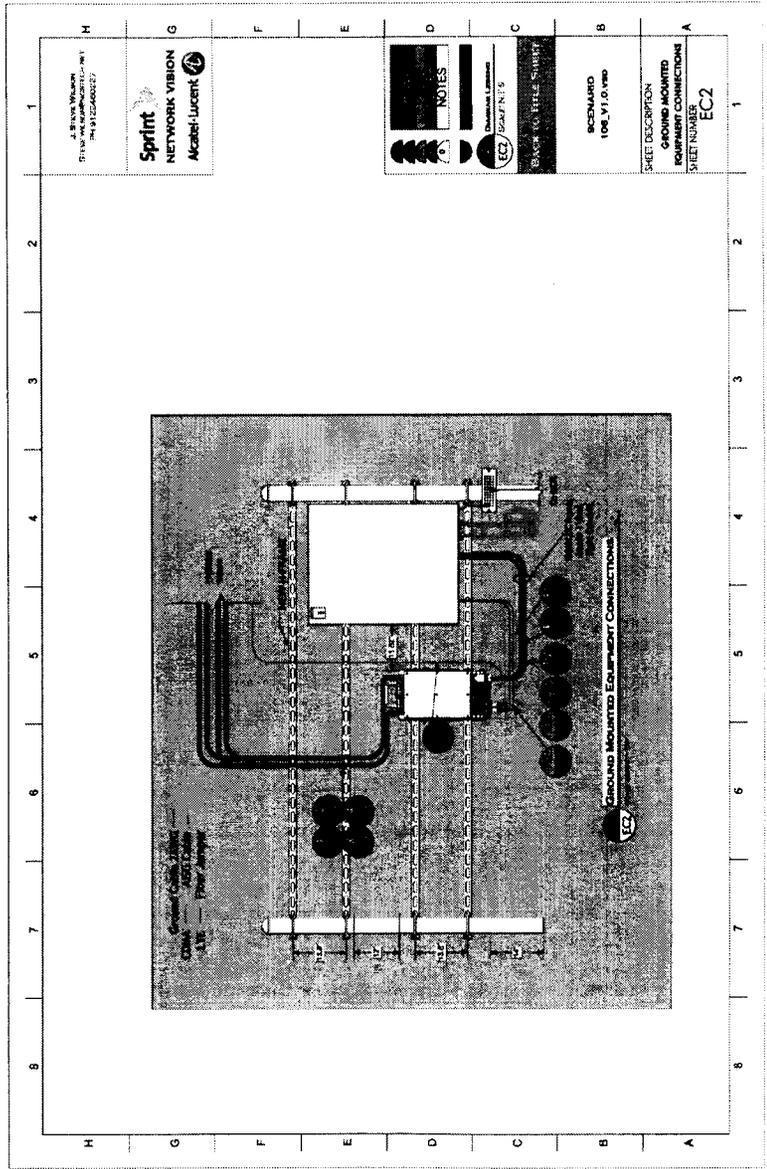
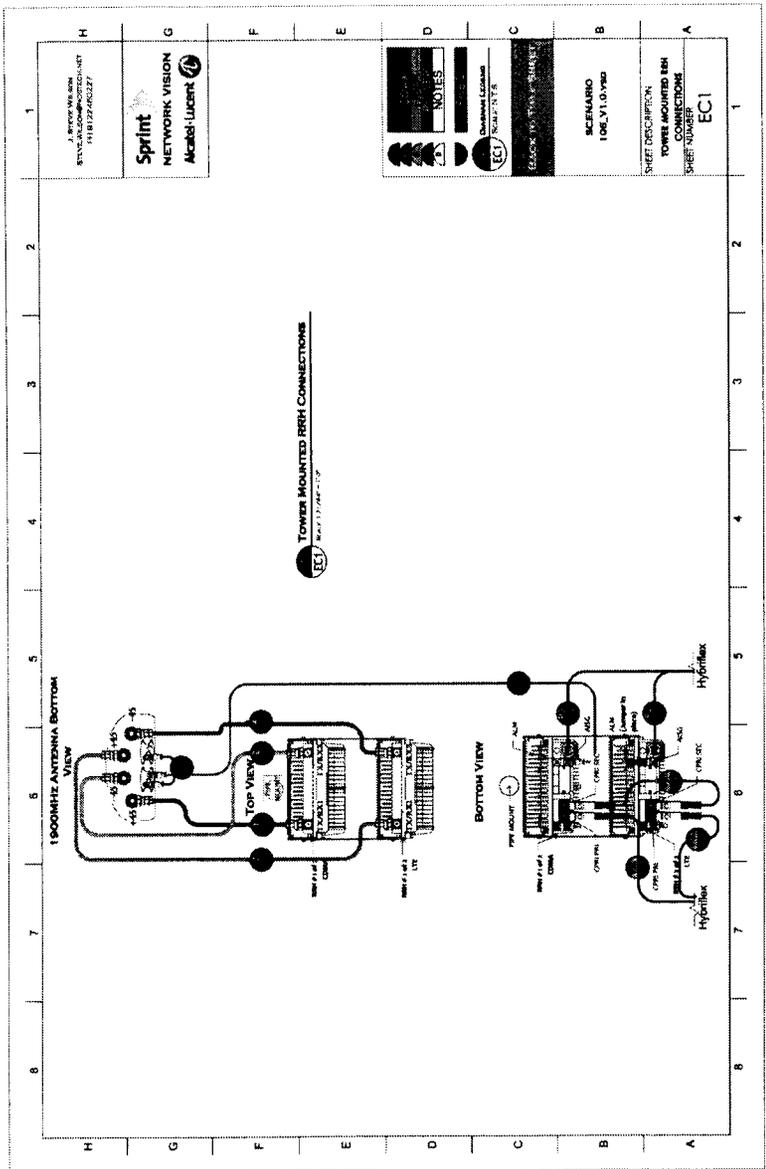
SHEET TITLE:

ANTENNA CONNECTION DIAGRAM

SHEET NUMBER:

A-110

REVISION:



PLANS PREPARED BY:

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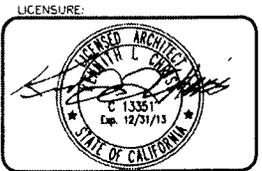
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OTAY WATER DISTRICT OFFICE (8P)
SD34XC534
 2554 SWEETWATER SPRINGS BLVD.
 SPRING VALLEY, CA 91977

ISSUE DATE:
04/11/2013

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FIELD SET

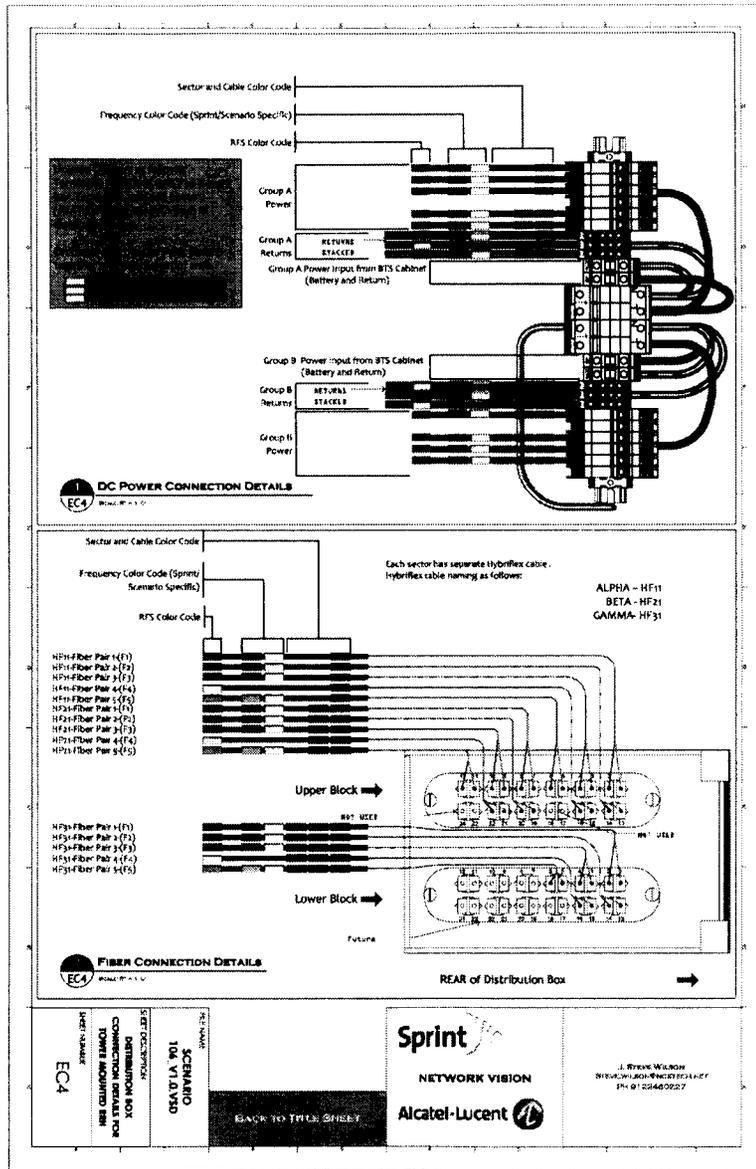
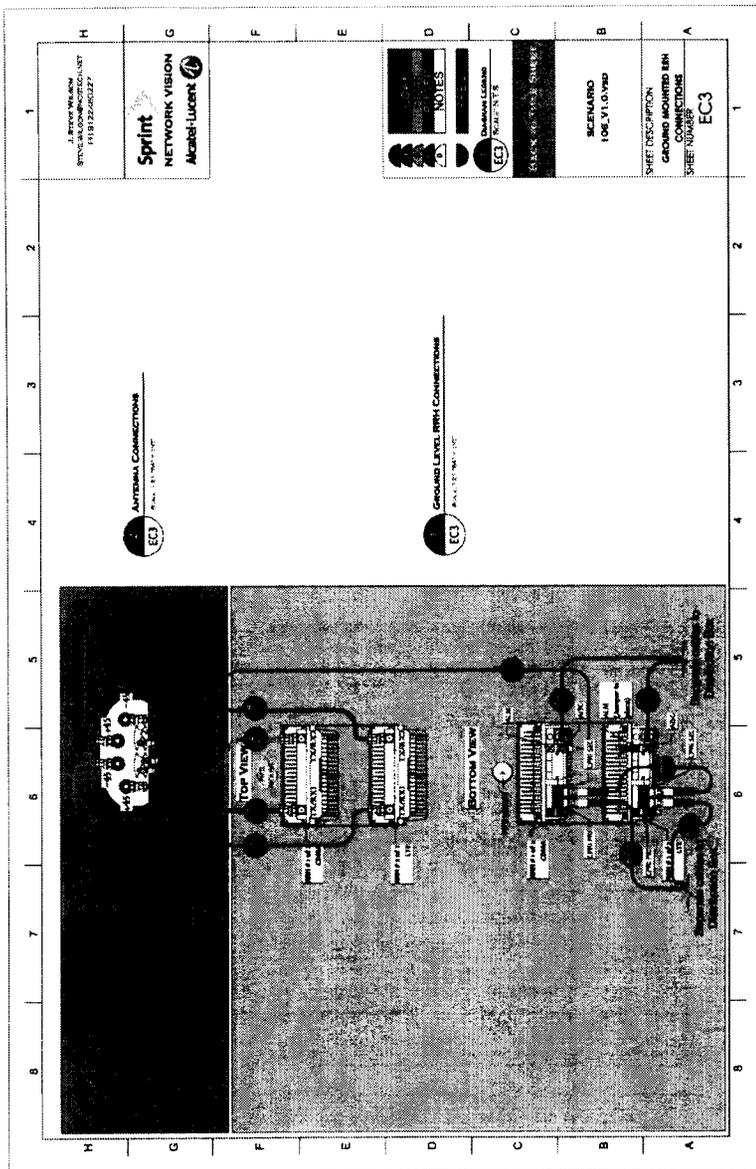
REVISIONS

REV	DATE	DESCRIPTION	BY
0	04/11/13	ISSUED FOR FIELD SET	AC



SHEET TITLE:
ANTENNA CONNECTION DIAGRAM

SHEET NUMBER: **A-120** REVISION:



PLANS PREPARED BY:

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ISSUE DATE:

04/11/2013

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FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
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LICENSURE:



SHEET TITLE:

ANTENNA CONNECTION DIAGRAM

SHEET NUMBER:

REVISION:

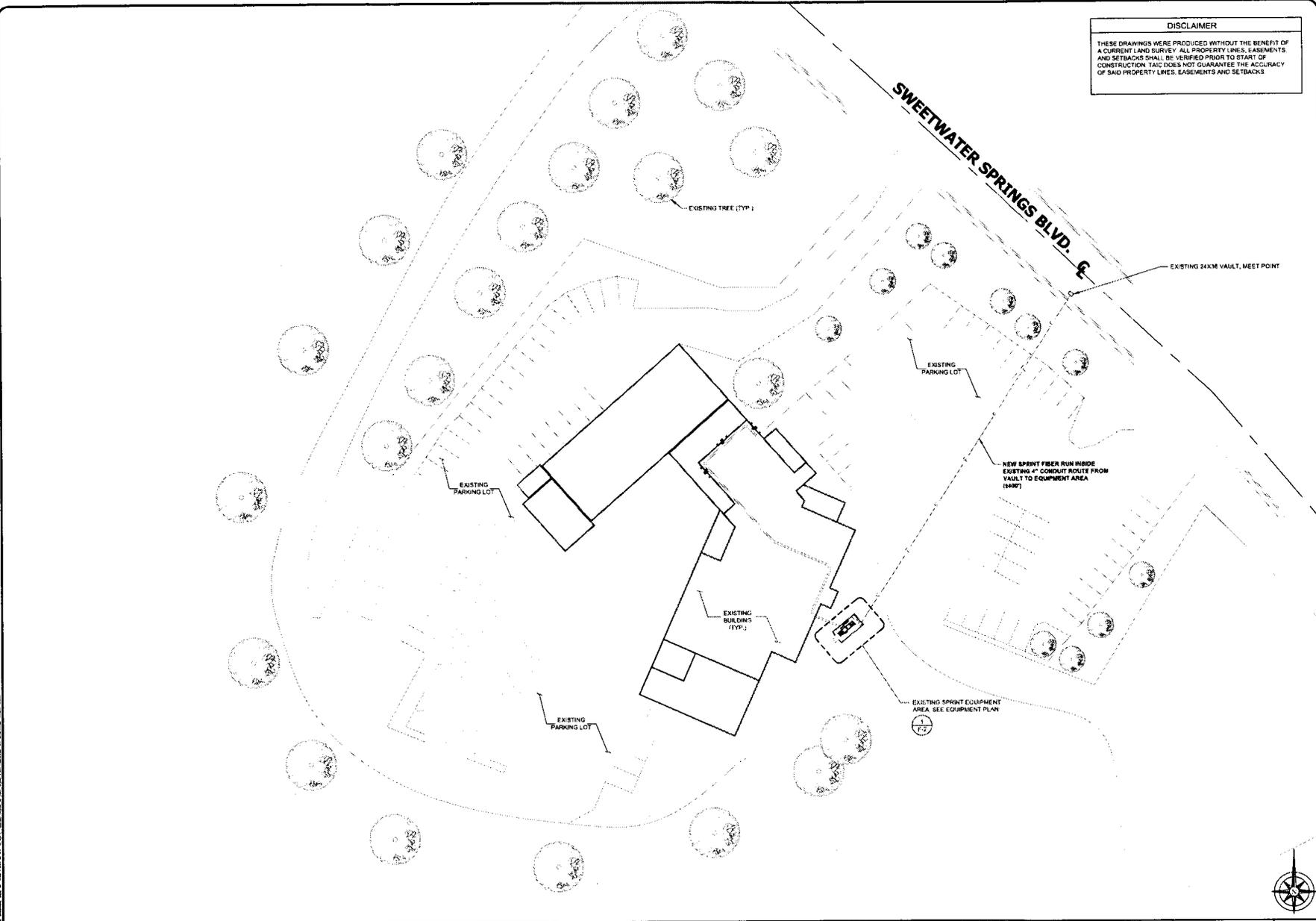
A-130



J. RENE WILSON
REGISTERED PROFESSIONAL ENGINEER
No. 0102462927

BACK TO TITLE SHEET

SCENARIO
100-VT-0-V00
SHEET DESCRIPTION
GROUND MOUNTED RRH DISTRIBUTION BOX
SHEET NUMBER
EC4



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ISSUED FOR:
 FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
0	04/11/13	ISSUED FOR FIELD SET	AC



SHEET TITLE:
FIBER SITE PLAN

SHEET NUMBER: 1 **REVISION:** 0

F-1 0

FIBER SITE PLAN

30' 0 15' 30' SCALE: 1" = 30'-0" (24x36)
 (OR) 1/2" = 30'-0" (11x17) 1



PLANS PREPARED BY:

Technology Associates
SAN DIEGO MARKET OFFICE
5473 KEARNY VILLA RD. STE. 300
SAN DIEGO, CA 92123

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0	04/11/13	ISSUED FOR FIELD SET	AC

LICENSURE:



SHEET TITLE:

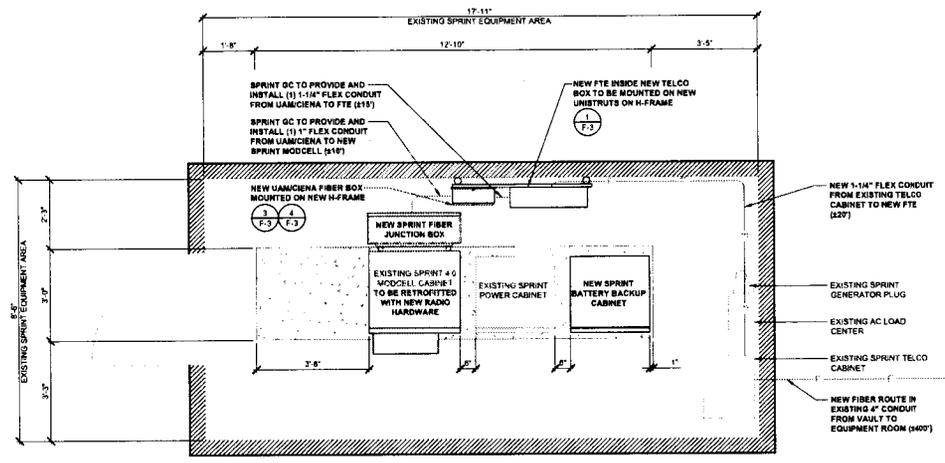
**FIBER EQUIPMENT
PLAN**

SHEET NUMBER:

F-2

REVISION:

0





PLANS PREPARED BY

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SAN DIEGO MARKET OFFICE
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LICENSURE:



SHEET TITLE:

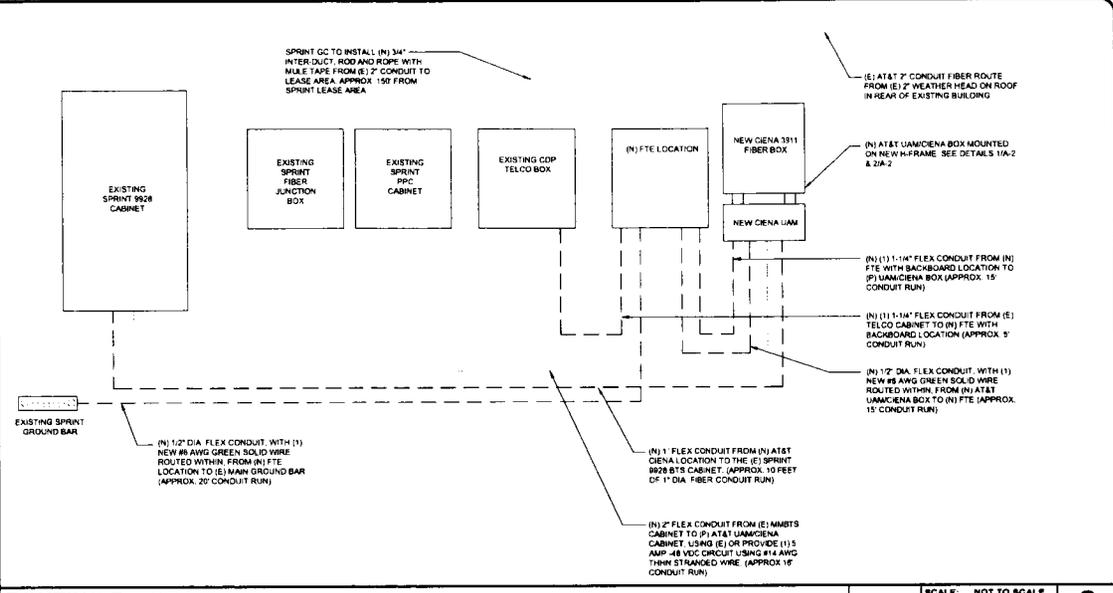
FIBER DETAILS

SHEET NUMBER

F-3

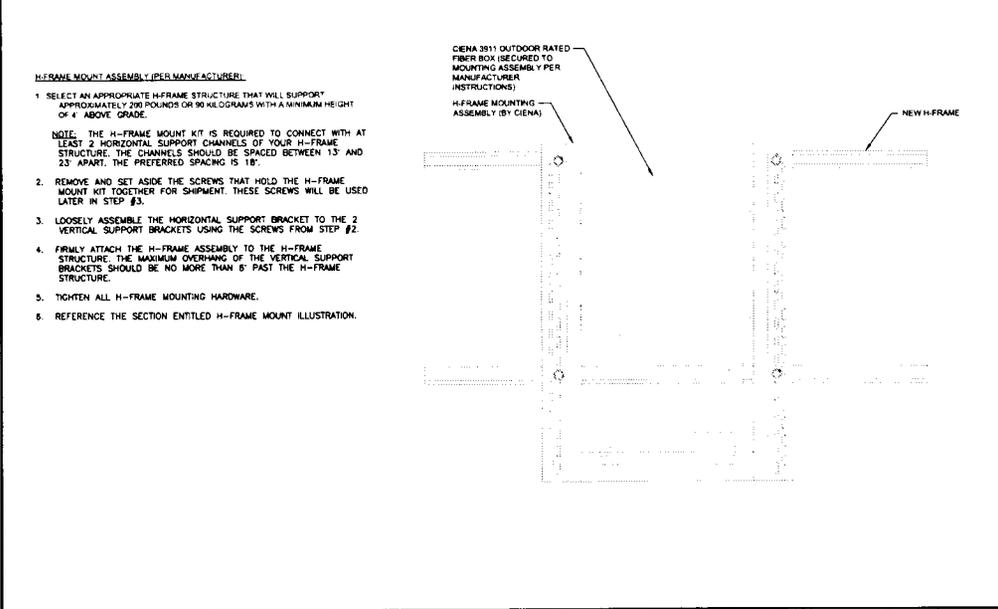
REVISION:

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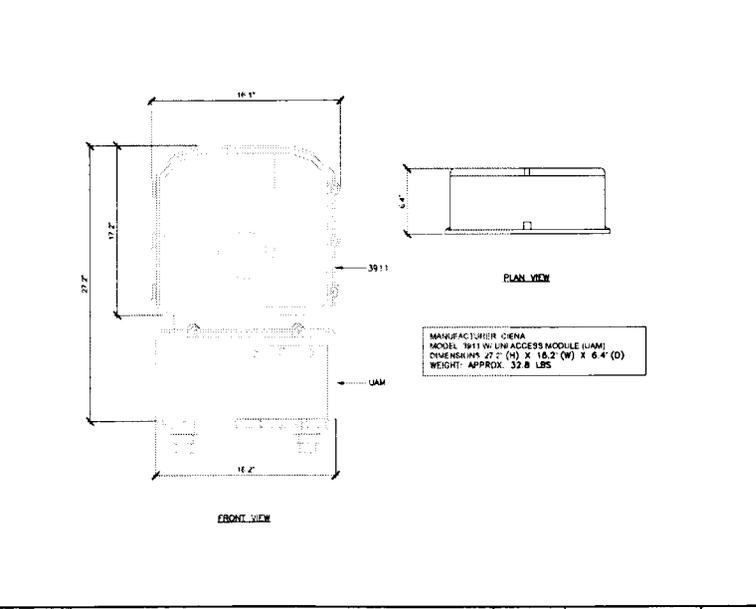


NOT USED N.T.S. SCALE: NOT TO SCALE (OR) NOT TO SCALE **1**

ROUTING DIAGRAM N.T.S. SCALE: NOT TO SCALE (OR) NOT TO SCALE **2**



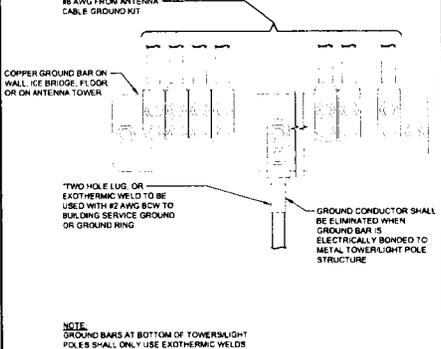
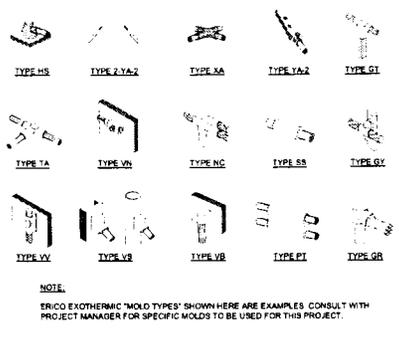
FIBER BOX H-FRAME MOUNTING N.T.S. SCALE: NOT TO SCALE (OR) NOT TO SCALE **3**



FIBER BOX SPECIFICATIONS N.T.S. SCALE: NOT TO SCALE (OR) NOT TO SCALE **4**

ELECTRICAL GROUNDING SPECIFICATIONS

- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE CURRENTLY IN EFFECT FOR THE AUTHORITY HAVING JURISDICTION.
- ALL GROUNDING DEVICE SHALL BE U.L. LISTED FOR THEIR INTENDED USE.
- GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID COPPER UNLESS OTHERWISE NOTED.
- CONNECTIONS OF ALL GROUND WIRES TO THE GROUND RING SHALL BE EXOTHERMIC (CAD-WELDED), UNLESS OTHERWISE NOTED, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AT 4" WIRELESS BROADBAND STANDARDS.
- GROUNDING CONDUCTORS SHALL BE ROUTED ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. WHEN REQUIRED, GROUND LEADS SHALL BE BENT TO A MINIMUM OF 8" RADIUS.
- WHERE GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO THE GROUND RING, INSTALL WIRE IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM CONNECTION POINT TO 5' BELOW GRADE AND SEAL THE TOP WITH SILICONE SEALANT.
- ALL GROUND BARS SHALL BE TINNED 1/4" COPPER SECTOR BARS 2" COLLECTOR AND MGB BARS 4" OF SUFFICIENT LENGTH TO ACCOMMODATE ALL REQUIRED CONNECTIONS WITHOUT DOUBLING LUGS, AND EACH INSTALLED WITH INSULATORS. WHEN CONNECTING GROUND BARS (WITHIN 10 FEET OF GRADE) DIRECTLY TO THE GROUND RING, 2 EA #2 SOLID DOWNLEADS SHALL BE CAD-WELDED TO THE GROUND BAR, 1 AT EACH OPPOSITE BOTTOM CORNER, AND EACH SHALL RUN IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM GROUND BAR DOWN TO THE GROUND RING. WHEN CONNECTING SECTOR GROUND BARS, DASHY-CHAIN THE GROUND BARS AND RUN 1 EA #2 AWG STRANDED COPPER WIRE WITH TWIN INSULATION FROM THE MODEL GROUND BAR TO THE GROUND RING AND CAD-WELD TO THE RING.
- WHEN ATTACHING STRANDED GROUND LEADS TO THE GROUND BARS, 2 HOLE COMPRESSION LUGS SHALL BE USED, PROTECT WITH WEATHERPROOF HEAT SHRINK, AND WITH A THIN COAT OF KPDRS SHIELD OR EQUIVALENT PROPERLY APPLIED AND ATTACHED ONLY WITH STAINLESS STEEL HARDWARE.
- WHEN GROUNDING EQUIPMENT ENCLOSURES, PANELS, FRAMES, AND OTHER METAL APPARATUS, A #8 AWG STRANDED COPPER WIRE WITH WINNSULATION SHALL BE ATTACHED UTILIZING A 2 HOLE COMPRESSION TYPE LUG, PROTECTED WITH WEATHERPROOF HEAT SHRINK, A CLEAN AND CORROSION FREE METALLIC SURFACE UTILIZING STAINLESS STEEL SELF-TAPPING SCREWS AS NOTED IN NOTE 10 BELOW.
- PREPARE ALL BONDING SURFACES FOR GROUND CONNECTIONS BY REMOVING ANY AND ALL PAINT AND CORROSION TO BURN METAL, FOLLOWING CAD-WELDED CONNECTIONS TO NON-COPPER SURFACES APPLY ONE COAT OF ANY ANTI-OXIDIZING PAINT "COLD GALV" OR EQUIVALENT.
- GROUND RODS SHALL BE COPPER CLAD STEEL 5/8"x10", SPACED NO LESS THAN 10' ON CENTER. ERCO BRAND.
- ALL GROUND SYSTEM CONDUCTORS AND CONDUITS SHALL BE SECURED UTILIZING ONLY NONMETALLIC, NON-CONDUCTIVE UV RATED CLAMPS, BRACKET, AND OR SUPPORTS.
- WHEN REQUIRED, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT TESTING FIRM TO VERIFY, UTILIZING A MEGGER TEST, THAT THE RESISTANCE TO EARTH OF THE NEW GROUND SYSTEM IS EQUAL TO OR LESS THAN 8 (OHMS), A COPY OF THE COMPLETE TESTING REPORT SHALL BE PROVIDED TO THE ARCHITECT REPRESENTATIVE.
- ALL MATERIALS AND HARDWARE SHALL BE INSTALLED IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DEFINED IN NFPA-70 AND APPROVED BY A.E.I.
- ALL ANTENNA MOUNTING PIPES MUST BE GROUND TO A BUSH BAR, EACH WITH ITS OWN GROUND LEAD.



NOTES

1 EXOTHERMIC WELDING SCALE N.T.S. **3**

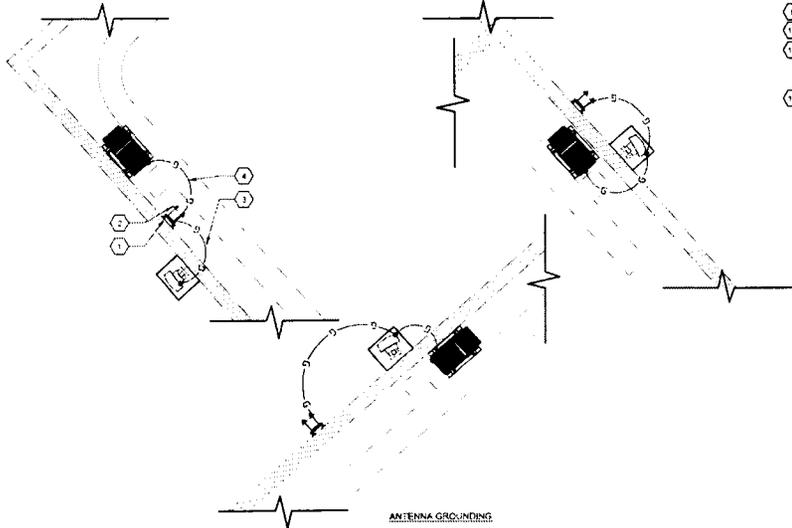
GROUND WIRE CONNECTION SCALE N.T.S. **4**

LEGEND:

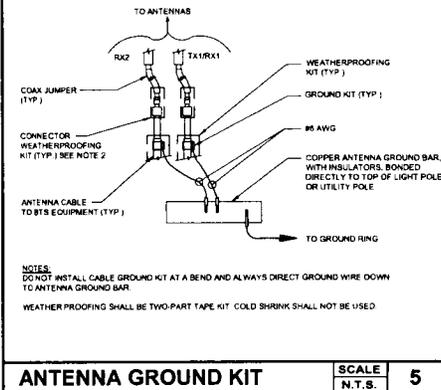
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COPPER GROUND ROD		TEST WELL
	MECHANICAL CONNECTION		GROUND BAR
	EXOTHERMIC WELD (CADWELDED/OTHERWELDED)		SIDE SPLICE CADWELD
	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM		

KEY NOTES:

- ANTENNA GROUND BUSH BAR NEAR ANTENNA MOUNTS WITH COAX GROUND KIT. SEE DETAIL B01 FOR GROUND BAR CONSTRUCTION.
- #8 AWG GROUND FROM ANTENNA GROUND BUSH BAR TO TIE INTO EXISTING EQUIPMENT GROUNDING SYSTEM (TYP OF (2) PLACES).
- #8 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUSH BAR (TYP OF (6)).
- #8 AWG GROUND FROM RRH UNITS TO ANTENNA GROUND BUSH BAR.
- #8 AWG GROUND FROM H-FRAME TO THE INTO EXISTING GROUND BUSH BAR.
- #8 AWG GROUND FROM BRU CABINET TO TIE INTO EXISTING GROUND BUSH BAR.
- EXISTING GROUND BUSH BAR NEAR EQUIPMENT WITH COAX GROUND KIT. SEE DETAIL B01 FOR GROUND BAR CONSTRUCTION.
- #8 AWG GROUND FROM EXISTING GROUND BUSH BAR TO TIE INTO EXISTING ANTENNA GROUNDING SYSTEM (TYP OF (2) PLACES).
- CAD WELD (TYP).
- #8 AWG GROUND FROM FIBER JUNCTION BOX TO THE INTO EXISTING GROUND BUSH BAR.
- GC SHALL VERIFY (2) #8 AWG THIRD GROUND LEADS FROM EACH OF TWO REMOTE INDIVIDUAL BUSES TO BE COLLECTED AT ONE MAIN MGB AND FURTHER ROUTED TO EXISTING BUILDING STEEL OR OTHER EXISTING DESIGNATED BUILDING GROUNDING SYSTEM (FINAL DESIGNATED POINT OF GROUNDING TO BE COORDINATED BETWEEN CM, GC AND BUILDING OWNER).
- #2 AWG GROUND FROM MODEL CABINET TO TIE INTO EXISTING GROUND BUSH BAR.



FINAL ANTENNA GROUNDING PLAN SCALE: 1/8" = 1'-0" (24x36) SCALE: 1/8" = 1'-0" (11x17) **2**

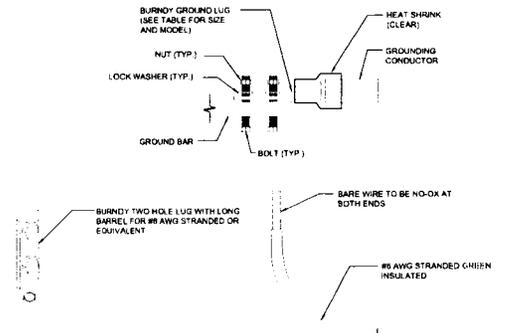


ANTENNA GROUND KIT SCALE N.T.S. **5**

WIRE SIZE	BURNODY LUG	BOLT SIZE
#8 AWG GREEN INSULATED	YA8C-2TC38	3/8" - 18 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 18 NC S 2 BOLT
#2 AWG STRANDED	YA3C-2TC38	3/8" - 18 NC S 2 BOLT
#2 0 AWG STRANDED	YA2B-2TC38	3/8" - 18 NC S 2 BOLT
#4 0 AWG STRANDED	YA2B-2N	1/2" - 18 NC S 2 BOLT

NOTES

- ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
- COPPER SHIELD, ANTI OX, OR NO OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
- ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



MECHANICAL LUG CONNECTION SCALE N.T.S. **6**



PLANS PREPARED BY:

Technology Associates
SAN DIEGO MARKET OFFICE
 5473 KEARNY VILLA RD. STE. 300
 SAN DIEGO, CA 92123

PROPRIETARY INFORMATION

THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO SPRINT ANY USE OR DISSEMINATION OTHER THAN AS IT RELATES TO SPRINT IS STRICTLY PROHIBITED.

PROJECT INFORMATION:

NETWORK VISION MMBTS LAUNCH
OTAY WATER DISTRICT OFFICE (8P)
SD34XC534
 2554 SWEETWATER SPRINGS BLVD.
 SPRING VALLEY, CA 91977

ISSUE DATE:

05/14/2013

ISSUED FOR:

FIELD SET

REVISIONS

REV#	DATE	DESCRIPTION	BY#
0	05/14/13	ISSUED FOR FIELD SET	AC

LICENSURE:



SHEET TITLE:

ANTENNA GROUNDING

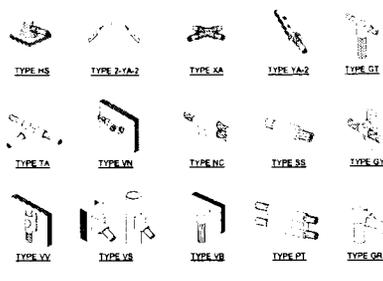
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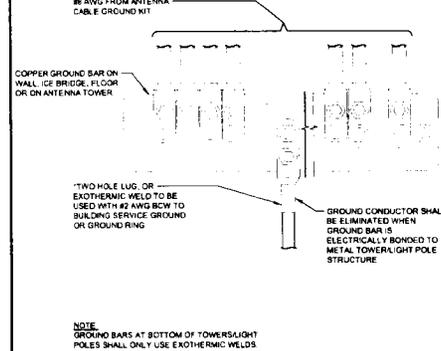
G-1 0

ELECTRICAL GROUNDING SPECIFICATIONS

- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE CURRENTLY IN EFFECT FOR THE AUTHORITY HAVING JURISDICTION.
- ALL GROUNDING DEVICE SHALL BE U.L. LISTED FOR THEIR INTENDED USE.
- GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID COPPER UNLESS OTHERWISE NOTED.
- CONNECTIONS OF ALL GROUND WIRES TO THE GROUND RING SHALL BE EXOTHERMIC (CAD WELDED), UNLESS OTHERWISE NOTED AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ATAT WIRELESS BROADBAND STANDARDS.
- GROUNDING CONDUCTORS SHALL BE ROUTED ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. WHEN REQUIRED, GROUND LEADS SHALL BE BENT TO A MINIMUM OF 90 DEGREES.
- WHERE GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO THE GROUND RING, INSTALL WIRE IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM CONNECTION POINT TO 5' BELOW GRADE AND SEAL THE TOP WITH SILICONE SEALANT.
- ALL GROUND BARS SHALL BE TINNED, 1/4" COPPER SECTOR BARS 2" COLLECTOR AND MGB BARS 4" OF SUFFICIENT LENGTH TO ACCOMMODATE ALL REQUIRED CONNECTIONS WITHOUT DOUBLING LUGS, AND EACH INSTALLED WITH ISOLATORS. WHEN CONNECTING GROUND BARS WITHIN 10 FEET OF GRADE, DIRECTLY TO THE GROUND RING, 2 EA. #2 SOLID DOWNLEADS SHALL BE CAD WELDED TO THE GROUND BAR. AT EACH OPPOSITE BOTTOM CORNER, AND EACH SHALL RUN IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM GROUND BAR DOWN TO THE GROUND RING. WHEN CONNECTING SECTOR GROUND BARS, CHAIN THE GROUND BARS AND RUN IN 1 EA. #2 AWG STRANDED COPPER WIRE WITH THIN INSULATION FROM THE MIDDLE GROUND RING TO THE GROUND RING AND CAD WELD TO THE RING.
- WHEN ATTACHING STRANDED GROUND LEADS TO THE GROUND BARS, 2-HOLE COMPRESSION LUGS SHALL BE USED. PROTECT WITH WEATHERPROOF HEAT SHRINK, AND WITH A THIN COAT OF COPPER SHIELD OR EQUIVALENT PROPERLY APPLIED AND ATTACHED ONLY WITH STAINLESS STEEL HARDWARE.
- WHEN GROUNDING EQUIPMENT ENCLOSURES, PANELS, FRAMES, AND OTHER METAL APPARATUS, A #8 AWG STRANDED COPPER WIRE WITH WINSULATION SHALL BE ATTACHED UTILIZING A 2-HOLE COMPRESSION TYPE LUG, POTECTED WITH WEATHERPROOF HEAT SHRINK, A CLEAN AND CORROSION FREE METALLIC SURFACE UTILIZING STAINLESS STEEL SELF-TAPPING SCREWS AS NOTED IN NOTE 10 BELOW.
- PREPARE ALL BONDING SURFACES FOR GROUND CONNECTIONS BY REMOVING ANY AND ALL PAINT AND CORROSION TO SHINY METAL, FOLLOWING: CAD WELDED CONNECTIONS TO NON-COPPER SURFACES, APPLY ONE COAT OF ANY ANTI-OXIDIZING PAINT, "COLD GALV" OR EQUIVALENT.
- GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8"x10", SPACED NO LESS THAN 10' ON CENTER - ERICO BRAND.
- ALL GROUND SYSTEM CONDUCTORS AND CONDUITS SHALL BE SECURED UTILIZING ONLY NONMETALLIC, NON-CONDUCTIVE, UV RATED CLAMPS, BRACKET, AND/OR SUPPORTS.
- WHEN REQUIRED, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT TESTING FIRM TO VERIFY, UTILIZING A MEGGER TEST, THAT THE RESISTANCE TO EARTH OF THE NEW GROUND SYSTEM IS EQUAL TO OR LESS THAN 5 (OHMS). A COPY OF THE COMPLETE TESTING REPORT SHALL BE PROVIDED TO THE ATAT REPRESENTATIVE.
- ALL MATERIALS AND HARDWARE SHALL BE INSTALLED IN A WORKMAN-LIKE MANNER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND DEFINED IN NFPA70 AND APPROVED BY A N.E.I.
- ALL ANTENNA MOUNTING PIPES MUST BE GROUND TO A BUSS BAR, EACH WITH ITS OWN GROUND LEAD.



NOTE:
ERICO EXOTHERMIC "MIG-DIP" TYPES SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC WELDS TO BE USED FOR THIS PROJECT.



NOTES

1 EXOTHERMIC WELDING

SCALE: 3
N.T.S.

GROUND WIRE CONNECTION

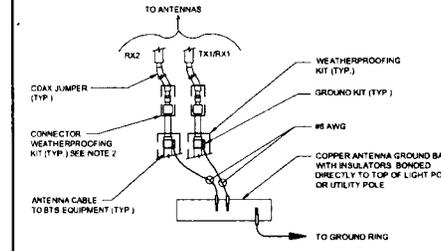
SCALE: 4
N.T.S.

LEGEND:

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COPPER GROUND ROD		TEST WELL
	MECHANICAL CONNECTION		GROUND BAR
	EXOTHERMIC WELD (CAD WELDED/THERMOWELD)		SIDE SPLICE CAD WELD
	FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM		

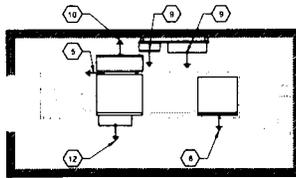
KEY NOTES:

- ANTENNA GROUND BUSS BAR NEAR ANTENNA MOUNTS WITH COAX GROUND KIT. SEE DETAIL #6/1 FOR GROUND BAR CONSTRUCTION.
- #8 AWG GROUND FROM ANTENNA GROUND BUSS BAR TO TIE INTO EXISTING EQUIPMENT GROUNDING SYSTEM (TYP OF (2) PLACES)
- #8 AWG ANTENNA MOUNT GROUND TO ANTENNA GROUND BUSS BAR (TYP OF (8))
- #8 AWG GROUND FROM RRH UNITS TO ANTENNA GROUND BUSS BAR
- #8 AWG GROUND FROM H-FRAME TO TIE INTO EXISTING GROUND BUSS BAR
- #2 AWG GROUND FROM BBU CABINET TO TIE INTO EXISTING GROUND BUSS BAR
- EXISTING GROUND BUSS BAR NEAR EQUIPMENT WITH COAX GROUND KIT. SEE DETAIL #6/1 FOR GROUND BAR CONSTRUCTION.
- #8 AWG GROUND FROM EXISTING GROUND BUSS BAR TO TIE INTO EXISTING ANTENNA GROUNDING SYSTEM (TYP OF (2) PLACES)
- CAD WELD (TYP)
- #8 AWG GROUND FROM FIBER JUNCTION BOX TO TIE INTO EXISTING GROUND BUSS BAR
- GC SHALL VERIFY (2) #8 AWG THIN GROUND LEADS FROM EACH OF TWO REMOTE INDIVIDUAL BUSES TO BE COLLECTED AT ONE MAIN MGB AND FURTHER ROUTED TO EXISTING BUILDING STEEL OR OTHER EXISTING DESIGNATED BUILDING GROUNDING SYSTEM IF FINAL DESIGNATED POINT OF GROUNDING TO BE COORDINATED BETWEEN CM, GC AND BUILDING OWNER.
- #2 AWG GROUND FROM MIDDLE CABINET TO TIE INTO EXISTING GROUND BUSS BAR



ANTENNA GROUND KIT

SCALE: 5
N.T.S.

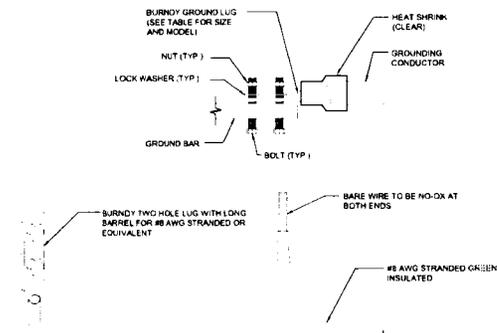


EQUIPMENT GROUNDING

WIRE SIZE	BURNDY LUG	BOLT SIZE
#8 AWG GREEN INSULATED	YA8C-2TC36	3/8" - 16 NC 8.2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC36	3/8" - 16 NC 8.2 BOLT
#2 AWG STRANDED	YA2C-2TC36	3/8" - 16 NC 8.2 BOLT
#2 1/2 AWG STRANDED	YA26-2TC38	3/8" - 16 NC 8.2 BOLT
#4 1/2 AWG STRANDED	YA28-2N	1/2" - 16 NC 8.2 BOLT

NOTES:

- ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
- COPPER WELD, ANTI-OX. OR NO-OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
- ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



FINAL EQUIPMENT GROUNDING PLAN

SCALE: 1/4" = 1'-0" (24x36)
OR 1/8" = 1'-0" (11x17)

2 MECHANICAL LUG CONNECTION

SCALE: 6
N.T.S.



PLANS PREPARED BY:



SAN DIEGO MARKET OFFICE
5473 KEARNEY VILLA RD., STE. 300
SAN DIEGO, CA 92123

PROPRIETARY INFORMATION

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NETWORK VISION MMBTS LAUNCH
OTAY WATER DISTRICT
OFFICE (8P)
SD34XC534
2554 SWEETWATER SPRINGS BLVD.
SPRING VALLEY, CA 91977

ISSUE DATE:

04/11/2013

ISSUED FOR:

FIELD SET

REVISIONS

REV	DATE	DESCRIPTION	BY
0	04/11/13	ISSUED FOR FIELD SET	AC



SHEET TITLE:

EQUIPMENT GROUNDING

SHEET NUMBER:

REVISION:

G-1A 0