NEW EXPRESS CARWASH DEVELOPMENT

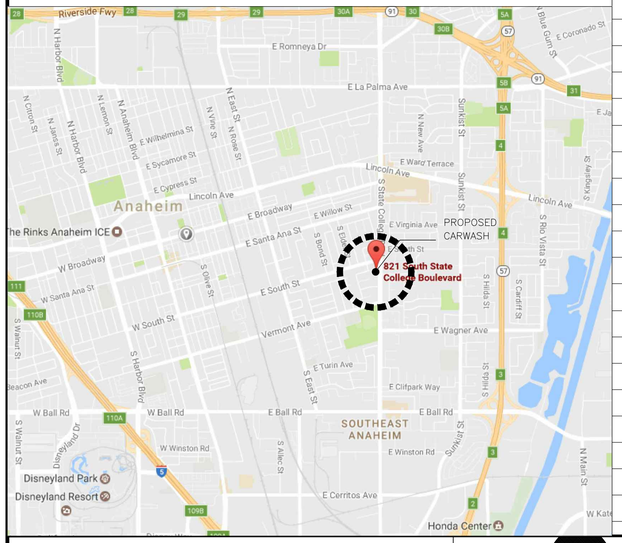
821 S. STATE COLLEGE BLVD., ANAHEIM, CA. 92806

PROJECT INFORMATION

- PROJECT: NEW CARWASH & COMMERCIAL BDLG.
- PROJECT ADDRESS: 821 S. STATE COLLEGE BLVD. ANAHEIM, CA 92806
- OWNER: ADAM NASRY 9242 WALKER ST. SUITE A CYPRESS, CA 90630
- APPLICANT: LEEDCO ENGINEERS, INC 3870 BALDWIN AVE. EL MONTE, CA 91731
- ZONING: CG
- APPLICABLE CODE: 2016 CBC WITH LOCAL AMENDMENTS
- APN: 251-011-06
- FLOOD ZONE: X

- LOT AREA: 23,762 S.F.
- BLDG HEIGHT: 30'-0"
- NO. OF STORY: 1-STORY
- FIRE SPRINKLER : NOT REQUIRED PER CBC 903.2
- BUILDING AREA: 2,407 S.F.
  CARWASH TUNNEL : 1,980 S.F.
  OFFICE/CONTROL : 288 S.F.
  TOILET/VENDING : 138 S.F.
- LANDSCAPE AREA: 3,490 S.F.
- PARKING PROVIDED:
  STANDARD ____ 15
  HANDICAP :____ 01
  EMPLOYEE PARKING ____ 02
  T O T A L 18

VICINITY MAP



SHEET INDEX

GENERAL NOTES

1. SEPERATE PERMIT REQUIRED FOR SIGNS, FIRE SPRINKLER SYSTEM, ELECTRICAL, MECHANICAL, PLUMBING AND DEMOLITION OF (E)CMU WALL. SEPARATE PERMIT FROM B.O.E. IS REQUIRED FOR SIDEWALK AND DRIVEWAY.
2. DOUBLE STRIPING OF STALLS SHALL BE PER FIG. 7 OF THE CITY OF LA BLD'G DEPT. STANDARD.
3. THE CONSTRUCTION SHALL NOT RESTRICT A FIVE FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
4. AN APPROVED SEISMIC GAS SHUT OFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWN STREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING. (PER ORD. 170,108) (INCLUDES COMMERCIAL ADDITIONS AND TI WORK OVER $100,000.) SEPARATE PLUMBING PERMIT IS REQUIRED.
5. PROVIDE ULTRA FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR LOW WATER CONSUMPTION.
6. A COPY OF EVALUATION REPORT AND/ OT CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE.
7. FLOOR OR LANDING ON EACH SIDE OF DOORS TO HAVE THE SAME ELEVATIONS. LANDINGS SHALL BE LEVEL EXCEPT FOR EXTERIOR LANDINGS (MAX. 20% SLOPE)
8. LANDING WIDTH AT DOORS MUST HAVE A MIN. CLEAR DIMENSION OF DOOR SERVED. MIN. LENGTH OF SUCH LANDINGS 48":
9. EGRESS THROUGH INTERVENING SPACE IS NOT ALLOWED TO GO THROUH;(1004.2)
   a. DIFFERENT TENANT SPACE OR DWELLING UNITS.
   b. A MORE HAZARDOUS OCCUPANCY.
   c. COMMERCIAL KITCHENS.
   d. STORAGE ROOMS, CLOSETS OR SIMILAR SPACES.
10. FIRE BLOCKING MUST BE PROVIDED IN ACCORDANCE WITH SECTION 717 AT THE FOLLOWING LOCATIONS;
    a. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS.
    b. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT 10-FOOT INTERVALS ALONG THE LENGTH OF THE WALL.
    c. AT ALL INTER CONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILING.
    d. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALL UNDER THE STAIRS IS UNFINISHED.
    e. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NONCOMBUSTIBLE MATERIALS.
11. WATER HEATER MUST BE STRAPPED TO WALL.
12. GLAZING IN HAZARDOUS LOCATIONS SHALL BE TEMPERED.
    a) INGRESS AND EGRESS DOORS
    b) PANELS IN SLIDING OR SWINGING DOORS
    c) DOORS AND ENCLOSURE FOR HOT TUB, BATH TUBS, SHOWERS (ALSO GLAZING IN WALL ENCLOSING THESE COMPARTMENTS WITHIN 5' OF STANDING SURFACE.
    d) IF WITHIN 2' VERTICAL EDGE OF CLOSED DOOR AND WITHIN 5' OF STANDING SURFACE.
    e) IN WALL ENCLOSING STAIRWAY LANDING
    f) GUARDS AND HANDRAILS
13. SMOKE AND FIRE DAMPERS MUST BE INSTALLED IN THE FOLLOWING LOCATIONS PER SECTIONS 717.5
    a. DUCT PENETRATIONS OF FIRE WALLS IN ACCORDANCE TO SECTION 717.1
    b. DUCT OPENINGS IF FIRE BARRIERS, EXCEPT EXIT ENCLOSURES AND EXIT PASSAGEWAYS WHERE THEY ARE NOT ALLOWED TO PENETRATE. (717.5.2)
    c. DUCT PENETRATING SHAFTS. (717.5.3)
    d. DUCTS PENETRATING FIRE PARTITIONS AND FIRE-RATED CORRIDOR WALLS. SEE EXCEPTION FOR STEEL DUCT WITH NO OPENINGS INTO CORRIDOR.(717.5.4.)
    e. DUCTS PENETRATING SMOKE BARRIERS (717.5.5)
    f. DUCTS PENETRATING HORIZONTAL ASSEMBLIES (717.6)
14. INTERIOR FINISH MATERIAL APPLIED TO WALL AND CEILINGS SHALL BE TESTED AS SPECIFIED IN SECTION 803. TABLE 803.9 INTERIOR EXIST STAIRWAYS, INTER EXIT RAMPS AND EXIT PASSAGEWAYS: CLASS "A" CORRIDORS AND ENCLOSURES FOR EXIT ACCESS STAIRWAYS AND EXIT ACCESS RAMPS: CLASS "B" ROOMS AND ENCLOSED SPACES : CLASS "C".
15. PERMANENT MARKING SHALL BE PROVIDED FOR LOW EMITTING, FUEL-EFFICIENT, AND CARPOOL/VANPOOL
16. ELECTRIC VEHICLE SUPPLY EQUIPMENT SHALL COMPLY WITH THE FOLLOWING;
    a. A SEPARATE ELECTRICAL PLAN CHECK IS REQUIRED TO VERIFY THE RACEWAY METHOD(S), WIRING SCHEMATICS AND ELECTRICAL CALCULATIONS FOR THE ELECTRICAL CHARGING SYSTEM. THE RACEWAY SHALL NOT BE LESS THAN THE TRADE SIZE 1.
    b. THE ELECTRICAL SYSTEM SHALL HAVE SUFFICIENT CAPACITY TO SIMULTANEOUSLY CHARGE ALL ELECTRIC VEHICLES AT THEIR FULL RATED AMPERAGE.
    c. THE SERVICE PANEL OR SUBPANEL(S) SHALL HAVE SUFFICIENT CAPACITY TO ACCOMMODATE THE REQUIRED NUMBER OF DEDICATED BRANCH CIRCUIT(S) FOR THE FUTURE INSTALLATION OF THE EVSE.
    d. THE SERVICE PANEL OR SUBPANEL(S) CIRCUIT DIRECTORY SHALL IDENTIFY THE RESERVED VERCURRENT PROTECTIVE DEVICE SPACE(S) FOR FUTURE EV CHARGING AS 'EV CAPABLE'. THE RACEWAY TERMINATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS 'EV CAPABLE'."
17. SITE HARDSCAPE SHALL BE UNCOLORED CONCRETE OR PERMEABLE PAVERS.
18. SOLAR ZONE AREA SHALL COMPLY WITH THE FOLLOWING;
    a. DESIGNATE ON THE ROOF PLAN SOLAR ZONE AREA(S) WITH TOTAL AREA EQUAL TO OR GREATER THAN 15% OF THE BUILDING'S ROOF AREA. THE SOLAR ZONE SHALL BE COMPRISED OF AREAS THAT HAVE NO DIMENSION LESS THAN 5 FEET AND EACH AREA SHALL NOT BE LESS THAN
       I. 80 SQ FT FOR ROOF AREAS OF 10,000 SQ FT OR LESS
       II. 160 SQ FT FOR ROOF AREAS OVER 10,000 SQ FT.
    b. THE SOLAR ZONE SHALL BE FREE OF OBSTRUCTIONS AND BE SETBACK AT LEAST TWO TIMES THE HEIGHT OF ANY OBSTRUCTION, INCLUDING BUT NOT LIMITED TO, VENTS, CHIMNEYS, AND EQUIPMENT.
    c. THE SOLAR ZONE SHALL ALLOW FOR A (6-FOOT) (4-FOOT) WIDE CLEAR PERIMETER ACCESS AROUND THE EDGES OF THE ROOF.
    d. PLANS SHALL INDICATE A LOCATION FOR INVERTERS AND METERING EQUIPMENT AND A PATHWAY FOR ROUTING FROM THE SOLAR ZONE TO THE MAIN SERVICE PANEL.
    e. PLANS SHALL INDICATE A PATHWAY FOR ROUTING OF PLUMBING FROM THE SOLAR ZONE TO THE WATER-HEATING SYSTEM.
    f. (5.211.1, ENERGY CODE §110.10, LAFD REQUIREMENT NO.96)
19. A COPY OF THE CONSTRUCTION DOCUMENTS OR A COMPARABLE DOCUMENT INDICATING THE INFORMATION FROM ENERGY CODE SECTION 110.10(B) THROUGH 110.10(C) SHALL BE PROVIDED TO THE OCCUPANT.
20. IRRIGATION CONTROLLER SHALL BE WEATHER OR SOIL BASED.
21. SEPARATE METERS OR SUB METERS SHALL BE PROVIDED FOR OUTDOOR WATER USE.
22. CONSTRUCTION WASTE SHALL BE REDUCED BY 50%. CITY OF LOS ANGELES CERTIFIED HAULER
23. 100% OF EXCAVATED SOIL AND VEGETATION RESULTING FROM LAND CLEARING SHALL BE REUSED OR RECYCLED.
24. TESTING AND ADJUSTMENT IS REQUIRED FOR ALL NEW INSTALLATION OF ANY OF THE FOLLOWING SYSTEMS:
    a. HEATING VENTILATING AND AIR CONDITIONING SYSTEM
       I. MECHANICAL VENTILATION IN RESTROOM ONLY, WITH OCCUPANCY SENSOR
       II. TESTING AND ADJUSTMENT TO BE PERFORMED IN ACCORDANCE WITH NEBB'S STANDARDS FOR TESTING, ADJUSTMENT, AND BALANCING OF ENVIRONMENTAL SYSTEMS (7TH EDITION)
    b. INDOOR AND OUTDOOR LIGHTING AND CONTROLS
       I. INDOOR LIGHTING – LED DOWN LIGHTS WITH DIMMER & PHOTO/OCCUPANCY SENSORS
          OUTDOOR LIGHTING – LED WALL PACK WITH TIME LOCK & PHOTO CONTROL
       II. THE TESTING AND ADJUSTMENT PROCEDURE
          THE INDOOR LIGHTING CONTROLS SHALL BE PERFORMED IN ACCORDANCE WITH TITLE 24 ACCEPTANCE CRITERIA NA7.6.1 & NA7.6.2.3
          THE OUTDOOR LIGHTING CONTROLS SHALL BE PERFORMED IN ACCORDANCE WITH TITLE 24'S ACCEPTANCE CRITERIA NA7.8.1.2
    c. WATER HEATING SYSTEMS
       I. TANKLESS WATER HEATER – EEMAX, INC. MODEL SP3208
       II. THE TESTING AND ADJUSTMENT OF THE SYSTEM
          OPERATION TEST – AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER OPERATION.
          TEMPERATURE READING – 105° ~ 110° AT WATER HEATER OUTLET WITH 0.5 GPM
          LEAK TEST – CHARGE SYSTEM AND TEST FOR LEAKS (RECHECK UNTIL NO LEAKS EXIST)
    d. RENEWABLE ENERGY SYSTEMS : N.A
    e. LANDSCAPE IRRIGATION SYSTEMS
       I. THE TYPES OF IRRIGATORS AND CONTROLLER : WATER OR SOIL BASED
       II. THE TESTING AND ADJUSTMENT PROCEDURE FOR THE IRRIGATION SYSTEM
          PRESSURE TESTS – VERIFY WATER PRESSURE 20~40 psi FOR DRIP IRRIGATION AND ASSURE THERE IS NO WATER LEAKAGE AT VALVES, PIPING, AND SPRINKLER HEADS
          WATER COVERAGE – OBSERVE SPRAY PATTERN AND DISTANCE
          CORRECT PARAMETERS INTO SMART CONTROLLER – VERIFY ZIP CODE, GRASS TYPE, WATER RUN TIME, PERMITTED WATERING DAYS , ETC.
          PROPER CONTROLLER FUNCTION – OBSERVE PROPER START-UP AND SHUT-OFF BY IRRIGATION CONTROLLER
    f. WATER REUSE SYSTEMS
       I. THE GREY WATER OR RECLAIMED/RECYCLED WATER SYSTEM : 2-1,500 GAL CLARIFIER
       II. THE TESTING AND ADJUSTMENT PROCEDURE FOR THE SYSTEM (5.410.4.2, 5.410.4.3) SHALL BE PROVIDED BY LA CITY CERTIFIED AGENCY.
25. HVAC BALANCING.
    IN ADDITION TO TESTING AND ADJUSTING, BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, BALANCE THE SYSTEM IN ACCORDANCE WITH THE PROCEDURES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS; THE NATIONAL ENVIRONMENTAL BALANCING BUREAU PROCEDURAL STANDARDS; ASSOCIATED AIR BALANCE COUNCIL NATIONAL STANDARDS OR AS APPROVED BY THE ENFORCING AGENCY.
26. A FINAL REPORT FOR THE TESTING AND ADJUSTING OF ALL NEW SYSTEMS SHALL BE COMPLETED AND PROVIDED TO THE FIELD INSPECTOR PRIOR TO FINAL APPROVAL. THIS REPORT SHALL BE SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.
27. AN OPERATION & SYSTEMS MANUAL, SHALL BE PROVIDED TO THE OWNER OR REPRESENTATIVE AND TO THE FIELD INSPECTOR AT THE TIME OF FINAL INSPECTION.
28. EXTERIOR NOISE TRANSMISSION, PRESCRIPTIVE METHOD.
    WALL AND ROOF-CEILING ASSEMBLIES EXPOSED TO THE NOISE SOURCE MAKING UP THE BUILDING OR ADDITION ENVELOPE OR ALTERED ENVELOPE SHALL MEET A COMPOSITE STC RATING OF AT LEAST 50 OR A COMPOSITE OITC RATING OF NO LESS THAN 40, WITH EXTERIOR WINDOWS OF A MINIMUM STC OF 40 OR OITC OF 30 IN THE FOLLOWING LOCATIONS:
    1. WITHIN THE 65 CNEL NOISE CONTOUR OF AN AIRPORT.
       EXCEPTIONS:
       1. LCTN OR CNEL FOR MILITARY AIRPORTS SHALL BE DETERMINED BY THE FACILITY AIR INSTALLATION COMPATIBLE LAND USE ZONE (AICUZ) PLAN.
       2. LCTN OR CNEL FOR OTHER AIRPORTS AND HELIPORTS FOR WHICH A LAND USE PLAN HAS NOT BEEN DEVELOPED SHALL BE DETERMINED BY THE LOCAL GENERAL PLAN NOISE ELEMENT.
    2. WITHIN THE 65 CNEL OR LCTN NOISE CONTOUR OF A FREEWAY OR EXPRESSWAY, RAILROAD, INDUSTRIAL SOURCE OR FIXED-GUIDEWAY SOURCE AS DETERMINED BY THE NOISE ELEMENT OF THE GENERAL PLAN.
    NOISE EXPOSURE WHERE NOISE CONTOURS ARE NOT READILY AVAILABLE.

    BUILDINGS EXPOSED TO A NOISE LEVEL OF65 DB LEQ-1-HRDURING ANY HOUR OF OPERATION SHALL HAVE BUILDING, ADDITION OR ALTERATION EXTERIOR WALL AND 11 ROOF-CEILING ASSEMBLIES EXPOSED TO THE NOISE SOURCE MEETING A COMPOSITE STC RATING OF AT LEAST 45 (OR OITC 35), WITH EXTERIOR WINDOWS OF A MINIMUM STC OF 40 (OR OITC 30).
29. PERFORMANCE METHOD.
    FOR BUILDINGS LOCATED AS DEFINED IN SECTION 5.507.4.1 OR 5.507.4.1.1, WALL AND ROOF-CEILING ASSEMBLIES EXPOSED TO THE NOISE SOURCE MAKING UP THE BUILDING OR ADDITION ENVELOPE OR ALTERED ENVELOPE 11 SHALL BE CONSTRUCTED TO PROVIDE AN INTERIOR NOISE ENVIRONMENT ATTRIBUTABLE TO EXTERIOR SOURCES THAT DOES NOT EXCEED AN HOURLY EQUIVALENT NOISE LEVEL (LEQ-LHR) OF 50 DBA IN OCCUPIED AREAS DURING ANY HOUR OF OPERATION. 5.507.4.2.1 SITE FEATURES. EXTERIOR FEATURES SUCH AS SOUND WALLS OR EARTH BERMS MAY BE UTILIZED AS APPROPRIATE TO THE BUILDING, ADDITION OR ALTERATION PROJECT TO MITIGATE SOUND I I MIGRATION TO THE INTERIOR. 5.507.4.2.2 DOCUMENTATION OF COMPLIANCE. AN ACOUSTICAL ANALYSIS DOCUMENTING COMPLYING INTERIOR SOUND LEVELS SHALL BE PREPARED BY PERSONNEL APPROVED BY THE ARCHITECT OR ENGINEER OF RECORD.
30. INTERIOR SOUND TRANSMISSION.
    WALL AND FLOOR CEILING ASSEMBLIES SEPARATING TENANT SPACES AND TENANT SPACES AND PUBLIC PLACES SHALL HAVE AN STC OF AT LEAST 40.
    NOTE: EXAMPLES OF ASSEMBLIES AND THEIR VARIOUS STC RATINGS MAY BE FOUND AT THE CALIFORNIA OFFICE OF NOISE CONTROL: http://www.toolbase.org/pdf/casestudies/stc_icc_ratings.pdf.
31. SOUND ATTENUATION MEASURES
    CARWASH FEATURES A CMU EXTENSION ELEMENT THAT WILL DEADEN THE NOISE TRANSMISSION TOWARD THE SENSITIVE RECEPTORS. LIKEWISE AT THE ENTRY, AN EXTENSION IS PROVIDED SHELTERING THE CARWASH OPENING & BLOCKING NOISE TRANSMISSION.
32. NO PERSON SHALL WITHIN THE CITY CREATE ANY SOUND RADIATED FOR EXTENDED PERIODS FROM ANY PREMISES WHICH PRODUCES A SOUND PRESSURE LEVEL AT ANY POINT ON THE PROPERTY LINE IN EXCESS OF SIXTY DECIBELS (RE 0.0002 MICROBAR) READ ON THE A-SCALE OF A SOUND LEVEL METER. READINGS SHALL BE TAKEN IN ACCORDANCE WITH THE INSTRUMENT MANUFACTURER'S INSTRUCTIONS, USING THE SLOWEST METER RESPONSE.

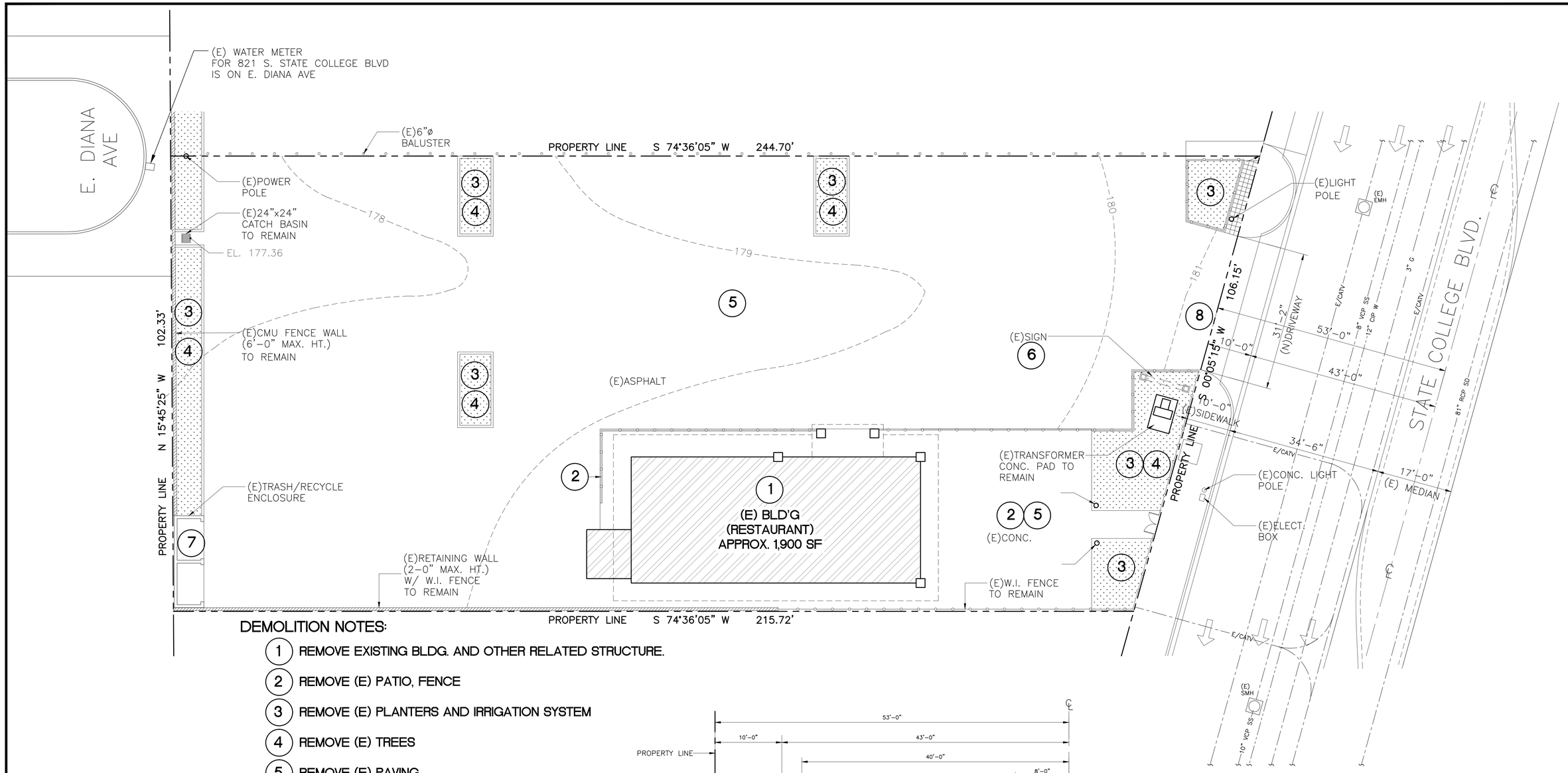
LEEDCO ENGINEERS
STRUCTURES · FOUNDATIONS
3870 BALDWIN AVE., EL MONTE, CA. 91731 (626) 448-7870

TITLE: NEW EXPRESS CAR WASH DEVELOPMENT PROJECT
FOR
OWNER: ADAM NASRY
JOB ADDRESS: 821 S. STATE COLLEGE BLVD., ANAHEIM, CA. 92806

REVISIONS
CITY SUBMITTED 11-08-18

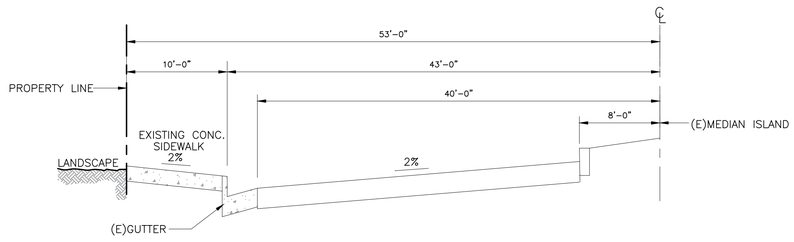
APPROVED BY: C. D. LEE
JOB NO.: 7927
DRAWN BY: H.W.
DATE: 12-07-18

T-1.0



DEMOLITION NOTES:

1. REMOVE EXISTING BLDG. AND OTHER RELATED STRUCTURE.
2. REMOVE (E) PATIO, FENCE
3. REMOVE (E) PLANTERS AND IRRIGATION SYSTEM
4. REMOVE (E) TREES
5. REMOVE (E) PAVING
6. REMOVE (E) SIGN
7. REMOVE (E) TRASH ENCLOSURE
8. (E) PORTION OF DRIVEWAY
9. ABANDON (E) WATER SERVICE IN DIANA AVE. SALVAGE METER TO CITY; CAP SERVICE AT CURB



STANDARD SECTION PROPERTY LINE TO STREET CENTERLINE

SCALE : NTS

REFERENCE BENCHMARK: 1K-30-82
3-3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "1K-30-82" SET IN TOP OF A 6"x6" CONCRETE POST SW'LY CORNER OF THE INTERSECTION OF SOUTH STREET AND STATE COLLEGE BLVD, 21 FT S'LY OF THE CENTERLINE OF SOUTH STREET, 273 FT W'LY OF THE CENTERLINE OF STATE COLLEGE BLVD AND 1 FT S'LY OF CURB FACE. MONUMENT IS UP 0.2 FT ABOVE SIDEWALK.
ELEV NAVD88 177.857 FT

N

EXISTING SITE PLAN AND DEMOLITION PLAN

SCALE : 3/32"=1'-0" | 1

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A-1.0

NEW CARWASH BUILDING DESIGN

POWER NOTES

1. ANAHEIM PUBLIC UTILITIES DEPARTMENT
2. 480V 600 A
3. NEW SWITCH IN 5'x5' BELOW-GRADE VAULT
4. NEW TRANSFORMER ON A 6'x8' PAD

NOISE STUDY NOTES

1. PER AMC SECTION 6.70.010 FURTHER SPECIFIC REQUIREMENTS ARE LISTED SHEET T-1.0 GENERAL NOTE #32

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- ZONING: CG
- APPLICABLE CODE: 2016 CBC WITH LOCAL AMENDMENTS
- APN: 251-011-06
- FLOOD ZONE: X
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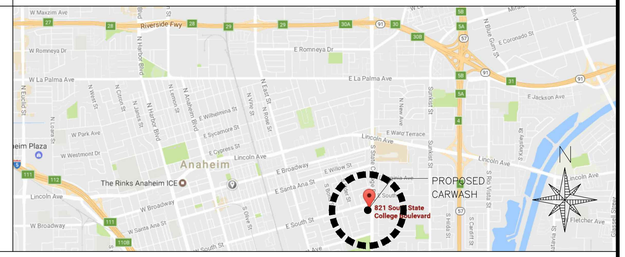
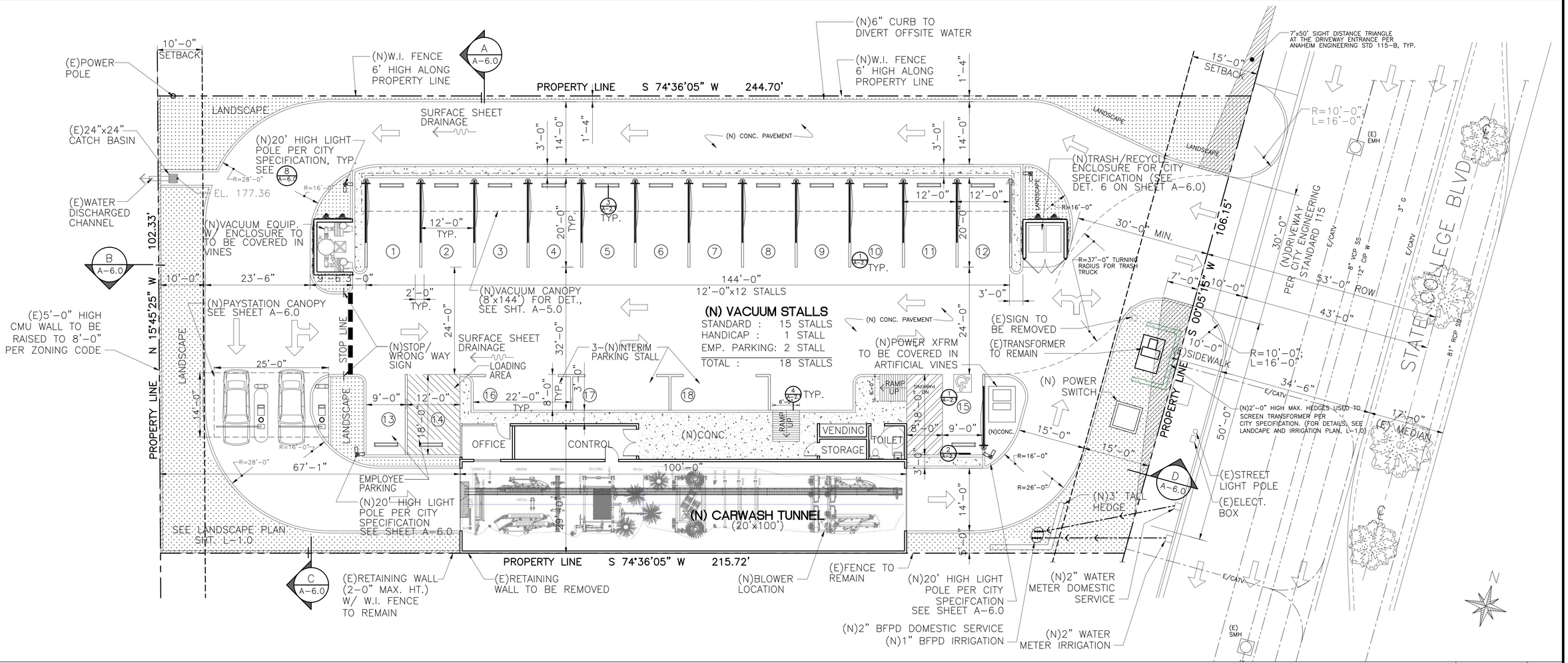
- BLDG HEIGHT: 30'-0"
- NO. OF STORY: 1-STORY
- FIRE SPRINKLER : NOT REQUIRED PER CBC 903.2
- BUILDING AREA: 2,407 S.F.
  - CARWASH TUNNEL : 1,980 S.F.
  - OFFICE/CONTROL : 288 S.F.
  - TOILET/VENDING : 138 S.F.
- LANDSCAPE AREA: 3,490 S.F.
- PARKING PROVIDED:
  - STANDARD ____ 15
  - HANDICAP : ____ 01
  - EMPLOYEE PARKING ____ 02
  - TOTAL 18

LOCATION MAP





PROPOSED SITE PLAN

SCALE : 3/32"=1'-0"

1

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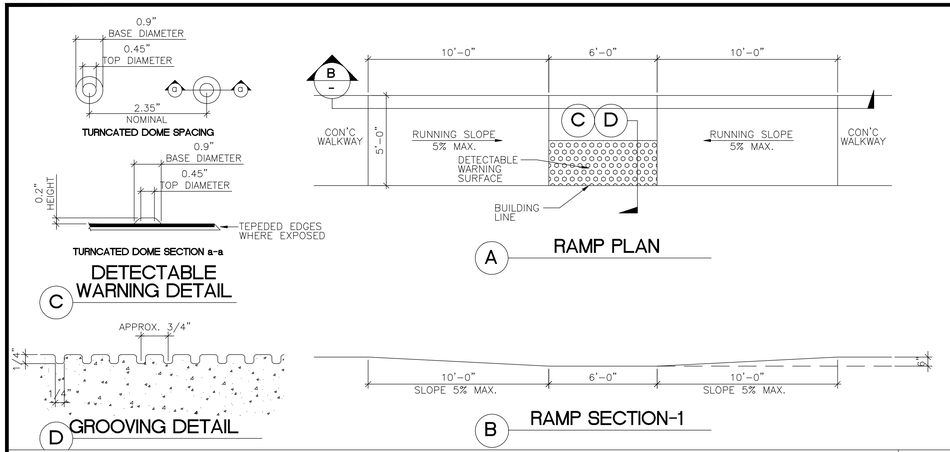
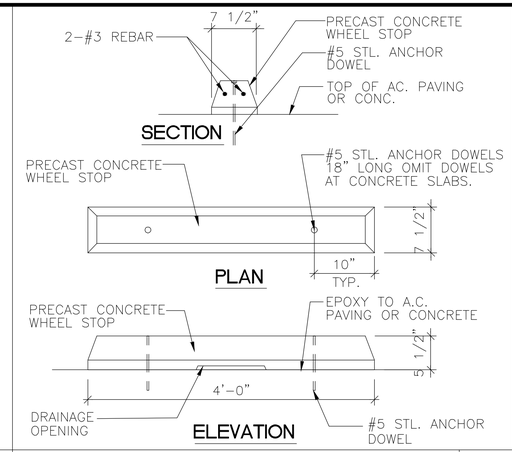
APPROVED BY: C. D. LEE	JOB NO.: 7927
DRAWN BY: H.W.	DATE: 12-04-18

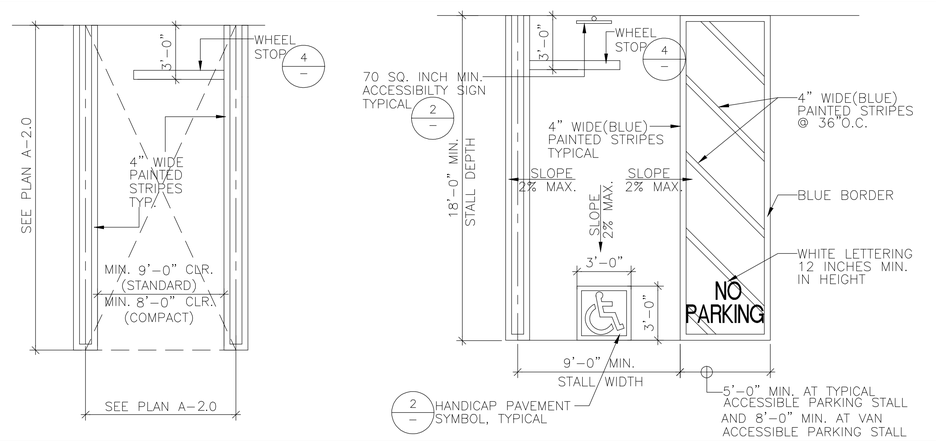
A-2.0



CURB/RAMP/STAIR PLAN DETAIL | 4

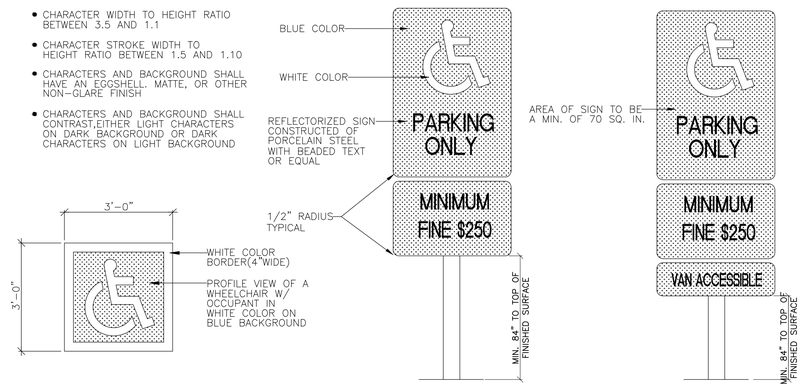


WHEEL STOP DETAIL | 3



PARKING STALL DETAIL | 1

- CHARACTER WIDTH TO HEIGHT RATIO BETWEEN 3.5 AND 1.1
- CHARACTER STROKE WIDTH TO HEIGHT RATIO BETWEEN 1.5 AND 1.10
- CHARACTERS AND BACKGROUND SHALL HAVE AN EGGSHELL MATTE, OR OTHER NON-GLARE FINISH
- CHARACTERS AND BACKGROUND SHALL CONTRAST,EITHER LIGHT CHARACTERS ON DARK BACKGROUND OR DARK CHARACTERS ON LIGHT BACKGROUND



ACCESSIBLE PARKING SIGN DETAIL | 2

ACCESSIBLE DETAILS

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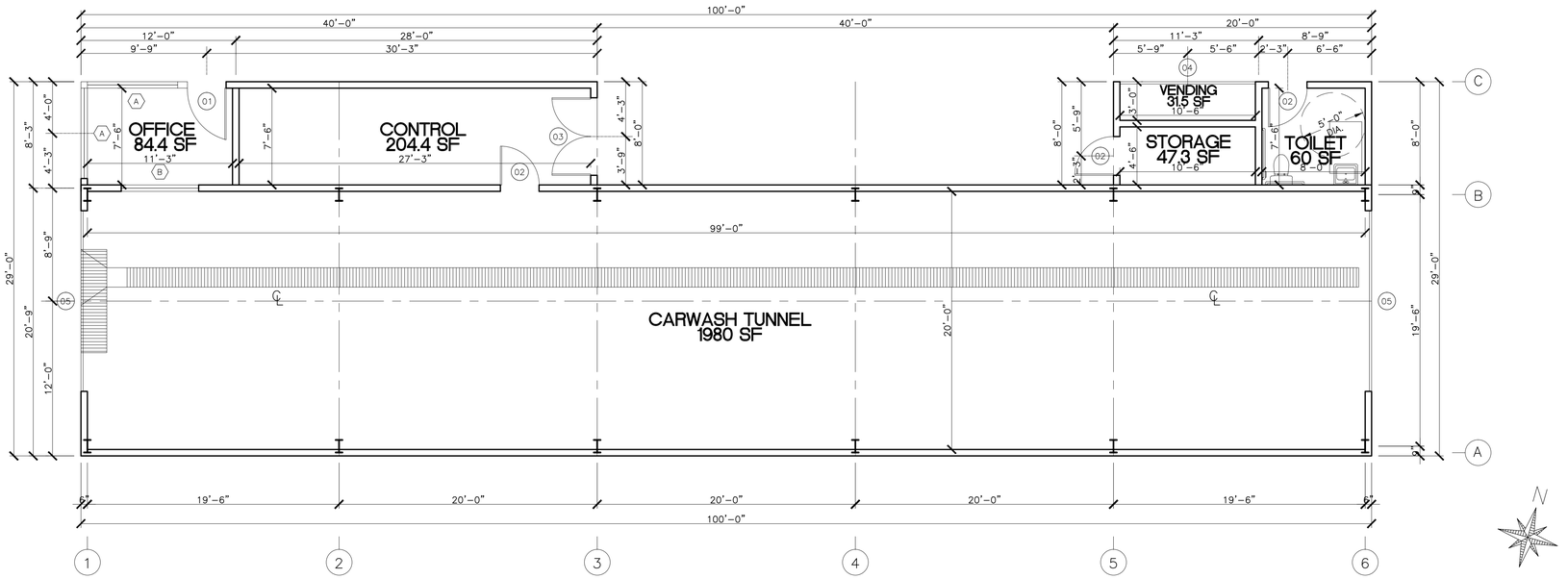
A-2.1

DOOR SCHEDULE

KEY	SIZE		DESCRIPTION & TYPE	FRAME MATERIAL	THK.	CORE	GLAZING AREA	FIRE RATING	EA	REMARKS
	WIDTH	HEIGHT								
01	3'–0"	7'–0"	SWING	ALUM.	1 3/4"	HOLLOW	18.6	–	1	TEMP. GLASS SELF–CLOSING
02	3'–0"	7'–0"	SWING	ALUM.	1 3/4"	HOLLOW	–	–	3	SELF–CLOSING
03	6'–0"	7'–0"	DBL.SWING	ALUM.	1 3/4"	HOLLOW	–	–	1	SELF–CLOSING
04	10'–6"	6'–0"	ROLL–UP	ST'L	–	–	–	–	1	–
05	14'–0"	10'–0"	ROLL–UP	ST'L	–	–	–	–	1	–

WINDOW SCHEDULE

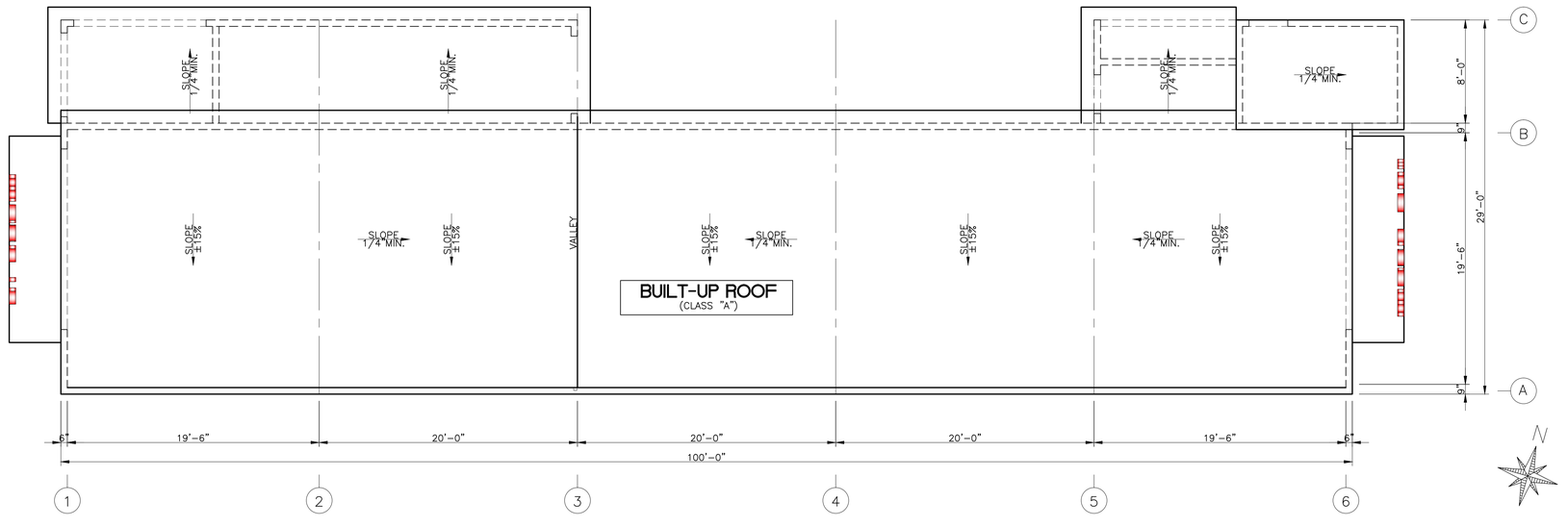
KEY	SIZE		DESCRIPTION & TYPE	FRAME MATERIAL	GLAZING AREA	FIRE RATING	OITC RATING	EA	REMARKS
	WIDTH	HEIGHT							
A	7'–0"	4'–6"	SLIDING 1	ALUM.	32.2	–	–	2	–
B	6'–0"	3'–0"	FIXED 2	ALUM.	18.0	–	–	1	1/2" LAMINATED GLASS



CAR WASH FLOOR PLAN

SCALE : 3/16"=1'-0"

1



CAR WASH ROOF PLAN

SCALE : 3/16"=1'-0"

2

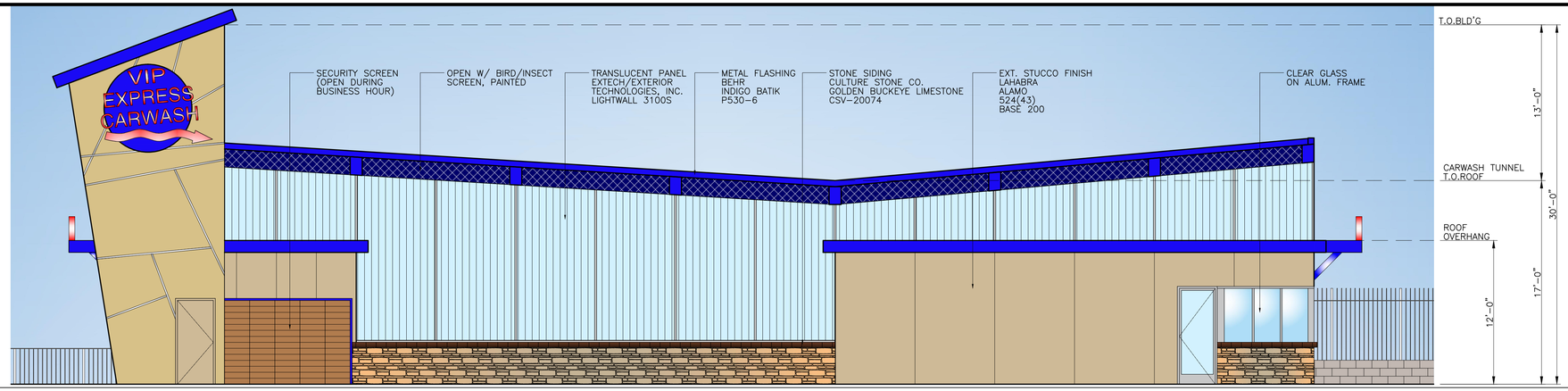
LEEDCO ENGINEERS
STRUCTURES · FOUNDATIONS
3870 BALDWIN AVE., EL MONTE, CA. 91731 (626) 448-7870

TITLE: NEW CARWASH DEVELOPMENT PROJECT
FOR
OWNER: ADAM NASRY
JOB ADDRESS: 821 S. STATE COLLEGE BLVD. ANAHEIM, CA 92806

REVISIONS

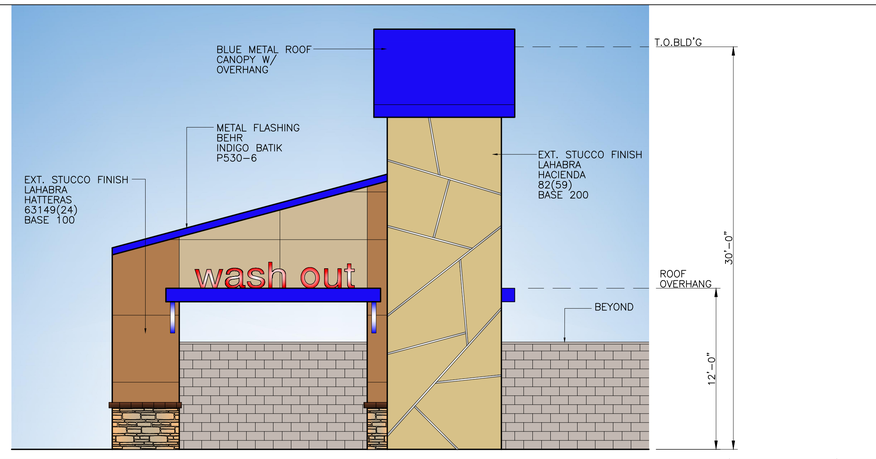
APPROVED BY: C. D. LEE
DRAWN BY: H.W.
JOB NO.: 7927
DATE: 12–07–18

A–3.0



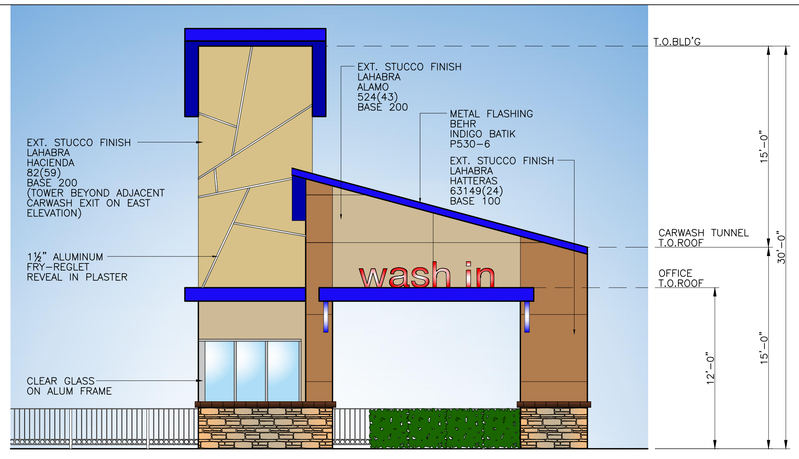
CARWASH NORTH ELEVATION

SCALE : 3/16"=1'-0" | 1



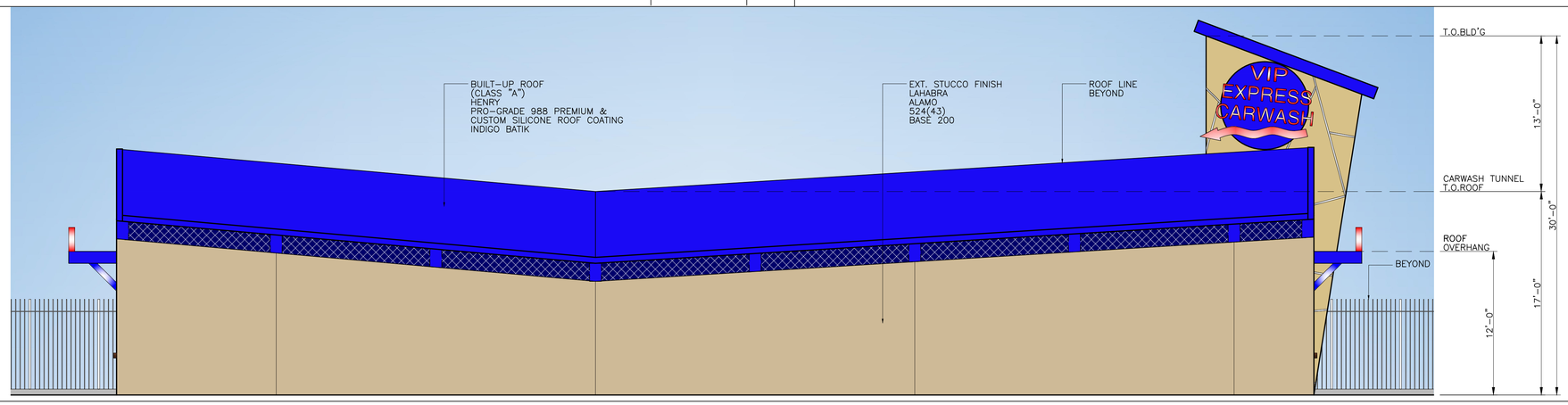
CARWASH EAST ELEVATION

SCALE : 3/16"=1'-0" | 4



CARWASH WEST ELEVATION

SCALE : 3/16"=1'-0" | 2



CARWASH SOUTH ELEVATION

SCALE : 3/16"=1'-0" | 3

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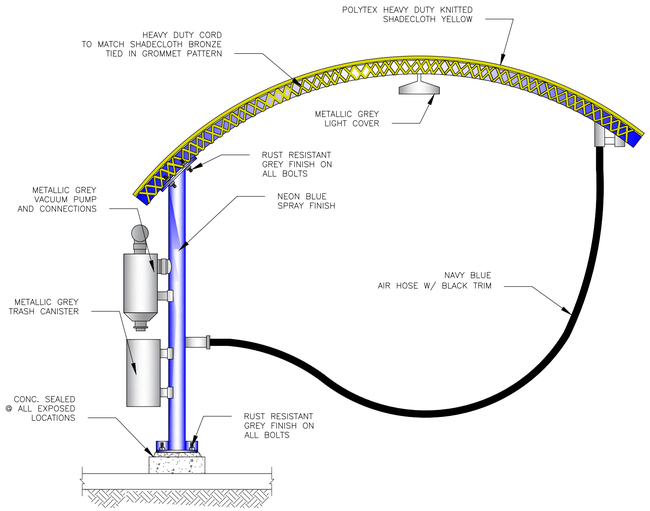
REVISIONS

APPROVED BY: C. D. LEE
JOB NO.: 7927
DRAWN BY: H.W.
DATE: 12-07-18

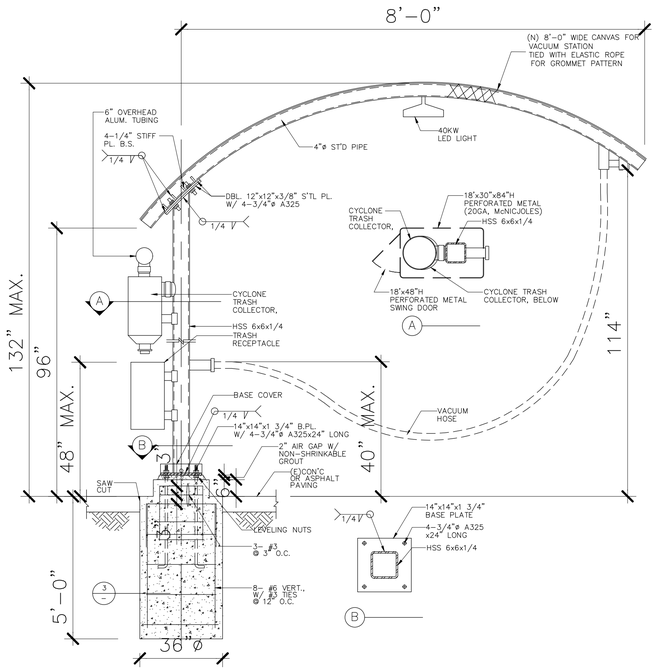
A-4.0



VACUUM CANOPY COLOR DETAIL

SCALE : 3/16" = 1'-0"

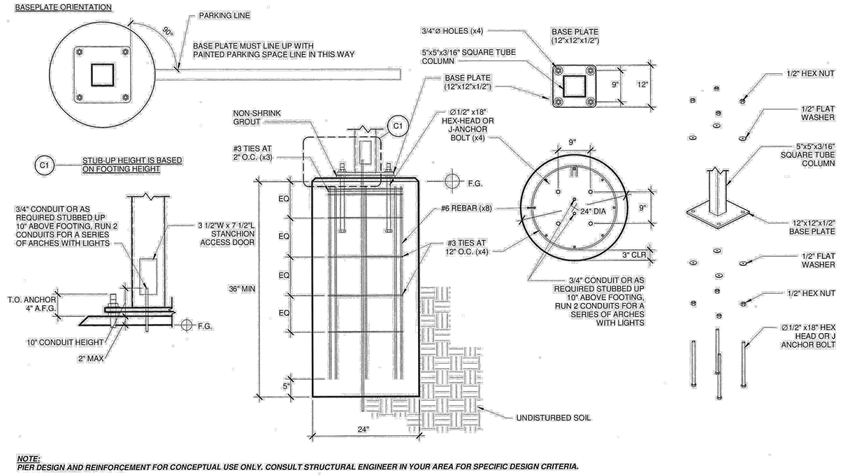
5



CANOPY POST W/ VACUUM ATTACHMENT

SCALE : 3/16" = 1'-0"

3

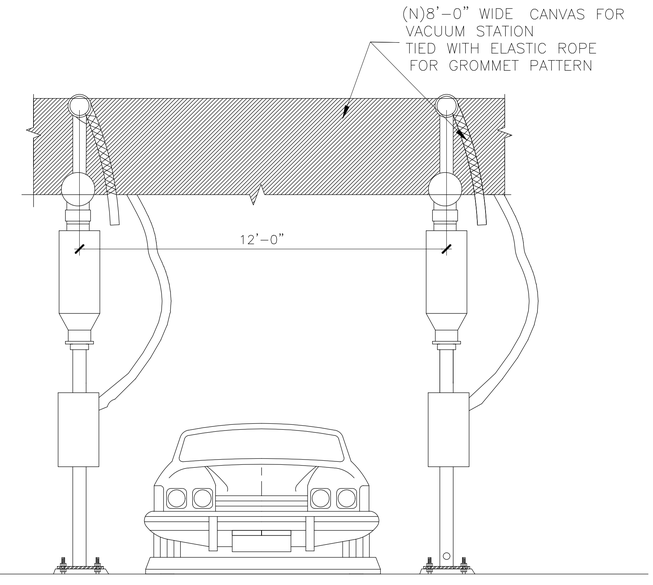


NOTE:
PIER DESIGN AND REINFORCEMENT FOR CONCEPTUAL USE ONLY. CONSULT STRUCTURAL ENGINEER IN YOUR AREA FOR SPECIFIC DESIGN CRITERIA.

MANUFACTURER'S HOLDOWN DETAILS

SCALE : N.T.S.

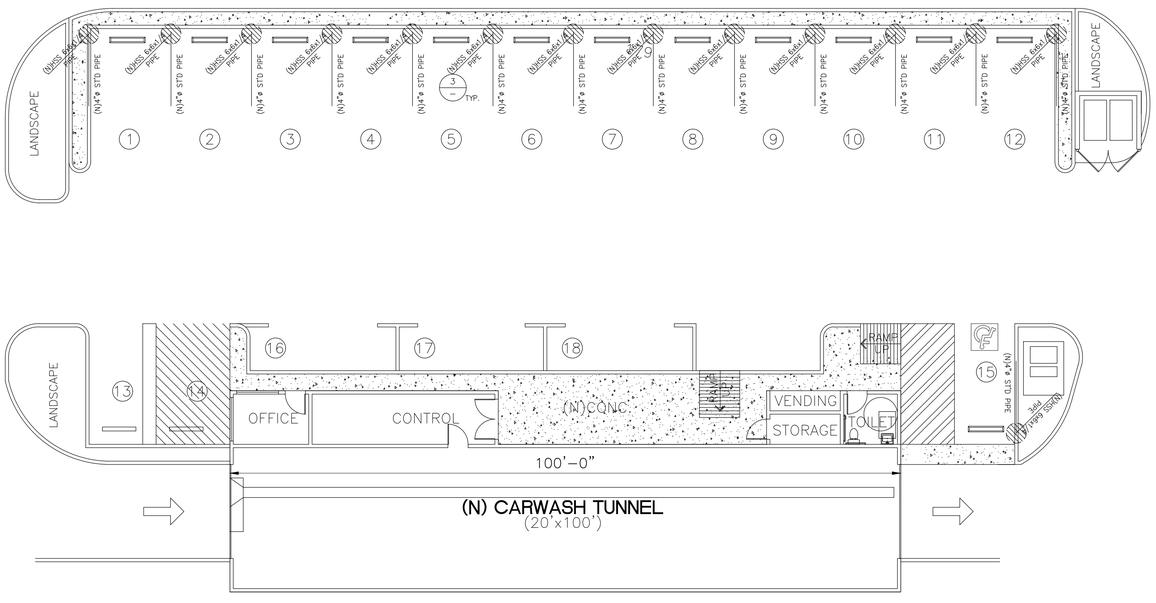
1



NORTH ELEVATION AND CANVAS DETAILS

SCALE : 3/8" = 1'-0"

4



CANOPY FOUNDATION FOOTING PLAN VIEW

SCALE : 3/32"=1'-0"

2

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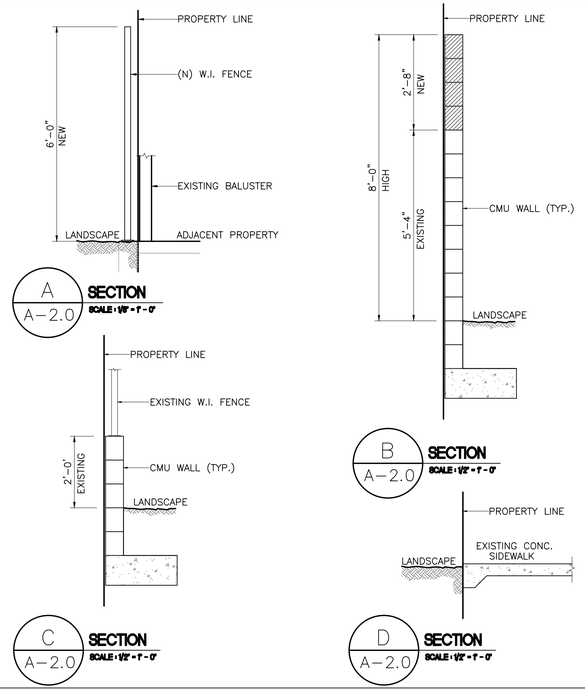
JOB ADDRESS: 821 S. STATE COLLEGE BLVD., ANAHEIM, CA. 92806

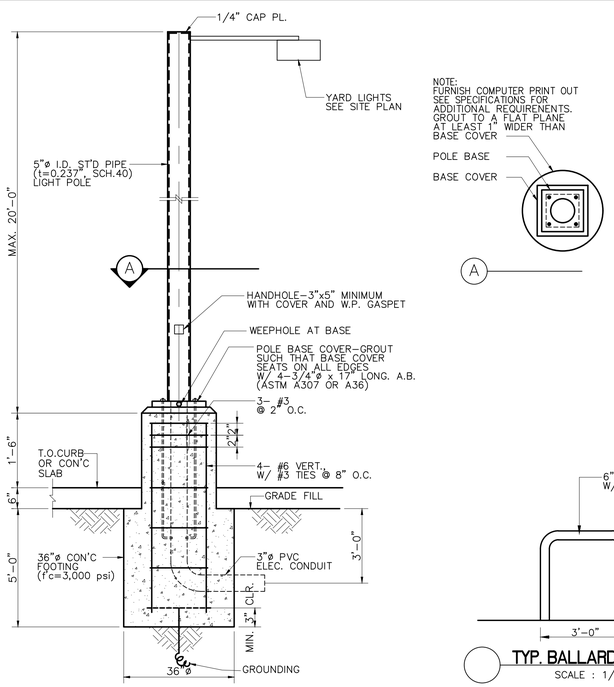
REVISIONS

APPROVED BY: C. D. LEE
DRAWN BY: H.W.
JOB NO.: 1927
DATE: 12-07-18

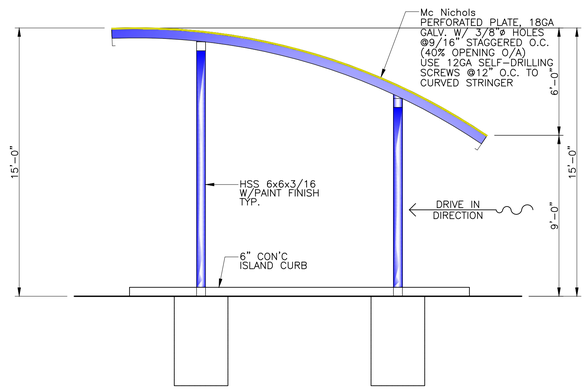
A-5.0



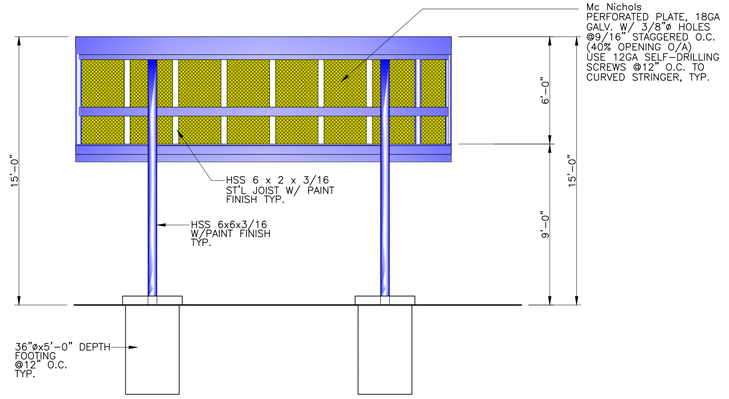
CMU WALL DETAILS AND FRONTAGE PERIMETER DET. — 7



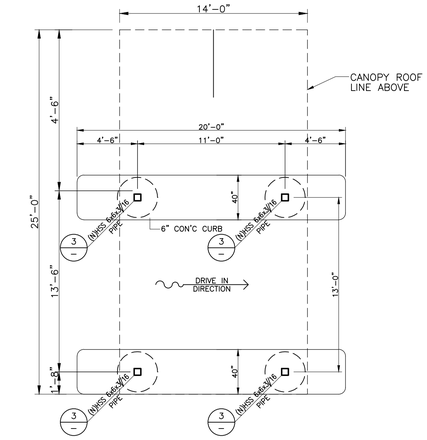
LIGHT POLES WITH FOOTING AND BOLLARD DET. — 8



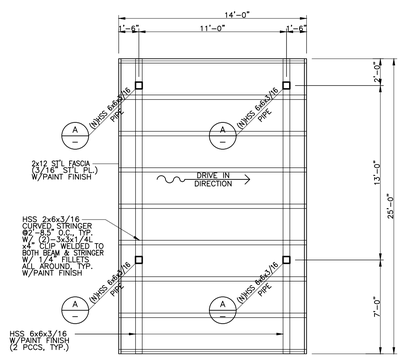
PAY STATION EAST ELEVATION — SCALE: 1/4"=1'-0" — 4



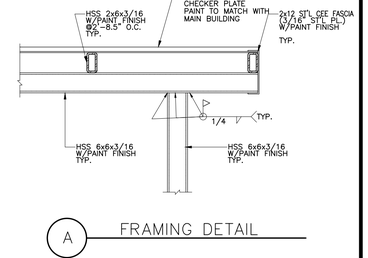
PAY STATION SOUTH ELEVATION — SCALE: 1/4"=1'-0" — 5



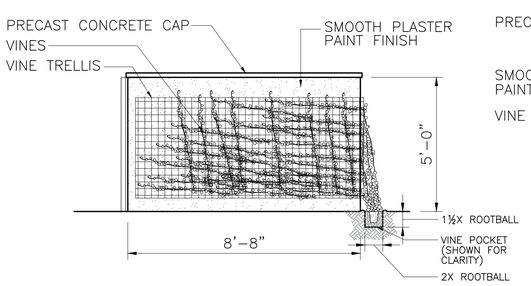
PAY STATION FOUNDATION PLAN — SCALE: 3/16"=1'-0" — 1



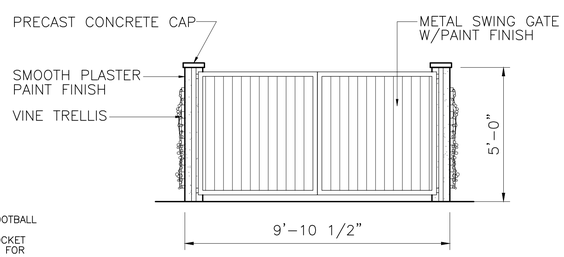
PAY STATION ROOF FRAMING PLAN — SCALE: 3/16"=1'-0" — 2



A FRAMING DETAIL

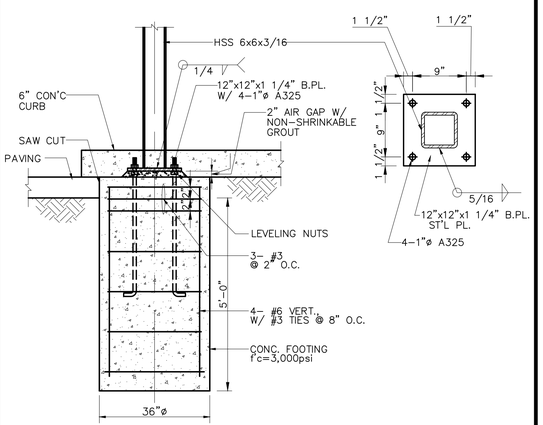


TRASH ENCLOSURE SIDE ELEVATION



TRASH ENCLOSURE FRONT ELEVATION

TRASH ENCLOSURE DETAILS — SCALE: 3/16"=1'-0" — 6



PAY STATION FOOTING DET. — SCALE: 1/4"=1'-0" — 3

LEEDCO ENGINEERS
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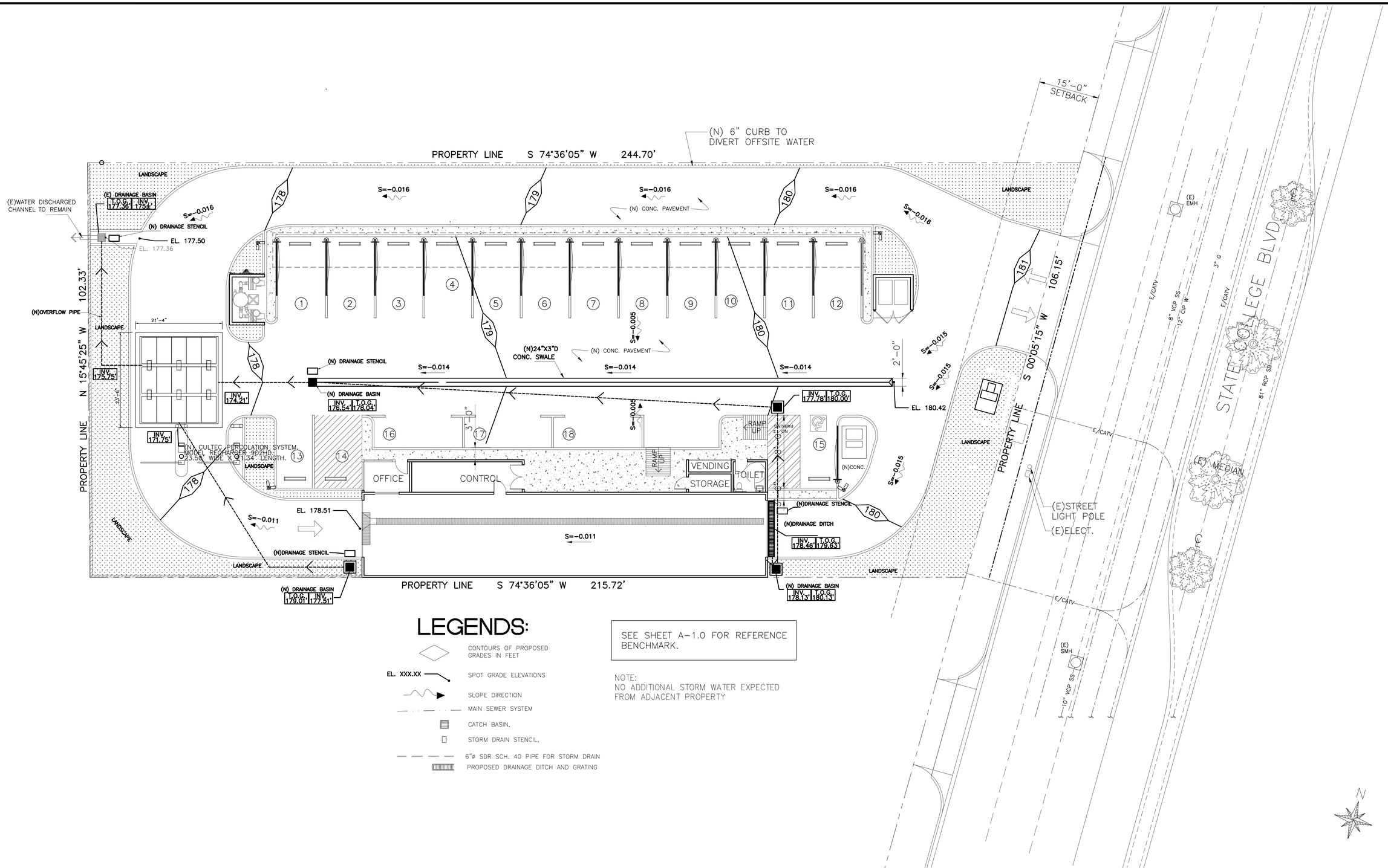
3870 BALDWIN AVE., EL MONTE, CA. 91731 (626) 448-7870

TITLE	NEW CARWASH DEVELOPMENT PROJECT
FOR	
OWNER	ADAM NASRY
JOB ADDRESS	821 S. STATE COLLEGE BLVD., ANAHEIM, CA. 92806

REVISIONS	APPROVED BY:	JOB NO.:	
	C. D. LEE	7927	A-6.0
	DRAWN BY: H.W.	DATE: 12-07-18	



LEGENDS:

- CONTOURS OF PROPOSED GRADES IN FEET
- EL. XXX.XX — SPOT GRADE ELEVATIONS
- SLOPE DIRECTION
- MAIN SEWER SYSTEM
- CATCH BASIN,
- STORM DRAIN STENCIL,
- 6"ø SDR SCH. 40 PIPE FOR STORM DRAIN
- PROPOSED DRAINAGE DITCH AND GRATING

SEE SHEET A-1.0 FOR REFERENCE BENCHMARK.

NOTE:
NO ADDITIONAL STORM WATER EXPECTED FROM ADJACENT PROPERTY

GRADING AND DRAINAGE PLAN

SCALE : 3/32"=1'-0"

1

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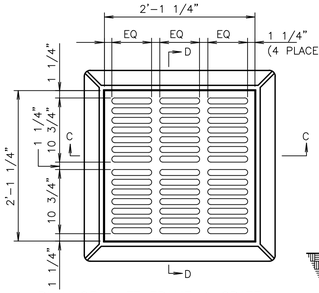
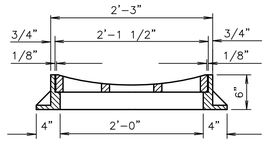
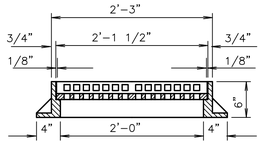
APPROVED BY: C. D. LEE	JOB NO.: 7927	C-1.0
DRAWN BY: H.W./JH	DATE: 12-07-18	



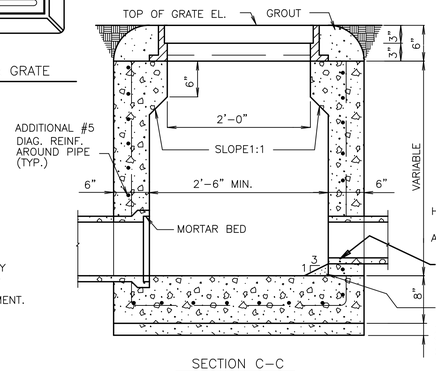
PLAN OF INLET FRAME & GRATE



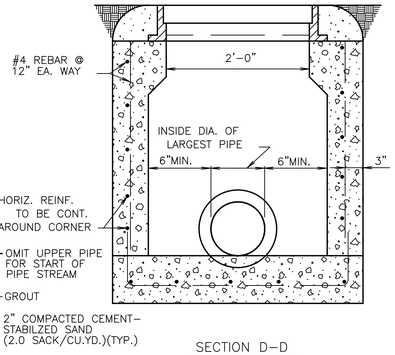
SECTION C–C THRU INLET FRAME & GRATE



SECTION D–D THRU INLET FRAME & GRATE



SECTION C–C



SECTION D–D

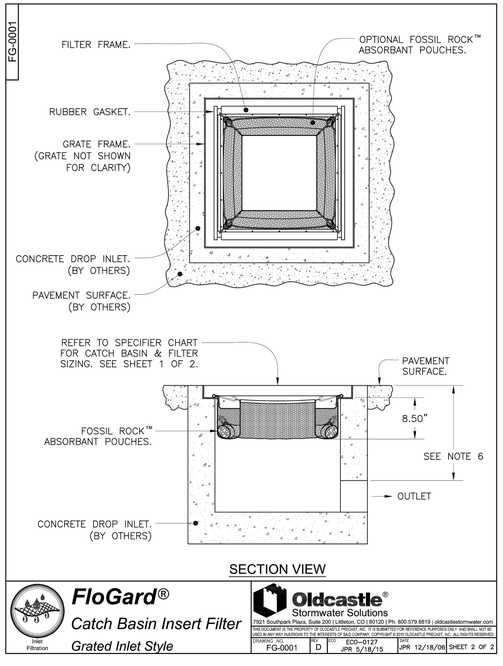
NOTES:

1. GRASS AREA INLET FRAMES & GRATES SHALL BE STANDARD NORMAL WEIGHT.
2. PRECAST INLET SECTIONS MAY BE USED IN LIEU OF CAST–-IN–PLACE INLETS, AS APPROVED BY THE GOVERNMENT.
3. USE PREFABRICATE FABRIC INSERT FILTER.

GRASS AREA INLET

CATCH BASIN DETAIL

SCALE : N.T.S. | 4

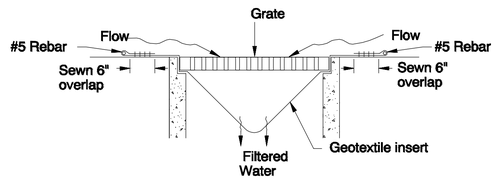


CATCH BASIN FILTER DETAIL

SCALE : N.T.S. | 5

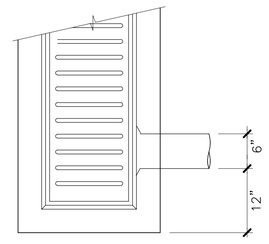
DRAINAGE STENCIL

SCALE : N.T.S. | 1

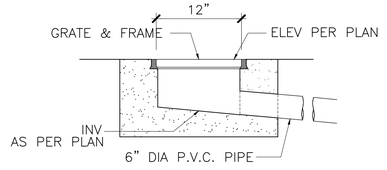


FABRIC INSERT FILTER DETAIL

SCALE : N.T.S. | 2



PLAN



SECTION

DRAINAGE DITCH AND GRATING DETAIL

SCALE : N.T.S. | 3

LEEDCO ENGINEERS
STRUCTURES· FOUNDATIONS
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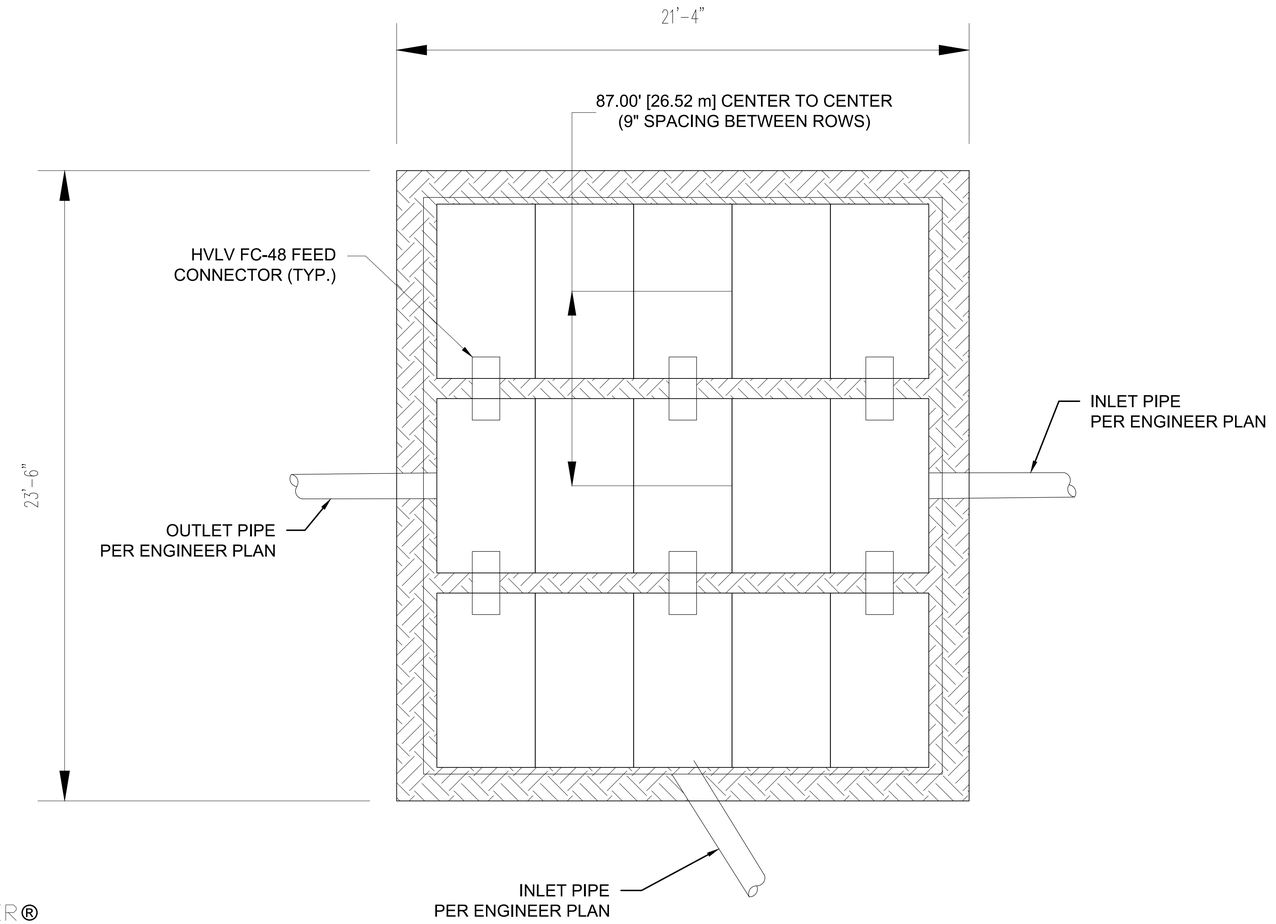
TITLE	NEW CARWASH DEVELOPMENT PROJECT
	FOR
OWNER	ADAM NASRY
JOB ADDRESS	821 S. STATE COLLEGE BLVD., ANAHEIM, CA. 92806

REVISION - 11-09-18
LID DETAILS

APPROVED BY: C. D. LEE	JOB NO.: 7927	C-1.1
DRAWN BY: H.W.	DATE: 12-07-18	



***NOTE: ALL EXTERNAL SYSTEM STRUCTURES, INLET/OUTLET PIPES, AND PROPOSED ELEVATIONS MUST BE DESIGNED AND APPROVED BY ENGINEER. ALL SYSTEM ELEVATIONS PROVIDED MUST BE VERIFIED BY THE DESIGN ENGINEER AND THE DESIGN ENGINEER MUST ENSURE CHAMBER BURIAL REQUIREMENTS ARE MET.**

MATERIALS LIST
(SYSTEM MATERIALS LIST - SEE COVER SHEET FOR COMBINED PROJECT MATERIALS LIST)

RECHARGER 902HD CHAMBER	15	PIECES
RECHARGER 902HD END CAP	6	PIECES
HVLV FC-48 FEED CONNECTORS	6	PIECES
CULTEC NO. 410 NON- WOVEN GEOTEXTILE	211	SQ. YARDS
CULTEC NO. 66 WOVEN GEOTEXTILE	50	LINEAL FEET
1-2 INCH WASHED, CRUSHED STONE	98	TONS

CULTEC RECHARGER®
902HD LEGEND

- RECHARGER 902HD CHAMBER
- RECHARGER 902HD END CAP
- HVLV FC-48 FEED CONNECTORS
- CULTEC NO. 66 WOVEN GEOTEXTILE
- STONE BORDER

CULTEC STORMWATER MANAGEMENT SYSTEM
TOTAL STORAGE PROVIDED: 2345 c.f.
(SYSTEM AREA: 660 s.f.)
*SYSTEM INSTALLED REQUIRING TYPICAL STONE AMOUNTS OF 9 INCHES BELOW CHAMBERS, 12 INCHES ABOVE CHAMBERS AND A 12 INCH MINIMUM BORDER SURROUNDING

CULTEC™
CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280 PH: (203) 775-4416
878 Federal Road PH: (800) 4-CULTEC
Brookfield, CT 06804 FX: (203) 775-1462
www.cultec.com tech@cultec.com

NEW AUTOMATED EXPRESS CARWASH
821 S. STATE COLLEGE BLVD.
ANAHEIM, CA. 92806
SYSTEM LAYOUT SHEET

CULTEC STORMWATER CHAMBER

PROJECT NO:	DATE: 11-08-18
DESIGNED BY: G.M.A.	CHECKED BY: C. LEE
SCALE: N.T.S.	SHEET NO: C-2.0

CULTEC Recharger 902HD Stormwater System Calculations

CONSULTING ENGINEER:

Leedco Engineers
3870 Baldwin Ave
El monte, CA
626-448-7870

PROJECT INFORMATION:

18-0228.00
New Express Carwash
821 S. STATE COLLEGE BLVD.
ANAHEIM, CA. 92806

CALCULATED BY:

XXXX
LEEDCO ENGNEERS
3870 BALDWIN AVE
EL MONTE CA
(626) 448-7870

DATE: 8/29/18

System Information

Proposed bed layout of 3 Rows 5 No. of Units per Row

Given:

Storage required	796 CF	22.54	m^3
Stone base	9 inches	229	mm
Stone above	12 inches	305	mm
Chamber Spacing	12 inches	305	mm
No. of HVLV FC-48 Feed Connectors	6 units		
Stone Porosity	40 %		
Stone Border Width	1 feet	0.305	m

Assumptions

Model Name		Chamber Height	Design Unit Height	Chamber Width	Chamber Spacing	Design Unit Width	Chamber Volume per Linear Foot	Design Unit Volume	Installed Chamber Length
		inches	feet	inches	inches	feet	cu. ft/ft	cu. ft/ft	feet
		mm	m	mm	mm	m	cu. m/m	cu. m/m	m
Recharger® 902HD Chamber	English	48	5.750	78	12	7.50	17.66	27.846	3.667
	Metric	1219	1.753	1981	305	2.29	1.641	2.587	1.118
Recharger® 902HD End Cap	English	48.5	5.750	78	12	7.50	5.509	20.555	0.501
	Metric	1232	1.753	1981	305	2.29	0.512	1.910	0.153
HVLV™ FC -48 Feed Connectors	English	12	n/a	16	n/a	n/a	0.913	n/a	1.000
	Metric	305	n/a	406	n/a	n/a	0.085	n/a	0.305

Storage Provided within CULTEC Recharger 902HD Stormwater Chamber, End Caps and HVLV FC-48 Feed Connector Internal Manifold System *- not including stone*

Number of Recharger 902HD chambers by design	15	pcs x	3.667	=	15 pcs		
				=	55.00 feet	16.76	m
Number of Recharger 902HD end caps	6	pcs x	0.501	=	6 pcs		
				=	3.01 feet	0.92	m
Number of HVLV FC-48 Feed Connectors	6	pcs x	1.000	=	6 pcs		
				=	6.00 feet	1.83	m
Total footage of Recharger 902HD chambers				=	55.00 feet	16.76	m
Total footage of Recharger 902HD end caps				=	3.01 feet		
Total footage of HVLV FC-48 Feed Connectors				=	6.00 feet	1.83	m
Storage provided within Recharger 902HD chambers				=	971.30 CF	27.51	m^3
Storage provided within Recharger 902HD end caps					16.56 CF	0.47	m^3
Storage provided within HVLV FC-48 Feed Connectors				=	5.48 CF	0.16	m^3
Total Storage within Recharger 902HD chambers and feed connectors				=	**993.34 CF**	**28.13**	**m^3**

Storage Provided within Entire CULTEC Stormwater System *- including stone*

Bed width			23.50 feet	7.16 m
Bed length			21.34 feet	6.50 m
Effective Bed depth *(not including additional cover)*			5.75 feet	1.75 m
Total Area			501.38 sq. ft.	46.58 m^2
Volume of Effective Excavation *(not including additional cover)*			2882.94 CF	81.64 m^3
Perimeter of Bed			89.67 feet	27.33 m
Total Storage within CULTEC Recharger 902HD chambers, end caps and feed connectors			993.34 CF	28.13 m^3
Total Stone Required			1889.60 CF	53.51 m^3
			70 CY	
			98 tons	
Storage provided within stone			755.84 CF	21.41 m^3
Total Storage within CULTEC Stormwater System		=	**1750 CF**	**49.56 m^3**

Req. storage attained.

CULTEC MATERIALS LIST

Model	Quantity	Unit of Measure	Quantity	Unit of Measure
Recharger 902HD Heavy Duty Chamber	12	pcs		
Recharger 902HD End Cap	6	pcs		
HVLV FC-48 Feed Connectors	6	pcs		
CULTEC No. 410 Non-Woven Geotextile	210.88	Sq. Yards	176	m2
CULTEC No. 66 Woven Geotextile 7.5' x 100' (2.29 m W x 30.48 m L)	50	feet	15	m
Total Stone	98	tons	54	cubic meters

SYSTEM STORAGE CALCULATION

Project Information: **Date:** 8/29/2018

18-0228.00
New Express Carwash
821 S. STATE COLLEGE BLVD.
ANAHEIM, CA. 92806

Number of Rows-	3	units	
Total number of chambers -	15	units	
HVLV FC-48 Feed Connectors -	6	units	
Stone Void -	40	%	
Stone Base -	9	inches	229 mm
Stone Above Units -	12	inches	305 mm
Area -	501.38	ft^2	46.58 m^2
Base of Stone Elevation-	100.00		

CULTEC Recharger 902HD Incremental Storage Volumes

Height of System		End Cap Volume		Chamber Volume		HVLV FC-48 Feed Connector Volume		Stone Volume		Cumulative Storage Volume		Total Cumulative Storage Volume		Elevation	
in	mm	ft^3	m^3	ft^3	m^3	ft^3	m^3	ft^3	m^3	ft^2	m^2	ft^3	m^3	ft	m
69.00	1753	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1748.08	49.50	105.75	101.75
68.00	1727	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1731.37	49.03	105.67	101.73
67.00	1702	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1714.66	48.55	105.58	101.70
66.00	1676	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1697.94	48.08	105.50	101.68
65.00	1651	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1681.23	47.61	105.42	101.65
64.00	1626	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1664.52	47.13	105.33	101.63
63.00	1600	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1647.81	46.66	105.25	101.60
62.00	1575	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1631.09	46.19	105.17	101.57
61.00	1549	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1614.38	45.71	105.08	101.55
60.00	1524	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1597.67	45.24	105.00	101.52
59.00	1499	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1580.96	44.77	104.92	101.50
58.00	1473	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	1564.24	44.29	104.83	101.47
57.00	1448	0.12	0.00	1.16	0.03	0.00	0.00	16.20	0.46	17.48	0.49	1547.53	43.82	104.75	101.45
56.00	1422	0.17	0.00	2.20	0.06	0.00	0.00	15.76	0.45	18.14	0.51	1530.05	43.33	104.67	101.42
55.00	1397	0.17	0.00	4.40	0.12	0.00	0.00	14.88	0.42	19.46	0.55	1511.92	42.81	104.58	101.40
54.00	1372	0.23	0.01	7.15	0.20	0.00	0.00	13.76	0.39	21.14	0.60	1492.46	42.26	104.50	101.37
53.00	1346	0.29	0.01	9.35	0.26	0.00	0.00	12.86	0.36	22.50	0.64	1471.32	41.66	104.42	101.35
52.00	1321	0.23	0.01	11.55	0.33	0.00	0.00	12.00	0.34	23.78	0.67	1448.82	41.03	104.33	101.32
51.00	1295	0.29	0.01	12.65	0.36	0.00	0.00	11.54	0.33	24.48	0.69	1425.04	40.35	104.25	101.30
50.00	1270	0.29	0.01	13.75	0.39	0.00	0.00	11.10	0.31	25.14	0.71	1400.56	39.66	104.17	101.27
49.00	1245	0.29	0.01	14.85	0.42	0.00	0.00	10.66	0.30	25.80	0.73	1375.42	38.95	104.08	101.24
48.00	1219	0.29	0.01	15.40	0.44	0.00	0.00	10.44	0.30	26.13	0.74	1349.63	38.22	104.00	101.22
47.00	1194	0.29	0.01	16.50	0.47	0.00	0.00	10.00	0.28	26.79	0.76	1323.50	37.48	103.92	101.19
46.00	1168	0.35	0.01	17.05	0.48	0.00	0.00	9.75	0.28	27.15	0.77	1296.71	36.72	103.83	101.17
45.00	1143	0.29	0.01	18.15	0.51	0.00	0.00	9.34	0.26	27.78	0.79	1269.56	35.95	103.75	101.14
44.00	1118	0.29	0.01	18.15	0.51	0.00	0.00	9.34	0.26	27.78	0.79	1241.78	35.16	103.67	101.12
43.00	1092	0.35	0.01	19.25	0.55	0.00	0.00	8.87	0.25	28.47	0.81	1214.01	34.38	103.58	101.09
42.00	1067	0.29	0.01	19.80	0.56	0.00	0.00	8.68	0.25	28.77	0.81	1185.53	33.57	103.50	101.07
41.00	1041	0.29	0.01	19.80	0.56	0.00	0.00	8.68	0.25	28.77	0.81	1156.77	32.76	103.42	101.04
40.00	1016	0.35	0.01	20.90	0.59	0.00	0.00	8.21	0.23	29.46	0.83	1128.00	31.94	103.33	101.02
39.00	991	0.29	0.01	20.90	0.59	0.00	0.00	8.24	0.23	29.43	0.83	1098.54	31.11	103.25	100.99
38.00	965	0.41	0.01	21.45	0.61	0.00	0.00	7.97	0.23	29.83	0.84	1069.11	30.27	103.17	100.97
37.00	940	0.29	0.01	21.45	0.61	0.00	0.00	8.02	0.23	29.76	0.84	1039.28	29.43	103.08	100.94
36.00	914	0.35	0.01	22.55	0.64	0.00	0.00	7.55	0.21	30.45	0.86	1009.53	28.59	103.00	100.91
35.00	889	0.35	0.01	22.00	0.62	0.00	0.00	7.77	0.22	30.12	0.85	979.07	27.72	102.92	100.89
34.00	864	0.29	0.01	22.55	0.64	0.00	0.00	7.58	0.21	30.42	0.86	948.95	26.87	102.83	100.86
33.00	838	0.35	0.01	23.10	0.65	0.00	0.00	7.33	0.21	30.78	0.87	918.54	26.01	102.75	100.84
32.00	813	0.35	0.01	23.10	0.65	0.00	0.00	7.33	0.21	30.78	0.87	887.75	25.14	102.67	100.81
31.00	787	0.41	0.01	23.10	0.65	0.00	0.00	7.31	0.21	30.82	0.87	856.97	24.27	102.58	100.79
30.00	762	0.35	0.01	23.65	0.67	0.00	0.00	7.11	0.20	31.11	0.88	826.15	23.39	102.50	100.76
29.00	737	0.35	0.01	23.65	0.67	0.00	0.00	7.11	0.20	31.11	0.88	795.04	22.51	102.42	100.74
28.00	711	0.35	0.01	23.65	0.67	0.00	0.00	7.11	0.20	31.11	0.88	763.93	21.63	102.33	100.71
27.00	686	0.35	0.01	24.20	0.69	0.00	0.00	6.89	0.20	31.44	0.89	732.82	20.75	102.25	100.69
26.00	660	0.35	0.01	24.20	0.69	0.00	0.00	6.89	0.20	31.44	0.89	701.38	19.86	102.17	100.66
25.00	635	0.41	0.01	24.20	0.69	0.00	0.00	6.87	0.19	31.48	0.89	669.93	18.97	102.08	100.64
24.00	610	0.35	0.01	24.75	0.70	0.00	0.00	6.67	0.19	31.77	0.90	638.46	18.08	102.00	100.61
23.00	584	0.35	0.01	24.75	0.70	0.00	0.00	6.67	0.19	31.77	0.90	606.69	17.18	101.92	100.58
22.00	559	0.35	0.01	25.30	0.72	0.00	0.00	6.45	0.18	32.10	0.91	574.91	16.28	101.83	100.56
21.00	533	0.41	0.01	24.75	0.70	0.02	0.00	6.64	0.19	31.82	0.90	542.81	15.37	101.75	100.53
20.00	508	0.35	0.01	25.30	0.72	0.14	0.00	6.40	0.18	32.19	0.91	510.99	14.47	101.67	100.51
19.00	483	0.41	0.01	25.30	0.72	0.27	0.01	6.32	0.18	32.30	0.91	478.81	13.56	101.58	100.48
18.00	457	0.41	0.01	25.85	0.73	0.33	0.01	6.08	0.17	32.66	0.92	446.51	12.64	101.50	100.46
17.00	432	0.41	0.01	25.85	0.73	0.36	0.01	6.06	0.17	32.69	0.93	413.85	11.72	101.42	100.43
16.00	406	0.41	0.01	25.85	0.73	0.38	0.01	6.06	0.17	32.70	0.93	381.16	10.79	101.33	100.41
15.00	381	0.35	0.01	25.85	0.73	0.40	0.01	6.07	0.17	32.67	0.93	348.46	9.87	101.25	100.38
14.00	356	0.41	0.01	26.40	0.75	0.42	0.01	5.82	0.16	33.05	0.94	315.79	8.94	101.17	100.36
13.00	330	0.41	0.01	25.85	0.73	0.43	0.01	6.04	0.17	32.72	0.93	282.74	8.01	101.08	100.33
12.00	305	0.47	0.01	26.95	0.76	0.44	0.01	5.57	0.16	33.42	0.95	250.02	7.08	101.00	100.30
11.00	279	0.41	0.01	26.40	0.75	0.45	0.01	5.81	0.16	33.06	0.94	216.60	6.13	100.92	100.28
10.00	254	0.47	0.01	26.40	0.75	0.48	0.01	5.78	0.16	33.12	0.94	183.53	5.20	100.83	100.25
9.00	229	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	150.41	4.26	100.75	100.23
8.00	203	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	133.70	3.79	100.67	100.20
7.00	178	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	116.99	3.31	100.58	100.18
6.00	152	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	100.28	2.84	100.50	100.15
5.00	127	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	83.56	2.37	100.42	100.13
4.00	102	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	66.85	1.89	100.33	100.10
3.00	76	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	50.14	1.42	100.25	100.08
2.00	51	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	33.43	0.95	100.17	100.05
1.00	25	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.47	16.71	0.47	16.71	0.47	100.08	100.03
0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00

SYSTEM STAGE-STORAGE TABLE

TM
CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280 PH: (203) 775-4416
878 Federal Road PH: (800) 4-CULTEC
Brookfield, CT 06804 FX: (203) 775-1462
www.cultec.com tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

NEW EXPRESS CARWASH
821 S. STATE COLLEGE BLVD.
ANAHEIM, CA. 92806
SYSTEM CALCULATION SHEET

PROJECT NO:	DATE: 11-08-18
DESIGNED BY: G.M.A.	CHECKED BY: C. LEE
SCALE: N.T.S.	SHEET NO: C-2.1

CULTEC RECHARGER® 902HD PRODUCT SPECIFICATIONS

GENERAL
CULTEC RECHARGER®902HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS
1. THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-58321)
2. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS."
3. THE CHAMBER SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12.
4. THE CHAMBER SHALL BE STRUCTURAL FOAM INJECTION MOLDED OF BLUE VIRGIN HIGH MOLECULAR WEIGHT IMPACT-MODIFIED POLYPROPYLENE.
5. THE CHAMBER SHALL BE ARCHED IN SHAPE.
6. THE CHAMBER SHALL BE OPEN-BOTTOMED.
7. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS.
8. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER®902HD SHALL BE 48 INCHES (1219 mm) TALL, 78 INCHES (1981 mm) WIDE AND 410 FEET (1.25 mm) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER®902HD SHALL BE 3.67 FEET (1.12 m).
9. MULTIPLE CHAMBERS MAY BE CONNECTED TO FORM DIFFERENT LENGTH ROWS. EACH ROW SHALL BEGIN AND END WITH A SEPARATELY FORMED CULTEC RECHARGER®902HD END CAP. MAXIMUM INLET OPENING ON THE END CAP IS 24 INCHES (600 mm).
10. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV™FC-48 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 11.5 INCHES (292 mm).
11. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 49 INCHES (1245 mm) LONG.
12. THE NOMINAL STORAGE VOLUME OF THE RECHARGER®902HD CHAMBER SHALL BE 17.66 FT3 / FT (1.641 m3 / m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER®902HD SHALL BE 64.75 FT3 / UNIT (1.834 m3 / UNIT) - WITHOUT STONE.
13. THE NOMINAL STORAGE VOLUME OF THE HVLV™FC-48 FEED CONNECTOR SHALL BE 0.913 FT3 / FT (0.085 m3 / m) - WITHOUT STONE.
14. THE RECHARGER®902HD CHAMBER SHALL HAVE TWENTY-FOUR DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
15. THE RECHARGER®902HD CHAMBER SHALL HAVE 7 CORRUGATIONS.
16. THE CHAMBER SHALL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH NEAR THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
17. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
18. THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING CULTEC'S QUALITY CONTROL AND ASSURANCE PROCEDURES.
19. MAXIMUM ALLOWABLE COVER OVER THE TOP OF THE CHAMBER SHALL BE 8.3 FEET (2.53 m).

END CAP PARAMETERS
1. THE CULTEC RECHARGER®902HD END CAP (REFERRED TO AS 'END CAP') SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-58321)
2. THE END CAP SHALL BE TWIN-SHEET THERMOFORMED OF BLACK VIRGIN HIGH MOLECULAR WEIGHT POLYETHYLENE.
3. THE END CAP SHALL BE JOINED AT THE BEGINNING AND END OF EACH ROW OF CHAMBERS USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS.
4. THE NOMINAL DIMENSIONS OF THE END CAP SHALL BE 48.5 INCHES (1231 mm) TALL, 78 INCHES (1981 mm) WIDE AND 9.7 INCHES (246 mm) LONG. WHEN JOINED WITH A RECHARGER 902HD CHAMBER, THE INSTALLED LENGTH OF THE END CAP SHALL BE 6.2 INCHES (157 mm).
5. MAXIMUM INLET OPENING ON THE END CAP IS 24 INCHES (600 mm).
6. THE END CAP SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12.

CULTEC HVLV FC-48 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL
CULTEC HVLV FC-48 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 902HD STORMWATER CHAMBERS.

FEED CONNECTOR PARAMETERS
1. THE FEED CONNECTOR SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-58321)
2. THE FEED CONNECTOR SHALL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
3. THE FEED CONNECTOR SHALL BE ARCHED IN SHAPE.
4. THE FEED CONNECTOR SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL DIMENSIONS OF THE CULTEC HVLV FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 49 INCHES (1245 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-48 FEED CONNECTOR SHALL BE 0.913 FT3 / FT (0.085 m³ / m) - WITHOUT STONE.
7. THE HVLV FC-48 FEED CONNECTOR SHALL HAVE 4 CORRUGATIONS.
8. THE HVLV FC-48 FEED CONNECTOR MUST BE FORMED AS A WHOLE UNIT HAVING TWO OPEN ENDS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE FEED CONNECTOR SHALL BE DESIGNED TO WITHSTAND AASHTO HS-25 DEFINED LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE FEED CONNECTOR SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

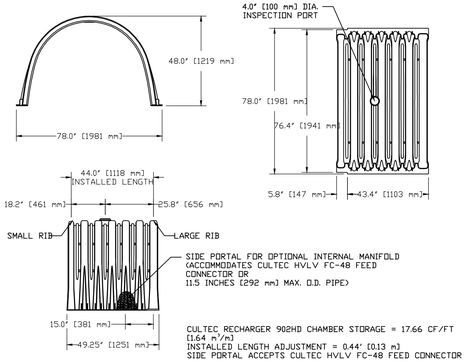
CULTEC NO. 66™ WOVEN GEOTEXTILE

GENERAL
CULTEC NO. 66™ WOVEN GEOTEXTILE IS UTILIZED AS AN UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE.

GEOTEXTILE PARAMETERS
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-58321).
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 315 LBS (1.40KN) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A TENSILE ELONGATION RESISTANCE OF 15% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A MULLEN BURST RESISTANCE OF 600PSI (4138 KPA) PER ASTM D3786 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A TEAR RESISTANCE OF 115 LBS (0.51 KN) PER ASTM D4533 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE RESISTANCE OF 150 LBS (0.66 KN) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 900 LBS (4.00 KN) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 70% @ 500 HRS. PER ASTM D4355 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.05 SEC-1 PER ASTM D4491 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 4 GPM/FT2 (160 LPM/M2) PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERCENT OPEN AREA OF <1% PER CW-02215 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
14. THE GEOTEXTILE SHALL CONSIST OF A 100% HIGH-TENACITY, SLIT-FILM POLYPROPYLENE YARNS.

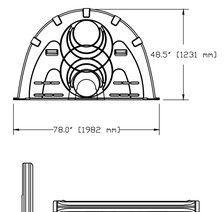
902HD 1.0

GENERAL NOTES



CULTEC RECHARGER 902HD CHAMBER STORAGE = 17.66 CF/FT (1.64 m³/m)
INSTALLED LENGTH ADJUSTMENT = 0.44' (0.13 m)
SIDE PORTAL ACCEPTS CULTEC HVLV FC-48 FEED CONNECTOR

902HD 4.0 **CULTEC RECHARGER 902HD HEAVY DUTY THREE VIEW**

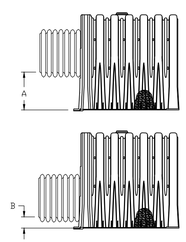


CULTEC RECHARGER 902HD END CAP STORAGE = 5.34 CF/FT (.49 m³/m)
INSTALLED LENGTH ADJUSTMENT = 0.29' (0.09 m)

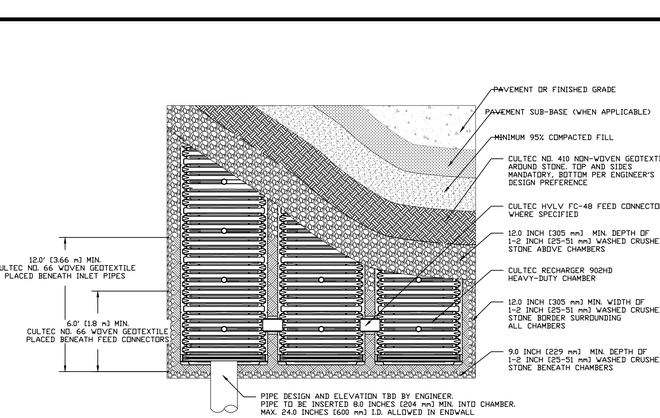
902HD 5.0 **CULTEC RECHARGER 902HD HEAVY DUTY END CAP THREE VIEW**

PIPE	A	B
6" [150 mm]	N/A	N/A
8" [200 mm]	N/A	N/A
10" [250 mm]	N/A	N/A
12" [300 mm]	29.50" [749 mm]	2.25" [57 mm]
15" [375 mm]	26.50" [673 mm]	2.25" [57 mm]
18" [450 mm]	23.50" [597 mm]	2.50" [64 mm]
24" [600 mm]	16.50" [420 mm]	3.00" [76 mm]

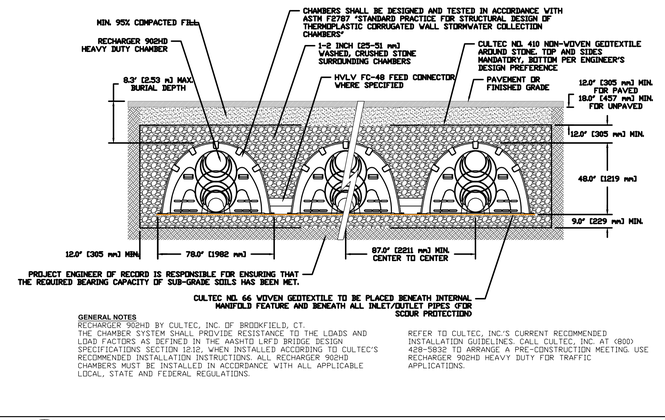
*THE TYPICAL INVERT TABLE ABOVE IS BASED ON THE INSIDE DIAMETER OF STANDARD CORRUGATED PLASTIC PIPE. THE HEAVY DUTY END CAP HAS PRE-MARKED TRIM LINES FOR PIPE DIAMETERS 12" (300mm), 15" (375mm), 18" (450mm) AND 24" (600mm). PIPES OF ANY SIZE AND MATERIAL UP TO 24" MAY BE PLACED AT CUSTOM LOCATIONS AND CUSTOM INVERTS. THE CROWN OF THE PIPE MUST REMAIN A MINIMUM OF 4" (100mm) FROM THE EDGE OF THE HEAVY DUTY END CAP.



902HD 8.0 **CULTEC RECHARGER 902HD TYPICAL PIPE INVERTS**



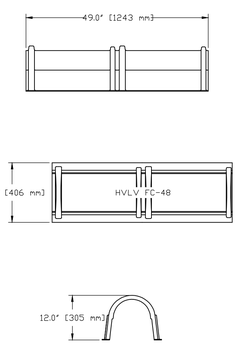
902HD 2.0 **CULTEC RECHARGER 902HD HEAVY DUTY PLAN VIEW**



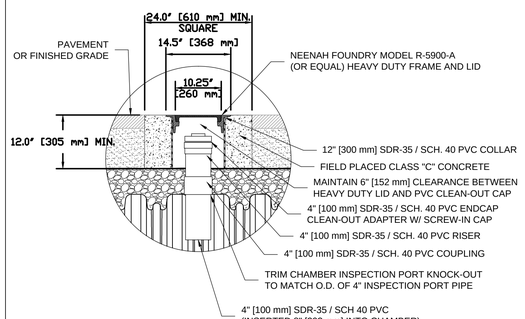
GENERAL NOTES
RECHARGER 902HD BY CULTEC, INC. OF BROOKFIELD, CT.
THE CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. ALL RECHARGER 902HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES. CALL CULTEC, INC. AT (800) 428-5832 TO ARRANGE A PRE-CONSTRUCTION MEETING. USE RECHARGER 902HD HEAVY DUTY FOR TRAFFIC APPLICATIONS.

902HD 6.0 **CULTEC RECHARGER 902HD HEAVY DUTY CROSS SECTION**



902HD 9.0 **CULTEC HVLV FC-48 FEED CONNECTOR THREE VIEW**



902HD 10.0 **OPTIONAL INSPECTION PORT - ZOOM DETAIL**

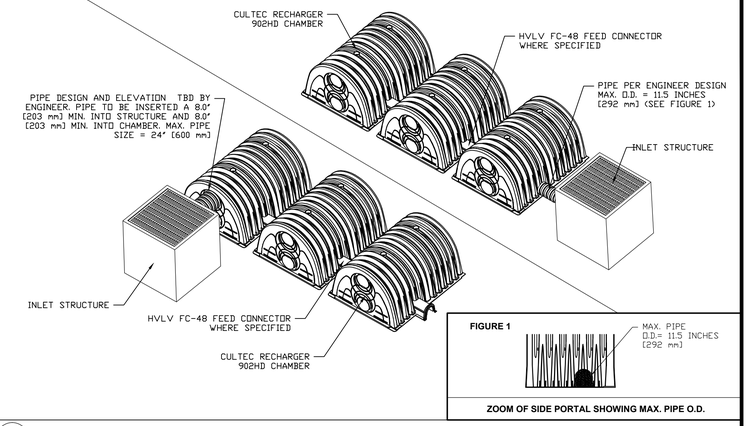
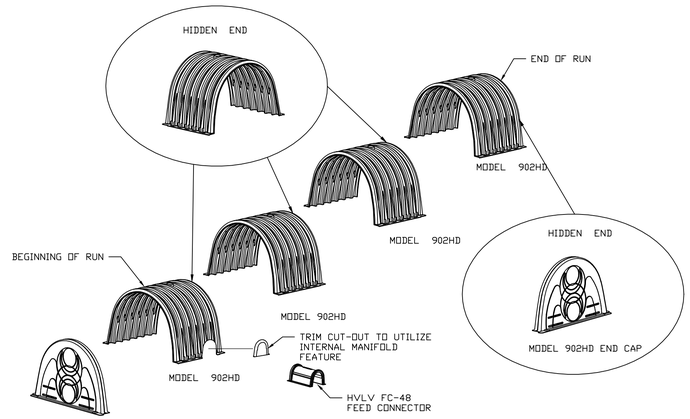


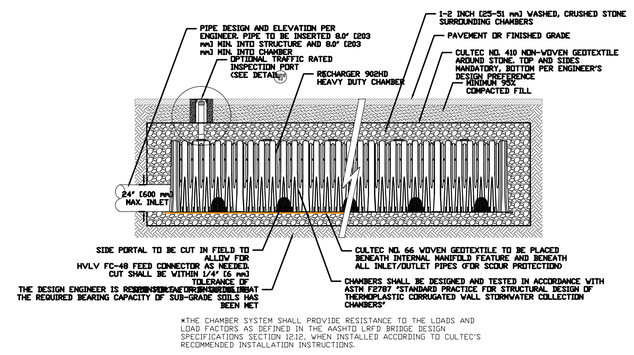
FIGURE 1

ZOOM OF SIDE PORTAL SHOWING MAX. PIPE O.D.

902HD 3.0 **CULTEC TYPICAL INLET CONNECTION**



902HD 7.0 **CULTEC RECHARGER 902HD HEAVY DUTY TYPICAL INTERLOCK**



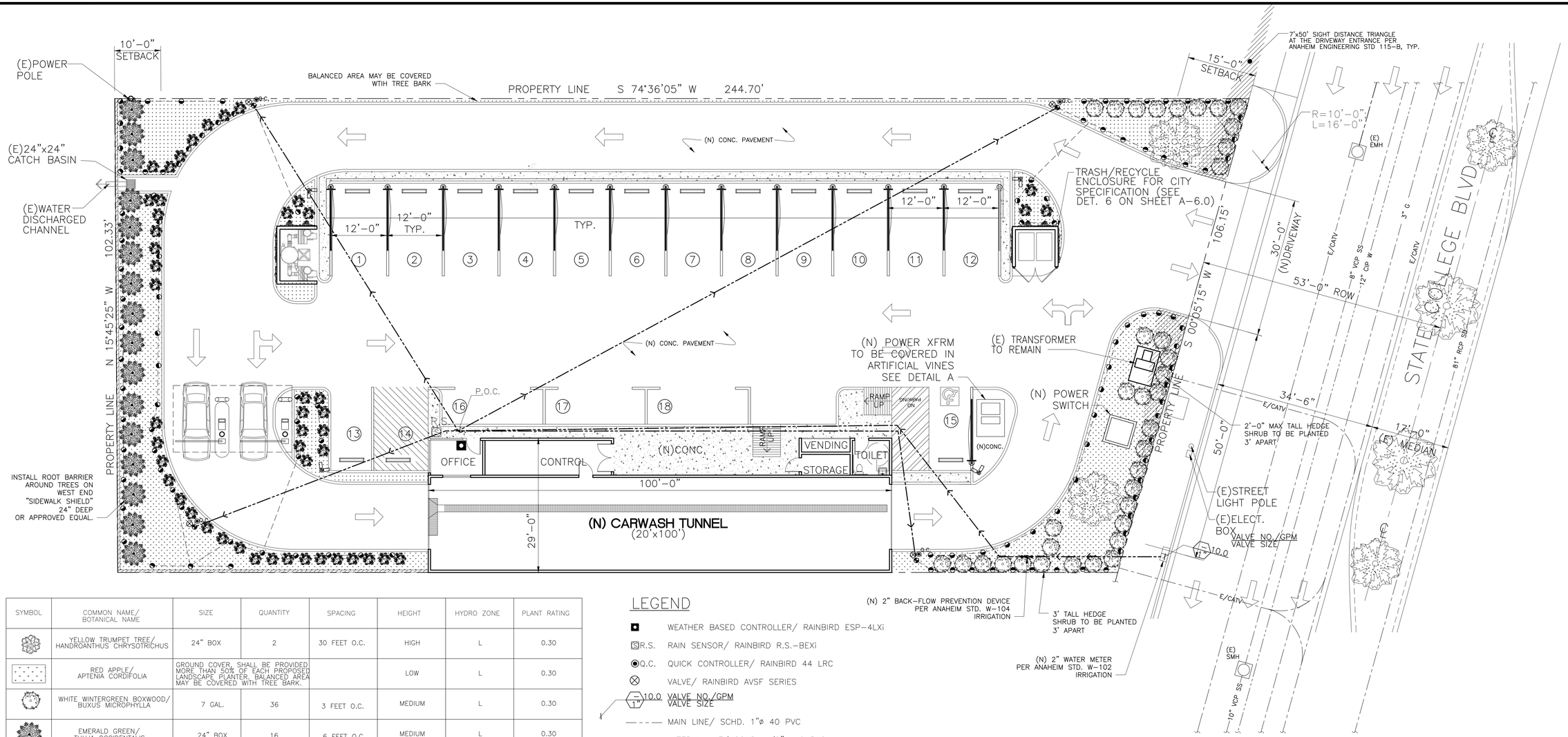
*THE CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

902HD 11.0 **CULTEC INTERNAL MANIFOLD - OPTIONAL INSPECTION PORT DETAIL**

TM
CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280 PH: (203) 775-4416
878 Federal Road PH: (800) 4-CULTEC
Brookfield, CT 06804 FX: (203) 775-1462
www.cultec.com tech@cultec.com
CULTEC

RECHARGER 902HD
821 S. STATE COLLEGE BLVD.
ANAHEIM, CA. 92806

PROJECT NO:	DATE: 11-08-18
DESIGNED BY: G.M.A.	CHECKED BY: C. LEE
SCALE: N.T.S.	SHEET NO: C-2.2



SYMBOL	COMMON NAME/ BOTANICAL NAME	SIZE	QUANTITY	SPACING	HEIGHT	HYDRO ZONE	PLANT RATING
	YELLOW TRUMPET TREE/ HANDROANTHUS CHRYSOTRICHUS	24" BOX	2	30 FEET O.C.	HIGH	L	0.30
	RED APPLE/ APTENIA CORDIFOLIA	GROUND COVER, SHALL BE PROVIDED MORE THAN 50% OF EACH PROPOSED LANDSCAPE PLANTER. BALANCED AREA MAY BE COVERED WITH TREE BARK.			LOW	L	0.30
	WHITE WINTERGREEN BOXWOOD/ BUXUS MICROPHYLLA	7 GAL.	36	3 FEET O.C.	MEDIUM	L	0.30
	EMERALD GREEN/ THUJA OCCIDENTALIS	24" BOX	16	6 FEET O.C.	MEDIUM	L	0.30
	LAVENDER BUSH/ LAVANDULA	5 GAL.	45	3 FEET O.C.	MEDIUM	L	0.30
	CALIFORNIA GOLD/ BOUGAINVILLEA	5 GAL.	4	3 FEET O.C.	MEDIUM	L	0.30

SYMBOL	DESCRIPTION	GPAC	RADIUS	PSI
	RAINBIRD 'BUBBLER'/QTR	.5	5'	30
	RAINBIRD 'BUBBLER'/HALF	1.0	5'	30

LEGEND

- WEATHER BASED CONTROLLER/ RAINBIRD ESP-4LXi
- R.S. RAIN SENSOR/ RAINBIRD R.S.-BEXi
- Q.C. QUICK CONTROLLER/ RAINBIRD 44 LRC
- VALVE/ RAINBIRD AVSF SERIES
- 10.0 VALVE NO./GPM; 1" VALVE SIZE
- MAIN LINE/ SCHD. 1"ø 40 PVC
- LATERAL LINE/ SCHD. 1/2"ø 40 PVC
- P.O.C. POINT OF CONNECTION
- 2" BACK-FLOW PREVENTION DEVICE PER ANAHEIM STD. W-104 IRRIGATION

A ARTIFICIAL VINES ON TRANSFORMER

THE CAR WASH SHALL COMPLY WITH ALL STATE LAWS AND LOCAL ORDINACES FOR WATER CONSERVATION MEASURES, INCLDUING CHAPTER 10.18 OF ANAHEIM MUNICIPAL CODE AND ORDINANCES RELATING TO WATER REDUCTION PROVISIONS.

N

NOTES:
1. 5 GALLON SHRUB FOR EVERY 300 SQ. FT.
2. (1) ONE 15-GAL TREE PER EVERY 600 SQ. FT.
3. INSTALL ROOT BARRIER WHERE CALLED OUT ON PLAN.

LANDSCAPE AND IRRIGATION PLAN

SCALE : 3/32"=1'-0" | 1

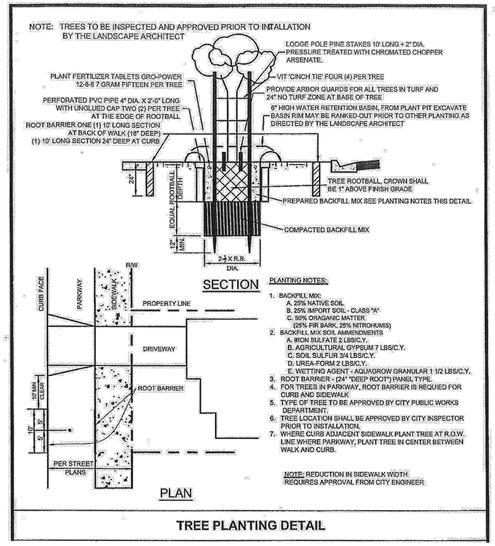
LEEDCO ENGINEERS
STRUCTURES · FOUNDATIONS
3870 BALDWIN AVE., EL MONTE, CA. 91731 (626) 448-7870

TITLE: NEW CARWASH DEVELOPMENT PROJECT
FOR
OWNER: ADAM NASRY
JOB ADDRESS: 821 S. STATE COLLEGE BLVD. ANAHEIM, CA 92806

REVISIONS

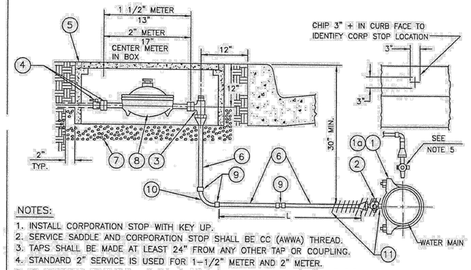
APPROVED BY: C. D. LEE | JOB NO.: 7927
DRAWN BY: H.W. | DATE: 12-07-18

L-1.0



TREE PLANTING DETAIL

LIST OF MATERIAL					
ITEM	DESCRIPTION	FORD	JONES	MUELLER	A.Y. McDONALD
1	DOUBLE STRAP SERVICE SADDLE	202B	J-979	BR2B SERIES	3825
1a	DOUBLE STRAP SERVICE SADDLE (SEE NOTE 9)	202BS	J-969	BR2S SERIES	3856
2	CORPORATION STOP, 2"	——	——	N-3500BN	——
3	ANGLE METER STOP, 2"	BFA43-777WRQ-NL	E-1975W	B-24276-1-3-N	74602B-22
4	METER COUPLING W/BALL VALVE W/HANDLE	BF13-777W-NL	E-1913WJ	B-24337-41-N	76101MW2
5	POLYMER CONCRETE METER BOX & LID (SEE SECTION 2-10.04)				
6	2" COPPER TUBE, TYPE K, SOFT OR RIGID				
7	1/2" CRUSHED ROCK, 4" BASE				
8	WATER METER (SEE SECTION 2-11)				
9	COMPRESSION COUPLING (USE WHEN L > 20' & AT SHORT RADIUS ELL)				
10	SHORT RADIUS ELL TYPE K COPPER				
11	TAPE WRAP A DISTANCE OF 3 FEET FROM & INCLUDING CORPORATION STOP W/ POLKEN #900 OR APPROVED EQUAL				



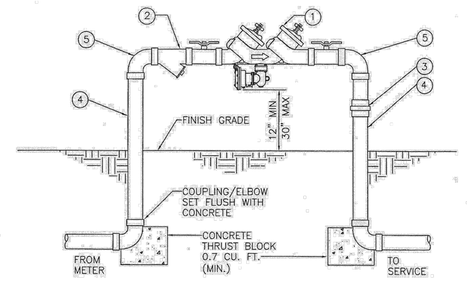
NOTES:

1. INSTALL CORPORATION STOP WITH KEY UP.
2. SERVICE SADDLE AND CORPORATION STOP SHALL BE CC (AWWA) THREAD.
3. TAPS SHALL BE MADE AT LEAST 24" FROM ANY OTHER TAP OR COUPLING.
4. STANDARD 2" SERVICE IS USED FOR 1-1/2" METER AND 2" METER.
5. IF APPROVED BY THE WATER UTILITY INSPECTOR, WATER MAIN MAY BE TAPPED W/SERVICE SADDLE AND CORPORATION STOP FROM TOP WHEN FINISHED SURFACE IS GREATER THAN 5-FEET OVER TOP OF PIPE.
6. A TRAFFIC LOAD RATING COVER SHALL BE USED IN AREAS WITHOUT CURB, IN AREAS WITH ROLLED OR TYPE "F" CURB, OR WHERE THE METER IS LOCATED WITHIN 5-FEET OF THE BCR, ECR OR A DRIVEWAY APPROACH.
7. ANGLE METER STOPS SHALL BE PROVIDED WITH 360° TEE HEAD ROTATION.
8. TURBINE METER REQUIRES WATER ENGINEERING APPROVAL.
9. FOR USE ON PVC WATER MAIN CONSTRUCTION ONLY. PVC WATER MAIN CONSTRUCTION SHALL BE PRE-APPROVED BY THE UTILITY PER SECTION 2-02.

2 INCH WATER SERVICE INSTALLATION

WATER SERVICES			PUBLIC UTILITIES DEPARTMENT	CITY OF ANAHEIM	STD. NO.
	BY	DATE			
DRAWN	TL	12-5-14	APPROVED: WATER ENGR.-MGR.-WATER SERVICES	DATE 2/12/15	W-102
CHECKED	DRS	12-12-14	APPROVED:		
RECOMMENDED	DE	12-12-14	ASST. GEN. MGR.-WATER SERVICES	DATE 2-13-15	SHEET 1 OF 1

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	BACKFLOW PREVENTION DEVICE, USC APPROVED TYPE
2	WYE STRAINER, BRONZE
3	BRASS UNION
4	RISER AND NIPPLES — BRASS OR COPPER
5	90° ELBOW — BRASS OR COPPER



NOTES:

1. THE BACKFLOW PREVENTER ASSEMBLY SHALL CONSIST OF AN APPROVED REDUCED PRESSURE ASSEMBLY. THE DEVICE SHALL BE LEAD FREE FOR DOMESTIC SERVICE.
2. LOCATION AND INSTALLATION SHALL BE PER PLAN AS SUBMITTED TO AND APPROVED BY THE UTILITY.
3. NO CONNECTIONS TO BE MADE BETWEEN METER AND BACKFLOW PREVENTER.
4. SECURITY ENCLOSURE (OPTIONAL) SHALL BE PER PUBLIC WORKS STD 512 OR AS SPECIFIED PER PROJECT PLAN OR AS DIRECTED BY THE UTILITY.
5. BACKFLOW DEVICE SHALL NOT BE LOCATED WITHIN THE PUBLIC RIGHT OF WAY (ROW) AND SHALL BE OUTSIDE OF THE SETBACK AREA (SETBACK TYPICALLY 5-FT MIN. FROM ROW).
6. ENCLOSURES WITH HEIGHT GREATER THAN 36" SHALL BE SUBMITTED FOR APPROVAL BY THE PLANNING DEPARTMENT.

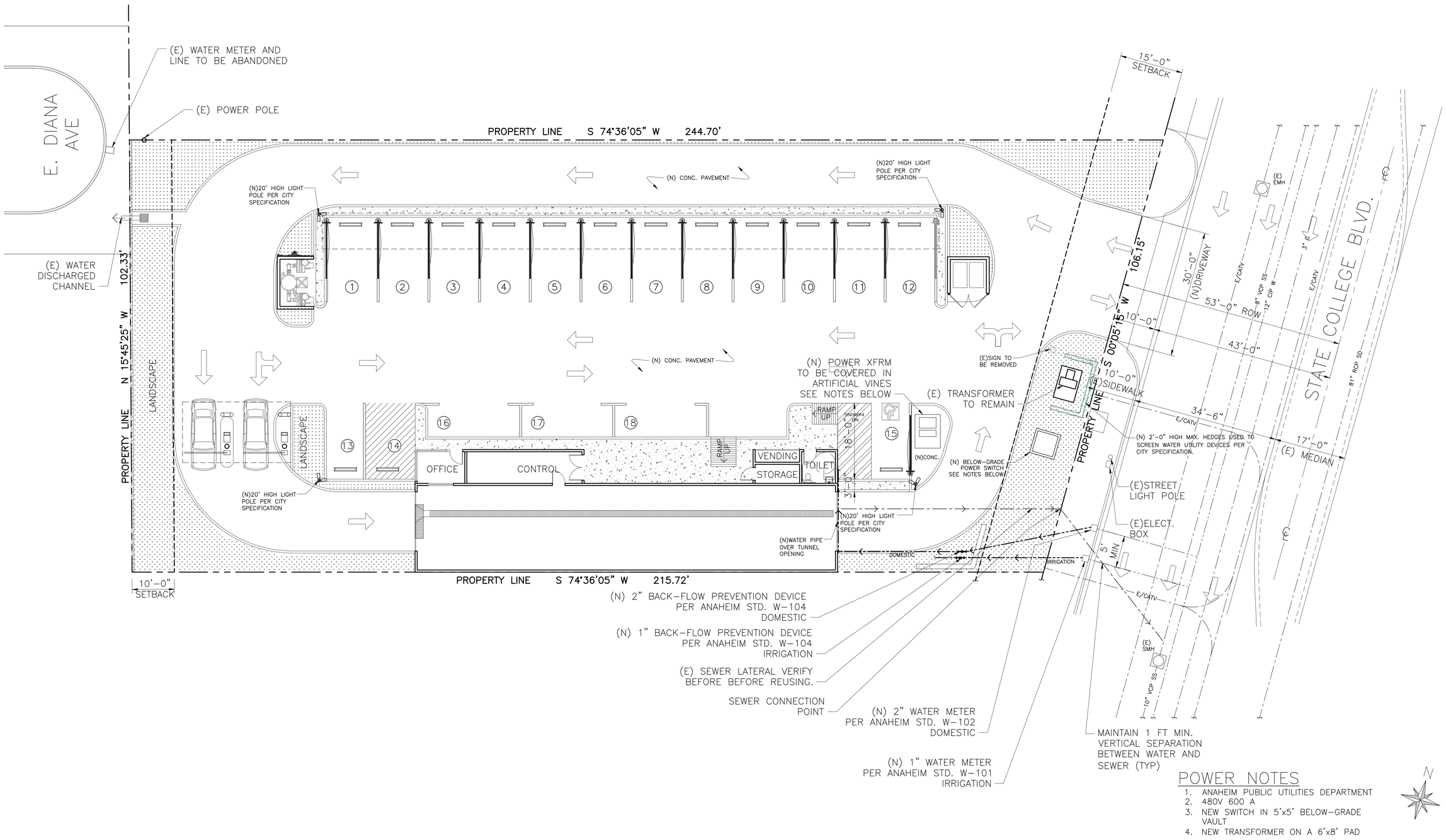
3/4 INCH THROUGH 2 INCH REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY

...ATER SERVICES			PUBLIC UTILITIES DEPARTMENT	CITY OF ANAHEIM	STD. NO.
	BY	DATE			
DRAWN	TL	6-26-12	APPROVED: CIVIL ENGINEER-WATER SERVICES	DATE 8/3/12	W-104
CHECKED	DRS	7-11-12	APPROVED:		
RECOMMENDED	MF	7-11-12	ASST. GEN. MGR.-WATER SERVICES	DATE 8.8.12	SHEET 1 OF 1

LEEDCO ENGINEERS
STRUCTURES · FOUNDATIONS
3870 BALDWIN AVE., EL MONTE, CA. 91731 (626) 448-7870

TITLE	NEW CARWASH DEVELOPMENT PROJECT
	FOR
OWNER	ADAM NASRY
JOB ADDRESS	821 S. STATE COLLEGE BLVD. ANAHEIM, CA 92806

REVISIONS	APPROVED BY:	JOB NO.:	
IRRIGATION SPEC SHEETS	C. D. LEE	7927	L-2.0
	DRAWN BY: H.W.	DATE: 12-07-18	



POWER NOTES

1. ANAHEIM PUBLIC UTILITIES DEPARTMENT
2. 480V 600 A
3. NEW SWITCH IN 5'x5' BELOW-GRADE VAULT
4. NEW TRANSFORMER ON A 6'x8' PAD

PROPOSED UTILITY PLAN

SCALE : 3/32"=1'-0"

1

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