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1. ALL WORK PERFORMED IN THIS CONTRACT SHALL CONFORM TO:
    - A. THE PROJECT SPECIFICATIONS AND ALL SAFETY REGULATION; CODES AND REQUIREMENTS PERTINENT TO THE PROJECT CONSTRUCTION.
    - B. ALL SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) AND AMERICAN PUBLIC WORKS ASSOCIATION (APWA).
    - C. CITY OF LOS ANGELES STANDARD PLANS AND SPECIFICATIONS.
    - D. PROJECT GEOTECHNICAL REPORT.
  2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE KNOWLEDGEABLE TO INTERPRET AND APPLY THE ABOVE CODES AND SPECIFICATIONS.
  3. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE WORK SPECIFIED ON THE DRAWINGS, SPECIFICATIONS AND WITHIN THE VARIOUS NOTES SHOWN HEREIN.
  4. THE EXISTING CONDITIONS SHOWN DIAGRAMMATICALLY ON THE PLANS ORIGINATED FROM AS BUILT DRAWINGS AND FIELD SURVEY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE JOB SITE AND VERIFY THE EXACT EXISTING CONDITIONS BEFORE SUBMITTING HIS/HER BID. ANY DISCREPANCY SHALL BE REPORTED IMMEDIATELY TO THE CITY ENGINEER FOR PROPER ACTION.
  5. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES IN THE AREA OF WORK WHICH ARE NOT INCLUDED IN THIS CONSTRUCTION. ANY DAMAGE RESULTING FROM THIS WORK SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE CITY.
  6. UNCLOG, CLEAN AND FLUSH THE ENTIRE SITE DRAINAGE SYSTEM AFTER PAVING AND IMMEDIATELY BEFORE A RAIN FORECAST.
  7. ALL EXISTING STREET IMPROVEMENTS, UNLESS OTHERWISE INDICATED HEREIN TO BE REMOVED, SHALL BE PROTECT IN PLACE. THESE ITEMS INCLUDE LIGHT POLES, POWER POLES, SIGNAL POLES AND APPURTENANCES.
  8. CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS BOTH IN PRIVATE PROPERTY AND IN PUBLIC RIGHT OF WAY FOR EXISTING LATERALS TO BE REMOVED OR CAPPED.
  9. UTILITIES TO BE VERIFIED IN FIELD TO ENSURE EXISTING UTILITY TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION IF REQUIRED. ALL EXISTING/RELOCATED UTILITIES PER NEW SITE LAYOUT WILL BE PROTECTED IN PLACE.

UNDERGROUND SERVICE ALERT:

  10. BEFORE COMMENCING ANY EXCAVATION ON-SITE AND OFF-SITE, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT INQUIRY I.D. NUMBER BY CALLING 1-800-422-4133. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE EXCAVATION WORK IS STARTED THAT UTILITY COMPANIES CAN BE NOTIFIED.

PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS:

  11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO THE WORK PER SECTION 7-9 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

REMOVALS:

  12. EXISTING STRUCTURES AND SUBSTRUCTURES WHICH ARE INDICATED TO BE REMOVED IN THIS CONSTRUCTION DOCUMENTS SHALL BE TOTALLY REMOVED AND DISPOSED OF OFFSITE, UNLESS OTHERWISE INDICATED. EXISTING FACILITIES WHICH ARE DISCOVERED DURING CONSTRUCTION (INCLUDING WALLS, FOOTINGS, AND FOUNDATIONS) SHALL BE REPORTED TO AND COORDINATED WITH THE GEOTECHNICAL ENGINEER OF RECORD AS TO THEIR REMOVAL.
  13. FOLLOWING DEMOLITION, THE CONSTRUCTION AREA SHOULD BE CLEARED OF ANY VEGETATION AND STRIPPED OF MISCELLANEOUS DEBRIS AND OTHER DELETERIOUS MATERIAL. VEGETATION AND ORGANIC MATTER SHOULD NOT BE INCORPORATED INTO THE COMPACTED FILL.
  14. ALL SITE PREPARATION AS INDICATED SHALL BE MADE UNDER THE CONTINUOUS INSPECTION OF THE GEOTECHNICAL ENGINEER. SECURE THE REQUIRED PERMITS FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR THE CONSTRUCTION OF TRENCHES, SHORING OR EXCAVATIONS WHICH ARE 5 FEET OR DEEPER OR WORK THAT MAY JEOPARDIZE THE SAFETY OF WORKERS. SHORING CALCULATIONS SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE AS REQUIRED FOR APPROVAL AND PERMITTING.
  15. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO CONTROL DUST CAUSED BY WORK ACTIVITIES AS REQUIRED BY THE CITY ENGINEER. THE CONTRACTOR SHALL PROVIDE 6' HIGH TEMPORARY FENCING WITH VISUAL BARRIER AROUND THE PROJECT LIMITS AND A TEMPORARY CONSTRUCTION ACCESS ON-SITE.
  16. ALL WORK IN THE PUBLIC RIGHT OF WAY REQUIRES APPROVAL BY THE CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS BEFORE CONSTRUCTION BEGINS. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS INCLUDING UTILITY CONNECTIONS REQUIRED PRIOR TO CONSTRUCTION.
  17. VOIDS RESULTING FROM REMOVAL OF STRUCTURES SHALL BE FILLED WITH SUITABLE MATERIALS APPROVED BY THE CITY INSPECTOR AND COMPACTED TO 95% MINIMUM DENSITY PER ASTM D-1557 AND THE RECOMMENDATIONS WITHIN THE SOILS ENGINEERING EXPLORATION REPORT.
  18. UPON COMPLETION OF PROJECT, CONTRACTOR SHALL REMOVE EXISTING CONSTRUCTION FENCING, APPURTENANCES AND OFFICE TRAILERS FROM THE SITE. PAVEMENT SHALL BE PATCHED AND REPAIRED TO MATCH ADJACENT PAVEMENT AND APPROVED BY THE CITY ENGINEER AS APPLICABLE.
  19. ANY ADDITIONAL SURVEYS OR TESTING AS A RESULT OF CONTRACTOR ERROR OR MISINFORMATION WILL BE CHARGED TO THE CONTRACTOR.
  20. 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.
  21. TRIM TREE ROOTS AS NECESSARY OR GRADED ON AREAS TO BE PAVED. TRIM ROOTS UNDER THE DIRECTION OF A CERTIFIED CITY APPROVED ARBORIST. NOTIFY THE CITY ENGINEER PRIOR TO TRIMMING OF TREES.

## GENERAL NOTES:

1. JUST TO GRADE EXISTING MANHOLE RIMS, VALVE BOXES AND ELECTRICAL VAULT LIDS TO DESIGN GRADES IN THE IMPROVEMENT AREA, UNLESS NOTED OTHERWISE. CONTRACTOR TO VERIFY LOCATION AND NUMBER MANHOLE RIMS, VALVE BOXES AND ELECTRICAL VAULT LIDS IN THE FIELD PRIOR TO BIDDING.
  2. EXISTING UTILITIES ARE EXPOSED OR DETERMINED TO EXIST UNDER THE ROUGH GRADING SITE, CONTRACTOR SHALL PROVIDE A FLAGGED STAKE THAT INDICATE THEIR LOCATION, TYPE OF UTILITY, SIZE, MATERIAL, AND DEPTH. STAKES SHALL BE INSTALLED NO LESS THAN 50' ON CENTER ON STRAIGHT S AND AT BENDS.
  3. BOUNDARIES, EASEMENTS, DRAINAGE DEVICES AND RESTRICTED USE AREAS SHALL BE LOCATED PERSTRUCTION STAKING BY A LICENSED SURVEYOR PAID FOR BY THE CONTRACTOR. PRIOR TO GRADING, AS REQUESTED BY THE CITY ENGINEER, ALL PROPERTY LINES, EASEMENTS, AND RESTRICTED USE AREAS SHALL STAKED.
  4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE CITY ENGINEER WITH A COMPLETE SET OF PRODUCIBLE & RED MARKED PRINT "AS-BUILT" DRAWINGS OF ALL WORK PERFORMED UNDER THIS CONTRACT, AS SHOWN WITHIN THESE CONSTRUCTION DRAWINGS. ALL FIELD CHANGES SHALL BE SHOWN IN FULL ON THE "AS-BUILT" DRAWINGS AND SHALL INCORPORATE AS A MINIMUM, NEW ELEVATIONS, GRADES ALIGNMENT OF UNDERGROUND FACILITIES WITH DIMENSIONAL TIES TO BUILDING OR OTHER VISIBLE MOVEMENTS.
  5. CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION TO THEIR EXISTING CONDITION OF THE FACILITIES WHICH ARE INTENDED TO REMAIN IN PLACE. AND ALL REPAIRS TO ANY DAMAGED MATERIALS OR FACILITIES SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
  6. CONTRACTOR OFFSITE WORK TO COMPLY WITH THE REQUIREMENTS OF THE LOCAL GOVERNING AGENCY. SECURE PAY FOR REQUIRED CONSTRUCTION PERMITS.

## GENERAL GEOTECHNICAL NOTES:

- WORK MUST BE IN COMPLIANCE WITH THE RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL SULTANT'S REPORT(S) AND THE APPROVED GRADING PLANS AND SPECIFICATIONS.

GEOTECHNICAL INVESTIGATION WAS PREPARED BY GEOTECHNICAL ENGINEERING DIVISION W.O. #E170517A, FILE #17-074 DATED AUGUST 22, 2017, ENTITLED "GEOTECHNICAL ENGINEERING REPORT GRANADA HILLS POOL REPLACEMENT PROJECT WITH ADDRESS 16730 CHATSWORTH STREET TRACT: SUBDIVISION NO.1 OF THE PROPERTY OF THE PORTER LAND AND WATER COMPANY BLOCK: NONE, LOT: 2 SEC 18 T2N R15W LOS ANGELES, CALIFORNIA. RECOMMENDATIONS OF THE SOILS REPORT AND SUPPLEMENTS / ADDENDUMS ARE PART OF THIS NOTE AND SHALL BE PERFORMED BY THE CONTRACTOR AS APPLICABLE. IF DISCREPANCIES EXIST, THE GEOTECHNICAL REPORT SHALL GOVERN.

EARTH WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS IN TECHNICAL REPORT AND THE LADBS GRADING DIVISION REQUIREMENTS. ALL EARTHWORK SHOULD BE PERFORMED UNDER THE OBSERVATION AND TESTING OF A QUALIFIED GEOTECHNICAL ENGINEER.

SOIL BENEATH NEW PAVEMENTS, POOL DECK, AND SPLASH PAD SHALL BE OVER-EXCAVATED TO A DEPTH OF 24 INCHES BELOW EXISTING GRADING OR 24 INCHES BELOW THE FINISHED GRADE, WHICHEVER IS GREATER AND SHALL RESULT IN 24" OF COMPACTED FILL. THE EXCAVATION SHALL EXTEND LATERALLY AT LEAST 2 FEET BEYOND THE EDGE OF THE PAVEMENT OR TO THE PROPERTY BOUNDARY, WHICHEVER IS LESS.

SOIL BENEATH THE POOL SHALL BE EXCAVATED TO THE DESIGN SUBGRADE OR TO THE NATIVE SOIL, WHICHEVER IS GREATER. AS ADDITIONAL 12" SHALL BE EXCAVATED SO THAT THE POOL IS UNDERLAIN BY 12" OF FILL.

SOIL BENEATH SECONDARY (I.E. NON-STRUCTURAL) STRUCTURES SHALL BE OVER-EXCAVATED TO A DEPTH THAT SHALL RESULT IN AT LEAST 24 INCHES OF COMPACTED FILL BENEATH THE FOOTING. THIS 24 INCHES INCLUDES SUBGRADE PREPARATION. THE EXCAVATION SHALL EXTEND LATERALLY AT LEAST 2 FEET BEYOND THE EDGE OF THE FOOTING OR TO THE PROPERTY BOUNDARY, WHICHEVER IS LESS.

SOIL BENEATH SHALLOW FOUNDATIONS SHALL BE OVER-EXCAVATED TO A DEPTH THAT SHALL RESULT IN AT LEAST 30 INCHES OF COMPACTED FILL BENEATH THE FOOTING. THIS 30 INCHES INCLUDES SUBGRADE PREPARATION. THE EXCAVATION SHALL EXTEND LATERALLY AT LEAST 2 FEET BEYOND THE EDGE OF THE FOOTING OR TO THE PROPERTY BOUNDARY, WHICHEVER IS LESS.

EXCAVATION BOTTOMS SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES, MOISTURE CONDITIONED TO WITHIN 3 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 95 PERCENT. ALL EXCAVATION BOTTOMS MUST BE APPROVED BY A REPRESENTATIVE OF GEO AND BY THE LADBS GRADING INSPECTOR PRIOR TO BACK FILL.

UNCHARGED, TEMPORARY VERTICAL EXCAVATIONS SHALL NOT EXCEED 5 FEET. UNSURCHARGED EXCAVATIONS GREATER THAN 5 FEET AND TO A MAXIMUM OF 10 FEET SHALL BE SLOPED AT A 1.5:1 (H:V) FLATTER INCLINATION FROM THE GROUND SURFACE TO THE BOTTOM OF THE EXCAVATION. IF DEEPER EXCAVATIONS ARE PROPOSED, THEY SHALL BE REVIEWED BY GEO AND SUPPLEMENTAL RECOMMENDATION MAY BE REQUIRED.

FOR EXCAVATION, IT IS RECOMMENDED THAT WALLS, STRUCTURES, OR PORTIONS OF STRUCTURES WITHIN A HORIZONTAL DISTANCE OF 1½ TIMES THE DEPTH OF THE EXCAVATION BE INSPECTED TO DETERMINE THEIR CURRENT CONDITION.

PHOTOGRAPHS SHOULD BE TAKEN OF PRECONSTRUCTION CONDITIONS AND LEVEL SURVEYS SHOULD BE FORMED.

CONTRACTOR SHALL NOT POUR FOOTINGS UNTIL AN APPROVAL LETTER IS ISSUED BY THE DEPARTMENT OF BUILDING AND SAFETY, GRADING DIVISION FOR THE COMPACTION CERTIFICATION. THE CONTRACTOR MAY PLACE IN COMPACTED FILL FOR FOUNDATION ELEMENTS BEFORE THE FILL CERTIFICATION APPROVAL LETTER IS ISSUED, BUT DOES SO AT HIS/HER OWN RISK.

GEOTECHNICAL ENGINEER IS TO APPROVE THE KEY OR BOTTOM OF EXCAVATION AND LEAVE A CERTIFICATE ON THE SITE FOR THE CITY INSPECTOR. THE CITY INSPECTOR IS TO BE NOTIFIED BEFORE ANY CONCRETE BEING PLACED AND FOR BOTTOM INSPECTION BEFORE FILL IS PLACED. FILL MAY NOT BE PLACED WITHOUT APPROVAL OF THE CITY INSPECTOR.

GEOTECHNICAL ENGINEER SHALL PROVIDE SUFFICIENT INSPECTIONS DURING THE PREPARATION OF THE CROWN GROUND AND THE PLACEMENT AND COMPACTION OF THE FILL TO BE SATISFIED THAT THE WORK IS BEING PERFORMED IN ACCORDANCE WITH THE PLAN AND APPLICABLE CODE REQUIREMENTS.

FOUNDATION AND WALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER, PRIOR TO THE PLACING OF STEEL OR CONCRETE.

PILE FOUNDATIONS ARE DESIGNED TO DERIVE SUPPORT IN ENGINEERED FILL, AS A MINIMUM, FOOTINGS SHALL BE FOUNDED ON AT LEAST 30 INCHES OF PROPERLY COMPACTED FILL MATERIAL AND SHALL BE PLACED AT LEAST 24 INCHES BELOW THE LOWEST ADJACENT GRADE.

SMALL EXCAVATIONS FOR UTILITY PIPES MAY BE BACKFILLED WITH ONSITE SOILS UNDER THE OBSERVATION OF A REPRESENTATIVE OF GEO. AFTER UTILITY PIPES HAVE BEEN LAID, PROPERLY BEDDED, AND COVERED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THEY SHALL BE BACK FILLED TO THE GROUND SURFACE OR DESIGN GRADE WITH CONTROLLED BACKFILL. CONTROLLED BACKFILL SHALL BE MOISTURE CONDITIONED, PLACED AND COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED ABOVE. DENSIFICATION BY VIBRATING OR JETTING IS NOT ALLOWED.

ON-SITE PAVEMENT ADAPTED PER GEOTECHNICAL REPORT AND SUPPLEMENTAL REPORT, REFER TO SECTION C5.00 AND C5.01 PAVEMENT DETAILS FOR PAVEMENT THICKNESSES, COMPACTION REQUIREMENTS, AND OTHER CONDITIONS.

## L NOTES:

- SHALL NOT BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS, AND  
STALLATION OF SUBDRAIN (IF ANY) HAVE BEEN INSPECTED AND APPROVED BY THE SOIL ENGINEER. THE  
ENGINEER MAY REQUIRE A "STANDARD TEST METHOD FOR MOISTURE, ASH, ORGANIC MATTER, PEAT OR  
ER ORGANIC SOILS" ASTM D-2974-87 ON ANY SUSPECT MATERIAL. DETRIMENTAL AMOUNTS OF ORGANIC  
TERRIAL SHALL NOT BE PERMITTED IN FILLS. SOIL CONTAINING SMALL AMOUNTS OF ROOTS MAY BE  
LOWED PROVIDED THAT THE ROOTS ARE IN A QUANTITY AND DISTRIBUTED IN A MANNER THAT WILL NOT  
DETRENENTAL TO THE FUTURE USE OF THE SITE AND THE GEOTECHNICAL ENGINEER APPROVED THE USE  
SUCH MATERIAL.

FILL TO BE PLACED, UNTIL THE GEOTECHNICAL ENGINEER OR CITY ENGINEER HAS INSPECTED AND  
ROVED THE BOTTOM OF EXCAVATION. FILL MATERIAL INCLUDING BASE MATERIAL SHALL BE OBTAINED  
M A DESIGNATED ON-SITE STOCKPILE AREAS, AS DIRECTED BY THE OAR. ANY ADDITIONAL IMPORT FILL  
TERRIAL SHALL HAVE AN EXPANSION INDEX OF LESS THAN "20". IN NO CASE SHALL ON-SITE CLAY SOILS  
PLACED IN THE UPPER 24 INCHES BENEATH CONCRETE SLABS AND WALKS AND BEHIND RETAINING WALLS  
DIRECTED IN THE GEOTECHNICAL INVESTIGATION REPORT.

ONSITE OR NATIVE SOILS; THE GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO REVIEW THE TYPES OF  
TERIALS ENCOUNTERED IN THE EXCAVATIONS IN ORDER TO CONFIRM THEIR RE-USABILITY.

EXISTING PEA GRAVEL FILL BY ITSELF IS NOT ACCEPTABLE FOR REUSE AS BACK FILL, BUT IT MAY BE  
NDED WITH THE NATIVE SOIL. FILL MATERIALS SHALL CONSIST OF THE NATIVE SOIL OR APPROVED IMPORT  
. IMPORT SOIL AND ONSITE BLENDED NATIVE SOIL/PEA GRAVEL SHALL BE PREDOMINANTLY GRANULAR  
IMUM 80% PASSING THE NO. 4 SIEVE AND BETWEEN 10% AND 35% PASSING THE NO. 200 SIEVE,  
-EXPENSIVE (EI LESS THAN 20). ALL FILL SHALL BE FREE OF ORGANIC OR INORGANIC DEBRIS,  
TAMINATION AND MATERIALS WITH ANY DIMENSION LARGER THAN 3 INCHES. PROPOSED IMPORT SOIL  
LL BE REVIEWED BY GEO FOR APPROVAL PRIOR TO DELIVERY TO THE JOB SITE. GEO SHALL BE NOTIFIED  
INIMUM OF THREE WORKING DAYS PRIOR TO SCHEDULED DELIVER TO THE SITE.

MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS,  
TURE-CONDITIONED TO WITHIN 3 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT AND MECHANICALLY  
IPACTED. CLAYEY SOILS (I.E. THOSE WITH 15% OR MORE FINER THAN 0.005 MM SIEVE) ARE NOT  
CIPACITATED AT THIS TIME. PRIMARY STRUCTURAL FILL AND THE UPPER 1-FOOT OF SUBGRADE BENEATH  
EMENTS SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT RC. ANY AGGREGATE BASE SHOULD BE  
TURE CONDITIONED TO WITHIN 3 PERCENT ABOVE OPTIMUM AND COMPACTED TO A MINIMUM OF 95  
CENT RC.

PLACEMENT AND COMPACTION SHALL BE OBSERVED AND TESTED BY A CERTIFIED COMPACTION TESTING  
NCY WORKING UNDER THE DIRECT SUPERVISION OF GEO. COMPACTED FILL SOILS SHALL BE KEEP MOIST,  
OR SLIGHTLY ABOVE THE SPECIFIED MOISTURE CONTENT AT THE TIME OF COMPACTION) BUT NOT  
ODED, UNTIL COVERED WITH SUBSEQUENT CONSTRUCTION. IF COMPACTED FILL SOILS BECOME SOFTENED  
DISTURBED, THEY SHALL BE REPLACED OR RECOMPACTED AT THE DIRECTION OF GEOTECHNICAL ENGINEER  
ORE ADDITIONAL FILL OR CONSTRUCTION IS PLACED. CERTIFICATION AND INSPECTION APPROVALS FOR  
IPROMISED SOILS ARE VOID AND INVALID.

# STREET INDEX

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# VICINITY MAP

NOT TO SCALE

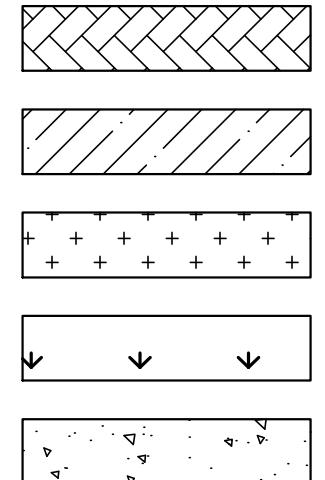
A circular registration stamp. The outer ring contains the words "REGISTERED PROFESSIONAL ENGINEER" at the top and "STATE OF CALIFORNIA" at the bottom. The inner circle contains "VIRGILIO C. AOANJAN" in the center, flanked by two five-pointed stars. Below the name is a horizontal line with "No. C36079" written on it. At the bottom of the inner circle is another horizontal line with "Exp. 6/30/20" written on it.

DEPARTMENT OF PUBLIC WORKS		CITY ENGINEER
GARY LEE MOORE, PE, ENV SP	ARCHITECTURAL DIVISION	DATE:
ARCHITECT/ENGINEER: VIRGILIO AOANAN	LIC. NO.: C36079	03/03/2020
DESIGNED BY: VIRGILIO AOANAN		03/03/2020
DRAWN BY: AUTUMN WAGGONER		03/03/2020
CHECKED BY: VIRGILIO AOANAN		03/03/2020
APPROVED BY: VIRGILIO AOANAN		03/03/2020

CITY OF LOS ANGELES		SHEET TITLE: GENERAL NOTES, LEGEND, AND ABBREVIATIONS	
PROJECT: GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT		ADDRESS: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344	
WORK ORDER NO. <b>#E170517</b>		PLAN FILE NO. <b>#308</b>	
DRAWING NO. <b>C100</b>		SHEET NO. 1 OF 19	
SHEET <b>1</b>	TO	SHEETS <b>19</b>	

## DEMOLITION LEGEND:

- REMOVE EXISTING CONCRETE PAVING
- REMOVE EXISTING ASPHALT PAVING
- REMOVE EXISTING STRUCTURE
- CLEAR, GRUB, AND REMOVE EXISTING TURF/PLANTER/SHRUBS AND ROOTS
- PROTECT IN PLACE EXISTING CONCRETE



## SITE PLAN LEGEND:

ASPHALT PAVEMENT OVER CRUSHED AGGREGATE BASE	
CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE	
TURF OR PLANTER AREA (SEE LANDSCAPING DRAWINGS)	
WALL (SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS)	
PROPERTY LINE -----	-----
CENTER LINE -----	-----
FINISHED GRADE CONTOUR -----	150.00 -----
EXISTING GRADE CONTOUR -----	(150.00) -----
EXISTING GRADE ELEVATION -----	(150.00) -----
FINISHED GRADE ELEVATION -----	150.00 -----
CHAIN LINK FENCE (CLF) -----	----- x ----- x -----
FLOW LINE -----	----- → ----- ← -----
RIDGE LINE -----	----- R -----
GRADE BREAK -----	----- GB -----
GAS LINE -----	----- G -----
ELECTRICAL CONDUIT -----	----- E -----
TRAFFIC SIGNAL LINE -----	----- TS -----
STORM DRAIN LINE -----	----- SD -----
FIRE WATER LINE -----	----- FW -----
FRENCH DRAIN LINE -----	----- FD -----
IRRIGATION LINE -----	----- IRR -----
SEWER LINE -----	----- SS -----
DOMESTIC WATER LINE -----	----- DW -----
CONTROL POINT -----	△ -----
STORM DRAIN MANHOLE -----	① -----
SEWER MANHOLE -----	② -----
STREET LIGHT -----	⊗ -----
GAS VALVE -----	⊗GV -----
PULL BOX -----	□PB -----
ELECTRICAL RISER -----	□ -----
GUY WIRES -----	← -----
POWER POLE -----	● -----
WATER METER -----	□WM -----
WATER VALVE -----	⊗WV -----
FIRE HYDRANT -----	⊗ -----
FIRE DEPARTMENT CONNECTION -----	↙⊗FDC -----
POST INDICATOR VALVE -----	⊗PIV -----
BACKFLOW PREVENTER -----	⊗HNHN⊗ -----

## UTILITY NOTES:

## WATER UTILITY NOTES:

1. ALL FITTINGS SUBJECT TO AN UNBALANCED HYDROSTATIC FORCE SHALL BE RESTRAINED WITH 2000 PSI CONCRETE THRUST BLOCKS BEARING AGAINST UNDISTURBED SOIL. IN ADDITION, ALL FLEXIBLE JOINTS SHALL BE RESTRAINED WITH ANCHOR BOXES.
  2. THE CONTRACTOR SHALL FURNISH, INSTALL AND TEST ALL PIPING FOR WATER INSIDE THE DEVELOPMENT, INCLUDING FIRE SERVICE AND HYDRANTS, AND THE DOMESTIC WATER SYSTEM. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL THE WATER APPURTENANCES, VALVES WATER METERS (SUB-METERS), FITTINGS, THRUST BLOCKS OR RESTRAINT SYSTEM, AND FINAL CHLORINATION/ DISINFECTION OF THE WHOLE WATER DISTRIBUTION SYSTEM OF THE PROJECT IN ACCORDANCE WITH THE WATER DISTRIBUTION SPEC 02510 REQUIREMENTS.
  3. PIPING SHALL BE "LISTED" FOR FIRE PROTECTION SERVICE AND COMPLY WITH AWWA STANDARDS, WHERE APPLICABLE. FITTINGS SHALL BE OF AN "APPROVED" TYPE.
  4. ALL CONTROL VALVES SHALL BE "LISTED" INDICATING TYPE UNLESS A NON-INDICATING VALVE, SUCH AS AN UNDERGROUND GATE VALVE WITH APPROVED ROADWAY BOX COMPLETE WITH T-WRENCH, IS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION (AHJ).
  5. DOMESTIC WATER LINE PIPE SIZE 2-1/2" AND SMALLER USE COPPER TUBING, TYPE L HARD. PROVIDE PIPE CORROSION PROTECTION.

## STORM DRAINAGE UTILITY NOTES:

1. ALL CATCH BASINS AND DRAINAGE INLETS SHALL BE STENCILED WITH "NO DUMPING, DRAINS TO OCEAN" LOGO. PER DETAIL 1 ON SHEET C5.02.
  2. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CITY ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.
  3. TRENCH EXCAVATION AND BACKFILLING SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARDS. THE CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (CAL-OSHA) SAFETY STANDARDS.
  4. COORDINATE WITH PLUMBING PLAN TO VERFIY EXACT LOCATION OF POINT OF CONNECTION BETWEEN PLUMBING AND CIVIL. ADJUST LINE AS REQUIRED.
  5. MINIMUM STORM DRAIN LINE PIPE SLOPE AT 0.50%.
  6. DIRECT ROOF DOWNSPOUT TO PLANTER BOX OR CONNECT TO ONSITE STORM DRAINAGE LINE TOWARDS THE BIO-FILTRATION AREAS AS INDICATED ON UTILITY PLAN.

## SEWER UTILITY NOTES:

1. CONTRACTOR TO COORDINATE WITH CITY OF LOS ANGELES FOR SADDLE CONNECTION TO STREET PER CITY OF LOS ANGELES STANDARD PLAN 27983.
  2. CONTRACTOR TO FIELD VERIFY EXISTING SEWER LINE CONNECTION, CONDUCT CCTV TO VERIFY PIPE SIZE, INVERT ELEVATION, AND IDENTIFY IF THE EXISTING PIPE IS DAMAGED. IF DAMAGED EXISTING PIPE NEEDS TO BE REPLACED BASED ON THE FINDINGS NEW SEWER 6"Ø LATERALS SHALL BE INSTALLED WITH A 1% MINIMUM SLOPE.
  3. CONTRACTOR TO COORDINATE WITH THE OFF-SITE WORKS DURING INSTALLATION, ADJUST SEWER LINE CONNECTION AS REQUIRED.
  4. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.
  5. TRENCH EXCAVATION AND BACKFILLING SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARD. THE CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (CAL-OSHA) SAFETY STANDARDS.
  6. FOR TOP OF RIM, CLEAN OUT COVER ELEVATION, AND MANHOLE COVER ELEVATION, COORDINATE UTILITY PLAN WITH GRADING PLANS; REPORT ANY DISCREPANCIES TO THE CITY ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.
  7. TEST SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 306 – UNDERGROUND CONDUIT CONSTRUCTION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
  8. CONTRACTOR TO VERIFY POINT OF CONNECTION BETWEEN SEWER LATERAL AND BUILDING PLUMBING SEWER LAYOUT AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.

## ABBREVIATIONS:

AC	ASPHALT CONCRETE
AD	AREA DRAIN
APWA	AMERICAN PUBLIC WORKS ASSOCIATION
ARCH	ARCHITECTURAL
ASPH	ASPHALT
BC	BEGINNING OF CURVE
BLDG	BUILDING
BM	BENCHMARK
BW	BACK OF SIDEWALK
BX	BOTTOM OF RAMP
BS	BOTTOM OF STEP
CAB	CRUSHED AGGREGATE BASE
CB	CATCH BASIN
CCTV	CLOSED CIRCUIT TELEVISION
CEFB	CITY ENGINEER FIELD BOOK
CF	CURB FACE
CL	CENTERLINE
CI	CAST IRON
CLF	CHAIN LINK FENCE
CLR	CLEAR
CMB	CRUSHED MISCELLANEOUS BASE
CO	CLEANOUT
CONC	CONCRETE
CPM	CONSTRUCTION PROJECT MANAGER
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DDSG	DRIVE DOUBLE-LEAF SWING GATE
DMH	DRAIN MAINTENANCE HOLE
DS	DRAIN
DW	DOMESTIC WATER
DWG(S)	DRAWING(S)
DWP	DEPARTMENT OF WATER AND POWER
DWY	DRIVEWAY
E	EAST
EC	END OF CURVE
EDS	EDISON
EG	EDGE OF GUTTER/EXISTING GRADE
ELEC	ELECTRICAL
EL, ELEV	ELEVATION
EJ	EXPANSION JOINT
EP	EDGE OF PAVEMENT
EXIST, EX	EXISTING
EXP	EXPANSION
FB	FIELD BOOK
FD	FRENCH DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FND	FOUNDATION
FS	FINISH SURFACE
FT	FEET
FW	FIRE WATER
G	GAS
GB	GRADE BREAK
GM	GAS METER
GVLT	GAS VAULT
GV	GAS VALVE
HP	HIGH POINT
IE	INVERT ELEVATION
IIE	INLET INVERT ELEVATION
INV	INVERT
IRR	IRRIGATION
ITEM NO.	ITEM SHOWN ON PTR
L	LENGTH
MAX	MAXIMUM
MEAS	MEASURED
MH	MAINTENANCE HOLE, MANHOLE

## ABBREVIATIONS:

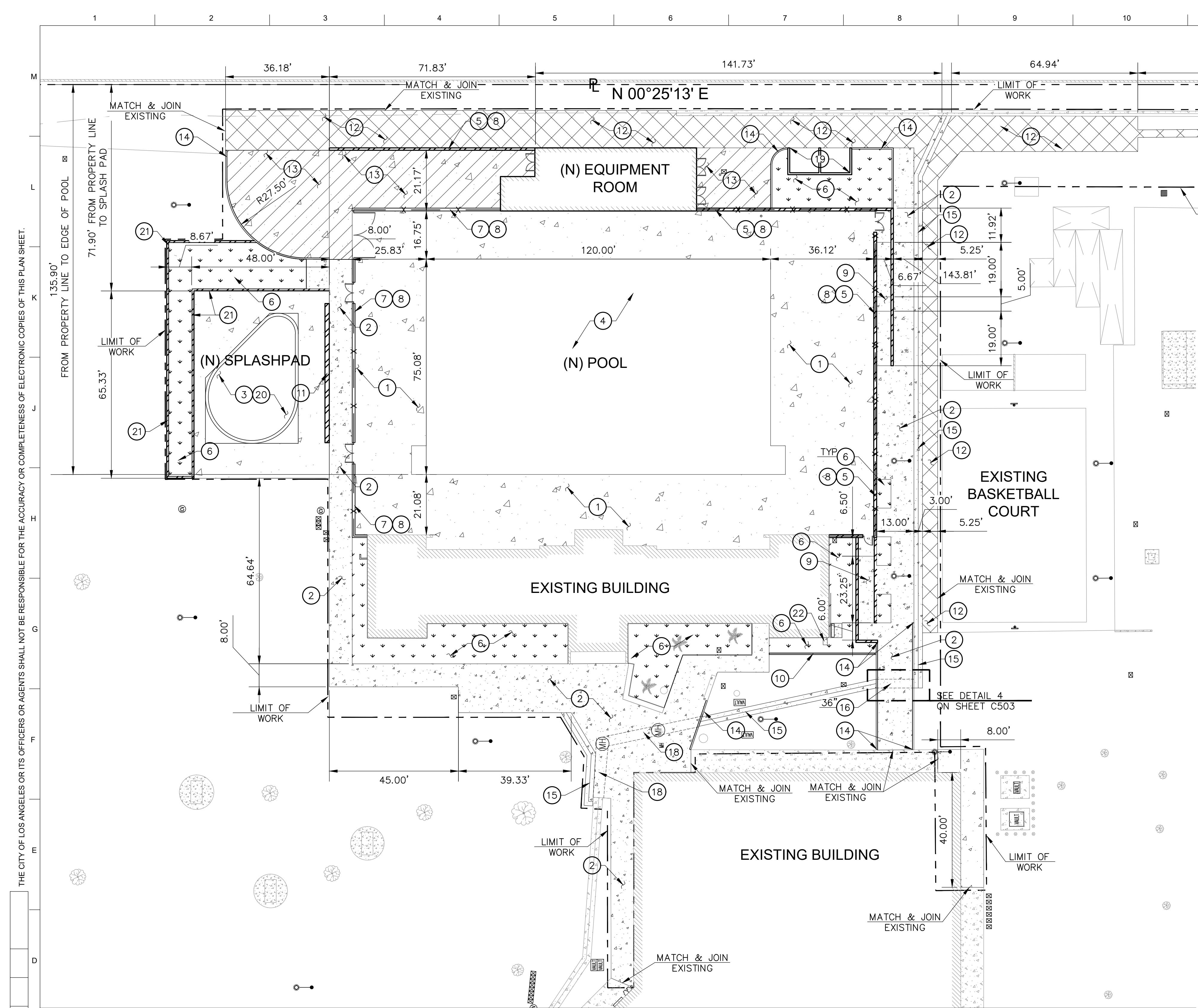
N	NORTH
NPR	NEWSPAPER RACK
OC	ON CENTER
OIE	OUTLET INVERT ELEVATION
OAR	OWNERS AGENT REPRESENTITIVE
P	PROPORTIONED
PA	PLANTING AREA
PM	PUNCH MARK ON MANHOLE, PARKING METER
PCC	PORTLAND CONCRETE CEMENT
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
PP	POWER POLE
PTR	PRELIMINARY TITLE REPORT
PSG	PEDESTRIAN SWING GATE
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
R	RADIUS (GEOMETRY), RIDGE (GRADING), RECORD (SURVEY)
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
RW	RIGHT OF WAY
S	SLOPE, SOUTH, SEWER
SD	STORM DRAIN
SDR	STANDARD PIPE DIMENSION RATIO
SSMH	SANITARY SEWER MANHOLE
SDMH	STORM DRAIN MANHOLE
SLPB	STREET LIGHT PULLBOX
SPK	SPIKE
SPKR	SPRINKLER
SS	SANITARY SEWER
STA	STATION, STD(S), STANDARD(S)
S&W	SPIKE & WASHER
SW	SIDEWALK
T	TANGENT
TA	TREE AREA
TAD	TOP OF AREA DRAIN
TC	TOP OF CONCRETE OR CURB
TCB	TOP OF CATCH BASIN
TCO	TOP OF CLEAN OUT
TE	TOP ELEVATION
TEL	TELEPHONE
TEL VLT	TELEPHONE VAULT
TG	TOP OF GRATE
TMH	TELEPHONE MANHOLE
TMS	TOP OF MOW STRIP
TOS	TOP OF SLOPE, TOP OF SLAB
TOE	TOP OF EMBANKMENT
TSPB	TRAFFIC SIGNAL PULLBOX
TS	TOP OF STEP
TW	TOP OF WALL
TX	TOP OF RAMP
TYP	TYPICAL
U/G	UNDERGROUND
VCP	VITRIFIED CLAY PIPE
VIF	VERIFY IN FIELD
V V	VAULT IN VENTS
W	DOMESTIC WATER, WEST
C	WATER METER
WV	WATER VALVE
WVLT	WATER VAULT
YB	YARD BOX
(W,S,G,E) (WATER, SEWER, GAS, ELECTRICAL)	

A circular professional engineer registration stamp. The outer ring contains the words "REGISTERED", "PROFESSIONAL", "VIRGILIO C. AOANANA", "ENGINEER", and "CIVIL" at the bottom. The center contains "No. C36079" above "Exp. 6/30/20". There are two small stars on either side of the expiration date.

<b>DEPARTMENT OF PUBLIC WORKS</b>	
<b>GARY LEE MOORE, PE, ENV SP</b>	
<b>ARCHITECTURAL DIVISION</b>	<b>CITY ENGINEER</b>
DATE:	
ARCHITECT/ENGINEER: VIRGILIO AOANAN LIC. NO.: C36079	03/03/2020
DESIGNED BY: VIRGILIO AOANAN	03/03/2020
DRAWN BY: AUTUMN WAGGONER	03/03/2020
CHECKED BY: VIRGILIO AOANAN	03/03/2020
APPROVED BY: VIRGILIO AOANAN	03/03/2020

<b>DATE:</b>	<b>06/22/21</b>	<b>SHEET TITLE:</b> GENERAL NOTES, LEGEND, AND ABBREVIATION <hr/>
<b>VERTICAL CONTROL:</b>		
<b>HORIZONTAL CONTROL:</b>		
<b>PROJECT:</b>	<b>GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT</b>	
<b>ADDRESS:</b>	<b>16730 CHATSWORTH STREET GRANADA HILLS. CA 91344</b>	

<b>PROJECT ISSUE DATE</b>	/ /		
	<b>WORK ORDER NO.</b>		
	#E170517		
<b>PLAN FILE NO.</b>	#308		
	<b>DRAWING NO.</b>		
<b>C101</b>			<b>SHEET</b>
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		<b>10</b>	



**SURVEY SOURCE**  
FLORENTINO FERRER & ASSOCIATES  
LAND SURVEYORS & ENGINEERS  
2268 CECIANA DRIVE  
HACIENDA HEIGHTS, CA 91745  
PHONE: (626)333-9644  
FAX: (626)629-7900

#### SHEET NOTES:

- BASIS OF BEARINGS:  
THE HORIZONTAL BASIS OF BEARING IS THE CENTERLINE OF CHATSWORTH AVENUE BEING N 89°34'52" W, AS SHOWN ON TRACT NO. 30883, M.B. 798, PAGES 33-34, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF THE LOS ANGELES COUNTY.  
THE VERTICAL BASIS OF BEARING IS A LOS ANGELES CITY BENCHMARK, 04-03302.
- BENCHMARKS:  
BM ID NO. 04-03302  
ELEVATION: 934.605 FEET  
YEAR: 1974  
NAVD 1988-2002  
4FT S OF S CURB LINE CHATSWORTH ST; 37.5FT W OF BC CURB RETURN W OF HAYVENHURST AVE;  
SW COR OF CB

#### SURVEY NOTES:

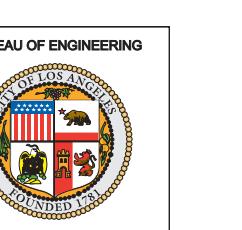
- BASIS OF BEARINGS:  
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SW COR OF CB

#### CONSTRUCTION NOTES:

- 6" CONCRETE PAVEMENT POOL DECK PER DETAIL 1 ON SHEET C500.
- 5" CONCRETE PAVEMENT PER DETAIL 3 ON SHEET C5.00. JOINTS PER SHEET C500 DETAIL 4.
- SPASH PAD PER ARCHITECTURAL AND AQUATIC DRAWINGS.
- POOL PER ARCHITECTURAL AND AQUATIC DRAWINGS.
- RETAINING WALL PER ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- PLANTER AREA PER LANDSCAPE DRAWINGS.
- 12" FENCE CURB PER DETAIL 2 ON SHEET C502.
- FENCE PER ARCHITECTURAL DRAWINGS.
- ADA RAMP PER ARCHITECTURAL DRAWINGS
- INSTALL MOWSTRIP PER DETAIL 4 ON SHEET C503.
- SEATWALL PER ARCHITECTURAL DRAWINGS.
- AC PAVEMENT PER DETAIL 3 ON SHEET C501. PROVIDE PAVEMENT TRANSITION PER SHEET C500 DETAIL 4.
- 8" CONCRETE PAVEMENT PER DETAIL 3 ON SHEET C500.
- CURB PER DETAIL 3 ON SHEET C5.02. ELEVATIONS PER GRADING SHEETS.
- CONSTRUCT V GUTTER PER DETAIL 4 ON SHEET C502.
- CONCRETE PARKWAY DRAIN PER CITY OF LOS ANGELES PLAN S-320-0. SIZE PER PLAN.
- REPLACE EXISTING TURF AREA, MATCH EXISTING.
- REPLACE EXISTING PARKWAY DRAIN AND PARKWAY DRAIN MANHOLES. VERIFY IN FIELD INVERT. TOP OF PARKWAY PER GRADING SHEET C300.
- TRASH ENCLOSURE PER ARCHITECTURAL DRAWINGS.
- 6" CONCRETE SPLASH PAD PER DETAIL 3 ON SHEET C500.
- 18" PLANTER WALL PER DETAIL 3 ON SHEET C503.
- SPLASH BLOCK PER ARCHITECTURAL DRAWINGS.

#### LEGEND:

ASPHALT PAVEMENT
CONCRETE PAVEMENT
EXISTING CONCRETE PAVEMENT
WALL
LANDSCAPE AREA
TRAFFIC RATED CONCRETE PAVEMENT.



**SITE CONTROL PLAN**  
20 10 0 20 40  
SCALE: 1" = 20'  
CITY OF LOS ANGELES



**BID SET**  
**PROJECT ISSUE DATE: 06/22/21**  
**CITY OF LOS ANGELES**  
**GRANADA HILLS POOL AND BATHHOUSE**  
**REPLACEMENT PROJECT**  
**ADDRESS: 16730 CHATSWORTH STREET**  
**GRANADA HILLS, CA 91344**

<b>BUREAU OF ENGINEERING</b>	
DATE BY	
REVISION DESCRIPTION	
INDEX NO.	
<b>RP-300118</b>	

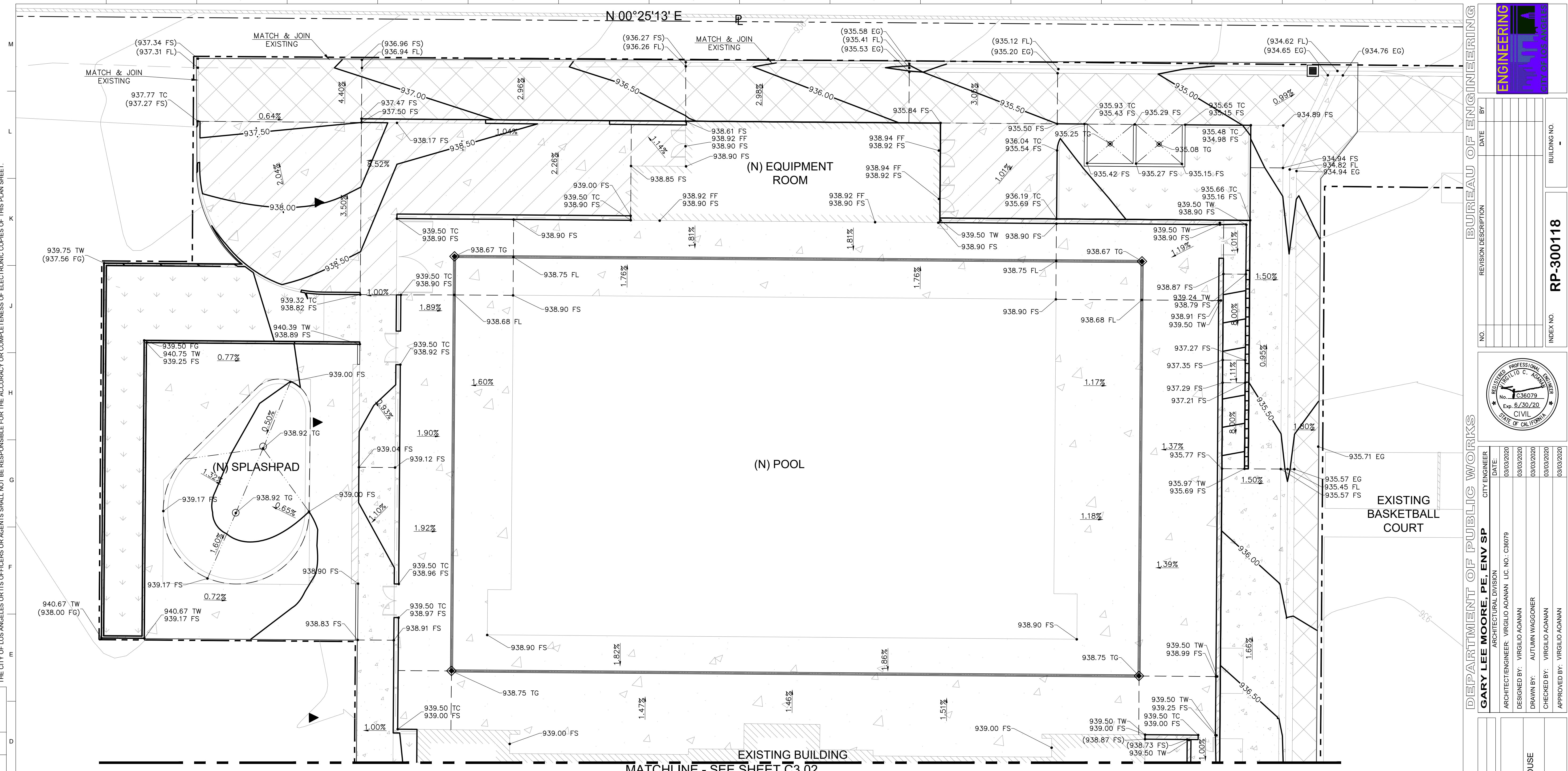


**DEPARTMENT OF PUBLIC WORKS**  
**GARY LEE MOORE, PE, ENV SP**  
CITY ENGINEER  
ARCHITECTURAL DIVISION  
DESIGNED BY: VIRGILIO AGUIRRE  
DRAWN BY: AUTUMN WAGGONER  
CHECKED BY: VIRGILIO AGUIRRE  
APPROVED BY: VIRGILIO AGUIRRE

**PROJECT: GRANADA HILLS POOL AND BATHHOUSE**  
**ADDRESS: 16730 CHATSWORTH STREET**  
**GRANADA HILLS, CA 91344**

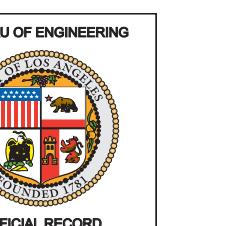
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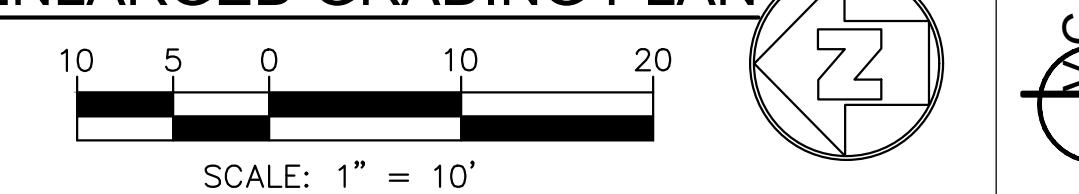


#### SHEET NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS, SEE SHEETS C1.00 AND C1.01.
- SEE ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR OTHER SITE RELATIVE DIMENSIONS NOT SHOWN ON THIS DRAWING.
- FOR FINAL GRADING PLAN NOTES, SEE THIS SHEET.
- FOR ELEVATION SHOWN ON THIS PLAN SUCH AS TOP OF GRATE, CLEAN OUT, MANHOLE COVER, TOP OF DRAINAGE GRATES, TOP OF RIM CONTRACTOR TO COORDINATE ELEVATION SHOWN ON UTILITY PLANS. REPORT/NOTIFY ENGINEER FOR ANY CONFLICT/DISCREPANCY IN ELEVATION PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CPM OR IOR PRIOR TO THE COMMENCEMENT OF ANY WORK.
- CONTRACTOR SHALL VERIFY JOINING OF NEW IMPROVEMENT TO ADJACENT FEATURES, EXISTING/ MATCH TO EXISTING FEATURES WITH SURVEY INFORMATION, CURRENT SITE CONDITION AND WITH THE DESIGN GRADE & ELEVATIONS AND SHALL REPORT ANY DISCREPANCIES TO THE CPM OR IOR PRIOR TO THE COMMENCEMENT OF WORK.



#### ENLARGED GRADING PLAN



BID SET PROJECT ISSUE DATE: 06/22/21

CITY OF LOS ANGELES

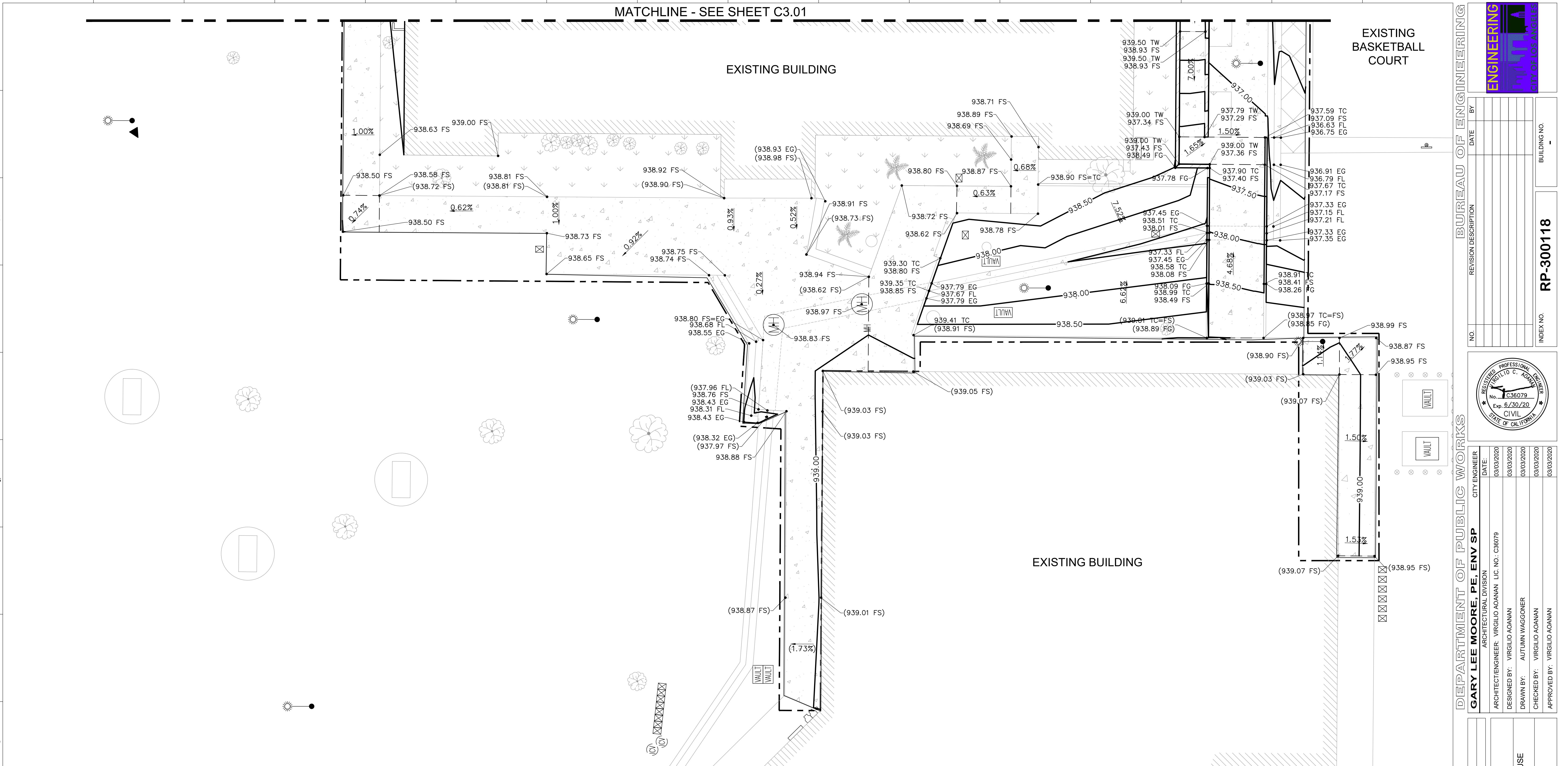
VERTICAL CONTROL:

HORIZONTAL CONTROL:

PROJECT: GRANDA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT

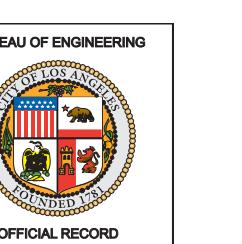
ADDRESS: 16730 CHATSWORTH STREET GRANDA HILLS, CA 91344

M  
THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.



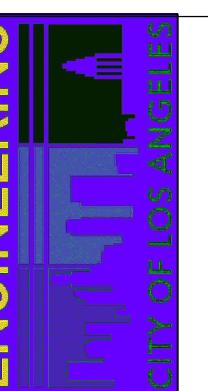
**SHEET NOTES:**

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**BID SET**  
**PROJECT ISSUE DATE: 06/22/21**  
**CITY OF LOS ANGELES**

**VERTICAL CONTROL:**  
**HORIZONTAL CONTROL:**  
**WORK ORDER NO. #E170517**  
**PLAN FILE NO. #308**  
**DRAWING NO. C302**  
**SHEET 7 OF 19 SHEETS 19**



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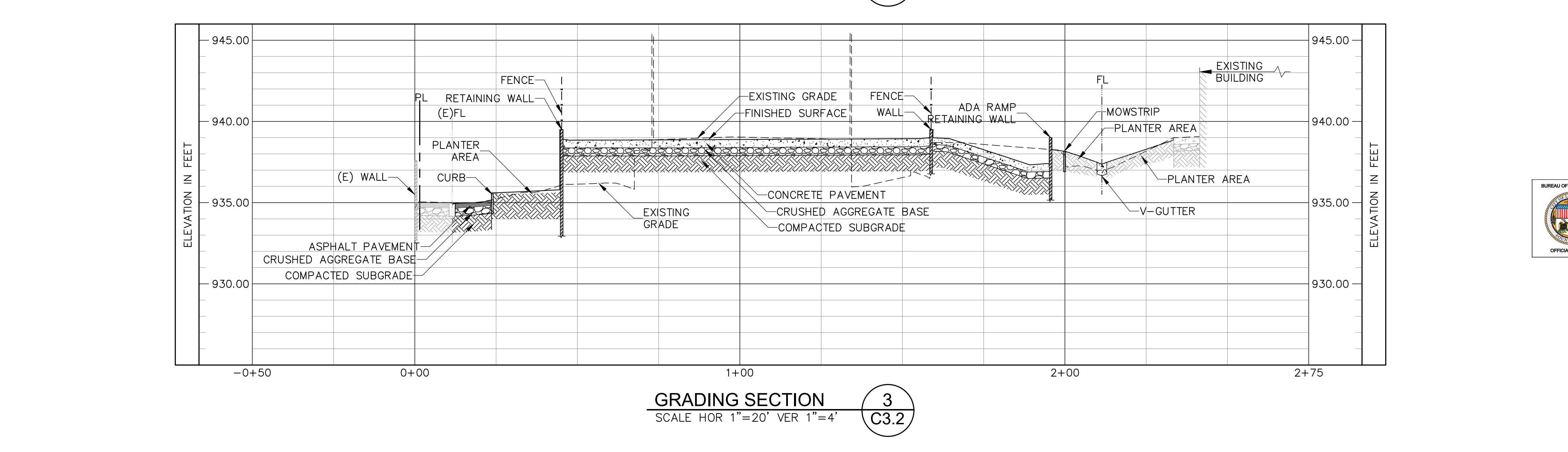
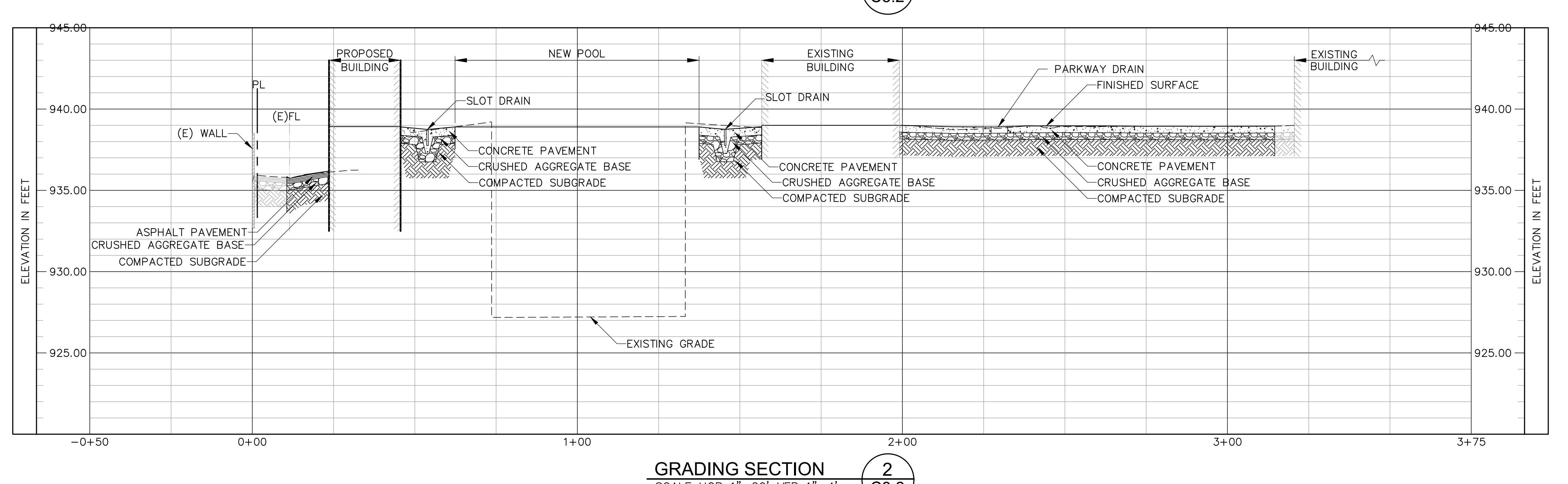
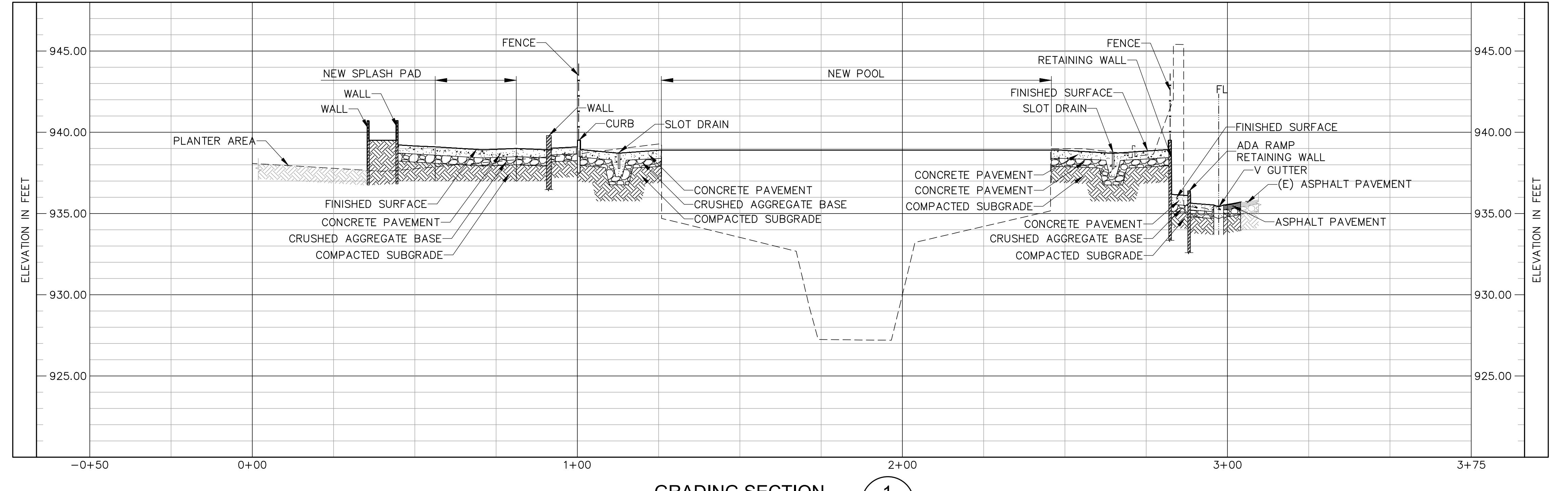
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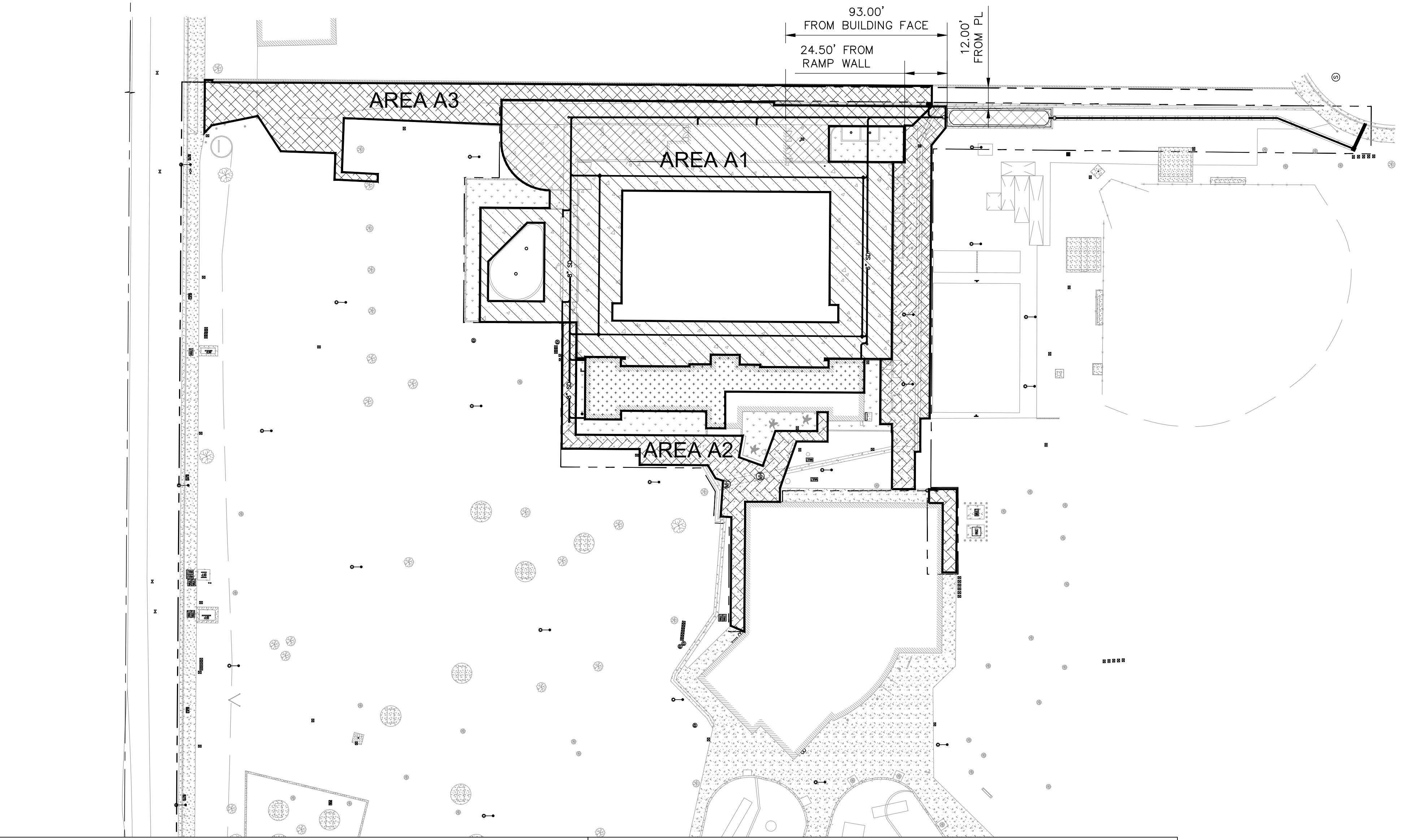
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BUREAU OF ENGINEERING		PROJECT ISSUE DATE: 06/22/21	
GARY LEE MOORE, PE, ENV SP		CITY OF LOS ANGELES	
ARCHITECTURAL DIVISION		CITY ENGINEER	
DESIGNED BY:	VIRGILIO AOANAN	DRAWN BY:	AUTUMN WAGGONER
CHECKED BY:	VIRGILIO AOANAN	APPROVED BY:	VIRGILIO AOANAN
SHEET NUMBER: 8		DRAWING NO. C303	
SHEET F OF 8		SHEETS 19 OF 19	
BUREAU OF ENGINEERING OFFICIAL RECORD			
CITY OF LOS ANGELES			
CIVIL ENGINEERS, INC.			
1600 BROADWAY, SUITE 1000, LOS ANGELES, CALIFORNIA 90015			
PHONE: (213) 202-7000 FAX: (213) 202-7001			
E-MAIL: <a href="mailto:info@cae.com">info@cae.com</a>			
WEBSITE: <a href="http://www.caen.com">www.caen.com</a>			
BUREAU OF ENGINEERING			
1600 BROADWAY, SUITE 1000, LOS			





LID SUMMARY TABLE

TRIBUTARY AREA	Hardscape Area (SF)	SWQDV	BMP DESCRIPTION AND QUANTITY	PROVIDED TREATMENT VOLUME (CF)
A1	22,446	1,670		
A2	(8,702 SF IN AREA A2 IS COMPENSATED FOR IN AREA A3 & ROOF)			
A3	7,252	540		
ROOF	+ + +	3,756	280	
TOTAL:	33,454	2,490	ADS STORMTECH	2,547

NOTES:

ANY CHANGES (TYPE, SIZE, LOCATION) TO APPROVED STORMWATER BEST MANAGEMENT PRACTICE(S) (BMPS) MUST OBTAIN WRITTEN APPROVAL FROM LOS ANGELES DEPARTMENT OF PUBLIC WORKS, BUREAU OF SANITATION PRIOR TO CONSTRUCTION OF BMP(S).

BUREAU OF ENGINEERING	
PROJECT NO.	RP-300118
INDEX NO.	-
BUILDING NO. -	
PROJECT ISSUE DATE: 06/22/21	
CITY OF LOS ANGELES	
DEPARTMENT OF PUBLIC WORKS	
GARY LEE MOORE, PE, ENV SP	
CITY ENGINEER	
ARCHITECTURAL DIVISION	
DATE:	03/03/2020
ARCHITECT/ENGINEER: VIRGILIO AOANAN	LIC. NO.: C-36079
DESIGNED BY:	VIRGILIO AOANAN
DRAWN BY:	AUTUMN WAGNER
CHECKED BY:	VIRGILIO AOANAN
APPROVED BY:	VIRGILIO AOANAN
PROJECT: GRANADA HILLS POOL AND BATHHOUSE REPLACEMENT PROJECT	
ADDRESS: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344	
BUREAU OF ENGINEERING OFFICIAL RECORD	
WORK ORDER NO.	#E170517
PLAN FILE NO.	#308
DRAWING NO.	C401
SHEET NO.	10
O SHEETS	19
PLOTTED: 09/18/2019 10:00:00 PM	

Low Impact Development (LID)  
Post Construction Stormwater Mitigation  
Best Management Practices (BMPs)



STORMWATER BMP(s) VERIFICATION

Upon LADBS Inspector Verification that approved stormwater BMPs are in place, a Stormwater Observation Report (SOR) Form shall be submitted to Department of Public Works, Bureau of Sanitation, 201 N. Figueroa, 3rd floor, station 18.

Project Address: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344

RESIDENTIAL (4 UNITS OR LESS, <10,000 SF, <2,500 SF within a ESA)

Item #	Stormwater BMP	Description (Units, total)	Reference Sheet(s)* (Sheet #)
1	Rain Tank(s) - 50 to 129 gal each		
2	Rain Tank(s) - > 130 gal min		
3	Shade Tree - min 15 gal		
4	Flow thru Planter(s)		
5	Permeable pavers / Porous concrete (min 10% open space)	<input type="checkbox"/> Incidental; total SF <input type="checkbox"/> Infiltration; total SF	
6	Rain Garden	<input type="checkbox"/> # - Lined; total SF <input type="checkbox"/> # - Unlined; total SF	
7	Dry Well		
8	SUMP Pump (modification was not required)		

ALL OTHER DEVELOPMENT  
(Residential: 5+ units, 10,000+ SF, within a ESA and ≥2,500SF)

Item #	Stormwater BMP	Description (Units, total)	Reference Sheet(s)* (Sheet #)
1	Infiltration Basin / Trench	1 UNIT WITH 2,547 CF	C4.00,C4.01
2	Dry Well		
3	Permeable pavers / Porous concrete (min 10% open space)	<input type="checkbox"/> Incidental; total SF <input type="checkbox"/> Infiltration; total SF	
4	Rain Tank(s) - 530 gal min		
5	Cistern	<input type="checkbox"/> Above Grade <input type="checkbox"/> Below Grade	
6	Flow thru Planter(s)		
7	Biofiltration	<input type="checkbox"/> # - Lined; total SF <input type="checkbox"/> # - Unlined; total SF	
8	Vegetative Swale / Filter Strip		
9	Catch Basin Filter(s)		
10	Trench Drain Filter(s)		
11	Down Spout Filter(s)		
12	SUMP Pump (modification was not required)		

\* At a minimum: Site Plan, Architectural Elevations, Roof Plan, Civil Sheets and Detail

STORMWATER OBSERVATION REPORT FORM  
(Residential ≥ 5 units & All other Development)



LOW IMPACT DEVELOPMENT

IN THE EVENT THAT THE APPROVED STORMWATER BMP CANNOT BE BUILT PER PLANS (OR ANY MODIFICATION), CONSULT WITH BUREAU OF SANITATION STAFF PRIOR TO ANY PLAN MODIFICATIONS. FAILURE TO DO SO MAY DELAY OBTAINING A FINAL APPROVAL AND CERTIFICATE OF OCCUPANCY (C OF O).

STORMWATER OBSERVATION means the visual observation of the stormwater related Best Management Practices (BMPs) for conformance with the approved LID Plan at significant construction stages and at completion of the project. Stormwater observation does not include or waive the responsibility for the inspections required by Section 108 or other sections of the City of Los Angeles Building Code.

STORMWATER OBSERVATION must be performed by the engineer or architect responsible for the approved LID Plan or designated staff in their employment. As part of the observation, provide photos of the BMPs taken during various construction phases.

STORMWATER OBSERVATION REPORT must be signed and stamped (see below) by the engineer or architect responsible for the approved LID Plan and submitted to the city prior to the issuance of the certificate of occupancy. PRIOR TO CERTIFICATE OF OCCUPANCY (C OF O), SOR FORM, PRINTED PHOTOS OF THE BMPs TAKEN DURING VARIOUS CONSTRUCTION PHASES AND APPROVED STAMPED PLANS BY THE BUREAU OF SANITATION MUST BE SUBMITTED TO THE PUBLIC COUNTER FOR STAFF APPROVAL.

Project Address: 16730 CHATSWORTH STREET GRANADA HILLS, CA 91344 Building Permit No.:

Name of Engineer/Architect responsible for the approved LID Plan: Virgil Aoanan Phone Number: 323-729-6098

List all BMPs installed as part of the project: Coordinates of the most significant (or typical) BMPs:

BMP Type: ADS STORMTECH # of units: 1 BMP Type: \_\_\_\_\_ # of units: \_\_\_\_\_  
Lat: 34.2642 ; Long: -118.4962 Lat: \_\_\_\_\_ ; Long: \_\_\_\_\_

BMP Type: \_\_\_\_\_ # of units: \_\_\_\_\_ BMP Type: \_\_\_\_\_ # of units: \_\_\_\_\_  
Lat: \_\_\_\_\_ ; Long: \_\_\_\_\_ Lat: \_\_\_\_\_ ; Long: \_\_\_\_\_

I DECLARE THAT THE FOLLOWING STATEMENTS ARE TRUE TO THE BEST OF MY KNOWLEDGE:

1. I am the engineer or architect responsible for the approved LID Plan, and;

2. I, or designated staff under my responsible charge, has performed the required site visits at each significant construction stage and at the completion to verify that the Best Management Practices (BMPs) as shown on approved plans have been constructed and installed in accordance with the approved LID Plan.

Wet Stamp of Engineer or Architect

Signature Date

LID PLAN

