

GRADING & DRAINAGE GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990), FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES AND OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR WILL NOTIFY THE ARCHITECT IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THIS WORK IS CONSIDERED INCIDENTAL TO THE PROJECT AND NO DIRECT PAYMENT WILL BE MADE THEREFOR.
4. ALL EXCAVATION SHALL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH, OSHA 29 CFR 1926.650. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KNOW AND COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970".
6. CONTRACTOR SHALL SCARIFY TO A DEPTH OF 8" AND RECOMPACT SUBGRADE TO 95% MAX. DENSITY AS DETERMINED BY ASTM D-1557 UNLESS NOTED OTHERWISE.
7. CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING BORROW MATERIAL OR HAULING OFF EXCESS MATERIAL. THE TRANSPORTATION AND/OR DISPOSAL OF THESE MATERIALS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THE PROJECT. ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN FOUR (4) DAYS OF EXCAVATION.
8. NO SEPARATE PAYMENT WILL BE MADE FOR ANY HAULING OR DISPOSAL OF MATERIALS. THE TRANSPORTATION AND/OR DISPOSAL OF MATERIAL SHALL BE CONSIDERED INCIDENTAL TO PROJECT.
9. WHEN ABUTTING NEW CONCRETE TO EXISTING, CUT BACK EXISTING TO A NEAT STRAIGHT LINE AS REQUIRED TO REMOVE ANY BROKEN OR CRACKED CONCRETE, AND MATCH NEW TO EXISTING. COORDINATE WITH CONSTRUCTION NOTES. NO SEPARATE PAYMENT SHALL BE MADE FOR SAW CUTTING OF EXISTING PAVEMENT OR CONCRETE BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. CUTTING OF PAVEMENT OR CONCRETE SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS.
10. EXERCISE CARE TO AVOID DISTURBING EXISTING UTILITIES, AND COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION.
12. CONTRACTOR SHALL PROVIDE REASONABLE ACCESS TO TEMPORARY FACILITIES WITHIN THE PROJECT AREA DURING CONSTRUCTION.
13. WATERING FOR DUST CONTROL, AS REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR. CONSTRUCTION AREAS SHALL BE WATERED OR OTHERWISE KEPT DUST FREE. THE CONTRACTOR SHALL USE WATERING EQUIPMENT FOR DUST POLLUTION ABATEMENT AS DIRECTED BY THE ARCHITECT.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS. WORK MATERIALS SHALL BE DISPOSED OF IN A CITY APPROVED WASTE AREA, IN ACCORDANCE WITH ALBUQUERQUE SPECIFICATIONS, SECURED BY AND AT THE EXPENSE OF THE CONTRACTOR.
15. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED UTILITY LINES THAT ARE EXPOSED AS A RESULT OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ARCHITECT.
16. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH "AS-BUILT" PLANS. THE MAINTENANCE OF THESE PLANS INCLUDE AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN TWO WEEKS, AT ALL TIMES AND SHALL BE SUBJECT TO REVIEW BY THE PROJECT MANAGER THROUGHOUT THE PROJECT. THE FINAL AS-BUILT PLANS SHALL BE SUBMITTED TO THE ARCHITECT BEFORE FINAL PAYMENT IS MADE.
17. THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.
18. CONTRACTOR SHALL ADJUST CLEANOUT RIMS, VALVE CANS, GRATES AND MH COVERS LIDS AS NEEDED TO MATCH FINISHED ELEVATIONS.
19. CONTRACTOR'S YARD, AND ANY OTHER AREAS DISTURBED BY THE CONTRACTOR NOT INCLUDED ON THE PLANS, SHALL BE RE-ESTABLISHED TO OWNERS SATISFACTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
20. COORDINATE WITH GEOTECHNICAL INVESTIGATION CONDUCTED BY FLORENTINO ENGINEERING, IF ANY CRITERIA WITHIN THIS REPORT CANNOT BE MET, CONTACT THE GEOTECHNICAL ENGINEER FOR SUPPLEMENTAL RECOMMENDATIONS.
21. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND ADHERING TO A STORMWATER POLLUTION PREVENTION PLAN.
22. SAFETY RAILS ARE REQUIRED AT ALL LOCATION ADJACENT TO A PEDESTRIAN WALKWAY WHERE A VERTICAL DROP OF 30" OR MORE EXISTS, OR AS APPLICABLE PER GOVERNING BUILDING CODE. SEE ARCHITECTS PLAN FOR SAFETY RAIL DETAILS.
23. THIS PROJECT IS TO ADHERE TO THE DEVELOPMENT GUIDELINES PROVIDED FOR THE LAS LOMITAS INDUSTRIAL PARK.
24. ALL LANDSCAPED AREAS SHALL BE DEPRESSED APPROXIMATELY 6" BELOW ADJACENT CONCRETE.
25. ALL SIDEWALKS AND RAMPS TO BE APPROXIMATELY 4-INCHES ABOVE ADJACENT LANDSCAPE FINISH.

DRAINAGE FACILITIES WITHIN THE ROW

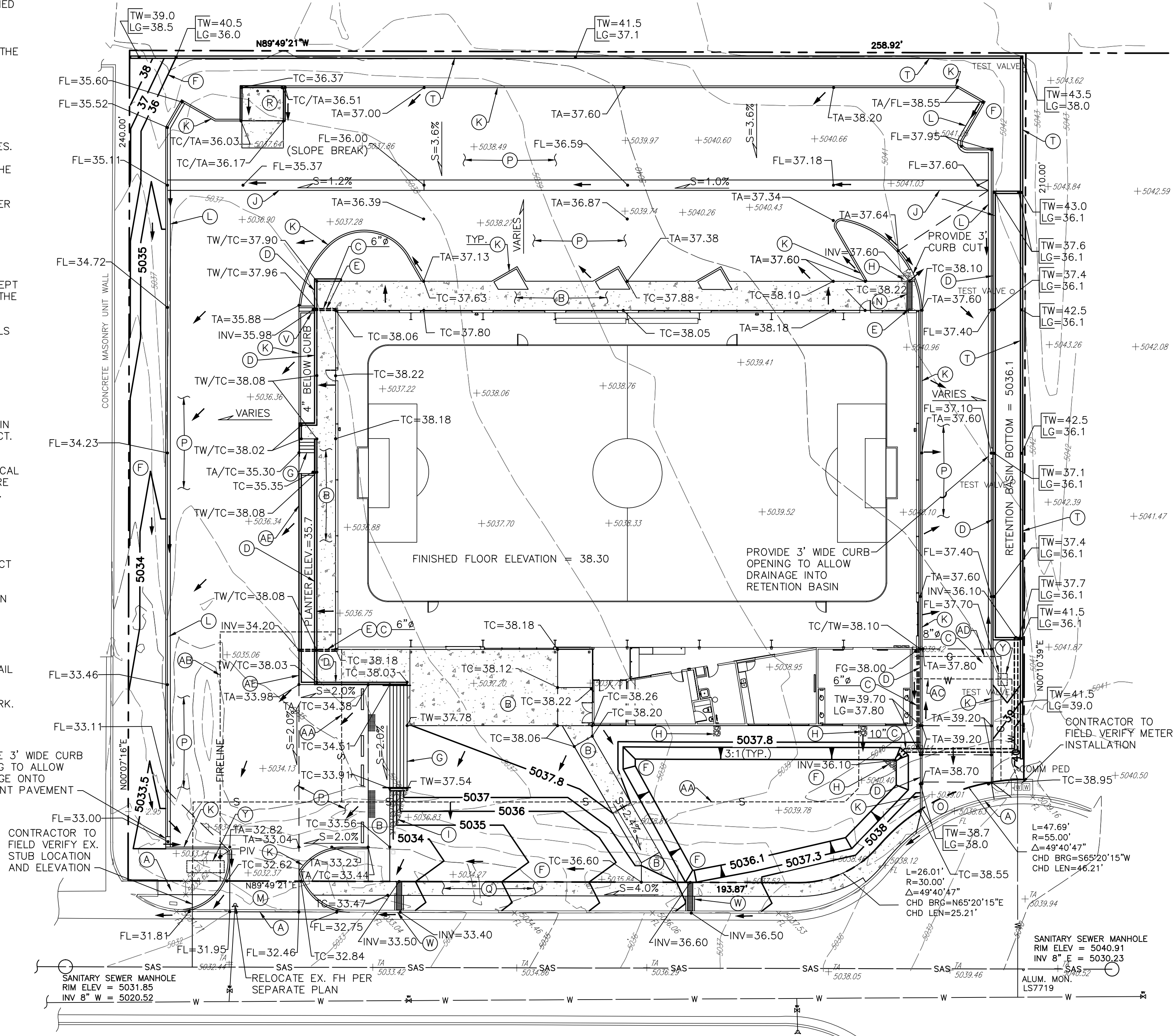
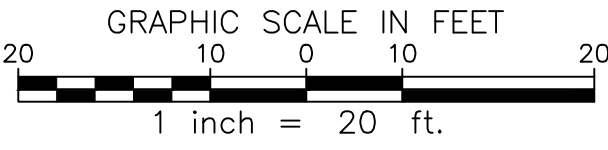
NOTICE TO CONTRACTOR (SO-19)

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE RIGHT-OF-WAY.
2. ALL WORK IN THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990 (NM ONE CALL "811") FOR THE LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO STREET USE.
6. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PREFORMED ON A 24-HOUR BASIS.

APPROVALS	NAME	DATE
INSPECTOR		

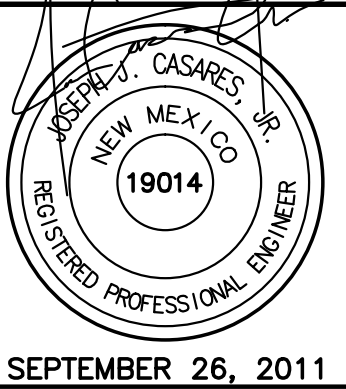
LEGEND

- × 71.05 EXISTING SPOT ELEVATION
- 71.05 PROPOSED ELEVATION
- TC = TOP OF CONCRETE
- TA = TOP OF ASPHALT
- TW = TOP OF RETAINING WALL
- FG = LOWEST ADJACENT GRADE
- EXISTING FIRE HYDRANT
- E— UNDERGROUND ELECTRIC
- G— UNDERGROUND GAS LINE
- SAS— EXISTING SANITARY SEWER LINE
- W— EXISTING WATER LINE
- C— EXISTING COMMUNICATIONS LINE
- SD— STORM DRAIN LINE
- EXISTING SEWER MANHOLE
- SURFACE FLOW DIRECTION ARROWS
- NEW CONCRETE
- EXPOSED AGGREGATE CONCRETE
- NEW RIPRAP




CONSTRUCTION NOTES

- A. REMOVE EXISTING CONCRETE TO THE NEAREST JOINT, SCORE, OR EDGE. PROVIDE NEAT, STRAIGHT SAWCUT EDGES AT ALL NEW TO EX. INTERFACES.
- B. CONSTRUCT 4" THICK CONCRETE (2500 PSI) WALKWAY WITH 6"X6"X#10. WIRE MESH. PROVIDE 6" (MAX. SPACING) SCORE JOINTS. ALSO PROVIDE 20" (MAX SPACING) EXPANSION JOINTS. SURFACE FINISH AS DIRECTED BY THE ARCHITECT.
- C. INSTALL NEW HDPE STORM DRAIN PIPE SIZES SHOWN (ADS N12-ST OR APPROVED EQUAL). SLOPE 6" PIPE AT 1/4" PER FOOT, AND 10" AT 0" PER FOOT (FLAT). PROVIDE BEDDING PER PIPE MANUFACTURER'S SPECIFICATIONS. PROVIDE 10" END SECTION AT DETENTION BASIN/PIPE INVERT.
- D. CONSTRUCT RETAINING WALL PER ELEVATIONS SHOWN AND PER DETAIL-1, SHEET C-103. SEE STRUCTURAL PLANS FOR ADDITIONAL HEIGHTS.
- E. INSTALL ROOF DRAIN NOZZLE PER DETAIL-2, SHEET C-103. PROVIDE ALL BENDS AND APPURTENANCE TO CONNECT TO DOWN SPOUT NOZZLE COORDINATE WITH BUILDING PLANS AS NECESSARY.
- F. GRADE AREA PER CONTOUR ELEVATIONS SHOWN.
- G. CONSTRUCT CONCRETE STAIRS PER DETAIL-3, SHEET C-103.
- H. INSTALL ANGULAR RIPRAP (4" TO 6") WITHIN AREA AS SHOWN ON PLAN AND PER DETAIL-4, SHEET C-103.
- I. STABILIZE SLOPE WITH 12" TO 24" BOULDERS, EMBEDDED.
- J. CONSTRUCT 3' WIDE CONCRETE VALLEY GUTTER PER DETAIL-5, SHEET C-103.
- K. CONSTRUCT HEADER CURB PER DETAIL-6, SHEET C-103.
- L. CONSTRUCT STANDARD CURB AND GUTTER PER DETAIL-7, SHEET C-103.
- M. CONSTRUCT CONCRETE DRIVE PAD PER COA DETAIL 2426.
- N. CONSTRUCT CULVERT PER DETAIL-13, SHEET C-103.
- O. CONSTRUCT CONCRETE DRIVE PAD PER COA DETAIL 2425.
- P. CONSTRUCT NEW ASPHALT SECTION PER DETAIL-10, SHEET C-103, AND PER SOILS REPORT RECOMMENDATION.
- Q. CONSTRUCT RIGHT-OF-WAY SIDEWALK PER COA DETAIL 2430.
- R. CONSTRUCT REFUSE ENCLOSURE PER DETAIL-11, SHEET C-103.
- S. NOTE NOT USED.
- T. CONSTRUCT KEYSTONE RETAINING WALL PER MANUFACTURER RECOMMENDATIONS.
- U. NOTE NOT USED.
- V. CONSTRUCT CULVERT CHANNEL (NO TOP PLATE) PER DETAIL-13, SHEET C-103.
- W. CONSTRUCT 12" WIDE SIDEWALK CULVERT PER COA DETAIL 2236.
- X. NOTE NOT USED.
- Y. PROVIDE UTILITY VENT PER DETAIL IN "LANDFILL GAS SURVEY" EXECUTED BY VINEYARD AND ASSOC. #011-1-078.
- Z. CONSTRUCT CONCRETE ADA COMPLIANT RAMP AT MAX. SLOPE OF 6"H:12"V (8.33%). PROVIDE DETECTABLE WARNING PLATES (TYP.).
- AA. INSTALL 4" PVC SEWER SERVICE AND CONNECT TO EXISTING STUB. PROVIDE PIPE BEDDING AND ADEQUATE DEPTH TO ACCOMMODATE TRAFFIC LOADING. COORDINATE WITH PIPE MANUFACTURER.
- AB. INSTALL 6" PVC FIRELINE. PROVIDE POST INDICATOR VALVE (PIV) AT LOCATION SHOWN AND PROVIDE PIPE BEDDING AND ADEQUATE DEPTH TO ACCOMMODATE TRAFFIC LOADING. COORDINATE WITH PIPE MANUFACTURER
- AC. INSTALL 2" WATER SERVICE IN LOCATION AS SHOWN ON PLAN.
- AD. INSTALL GAS SERVICE. COORDINATE WITH UTILITY COMPANY.
- AE. CONSTRUCT RETAINING WALL PER DETAIL-12, SHEET C-103.

BENCHMARK INFORMATION	
CP-13, #5 REBAR WITH PLASTIC CAP STAMPED	
"LARKIN GROUP CONTROL POINT",	
N=1755477.38, E=1723118.79	
ELEV.=6337.27, NAVD 1988	

IISA - INDOOR SOCCER ARENA  
ALBUQUERQUE, NEW MEXICO

GRADING AND DRAINAGE PLAN

		CONSULTING ENGINEERS AND SURVEYORS 8500 MENAUL BLVD. NE, SUITE A-440 ALBUQUERQUE, NEW MEXICO 87112 505-275-7500, FAX 505-275-0748 www.larkinm.com	
PROJECT NO.:	DRAWN:	CHECKED:	DATE:
2011-0007	KW	JC	SEPT. 2011
SHEET:			C-101