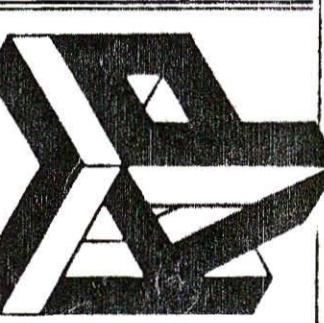


P.N.: 220-157
Date: 9-22-88
Dsn by: T.H.
Dwg by: T.H.
Ckd by: R.C.G.
(303) 792-0440

KLP Consulting Engineers, Inc.
40 Inverness Drive East #100
Englewood, Colorado 80112



PROPOSED ADDITION
TO CHERRY CREEK ATHLETIC CLUB
15528 EAST HAMPDEN CIRCLE
AURORA, COLORADO 80013

NO.	DATE	REVISION
0	Sept 26 88	Initial Review by City
1	Sept 26 88	Comments or Planning Cert.

GENERAL REQUIREMENTS

INFORMATION AND REQUIREMENTS:

-THE CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER OF BUREAU AT LEAST 24 HOURS PRIOR TO PLACEMENT OF ANY STRUCTURAL CONCRETE.

-THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS, READING CONDITIONS AND NOTED ASSUMPTIONS. ANY DEVIATIONS SHALL BE COORDINATED WITH THE ACTING ENGINEER OF BUREAU PRIOR TO PROCEEDING WITH RELATED WORK CONCERNING THE DEVIATION.

-EACH ASPECT OF THE REDEVELOPMENT AND OR REHABILITATION OF AN EXISTING BUILDING REQUIRES THAT CERTAIN ASSUMPTIONS BE MADE REGARDING EXISTING CONDITIONS, AND BECAUSE SOME OF THESE ASSUMPTIONS MAY NOT BE VERIFIED BY THE CONTRACTOR, THE CONTRACTOR SHALL NOT BE HELD LIABLE FOR ANY DAMAGES ASSOCIATE WITH INACCURATE PORTIONS OF THE BUILDING. THE OWNER AGREES THAT, EXCEPT FOR NEGLIGENCE ON THE PART OF THE DESIGN ENGINEER, OWNER, OR CONTRACTOR, THE CONTRACTOR SHALL NOT BE HELD LIABLE FOR ANY DAMAGES, FINANCIAL OR OTHERWISE, FOR ANY AND ALL CLAIMS ARISING OUT OF THE PROFESSIONAL SERVICES PROVIDED UNDER THIS AGREEMENT.

-IT IS AGREED THAT THE PROFESSIONAL SERVICES OF THE ARCHITECT/ENGINEER DO NOT EXTEND TO OR INCLUDE THE REVISE OR SITE OBSERVATION OF THE CONTRACTOR'S WORK AND THAT THE CONTRACTOR IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED AND FOR HOLD HARMLESS THE ARCHITECT/ENGINEER FROM ANY CLAIM OR SUIT WHATSOEVER, INCLUDING BUT NOT LIMITED TO ALL PATENTED, EXPENSES OR COSTS INVOLVED.

EXCLUDING THE CONTRACTOR'S LIABILITY FOR THE CONTRACTOR'S OWN NEGLIGENCE, IN THE EVENT OF THE FAILURE OF THE CONTRACTOR'S WORK TO COMPLY TO THE DESIGN INTENT AND THE CONTRACT DOCUMENTS, THE ARCHITECT/ENGINEER AGREES TO BE RESPONSIBLE FOR HIS OWN OR HIS EMPLOYEES' NEGLIGENCE ACTS, ERRORS, OR OMISSIONS.

-BUILDING CODE: DENVER BUILDING CODE-1987 EDITION.

-BUILDING CODE: UNIFORM BUILDING CODE-1988 EDITION.

ASSUMED LOADING:

-ROOF LIVE LOAD (SNOW) 30 PSF
-POOF DEAD LOAD (ASSUMED AREA) 100 PSF
-SEISMIC ZONE 90 MPH
-WIND LOAD (METHOD) 300 MPH

BUILDING AND FOUNDATION REPORT (EXHIBIT A)

DRILLED PILE DESIGN CRITERIA:

TYPE A: DRILLED PIERS BOTTOMED IN BEDROCK
-ALLOWABLE LOAD BEARING IN BEDROCK 30000 PSF
-SOIL SHEAR IN BEDROCK 20000 PSF
-MINIMUM DEAD LOAD 20000 PSF

DRILLED PILE AND GRADE BEAM CONSTRUCTION NOTES:

-PROVIDE 4" X 12" WIDE V-GROOVE DRILLED PILES FOR GRADE BEAMS AND WALLS.
-BACKFILL AND CRADLE SMALL LIGHT POLE SIGHT LINE BACKFILL MAY FROM THE ALILO.
-ALL WALLS OR GRADE BEAMS RETAINING EARTH SHALL BE PROPERLY SHORED OR ALL
-ALL REINFORCING STEEL SHALL BE SECURED TO THE EXISTING FORMATION, WALL OR CAISONS.
-ALL REINFORCING TO BE ANCHORED TO EXISTING FOUNDATION, WALL OR CAISONS.
-SHALL BE FASTENED SUP-B-SET EPOXY CAPSULES OF AN APPROVED ALTERNATE

CONCRETE AND REINFORCING STEEL

CODES AND REFERENCES:

-BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE: ACI-318-77
-SPECIFICATION FOR CONCRETE: ACI-117-77
-STRUCTURAL DESIGN: ACI-314-77
-DESIGN HANDBOOK: ACI-SPR-17A-77

CRITICAL DESIGN STRESSES:

-CONCRETE STRENGTH (28 DAY) 3000 PSI
-REINFORCING STEEL: #4 IN. DIA. GRADE 40 Fy = 40000 PSI
-#4 AND LARGER (ASTM A415, GRADE 60) Fy = 60000 PSI
-#4 REINFORCING STEEL: COLUMNS, TIES AND BARS WHICH
-ARE NOT VIBRATED: GRADE 40

CONCRETE TYPE II

CONCRETE CONSTRUCTION NOTES:

-PROVIDE COVERS FOR REINFORCING AS SPECIFIED IN ACI-318-77, SECTION 7.7.1
-WHERE SPLICES IN REINFORCING ARE REQUIRED, THE SPlices SHALL BE LAPPED AND
-SPlices SHALL BE SECURED WITH ONE OR MORE WRAPS AND SHOVED WITHIN
-THE REQUIRED LAP LENGTHS AND SHALL MEET THE REQUIREMENTS OF A CLASS "A" SPLICE
-MINIMUM SPLICE LENGTHS FOR CLASS "B" GRADE 60: 3000 PSI CONCRETE:
-REF: ACI-318-77, SEC. 12.16
-MAKE HORIZONTAL BARS CONTINUOUS AROUND CORNERS TO PROVIDE CORNER BARS
-ALL SLAB AND/OR WALL SPACES SHALL BE REINFORCED WITH #2-44 HARS AND
-SHALL EXTEND TWO FEET BEYOND THE EDGE OF THE SPACES.

FLOOR SLABS OF CONCRETE:

-DO NOT PLACE CONCRETE OVER FLOATING FLOOR SLABS WITH 6x6-WL-4 WIRE GRID WIRE
-FABRIC, UNLESS NOTE OTHERWISE.
-SEPARATE SLAB FROM FLOOR OVERLAY BEARING MEMBERS AND UTILITY LINES TO ALLOW
-FOR INDEPENDENT MOVEMENT OF THE SLAB. PROVIDE A POSITIVE CONTROL OR BLT
-JOINT AT THE CONSTRUCTION JOINT BETWEEN THE SLAB AND THE FOUNDATION WALL.
-JOINTS SHOULD BE LOCATED IN AREAS WHERE THERE IS NO LIKELY POSSIBILITY OF
-CRACKING OF THE SLAB. CONTROL JOINTS SHOULD BE PLACED TO PROVIDE APPROPRIATE
-SLAB AREA FOR THE AREAS FREE FROM JOINTS. JOINTS SHOULD BE LOCATED SO AS TO
-NOT PERMIT THE CONCRETE FROM MOVING PARALLEL WITH IT AND TRANSVERSE JOINTS
-AT FOUR FEET APPROXIMATELY ON CENTER.
-SOILS THAT WILL DAMAGE CONCRETE SLABS SHOULD BE KEPT SOILS DURING
-CONSTRUCTION TO AVOID SPREADING OF WATER AND ESPECIALLY 1 DAY OR SO
-PRIOR TO PLACING THE CONCRETE.
-A FRENCH DRAIN IS HIGHLY RECOMMENDED.

WOOD CONSTRUCTION

CODES AND REFERENCES:

-AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)
-AMERICAN SOCIETY FOR TEST MATERIALS (ASTM)
-U.S. PRODUCT STANDARD (PS)

-NATIONAL FOREST PRODUCTS ASSOCIATION (NFPA)

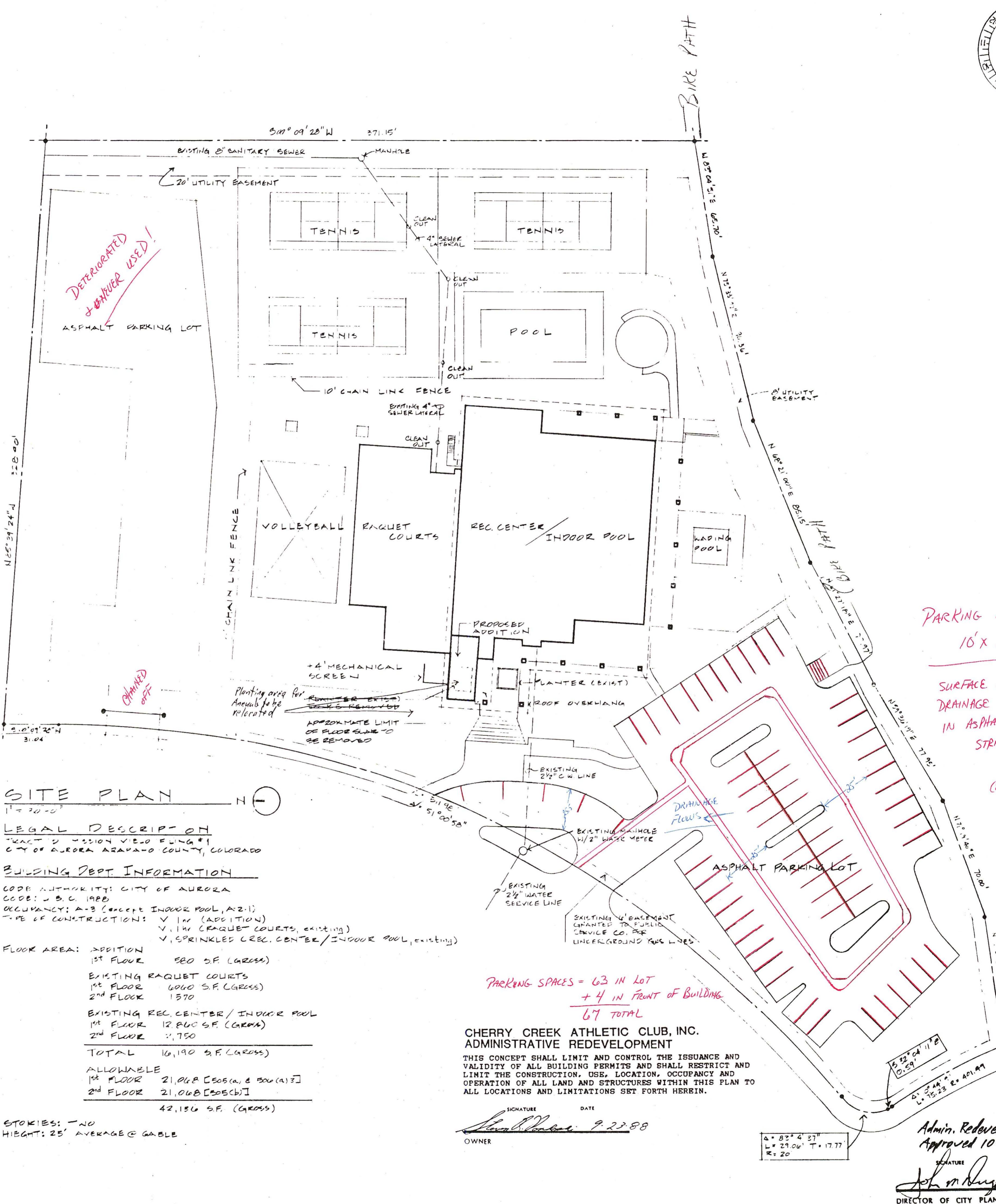
-TRAIL-JOIST CORP.

CRITICAL DESIGN STRESSES/DOUGLAS FIR-LARCH/MARSHALLELL BUCKLING

-LIGHT FRAMING (CONSTANT SPAN) FS = 1000 PSI
-HEAVY FRAMING (CONSTANT SPAN) FS = 1200 PSI
-STRUCTURAL JOISTS & PLANES (#2 OR BETTER) FS = 1250 PSI
-BEAMS & STRINGS (#4 OR BETTER) FS = 1200 PSI
-GLUED LAMINATED TIMBER (CWB: 24-F, 18-S) FS = 2400 PSI
-MICRO-LAM FS = 2800 PSI

FRAMING NOTES:

-ANY CHANGE IN LUMBER SPANS OR GAUGE MUST BE APPROVED IN WRITING BY THE
-ENGINEER OF BUREAU. ALL FRAMING SHALL BE IN CONFORMANCE WITH THE USE RAILING SCHEDULE TABLE 25-Q
(1985 EDITION).
-ALL FRAMING ANGLES AND JOINT HANGERS WHERE JOISTS FRAME INTO AND
-ARE SUPPORTED BY THE END OF SUPPORTING MEMBERS.
-PROVIDE SOLID BLOCKING AND BRACING AS REQUIRED BY UBC TABLE NO. 25-10-1 AND
-THIS WILL USUALLY CONSIST OF SOLID BLOCKING AT EACH SUPPORT AND BRACING, WHEN REQUIRED, AT EIGHT FEET MAXIMUM SPACING.
-ALL FRAMING JUNCTIONS, WHETHER THEY BE IN THE FORM OF AN ANGLE, A T-JOINT, A
-C-CORNER, OR A KNOT, SHALL BE SECURED TO THE EXISTING CONCRETE, NOT
-TO THE EXISTING WOOD. EACH SHALL BREAK A CRACK PLATE OF THE CRACKING ASSOCATION AND
-SHALL ALSO BE STAPLED "D-N".
-ALL FRAMING JOISTS AND BEAMS SHALL BE TREATED WOOD WITH 1/2" DIAMETER ANCHOR
-BOLTS AT FOUR FEET ON CENTERS UNLESS NOTED. SEE UBC SECTION 1511(C) AND
-2907(F), 1985 EDITION.
-ALL FRAMING, ROOF AND SUBFLOORS SHALL CONFORM TO THICKNESS AND
-FASING RATING AS REQUIRED BY UBC TABLE NO. 25-6-6.
-PLYWOOD SHEATHING FOR ROOF AND WALLS SHALL BE 1/2" MIN. THICK (1/4" C-C)
-AND 1/2" MIN. THICKNESS AT ALL JOINTS. SHEATHING IS TO BE ATTACHED WITH 1/4" NAILS AT 4 INCHES
-ON CENTER AT ALL PANEL EDGES PER UBC TABLE NO. 25-K-1 (1985 EDITION) UNLESS
-NOTED OTHERWISE ON STRUCTURAL DRAWINGS.



CHERRY CREEK ATHLETIC CLUB, INC.
ADMINISTRATIVE REDEVELOPMENT

THIS CONCEPT SHALL LIMIT AND CONTROL THE ISSUANCE AND
VALIDITY OF ALL BUILDING PERMITS AND SHALL RESTRICT AND
LIMIT THE CONSTRUCTION, USE, LOCATION, OCCUPANCY AND
OPERATION OF ALL LAND AND STRUCTURES WITHIN THIS PLAN TO
ALL LOCATIONS AND LIMITATIONS SET FORTH HEREIN.

SIGNATURE DATE
John M. Dugay 10-6-88
OWNER

Admin. Redevelopment Plan
Approved 10-6-88
John M. Dugay 10-6-88
DIRECTOR OF CITY PLANNING

NO.	DATE	REVISION
0	Sept 26 88	Initial Review by City
1	Sept 26 88	Comments or Planning Cert.

A-1