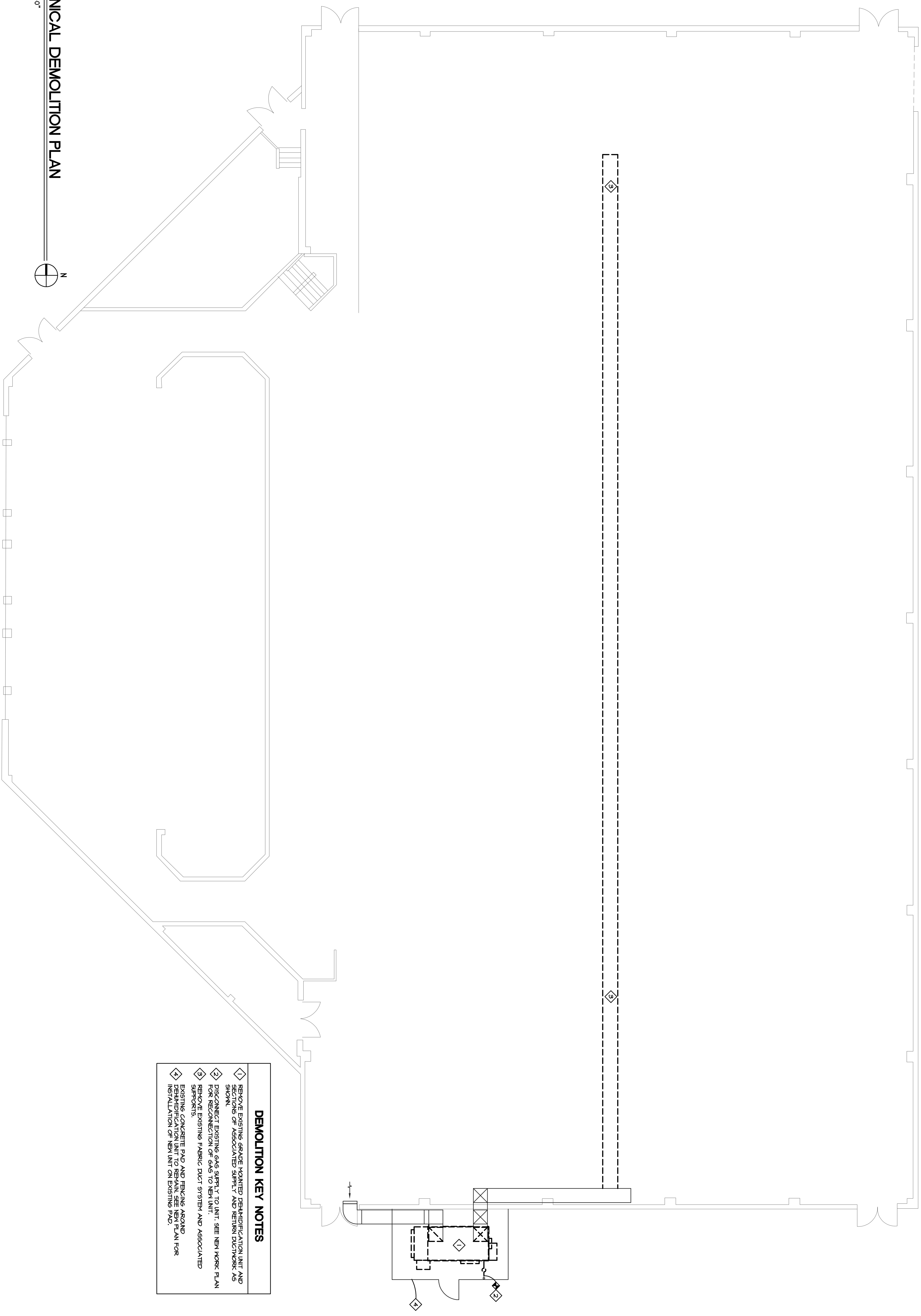
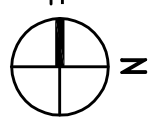


1
SCALE: 1/8"=1'-0"

MECHANICAL DEMOLITION PLAN

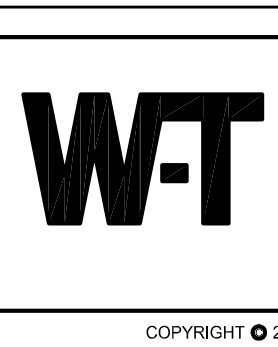


- DEMOLITION KEY NOTES**
- 1 REMOVE EXISTING GRADE MOUNTED DEHUMIDIFICATION UNIT AND SECTIONS OF ASSOCIATED SUPPLY AND RETURN DUCTWORK AS SHOWN.
 - 2 DISCONNECT EXISTING GAS SUPPLY TO UNIT. SEE NEW WORK PLAN FOR RECONNECT OF GAS TO NEW UNIT.
 - 3 REMOVE EXISTING FABRIC DUCT SYSTEM AND ASSOCIATED SUPPORTS.
 - 4 EXISTING CONCRETE PAD AND FINISHES AROUND DEHUMIDIFICATION UNIT TO REMAIN. SEE NEW PLAN FOR INSTALLATION OF NEW UNIT ON EXISTING PAD.

COPYRIGHT © 2014 W-T MECHANICAL/ELECTRICAL ENGINEERING, LLC.

SHEET TITLE:	
MECHANICAL DEMOLITION PLAN	
DATE:	01-08-17
SCALE:	AS NOTED
DRAWN:	MOV
CHECK:	MOV
JOB:	MT6410
SHEET	
MD-1	

**NELSON SPORTS COMPLEX
DEHUMIDIFICATION UNIT REPLACEMENT
ROLLING MEADOWS PARK DISTRICT, ILLINOIS**



W-T MECHANICAL/ELECTRICAL ENGINEERING, L.L.C.
MECHANICAL AND ELECTRICAL ENGINEERS
2675 Pratum Avenue
Hoffman Estates, Illinois 60192
PH: (224) 293-6333 FAX: (224) 293-6444
www.wtengineering.com
IL License No.: 184,004512 Exp: 04/30/15

REVISIONS	DATE	BY

COPYRIGHT © 2014 W-T MECHANICAL/ELECTRICAL ENGINEERING, LLC.

MECHANICAL LEGEND

—	NEW DUCTWORK AND AIR DEVICES TO MATCH EXISTING.
—	EXISTING DUCTWORK AND AIR DEVICES TO REMAIN, CLEAN AND RECONDITION AS REQUIRED.
---	EXISTING DUCTWORK AND AIR DEVICES TO BE REMOVED.
IO/NO	EXISTING DUCTWORK DIMENSIONS
①	TERMOSTAT
②	SENSOR (RENOTE TEMPERATURE SENSOR UNLESS OTHERWISE NOTED)
☐	TAKEOFF WITH MANUAL VOLUME DAMPER
—	LOCKABLE MANUAL VOLUME DAMPER (MVD)
—	FIRE DAMPER
—	FD
A.F.F.	ABOVE FINISHED FLOOR
B.F.C.	BELOW FINISHED CEILING
M.V.D.	LOCKABLE MANUAL VOLUME DAMPER
M.C.	INCHES OF WATER COLUMN
U.C.	UNDER CUT DOOR
U.T.R.	UP THROUGH ROOF
↻	NEW TO EXISTING CONNECTION
↻	DEMO BREAK POINT; DEMO BACK TO THIS POINT
RT-1	EQUIPMENT TAG
⊖	NEW AIR DEVICE TAG
⊖ (CH)	CEILING DIFFUSER WITH FOUR WAY THROW
⊖ (S)	CEILING DIFFUSER WITH THREE WAY THROW
⊖	CEILING DIFFUSER WITH TWO WAY THROW
⊖	CEILING DIFFUSER FOR RETURN AIR
⊖	SUPPLY REGISTER
⊖	RETURN / EXHAUST GRILLE
(X)-(CH)	EXISTING AIR DEVICE X = EXHAUST AIR E = RETURN AIR M = EXHAUST AIR T = RETURN AIR
⊖	EXISTING CEILING DIFFUSER
⊖	EXISTING CEILING DIFFUSER FOR RETURN AIR
⊖	VENTLESS PRESSURE REGULATOR
M	MANUAL GAS VALVE
⊖	MECHANICAL GAS VALVE

ICE RINK HEATING / COOLING AND DEHUMIDIFICATION UNIT SCHEDULE

ITEM TAG	MANUFACTURER AND MODEL NUMBER	SUPPLY FAN			REACTIVATION FAN			REACTIVATION HEATER		DEHUMIDIFICATION WHEEL, 5' x 400mm TIGEL		ELECTRICAL DATA		FILTER TYPE	UNIT WEIGHT (LBS)	REMARKS									
		CFM	ESP	HP	CFM	ESP	HP	MAX CAPACITY (BTU/HR)	DESIGN CAPACITY (BTU/HR)	PROCESS CFM	MOISTURE REMOVAL (LBS/HR)	P.D. REACTIVATION EFFICIENCY	P.D. HEAT TRANSFER EFFICIENCY				VOL-FH/PHZ	HKA	MAX FUSE						
D-1	HANERS* MAC2-800S	7500	4.1"	10	1750	3	BI-AF / I	1800	4.8	3450	400/2000	394152	7500	1750	1/2"	2.04"	2012 (BTU/LB)	1622 (BTU/LB)	460-3-60	2/0	30	30% PLATED DISPOSABLE	4000		ALL

REMARKS:

1. MOUNT UNIT ON EXISTING CONCRETE PAD, PROVIDE NEOPRENE PADS BETWEEN UNIT AND CONCRETE PER IFR, RECOMMENDATIONS.
2. OUTSIDE AIR INTAKE SHALL BE 10'-0" MINIMUM AWAY FROM ANY EXHAUST DISCHARGE.
3. PROVIDE WITH SOUND-ABSORBING UNIT MOUNTED CONTROLLER WITH BACKSET SHIP CAPABILITY FOR FUTURE CONNECTION TO A BAS. THE UNIT MOUNTED CONTROLLER SHALL HOSE UNIT CONTROLLER ALONG WITH ALL INTERNAL SENSORS FOR CONDITIONING THE SPACE AND SHALL CONTROL HEATING AND DEHUMIDIFYING. A SPACE TEMPERATURE AND HUMIDITY SENSOR SHALL BE PROVIDED BY THE MANUFACTURER FOR INSTALLATION BY INSTALLING CONTRACTOR.
4. PROVIDE FLEXIBLE CANNVAS AT ALL DUCT CONNECTIONS TO UNIT.
5. PROVIDE FLEXIBLE CANNVAS AT ALL DUCT CONNECTIONS TO UNIT.
6. PROVIDE GAS CONNECTION TO UNIT WITH REGULATOR GAS COOK LINE AND DIRT LES.
7. DISCONNECT SWITCH AND FIELD WIRING BY ELECTRICAL CONTRACTOR.
8. UNIT SHALL BE ILL LISTED RECOMMENDED SERVICE CLEARANCES.
9. PROVIDE SHUT-DOWN BELT'S INTERLOCKED WITH THE FIRE ALARM SYSTEM TO SHUT-DOWN THE UNIT UPON ALARM ACTIVATION WIRING PER LOCAL CODES BY ELECTRICAL CONTRACTOR.
10. PROVIDE SHUT-DOWN BELT'S INTERLOCKED WITH THE FIRE ALARM SYSTEM TO SHUT-DOWN THE UNIT UPON ALARM ACTIVATION WIRING PER LOCAL CODES BY ELECTRICAL CONTRACTOR.
11. DOUBLE WALL 2" INSULATED PANEL CONSTRUCTION.
12. PROVIDE WITH DEHUMIDIFICATION WHEEL.
13. PROVIDE WITH DEHUMIDIFICATION WHEEL.
14. PROVIDE WITH DEHUMIDIFICATION WHEEL.
15. PROVIDE WITH O.A. INTAKE HOOD WITH MOTORIZED 2 POSITION DAMPER.
16. PROVIDE WITH O.A. INTAKE HOOD WITH MOTORIZED 2 POSITION DAMPER.
17. PROVIDE ALTERNATE DRIVE SHEAVES, BELTS, ETC AS REQUIRED TO PROVIDE THE AIRFLOW SHOWN.

EXHAUST FAN SCHEDULE

ITEM TAG	MANUFACTURER AND MODEL NUMBER	QTY	CFM	ESP	SONES	ELECTRICAL DATA		CONTROLLED VIA	DAMPER TYPE	AREA SERVING	UNIT WEIGHT (LBS)	REMARKS	
						VOL-FH/PHZ	HP OR NOTED						
EX-1	GREENHECK* #CEB-48-60S-C30-V6D	1	8500	0.5"	35	460-3-60	3 HP	860	EXISTING GAS DETECTION SYSTEM	BACKCRAFT	ICE RINK	788	ALL

REMARKS:

1. VERIFY EXACT VOLTAGE PRIOR TO ORDERING EQUIPMENT.
2. VERIFY EXACT VOLTAGE PRIOR TO ORDERING EQUIPMENT.
3. PROVIDE WALL SLEEVE GRAVITY BACKCRAFT DAMPER, HEATER HOOD AND INLET GUARD.
4. PROVIDE WITH VARIABLE SPEED MOTOR, MOTOR SPEED TO BE CONTROLLED BY EXISTING CO / CO2 DETECTION SYSTEM, SEE PLAN NOTES.
5. PROVIDE WITH 0-10 V DC INPUT CONTROLLER FOR CONNECTION TO GAS DETECTION SYSTEM.

MECHANICAL GENERAL NOTES

1. MECHANICAL CONTRACTOR SHALL FINISH AND INSTALL FIRE DAMPERS IN DUCTWORK AND FIRESTOP ALL FIRE PENETRATIONS THRU RATED FLOORS, CEILINGS AND WALLS. VERIFY LOCATIONS OF ALL RATED ASSEMBLIES WITH ARCHITECTURAL PLANS, SEE SHEET A02. FIRE DAMPERS SHALL BE IN DAMPERS.
2. SEAL ALL PENETRATIONS THRU EXTERIOR WALLS WATER AND WEATHER TIGHT. ALL ROOF FLASHING SHALL BE BY THE ROOFING CONTRACTOR.
3. PROVIDE GAS PRESSURE REGULATORS AT ALL FUEL BURNING APPLIANCES. SIZE REGULATORS FOR THE FUEL REQUIRED FLOW AND INLET PRESSURES. PROVIDE VENT PIPING FROM REGULATOR RELIEF PORT TO OUTDOORS PER CODE REQUIREMENTS.
4. THE CONTRACTOR SHALL SUPPORT ALL DUCTWORK WITH APPROVED HANGERS AT INTERVALS NOT MORE THAN 10 FEET OR BY OTHER APPROVED MEANS. HANGERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S AND WORK SYSTEMS DESIGN. HANGERS SHALL BE SUPPORTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
5. ALL FUEL BURNING APPLIANCES AND EQUIPMENT SHALL BE INSTALLED AS REQUIRED BY THE TERMS OF THEIR APPROVAL IN ACCORDANCE WITH THE CONDITIONS SET FORTH IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND PER LOCAL CODE REQUIREMENTS. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE MADE AVAILABLE AT THE JOB SITE AT THE TIME OF INSPECTION.
6. ALL PIPING INSTALLED OUTDOORS SHALL BE ELEVATED NOT LESS THAN 35" ABOVE GROUND AND NOT LESS THAN 35" ABOVE THE ROOF SURFACE WHERE INSTALLED ACROSS THE ROOF. PIPING INSTALLED ABOVE GROUND OUTDOORS, AND INSTALLED ACROSS THE SURFACE OF ROOFS SHALL BE SECURELY TIED TO STRUCTURE AND PROTECTED FROM PHYSICAL DAMAGE. BURNING THROUGH OUTDOORS AND THE PIPING SHALL BE PROTECTED FROM PHYSICAL DAMAGE BY PAINTING PIPING WITH EXOXY BASED PAINT. COLOR SHALL BE SAFETY YELLOW.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND VERIFYING ALL EXISTING FIELD CONDITIONS PRIOR TO SUBMISSION OF HIS BID. THE CONTRACT DOCUMENTS INDICATE APPROXIMATE LOCATION OF EXISTING DUCTWORK AND PIPING AND ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL LOCATION AND ROUTING OF THE EXISTING DUCTS AND PIPING.
8. CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF ALL OTHER TRADES AND MAKING ANY NECESSARY MODIFICATIONS TO HIS WORK AT NO ADDITIONAL COST, INCLUDING ALL OFFSETS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OF ANY EXISTING MINOR INTERFERENCES, INCLUDING CONDUIT, HANGERS, SPRINKLER PIPING AND SPRINKLER HEADS AT NO ADDITIONAL COST.
10. CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK, INCLUDING MOVING AND REISING OF MATERIAL AND EQUIPMENT, AND PROVIDING ALL HANGER, SUPPORTS, ANCHORS, EXPANSION BEAMS, FITTINGS AND SLEEVES.
11. HVAC CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING OF BUILDING MATERIALS AS REQUIRED FOR INSTALLATION OF HIS WORK AND PROVIDE ALL HOLES AND SLEEVES FOR INSTALLATION OF MECHANICAL WORK.
12. ALL CONDENSATE DRAIN PIPING SHALL BE PITCHED A MINIMUM OF 1/8" PER FOOT.

AIR DEVICE SCHEDULE

ITEM TAG	MANUFACTURER AND MODEL NUMBER	TYPE	DESCRIPTION	REMARKS
⊖	TITUS* #DL	DRUM LOWER	ROTATING DRUM AND PIVOTED BLADES	1, 2, 3

REMARKS:

1. PROVIDE OPPOSED BLADE DAMPERS.
2. PROVIDE ADAPTER BOOTS AND INSULATED FLENUM BOXES AS REQUIRED.
3. PROVIDE WHITE FINISH IN LAV-IN AND DRYWALL AREAS. COORDINATE FINISH WITH ARCHITECT.

**NELSON SPORTS COMPLEX
DEHUMIDIFICATION UNIT REPLACEMENT
ROLLING MEADOWS PARK DISTRICT, ILLINOIS**

W-T MECHANICAL/ELECTRICAL ENGINEERING, L.L.C.
MECHANICAL AND ELECTRICAL ENGINEERS
2675 Pratum Avenue
Hoffman Estates, Illinois 60192
PH: (224) 293-6333 FAX: (224) 293-6444
www.wt-engineering.com
IL License No.: 184,004512 Exp: 04/30/15

M-2

SHEET TITLE: MECHANICAL SCHEDULES AND NOTES

DATE: 01-08-17

SCALE: AS NOTED

DRAWN: MOV

CHECK: MOV

JOB: M16410

COPYRIGHT © 2014 W-T MECHANICAL/ELECTRICAL ENGINEERING, L.L.C.