

**CEDAROAK PARK PRIMARY SCHOOL**  
**Class I Design Review**  
April 7, 2009

**APPLICATION SUMMARY**

For Class I Design Review approval to construct 6 additional vehicle parking spaces, landscaping, and storm water facility improvements associated with an existing 46,215 square foot primary school located on an 11.22-acre site.

**GENERAL INFORMATION**

**Location**

4515 South Cedaroak Drive (2S 1E Section 24 BA and 2S 1E Section 13 CC, Tax Lots 1800 and 9400). Its location is shown in Figure 1.

**Comprehensive Plan and Zoning Designations**

The Comprehensive Plan designation is Low Density Residential.

Consistent with the Comprehensive Plan, the property is zoned Single Family Residential Detached (R10).

**Applicant and Owner**

Tim Woodley, Director of Operations  
West Linn-Wilsonville School District  
P. O. Box 35  
West Linn, OR 97068  
Phone: 503-673-7976  
E-mail: [woodleyt@wlwv.k12.or.us](mailto:woodleyt@wlwv.k12.or.us)

**Applicant's Representatives**

Keith Liden, AICP  
Parsons Brinckerhoff  
400 S. W. 6<sup>th</sup> Avenue, Suite 802  
Portland, OR 97204  
Phone: 503-478-2348  
Fax: 503-274-1412  
E-mail: [liden@pbworld.com](mailto:liden@pbworld.com)

Karina Ruiz  
Dull Olson Weekes Architects  
907 S. W. Stark Street  
Portland, OR 97205  
Phone: 226-6950  
Fax: 273-9192  
E-mail: [KarinaR@dowa.com](mailto:KarinaR@dowa.com)

**Figure 2: Aerial Photo**



Source: City of West Linn

## **BACKGROUND INFORMATION**

### **Site Description**

The site is developed with CedarOak Park Primary School, including a 46,215 square foot building, driveway, parking, and play fields. The entire site is approximately 11.22 acres. In addition to the school building, an athletic field is located on the southwest side of the school. Primary access to the school is provided by South CedarOak Drive, which runs along the east side of the site.

## **Storm Water Improvements**

The storm runoff collected at the school is currently discharged into various drywells around the campus. The school has historically experienced excessive ponding during storm events, which is likely due to the inability of the existing drywells to function efficiently due to low soil infiltration rates. The ponding is concentrated mostly in the parking lot and courtyard areas of the school. To alleviate this condition, a storm drain system is proposed to discharge runoff from the parking lot and a portion the roof areas to an existing drainage channel along the northwestern edge of the property. In accordance with the city requirements, the proposed system will provide detention and treatment of storm runoff to limit the maximum discharge from the site to predevelopment rates. The detention facility will consist of oversized underground pipes, and the discharge into the drainageway will be regulated by a flow control manhole. This drainage is not identified by the city as a wetland or riparian area.

## **DESIGN REVIEW AND WATER RESOURCE AREA PROTECTION CRITERIA**

The relevant review criteria in the City of West Linn Community Development Code (CDC) include compliance with Chapter 55 Design Review and Chapter 32 Water Resource Area Protection.

### **Chapter 55 – Design Review**

Section 55.090 contains the applicable approval standards for a Class I Design Review. This section refers to the criteria in Section 55.100 B. As stated in the CDC, Subsections 55.100 B (5-6) only apply in cases involving exterior architectural construction. The relevant criteria in Subsections 55.100 B (1-4) are addressed below.

#### ***55.100 B. Relationship to the Natural and Physical Environment***

*Sections 55.100 B. 1. and 2.* are not relevant because there are no heritage trees on the site.

*Section 55.100 B. 3.* is satisfied because grading will only involve the parking area, and the natural drainage pattern will not be altered. In addition, the proposed storm water treatment will enhance the water quality compared to the existing condition.

*Section 55.100 B. 4.* is satisfied because the property is geologically stable. Furthermore, the existing school building will not be modified.

*Section 55.100 B. 5.* is satisfied because the school building will not be altered and the current building setback of over 50 feet from the northern property line will be retained.

### **Chapter 32 – Water Resource Area Protection**

Section 32.050 contains additional applicable approval standards for the parking lot, landscaping, and storm drainage improvements proposed in this application. These criteria are addressed below.

*Section 32.050 O.* is not relevant because a front yard setback reduction is not necessary or requested.

*Section 32.050 P.* is satisfied because the appropriate setbacks are proposed as noted above.

## **CONCLUSION**

The proposed parking lot, landscaping, and storm drainage improvements satisfy all the relevant criteria as demonstrated above.



**SITE DEMOLITION NOTES**

- SAVE AND PROTECT EXISTING ASPHALT THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING CONCRETE THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING CURBS THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING LANDSCAPE THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING BRACING EXTERIOR THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING FENCING THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAWCUT EXISTING CURB.
- DEMOLISH AND REWORK EXISTING CURB AND DEPOSE OF OFF-SITE.
- DEMOLISH AND REWORK EXISTING SIGN AND DEPOSE OF OFF-SITE.
- DEMOLISH AND REWORK EXISTING SIGN AND DEPOSE OF OFF-SITE. CAP PIPE, REBAR AND PAVE AT LIMIT OF WORK.
- DEMOLISH AND REWORK EXISTING SIGN PIPE AND DEPOSE OF OFF-SITE.
- DEMOLISH AND REWORK EXISTING FENCE AND DEPOSE OF OFF-SITE.
- DEMOLISH AND REWORK EXISTING ASPHALT PAVING SECTION, WORK TO ADJUST BULGING TO PROVIDE COMPLETE NEW PAVING SECTION AS SHOWN. REMOVE ALL ASPHALT UNDER EXISTING LANTS AND DEPOSE OFF-SITE.
- SAWCUT AC PAVING.
- REWORK EXISTING SITE, SEE LANDSCAPE DRAWING.
- REWORK AND SAVE EXISTING GATE, RELOCATE FOR CL.
- GRIND EXISTING AC PAVING, SEE BELOW FOR GRINDING DEPTH.
- SAWCUT CONCRETE SLAB.
- DEMOLISH AND REWORK EXISTING CONCRETE AND DEPOSE OF OFF-SITE.
- SAVE AND PROTECT EXISTING TREE DURING CONSTRUCTION, INSTALL TREE PROTECTION FENCING.
- RELOCATE EXISTING PLAY FEELING FOR DIRECTION OF SCHOOL DISTRICT.
- SAWCUT AND REWORK PORTION OF EXISTING ASPHALT PLAY AREA AS NECESSARY FOR INSTALLATION OF NEW STRIP DRAIN LINE, DEPOSE OF OFF-SITE.
- REWORK PORTION OF EXISTING FENCE FOR INSTALLATION OF NEW STRIP DRAIN LINE.

**GRINDING DEPTHS**

- REWORK EXISTING ASPHALT
- GRIND EXISTING AC PAVING DOWN 1"



DEMOLITION PLAN  
SCALE: 1" = 20'-0"

1" = 20'-0" 20' 0 20' 40' 60'



ARCHITECTURE • INTERIORS • PLANNING  
BULL VALLEY, WISCONSIN  
107 W. WATER STREET, SUITE 200, WEST LIMA, WISCONSIN 53092  
P: (509) 378-1100 / F: (509) 378-1101 / WWW.LOURA.COM

**CEDAR OAK PARK PRIMARY SCHOOL**  
Wilsonville School District  
West Linn - Wilsonville School District  
22210 SW Shafter Road  
West Linn, OR 97068  
L: (503) 673-7975  
F: (503) 673-7044

WINZLER SOBBLY  
18348 SW BIRCHDALE PARKWAY SUITE 100  
PORTLAND, OR 97224  
PH: (503) 253-8200 • FAX: (503) 253-8200  
WWW.WINZLER.COM



A R C H I T E C T	
phone	
date	
revised	
project #	09003
DEMOLITION PLAN	
<b>C2</b>	

PROJECT: 09-003 CEDAR OAK PARK PRIMARY SCHOOL DEMOLITION PLAN  
 DATE: 10/15/09  
 DRAWN BY: J. B. BROWN  
 CHECKED BY: J. B. BROWN  
 PROJECT MANAGER: J. B. BROWN  
 ARCHITECT: LOURA ARCHITECTURE, 107 W. WATER STREET, SUITE 200, WEST LIMA, WISCONSIN 53092  
 PHONE: (509) 378-1100, FAX: (509) 378-1101, WWW.LOURA.COM  
 SCALE: 1" = 20'-0"

**SITE CONSTRUCTION NOTES**

- CONSTRUCT STANDING CURB
- CONSTRUCT STANDING CONCRAVE
- CONSTRUCT LIGHT ASPHALT PAVEMENT SECTION
- CONSTRUCT HEAVY ASPHALT PAVEMENT SECTION
- CONSTRUCT OVERLAY ASPHALT PAVEMENT SECTION
- CONSTRUCT ADA APPROVED PARKING STALL
- INSTALL 3" WIDE PARKING STRIPES - WHITE (CONC) -
- MATCH EXISTING AC PAVEMENT, PROVIDE DUCK BOARD AT JUNCTION
- CONSTRUCT NEW DRIVE LANE FENCE
- PROVIDE NEW CURBS BY AREAS DETERMINED BY CONSTRUCTION SEE LANDSCAPE DRAWINGS
- CONTRACTOR SHALL PATCH & REPAIR ALL EXISTING ASPHALT PAVEMENT USED FOR STAGING AREAS AND CONSTRUCTION TRUCK PARKING. DAMAGED PAVEMENT SHALL BE REPAVED AND REPLACED WITH MATCHING PAVEMENT SECTION
- PROVIDE AC FINISH PATCH MATCH EXISTING THICKNESS
- NEW LIGHT POLE - SEE ELECTRICAL SITE PLAN
- PROVIDE RED PAINTED CURB FOR FIRE LANE WITH "FIRE LANE - NO PARKING" STENCILS AT 30' INTERVALS
- MATCH NEW SIGNAGE TO EXISTING SIGNAGE AND PROVIDE SMOOTH TRANSITION TO ADJACENT DRIVE CHANGES
- INSTALL CROSSING STRIPES (WHITE)
- INSTALL PAVEMENT MARKINGS (WHITE)
- INSTALL NEW PRECAST CONCRETE WHEEL STOP
- SEE LANDSCAPE PLANS FOR CONSTRUCTION INFORMATION
- CONSTRUCT CURB CURBS AT 6" ON CENTER AS SHOWN
- REMOVE EXISTING FENCE PRIOR AFTER INSTALLATION OF STORM DRAIN PIPE
- REPAIR ASPHALT PLAY AREA AFTER INSTALLATION OF STORM DRAIN PIPE
- INSTALL RELOCATED GATE
- INSTALL 30" HIGH EXISTING SIGN
- INSTALL ADA COMPLIANT SIGN
- VERIFY EXISTING CONCRETE OVERLAYS, REPAIR ANY PORTING OF CURBS SHOWN THAT WERE DEVELOPED

**PARKING STALL COUNT**

	STANDARD STALLS	COMPACT STALLS	ADA STALLS	TOTAL STALLS
EXISTING	64	2	1	67
PROPOSED	56	12	1	74



**SITE PLAN**  
SCALE: 1" = 20'-0"

1" = 20'-0" 20' 40' 60'



ARCHITECTURE • INTERIORS • PLANNING

SULLY GORDON WHEELER ARCHITECTS, INC.

**CEDAR OAK PARK PRIMARY SCHOOL**  
Wilsonville School District

West Linn - Wilsonville School District  
22216 SW Stafford Road  
West Linn, OR 97158  
T: (503) 673 7975  
F: (503) 673 7044

**WINTLER & JELLY**

15045 SW Agricultural Parkway, Suite 100  
Portland, OR 97224  
PH: (503) 255-2821 • FAX: (503) 255-2826  
WWW.WINTLERANDJELLY.COM



3 4 5 6 7 8

phase |

date |

REVISIONS |

Project # | 09000

**SITE PLAN**

**C3**

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 IBC, 2015 IRC, AND 2015 IFC. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 IBC, 2015 IRC, AND 2015 IFC. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 IBC, 2015 IRC, AND 2015 IFC.

1/10/2018 10:54 AM

**GRADING NOTES**

- THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TOWARD ALL EXISTING SUBSTRACTION FEATURES.
- THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS.
- SEE LANDSCAPE PLANS FOR PEDESTRIAN SEWERABLE DRAINS AROUND BUILDING.
- COMPLETELY COVER ANY SPA, STROPPLES WHICH REMAIN EXPOSED FOR MORE THAN TWO WEEKS WITH 6 MIL BLACK PLASTIC AND PROVIDE RESTRAINTS TO HOLD PLASTIC IN PLACE. REMOVE PLASTIC COVER AS PART OF CONTINGENCY EROSION CONTROL PLAN. INSTALL Silt FENCE COMPLETELY AROUND STROPPLES.
- STOP DIRTPILE AND PROVIDE FENCED AREA AS NEEDED TO COVER EXISTING PROPOSED STRUCTURE. PA AS SPECIFIED. SHIELD BUILDING AND PARADEWAY TO ACHIEVE INDICATED FINISH ELEVATIONS.
- MATCH EXISTING PARADEWAY GRADES AT JOINTS BETWEEN NEW AND EXISTING PARADEWAYS.

**EROSION CONTROL NOTES**

- NORMAL PILEY PROTECTION (TYPICAL OVER ALL OPEN GRADES AND EXISTING CURBS, SIDEWALKS AND WALK DRIVES).
- METAL SEDIMENT FENCE (TYPICAL)
- CONCRETE BLOCK TRUCK STOP PILE
- METAL W/PILE CONCRETE WEIHRIG AREA. ALL WATER COLLECTED THROUGH WEIHRIG AREA IS CONSIDERED HARMFUL WASTE AND SHALL BE CAPTURED AND RECYCLED AS SUCH. ALL CONCRETE FROM PILE SHALL BE RECYCLED. PILE SHALL BE MONITORED & MAINTAINED BY CONTRACTOR TO ENSURE NO OVERFLOW OCCURS. CONTRACTOR MAY ADJUST LOCATION WITH OWNER'S PERMISSION.
- PROVIDE JOINT MITING ON SLOPES AND BOTTOM OF BROWLINE.

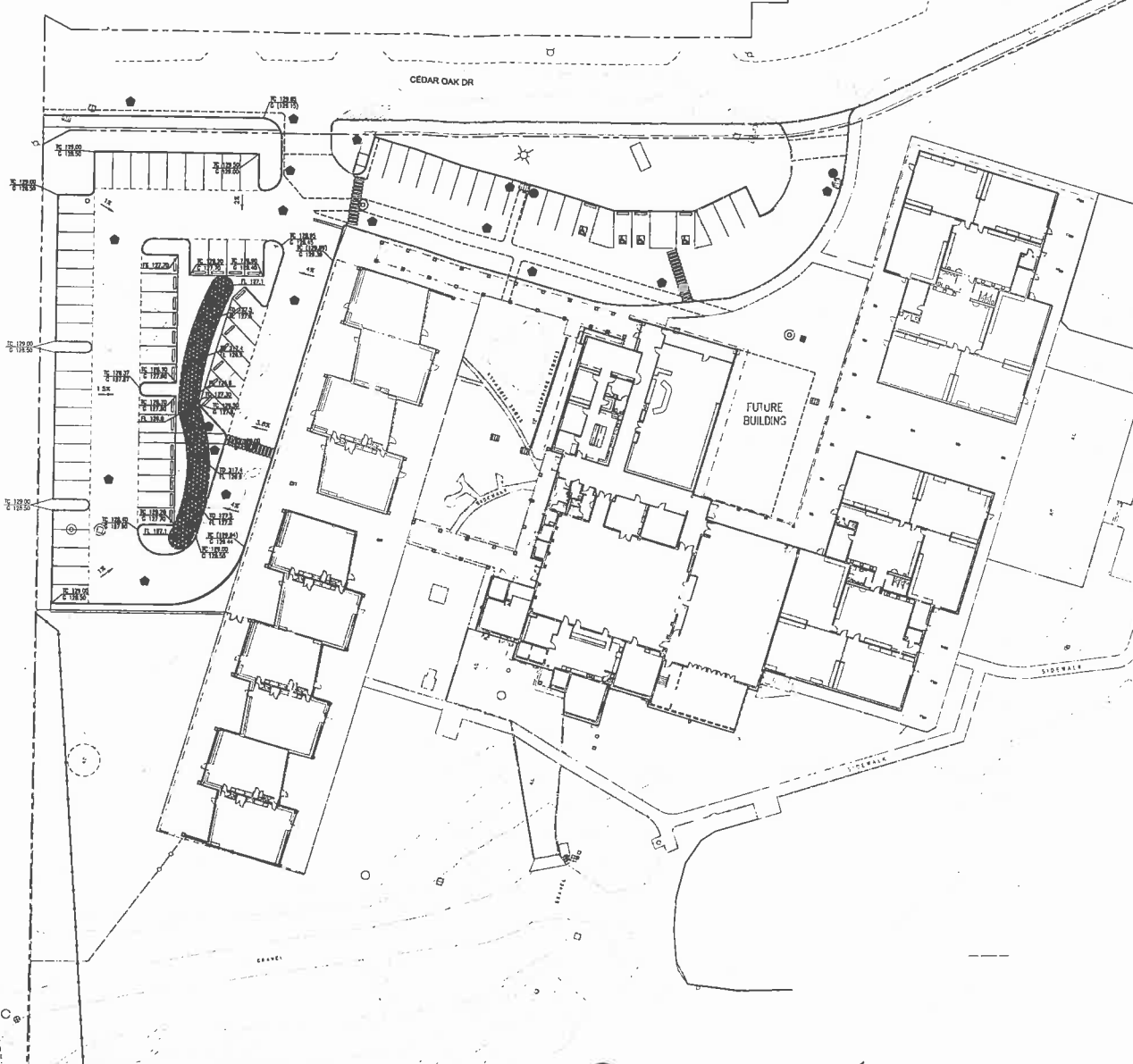
**GENERAL EROSION CONTROL NOTES**

THE PROPOSED EROSION CONTROL MEASURES ARE A MINIMUM BEST MANAGEMENT PRACTICE. THE CONTRACTOR MAY BE REQUIRED TO TAKE ADDITIONAL EROSION CONTROL MEASURES TO ENSURE THAT ALL EROSION CONTROL MEASURES ARE IN PLACE ON EITHER THE EXISTING SUBSTRACTION SYSTEMS. THE CONTRACTOR MAY ALSO BE REQUIRED BY THE CITY ENGINEER, CITY SUPERVISOR, OR PROJECT ENGINEER TO CONTROL DUST AND AIRBORNE SOILS.

PRIOR TO COMMENCEMENT OF GRADING ACTIVITY AND AFTER INSTALLATION OF EROSION CONTROL MEASURES, CONTRACTOR IS TO CONDUCT THE CITY OF WILSONVILLE INSPECTION AND APPROVAL.

**EROSION CONTROL STABILIZATION SEEDING**

FOOTING: 100 LBS PER 1000 SQ YD  
 CRUSTING: 100 LBS PER 1000 SQ YD  
 APPROXIMATE RATE: 100 LBS PER 1000 SQ YD



GRADING AND EROSION CONTROL PLAN  
 SCALE: 1"=20'-0"

1" = 20'-0" 20' 0 20' 40' 60'



LANDSCAPE ARCHITECTS & PLANNERS

SHILL OGDON WEEKS  
 ARCHITECTS, INC.

1000 WEST MAIN STREET, WEST Linn, OREGON 97146  
 P: (503) 323-7975 F: (503) 323-7044

**CEDAR OAK PARK PRIMARY SCHOOL**

West Linn - Wilsonville School District

22210 SW Steinfert Road  
 West Linn, OR 97146  
 T: (503) 323-7975  
 F: (503) 323-7044

WINTER SOCIETY

1825 SW BUCKLE HAMPWAY, SUITE 100  
 PORTLAND, OR 97205  
 PH: (503) 255-2851 FAX: (503) 255-2850  
 WWW.WINTERSOCIETY.COM



NO. 1	DATE	BY

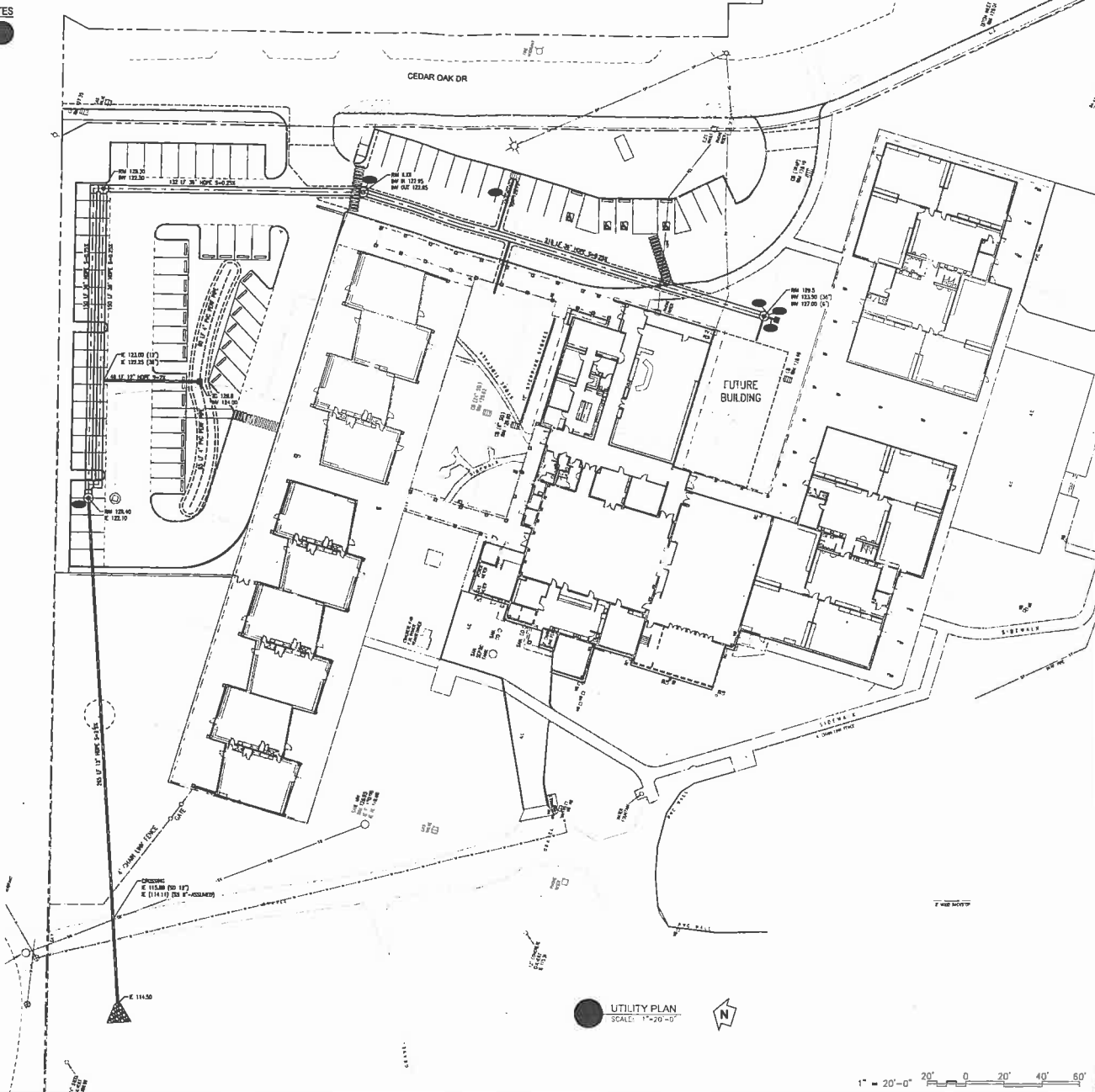
project # | 09003  
 GRADING AND EROSION CONTROL PLAN

**C4**



**STORM & SANITARY CONSTRUCTION NOTES**

- INSTALL FRENCH DRAIN FROM FRENCH DRAIN INVERT TO VALVE TO INTO STW MAIN
- INSTALL 4" PVC TO CATCH BASIN SAGGING PIPE
- THE NEW ROOF DRAIN SHALL BE PER PLUMBING PLANS
- EXISTING LINES TO BE ABANDONED FROM BLDG PER LATEST PLUMBING CODE
- INSTALL EXISTING 8" MANHOLE
- INSTALL 8" FLOW CONTROL MANHOLE
- CONTRACTOR SHALL VERIFY THE SELECTIONS OF EXISTING DRAIN PIPE PRIOR TO CONSTRUCTION
- INSTALL 4" OF STORM LINE TO NEW GS LOCATION. PLEASE SHOW/POUT CONNECTION.
- TYPICAL STORM DRAINOUT



ADVERTISEMENT • INTEREST • PLANNING  
BULL OGDEN WALKER  
ARCHITECTS, INC.  
200 WEST BROADWAY, SUITE 200, WILSONVILLE, OR 97150  
TEL: (503) 261-7777 FAX: (503) 261-7778

**CEDAR OAK PARK PRIMARY SCHOOL**  
West Linn - Wilsonville School District  
22210 SW Stafford Road  
West Linn, OR 97138  
t: (503) 923-7975  
f: (503) 923-7044

**WINZLER SCHELLY**  
12075 SW 20TH AVENUE, SUITE 100  
PORTLAND, OR 97224  
PH: (503) 253-2000 • FAX: (503) 253-2000  
WWW.WINZLERSCHELLY.COM



phase	
date	
revision	
project #	05003
<b>UTILITY PLAN</b>	
<b>C5</b>	

ABBREVIATIONS	
AF	ARENE FINISHED FLOOR
A	AMPERE (AMP)
AL	ALUMINUM
AN	ANCHOR / ANCHORING
AS	AUTOMATIC TRANSFER SWITCH
CB	CIRCUIT BREAKER
C	CONDUIT
CTV	CLOSED CIRCUIT TELEVISION
CC	CIRCUIT
CLG	CEILING
CT	CURRENT TRANSFORMER
CJ	COPPER
DM	DOWN
EMEC	EMERGENCY
EHT	ELECTRIC METALLIC TUBING
EP	EXPLOSION PROOF
EP	EMERGENCY POWER OFF
ESC	ELECTRIC WATER COOLER
FA	FIRE ALARM
FLA	FULL LOAD AMPS
FLUOR	FLUORESCENT
FDC	FURNISHED BY CONTRACTOR
FDC	FURNISHED BY OWNER
FDC	INSTALLED BY CONTRACTOR
FDC	INSTALLED BY OWNER
GFP	GROUND FAULT PROTECTION
GF	GROUND FAULT INTERRUPTER
GFCD	GROUND FAULT CIRCUIT INTERRUPTER
GRC	GROUNDING ROD CONDUIT
GRO	GROUND
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE
HZ	HERTZ
IG	ISOLATED GROUND
INC	INCANDESCENT
JN	JUNCTION BOX
KW	KILOWATT
KWH	KILOWATT HOUR
KV	KILOVOLT
KVA	KILOVOLT AMP
KVA	KILOVOLT AMPS REACTIVE
LA	LEADING
LSD	LEADING
LV	LOW VOLTAGE
MCA	MAXIMUM ANTENNA TELEVISION
MCA	MAXIMUM CIRCUIT AMPS
MCR	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDF	MAIN DISTRIBUTION PANEL
MED	MEDICAL
MH	METAL HALIDE
MLO	MAIN LISTS ONLY
MPT	METROTECH WIPOR
MVS	MANUAL TRANSFER SWITCH
MCC	MET IN CONTRACT
ML	MOTOR LIGHT CIRCUIT
PA	PUBLIC ADDRESS
PE	PHOTO ELECTRIC CELL
PF	POWER FACTOR
PHL	PHASED/PHASE
PVC	POLYVINYL CHLORIDE CONDUIT
PWR	POWER
SDP	SUB-DISTRIBUTION PANEL
STR	STARTER
SV	SOLVED VALVE
SW	SWITCH
TD	TIME DELAY
TP	TEMPERATURE
TTB	TELEPHONE TERMINAL BOARD
TTB	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TY	TYPICAL
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERES
VP	VAPOR PROOF
W	WATS
WP	WEATHER PROOF
WTR	WATER TRANSFORMER
WTR	TRANSFER SWITCH

**NOTE**

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE ORIGINAL.

LIGHTING	
	CEILING LUMINAIRE: SURFACE, RECESSED
	CEILING LUMINAIRE: PENDANT MOUNTED
	WALL LUMINAIRE: SURFACE, RECESSED
	WALL LUMINAIRE: SURFACE, RECESSED
	FLUORESCENT LUMINAIRE: SURFACE, RECESSED
	FLUORESCENT LUMINAIRE: TUBE LAMP
	POLE LIGHT: LUMINAIRE AS SHOWN
	RECESSES LIGHT ON EMERGENCY CIRCUIT
	EXIT LIGHT: CEILING, WALL (ARROWS AS SHOWN)
	BOLLARD
	EMERGENCY BATTERY LOAD: HEADS AS SHOWN
	WALL SWITCH: 1 POLE, 2 POLE
	WALL SWITCH: 1 WAY, 4 WAY
	WALL SWITCH: KEY LOCK, NONFIREPROOF
	WALL SWITCH: LOW VOLTAGE, PILOT
	WALL SWITCH: THREE TERMINAL TRIAKER
	PHOTOELECTRIC CELL
	WALL SWITCH OCCUPANCY SENSOR WITH MANUAL ON/OFF SWITCH
	OCCUPANCY SENSOR: WALL MOUNTED ADJUSTABLE, CEILING
	ULTRASONIC OCCUPANCY SENSOR: WALL MOUNTED ADJUSTABLE, CEILING
	DUAL TECH OCCUPANCY SENSOR: WALL MOUNTED ADJUSTABLE, CEILING
	RECESSES LUMINAIRE TYPE (SEE LUMINAIRE SCHEDULE)

EQUIPMENT	
	ELECTRICAL EQUIPMENT
	PANEL/BOARD: SURFACE, RECESSED
	CABINET: SURFACE, RECESSED
	TRANSFORMER
	GROUND ROD, IN TEST WELL
	GROUND RING
	EQUIPMENT WITH DERIVED GROUND
	VOLTMETER
	AMMETER
	SELECTOR SWITCH: VOLTMETER, AMMETER
	METER: KILOWATT HOUR, POWER FACTOR
	POTENTIAL TRANSFORMER, CURRENT TRANSFORMER
	CABLE TRAY: CENTER SUPPORT, OUTER SUPPORTS

POWER	
	WALL RECEPTACLE: SINGLE, DUPLEX
	WALL RECEPTACLE: EMERGENCY, 4-15FT
	CEILING RECEPTACLE: DUPLEX
	DUPLEX RECEPTACLE ABOVE COUNTER
	SPECIAL PURPOSE OUTLET AS NOTED, EMERGENCY
	CLOSE HANDLER RECEPTACLE
	FLUSH IN-FLOOR OUTLET: DUPLEX, COMBINATION, SIGNAL
	PEDISTAL OUTLET: POWER, SIGNAL, COMBINATION
	SURFACE OUTLET STRIP: EMERGENCY AS SHOWN
	TELEPHONE POLE: POWER, COMBINATION
	JUNCTION BOX
	DISCONNECT SWITCH: FUSED, NON-FUSED
	MOTOR STARTER: MANUAL, MAGNETIC, COMBINATION
	MOTOR CONNECTION
	CONDUCTOR: BELL PULL, SOUNDER
	PUSH BUTTON STATION
	WIRING CONCEALED IN CEILING OR WALL
	WIRING CONCEALED IN FLOOR OR UNDERGROUND
	INDICATES INSULATED GREEN GROUND WIRE
	HOME RUN DESTINATION SHOWN
	CONDUIT ELL UP, ETC.

ONE-LINE	
	CIRCUIT BREAKER
	SWITCH, FUSED SWITCH
	BUS
	AUTOMATIC SWITCH
	METER
	PANEL
	FEEDER CALLOUT
	FAULT CURRENT CALLOUT

SIGNAL	
	SPRINKLER SYSTEM SWITCH: FLOW, TAMPER
	WIRING: FIRE ALARM STATION
	DETECTOR: NONAUDIBLE, HEAD, PHOTOELECTRIC
	DUCT DETECTOR, TYPE AS NOTED
	FIRE ALARM: VERBAL
	FIRE ALARM: BELL, BELL W/VISUAL
	FIRE ALARM: CHIME, CHIME W/VISUAL
	FIRE ALARM: HORN, HORN W/VISUAL
	FIRE ALARM: HORN, HORN W/VISUAL
	FIRE ALARM: SPEAKER: WALL, CEILING
	FIRE ALARM: SPEAKER: WALL, CEILING
	FIRE ALARM: SPEAKER: WALL, CEILING
	WALL OUTLET: TELEPHONE, EMERGENCY TELEPHONE, DATA
	WALL OUTLET: COMBINATION TELEPHONE/DATA
	WALL OUTLET: MICROPHONE, INTERCOM, AUDIO JACK
	WALL OUTLET: VOLUME CONTROL, CITY CONTROL
	SYSTEM CLOCK: WALL, CEILING
	MASTER ANTENNA TV OUTLET
	THERMOSTAT
	WIRELESS EMERGENCY SECURITY STATION
	CARD KEY READER STATION
	SECURITY ELECTRONIC SENSOR

DESIGNATION SYMBOLS	
	EQUIPMENT DESIGNATION: SEE SCHEDULE.
	EXISTING TO REMAIN, EXISTING TO BE REMOVED
	EXISTING TO BE RELOCATED
	NEW, CONNECT TO
	NOTE



ARCHITECTS • ENGINEERS • PLANNERS

SULL BLEDSOE BREWER  
475 UNIVERSITY BLVD  
ANN ARBOR, MI 48106

PHOTO COURTESY OF  
LUMEN AND PHOTOGRAPHY  
7343 16TH STREET, ANN ARBOR, MI 48106

CEDAR OAK PARK PRIMARY SCHOOL

Wilsonville School District

West Linn - Wilsonville Road  
22210 SW Scullion Road  
West Linn, OR 97068  
P: (503) 673 9775  
F: (503) 673 7044

phase	
date	
revisions	

project # | 09003  
ELECTRICAL LEGEND

E0.1



AREA VECTORS - OFFERED PLANNING

PULL GLOBE WHEELS  
AT 1/4" = 1'-0"

BY: DR. JAMES L. STELLER, AIA, LEED AP, AIA, LEED AP  
7-103 216 0000 F-103 216 7117

# CEDAR OAK PARK PRIMARY SCHOOL

West Linn - Wilsonville School District

22210 SW Stallard Road  
West Linn, OR 97088  
(503) 873-7205  
F: (503) 873-7204

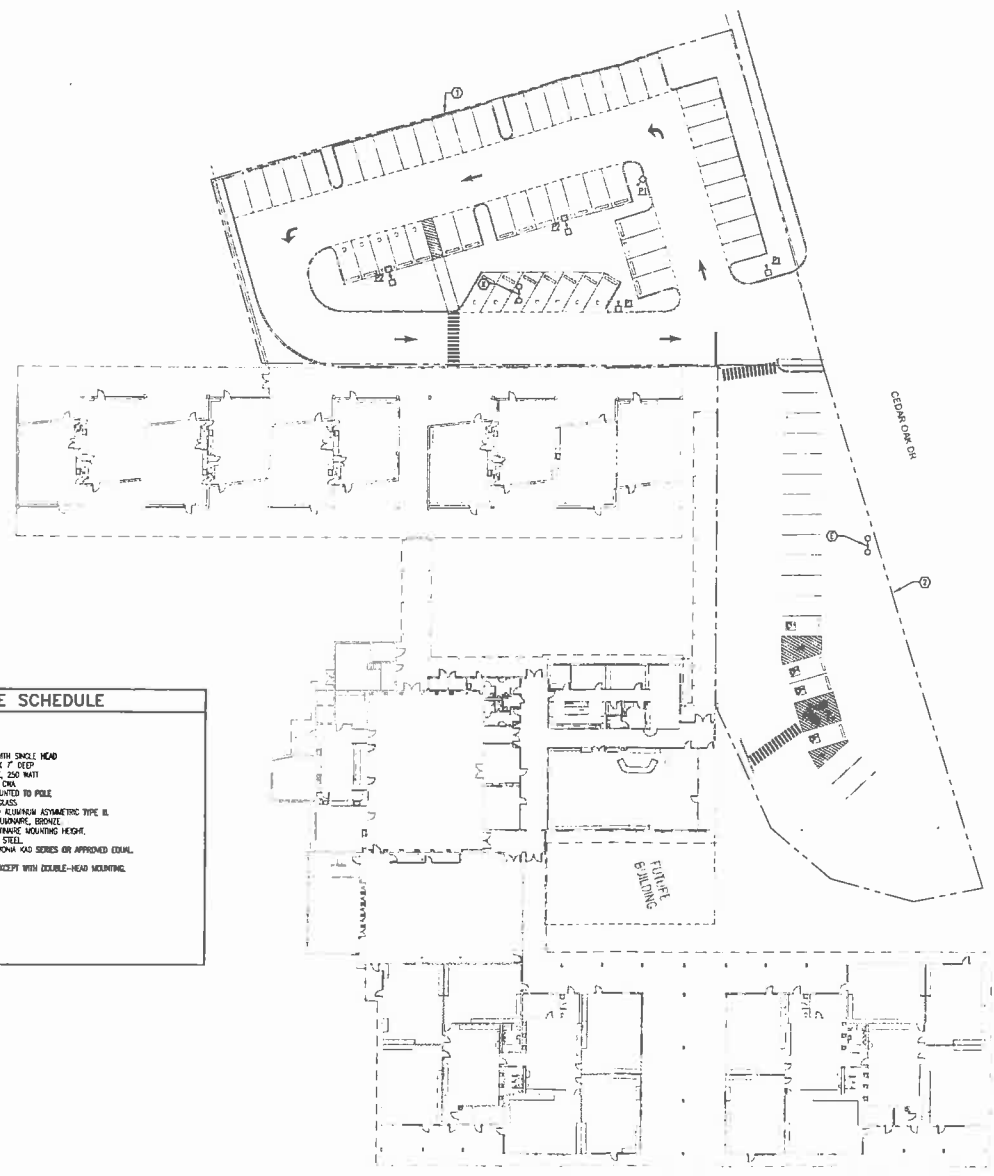
phase	
date	
revisions	

project # | 09003

SITE LIGHTING

# E1.0

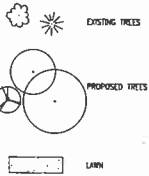
- NOTES:**
- ① NEW PARKING AREA, REFER TO CAL PLANS FOR DIMS OF OLD PARKING AREA, REMOVE EXISTING LUMINAIRE.
  - ② EXISTING PARKING AREA, EXISTING LIGHTING AND OVERHEAD LINE TO REMAIN.



LUMINAIRE SCHEDULE	
P1	HTO OUTDOOR POLE WITH SINGLE HEAD
1.	SIZE: 17" SQUARE X 7' DEEP
2.	LAMP: MFL W/SHD, 250 WATT
3.	BALLAST: VAC, HPT, CMA
4.	MOUNTING: NON-ADJUSTED TO POLE
5.	LENS: CLEAR FLAT GLASS
6.	REFLECTOR: FORMED ALUMINUM ASYMMETRIC TYPE II
7.	FINISH: POLE AND LUMINAIRE: BRONZE
8.	POLE: 2 1/2" HIGH LUMINAIRE MOUNTING HEIGHT, 5' SQUARE STRAIGHT STEEL
9.	MANUFACTURER: LITOPAK 600 SERIES OR APPROVED EQUAL
P2	SAME AS TYPE P1 EXCEPT WITH DOUBLE-HEAD MOUNTING.

1  
E1.0 SCALE: 1" = 20'-0"

**LEGEND**

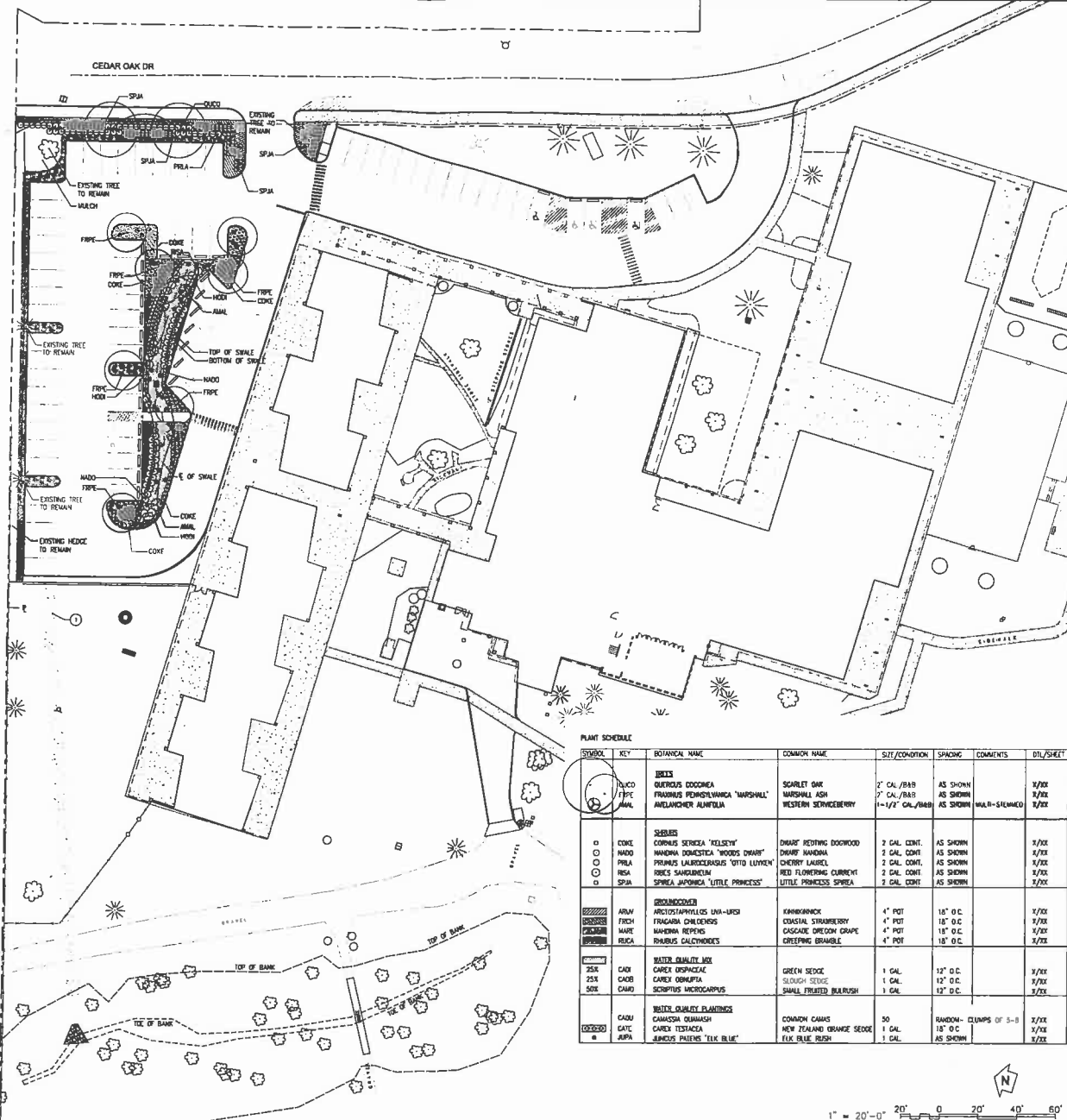


**GENERAL NOTES**

- CONTRACTOR TO VERIFY LOCATION OF EXISTING TREES INDICATED TO REMAIN PRIOR TO SOIL PREPARATION. PROTECT ALL TREES AND SHRUBS INDICATED TO REMAIN. COORDINATE WITH THE OWNER'S REPRESENTATIVE.
- PLANTING AREAS TO BE SUFFICIENTLY CLEARED OF ALL CONSTRUCTION MATERIALS INCLUDING IMPACTED ROCK TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE BEFORE BEGINNING ANY LANDSCAPE WORK.
- IDENTIFY ALL PLANTING AREAS IN FIELD WITH WHITE FIELD-MARKING CHALK OR APPROVED EQUIV. PLANTING BEGS TO BE ADJUSTED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLANT LOCATION.
- FOR PLANTING OCCURRING IN MASSSES OF SAME SPECIES PLANT, LABELING REFERS TO ALL ADJACENT BOTANICAL SYMBOLS. REFER TO DETAILS AND LEGEND FOR SPACING INFORMATION.
- THE OWNER'S REPRESENTATIVE WILL APPROVE INDIVIDUAL PLANT MATERIAL AND LOCATION OF PLANT MATERIAL PRIOR TO INSTALLATION. REFER TO SPECIFICATIONS FOR PROCEEDING.
- SHRUBS AND GROUNDCOVER TO BE PLANTED A MINIMUM OF ONE HALF THEIR ON CENTER SPACING AWAY FROM PAVEMENT EDGES UNLESS OTHERWISE NOTED.
- PROVIDE ROOT BARRIER AROUND ALL TREES WITHIN 5' OF PAVING, CURBS, WALLS, BUILDINGS, UTILITY DUCTS AND OTHER APPURTEANCES.
- PLANT QUANTITIES WHERE INDICATED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. CONTRACTOR IS RESPONSIBLE FOR PROMISING PLANTS IN QUANTITIES AND LOCATIONS SHOWN ON DRAWINGS.
- PROVIDE JUTE NETTING ON ALL SLOPES WITH GRADIENT OF 3:1 OR GREATER AS DIRECTED BY THE FIELD BY THE OWNER'S REPRESENTATIVE. STAPLE FABRIC TO GROUND WITH METAL STAKES AT 4' O.C.

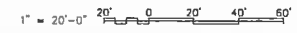
**KEY NOTES**

- RE-SEED AREAS OF DISTURBANCE DUE TO CONSTRUCTION.



**PLANT SCHEDULE**

SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	SIZE/CONDITION	SPACING	COMMENTS	QTY/SHEET
○	ALICO	IBEX	SCARLET OAK	2" CAL/BAB	AS SHOWN		1/XX
○	FRPE	FRAXINUS PENNSYLVANICA 'MARSHALL'	MARSHALL ASH	2" CAL/BAB	AS SHOWN		1/XX
○	MAN	AVICELARIA ALANTOLA	WESTERN SERVICEBERRY	1-1/2" CAL/BAB	AS SHOWN	MULCH-SHAWED	1/XX
○	SEBES	SEBESIA					
○	COKE	CORNUS SERICEA 'ELEGANT'	DWARF REDTIDING DOGWOOD	2 CAL. CONT.	AS SHOWN		1/XX
○	HADO	HAMONIA DOMESTICA 'WOODS DWARF'	DWARF HAMONIA	2 CAL. CONT.	AS SHOWN		1/XX
○	PRLA	PREFRAX LAROCCLUSANS 'OTTO LUYKEN'	CHERRY LAUREL	2 CAL. CONT.	AS SHOWN		1/XX
○	RESA	RIBES SAURURICUM	RED FLOWERING CURRANT	2 CAL. CONT.	AS SHOWN		1/XX
○	SPJA	SPIREA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	2 CAL. CONT.	AS SHOWN		1/XX
▨	EROUNDOVIA	EROUNDOVIA					
▨	ARUN	ARCTOSTAPHYLOS UVA-URSI	FAIRBANKS	4" POT	18" O.C.		1/XX
▨	FRCH	FRAXINA CHLORENSIS	COASTAL STRAWBERRY	4" POT	18" O.C.		1/XX
▨	WARE	WATERBURYA REPENS	CASCADE OREGON GRAPE	4" POT	18" O.C.		1/XX
▨	RECA	RHIBUS CALCHEDONIS	CREEPING BRAMBLES	4" POT	18" O.C.		1/XX
▨	WATER QUALITY MIX						
▨	25%	CAREX OSMOPHACEA	GREEN SEDGE	1 GAL.	12" O.C.		1/XX
▨	25%	CAREX OSMOPHACEA	SLUSHY SEDGE	1 GAL.	12" O.C.		1/XX
▨	50%	SCIRPUS MACROCARPUS	SMALL STRATED BURBUSH	1 GAL.	12" O.C.		1/XX
▨	WATER QUALITY PLANTINGS						
▨	CAUO	CAREX OSMOPHACEA	NEW ZEALAND ORANGE SEDGE	50	RANDOM - CLUMPS OF 5-8		1/XX
▨	CAFE	CAREX TESTACEA	FLK. BLUE RUSH	1 GAL.	18" O.C.		1/XX
▨	JUPA	JUNCUS PATENS 'ELK BLUE'		1 GAL.	AS SHOWN		1/XX



**CEDAR OAK PARK PRIMARY SCHOOL**  
 West Linn - Wilsonville School District  
 2720 SW Sullivan Road  
 West Linn, OR 97068  
 T: (503) 673 1975  
 F: (503) 673 7044

Planning  
 Urban Design  
 Landscape Architecture  
**WALKER MACY**  
 1111 E. Oak Ave. 9th  
 Portland, Oregon 97214  
 Phone: 503.225.1112 Fax  
 503.477.4571

Phase | construction  
 documents  
 date | 03.30.2009  
 revisions |

project # | 08003  
**PLANTING PLAN**  
**L1.0**

**IRRIGATION SCHEDULE**

SYMBOL	DESCRIPTION	GPM	P.S.I.	RADIUS	DETAIL SHEET
NOTE: USE 1" POP UP SPRAY HEADS IN LAWN AND PLANTING AREAS LESS THAN 6" WIDE, AND 1.5" POP UP SPRAY HEADS IN PLANTING AREAS GREATER THAN 6"					
[Symbol]	IRRIGATED LEO	24	30	4'	X4.1
[Symbol]	IRRIGATED LEO	24	30	4'	X4.1
[Symbol]	IRRIGATED LEO PIS-60-PIS-000	28	30	5'	X4.1
[Symbol]	IRRIGATED LEO PIS-60-PIS-000	40	30	5'	X4.1
[Symbol]	IRRIGATED LEO PIS-0-0	28	30	4'	X4.1
[Symbol]	IRRIGATED LEO PIS-0-1	28	30	4'	X4.1
[Symbol]	IRRIGATED LEO PIS-0-4	27	30	4'	X4.1
[Symbol]	IRRIGATED LEO PIS-0-7	1.05	30	4'	X4.1
[Symbol]	IRRIGATED LEO PIS-0-10W	72	30	4'	X4.1
[Symbol]	IRRIGATED LEO PIS-10-0	28	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-10-7	33	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-10-7	78	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-10-7	136	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-10-7	28	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-10-0	28	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-0	27	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-0	130	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-0	28	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-10	27	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-10	130	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-10	28	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1
[Symbol]	IRRIGATED LEO PIS-11-1	133	30	10'	X4.1

**IRRIGATION SCHEDULE**

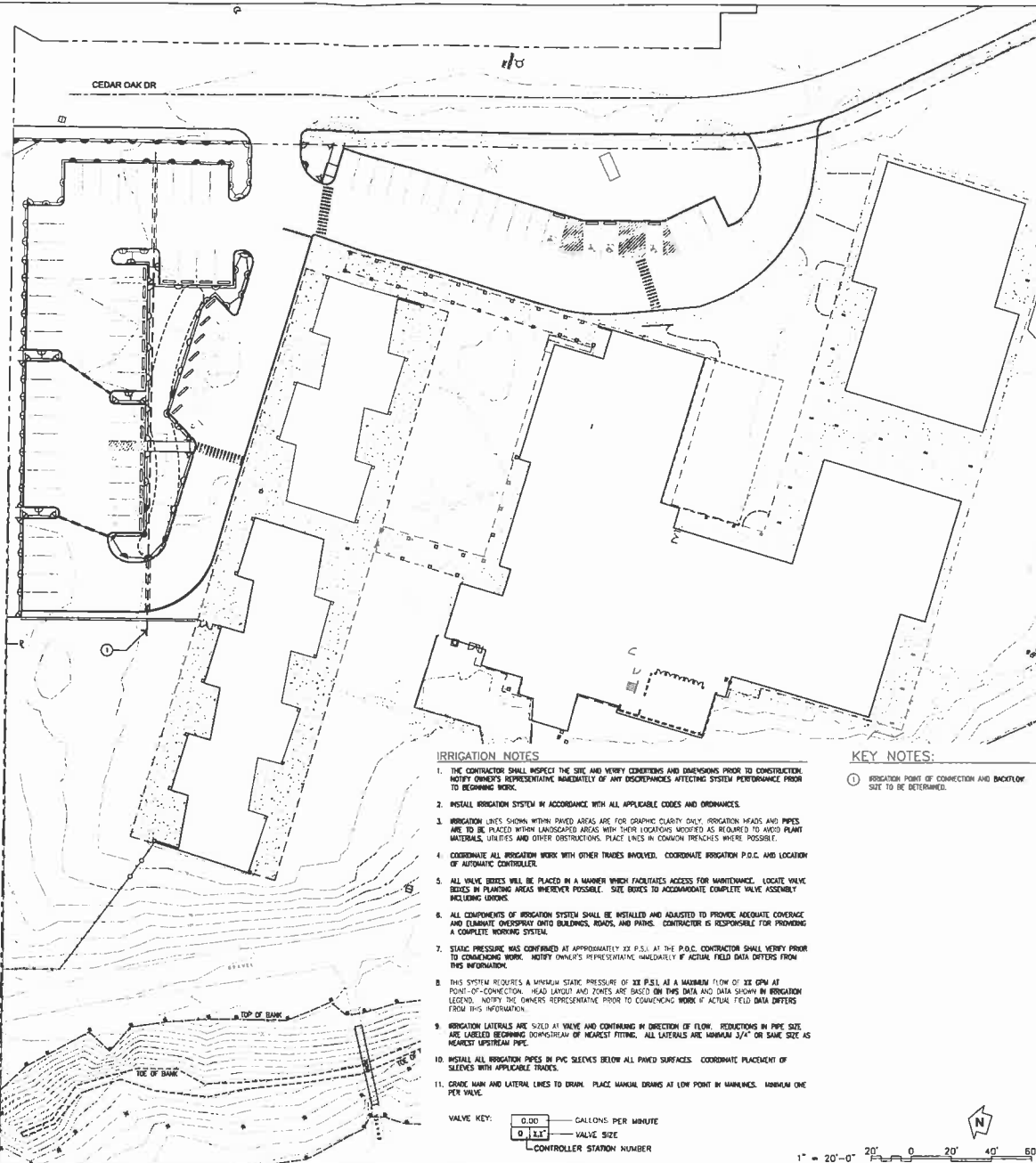
SYMBOL	DESCRIPTION	MANUF.	TYPE	DN/SHEET
[Symbol]	WATER METER	--	--	X4.1
[Symbol]	Y STRAINER	--	--	X4.1
[Symbol]	REMOTE CONTROL VALVE	--	--	X4.1
[Symbol]	DRIP REMOTE CONTROL VALVE	--	--	X4.1
[Symbol]	QUICK COUPLING VALVE	--	--	X4.1
[Symbol]	ISOLATION VALVE	--	--	X4.1
[Symbol]	SWING CHECK VALVE	--	--	X4.1
[Symbol]	DOUBLE CHECK VALVE	--	--	X4.1
[Symbol]	MASTER VALVE (DEPARTS OPEN)	--	--	X4.1
[Symbol]	RAMP/PRELIC SHUT-OFF	--	--	X4.1
[Symbol]	PRESSURE REGULATING VALVE	--	--	X4.1
[Symbol]	AIR/VACUUM RELIEF VALVE	--	--	X4.1
[Symbol]	MANUAL DRAIN VALVE	--	--	X4.1
[Symbol]	FILTER	--	--	X4.1
[Symbol]	FLOW SWITCH	--	--	X4.1
[Symbol]	CONTROLLER "A"	--	--	X4.1
[Symbol]	CONTROLLER "B"	--	--	X4.1
[Symbol]	CONTROLLER	--	--	X4.1
[Symbol]	BOOSTER PUMP	--	--	X4.1
[Symbol]	CONCRETE CONDUIT	--	--	X4.1
[Symbol]	3" MARLBORNE	3"	40 PVC	X4.1
[Symbol]	3" MARLBORNE	CLASS 200	PVC	X4.1
[Symbol]	LATERAL LINE, SIZE PER PLAN	CLASS 200	PVC	X4.1
[Symbol]	SLEEVE, SIZE 2" x PIPE DIA.	304	40 PVC	X4.1
[Symbol]	COMMUNICATION CABLE	--	--	X4.1
[Symbol]	CONTROL WIRE SLEEVING	CLASS 200	PVC	X4.1
[Symbol]	P.O.C.	POINT OF CONNECTION	--	X4.1
[Symbol]	TEMPORARY IRRIGATION ZONE, TYP. - MOTOR OR IMPACT HEAD W/ STAKED LATERAL LINE ON GRADE			

**LATERAL LINE SIZING CHART**

CLASS 200 PVC

3/4"	UP TO 10 GPM
1"	UP TO 16 GPM
1-1/2"	UP TO 33 GPM
2"	UP TO 55 GPM
2-1/2"	UP TO 80 GPM

NOTE: VELOCITY THROUGH PIPE IS NOT TO EXCEED 4.3 FEET PER SECOND (FPS) IN ACCORDANCE WITH INDUSTRY STANDARD. PRESSURE LOSS DUE TO PIPE FRICTION IN ANY ONE CIRCUIT IS NOT TO EXCEED 10% OF AVAILABLE STATIC PRESSURE.

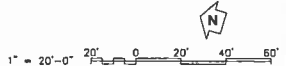
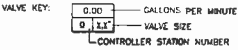


**IRRIGATION NOTES**

1. THE CONTRACTOR SHALL INSPECT THE SITE AND VERIFY CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY DISCREPANCIES AFFECTING SYSTEM PERFORMANCE PRIOR TO BEGINNING WORK.
2. INSTALL IRRIGATION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
3. IRRIGATION LINES SHOWN WITHIN PAVED AREAS ARE FOR GRAPHIC CLARITY ONLY. IRRIGATION HEADS AND PIPES ARE TO BE PLACED WITHIN LANDSCAPED AREAS WITH THEIR LOCATIONS MODIFIED AS REQUIRED TO AVOID PLANT MATERIALS, UTILITIES AND OTHER OBSTRUCTIONS. PLACE LINES IN COMMON TRENCHES WHERE POSSIBLE.
4. COORDINATE ALL IRRIGATION WORK WITH OTHER TRADES INVOLVED. COORDINATE IRRIGATION P.O.C. AND LOCATION OF AUTOMATIC CONTROLLER.
5. ALL VALVE BOXES WILL BE PLACED IN A MANNER WHICH FACILITATES ACCESS FOR MAINTENANCE. LOCATE VALVE BOXES IN PLANTING AREAS WHEREVER POSSIBLE. SIZE BOXES TO ACCOMMODATE COMPLETE VALVE ASSEMBLY INCLUDING GLOBES.
6. ALL COMPONENTS OF IRRIGATION SYSTEM SHALL BE INSTALLED AND ADJUSTED TO PROVIDE ADEQUATE COVERAGE AND EXHAUSTIVE OVERSPRAYS INTO BUILDINGS, ROADS, AND PARKS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE WORKING SYSTEM.
7. STATIC PRESSURE WAS CONFIRMED AT APPROXIMATELY 22 P.S.I. AT THE P.O.C. CONTRACTOR SHALL VERIFY PRIOR TO COMMENCING WORK. NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IF ACTUAL FIELD DATA DIFFERS FROM THIS INFORMATION.
8. THIS SYSTEM REQUIRES A MINIMUM STATIC PRESSURE OF 30 P.S.I. AT A MAXIMUM FLOW OF 33 GPM AT POINT-OF-CONNECTION. HEAD LAYOUT AND ZONES ARE BASED ON THIS DATA AND DATA SHOWN IN IRRIGATION LEGEND. NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK IF ACTUAL FIELD DATA DIFFERS FROM THIS INFORMATION.
9. IRRIGATION LATERALS ARE SIZED AT VALVE AND CONTAINING IN DIRECTION OF FLOW. REDUCTIONS IN PIPE SIZE ARE LABELED BEGINNING DOWNSTREAM OF NEAREST FITTING. ALL LATERALS ARE MINIMUM 3/4" OR SAME SIZE AS NEAREST UPSTREAM PIPE.
10. INSTALL ALL IRRIGATION PIPES IN PVC SLEEVES BELOW ALL PAVED SURFACES. COORDINATE PLACEMENT OF SLEEVES WITH HYDRO-CABLE TRACES.
11. CONDUIT MAN AND LATERAL LINES TO DRINK. PLACE MANUAL DRAINS AT LOW POINT IN MARLBORNE. MINIMUM ONE PER VALVE.

**KEY NOTES:**

1. IRRIGATION POINT OF CONNECTION AND BACKFLOW SUIT TO BE DETERMINED.





ARCHITECTURE • INTERIORS • PLANNING

**ULL OLSEN WEEBES**  
ARCHITECTS P.C.

**CEDAR OAK PARK PRIMARY SCHOOL**  
West Linn - Wilsonville School District

22210 SW Starford Road  
West Linn, OR 97138  
T: (503) 573 7875  
F: (503) 573 7044

Phase: construction  
documents  
date: 03/30/2009  
revision:



project #: 06703  
**IRRIGATION PLAN**  
**L2.0**