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01/14/09 - WWSU - WEST LINN-WILSONVILLE SCHOOL DISTRICT\11456-09002 - WWSU SUNSET PARKING LOT PAVING REPAIR\DWG Set Sheets 6/10/2010 10:37 AM

WLWV SCHOOLS

WEST LINN-WILSONVILLE SCHOOL DISTRICT

SUNSET PARKING LOT PAVING REPAIR

CONSTRUCTION SET

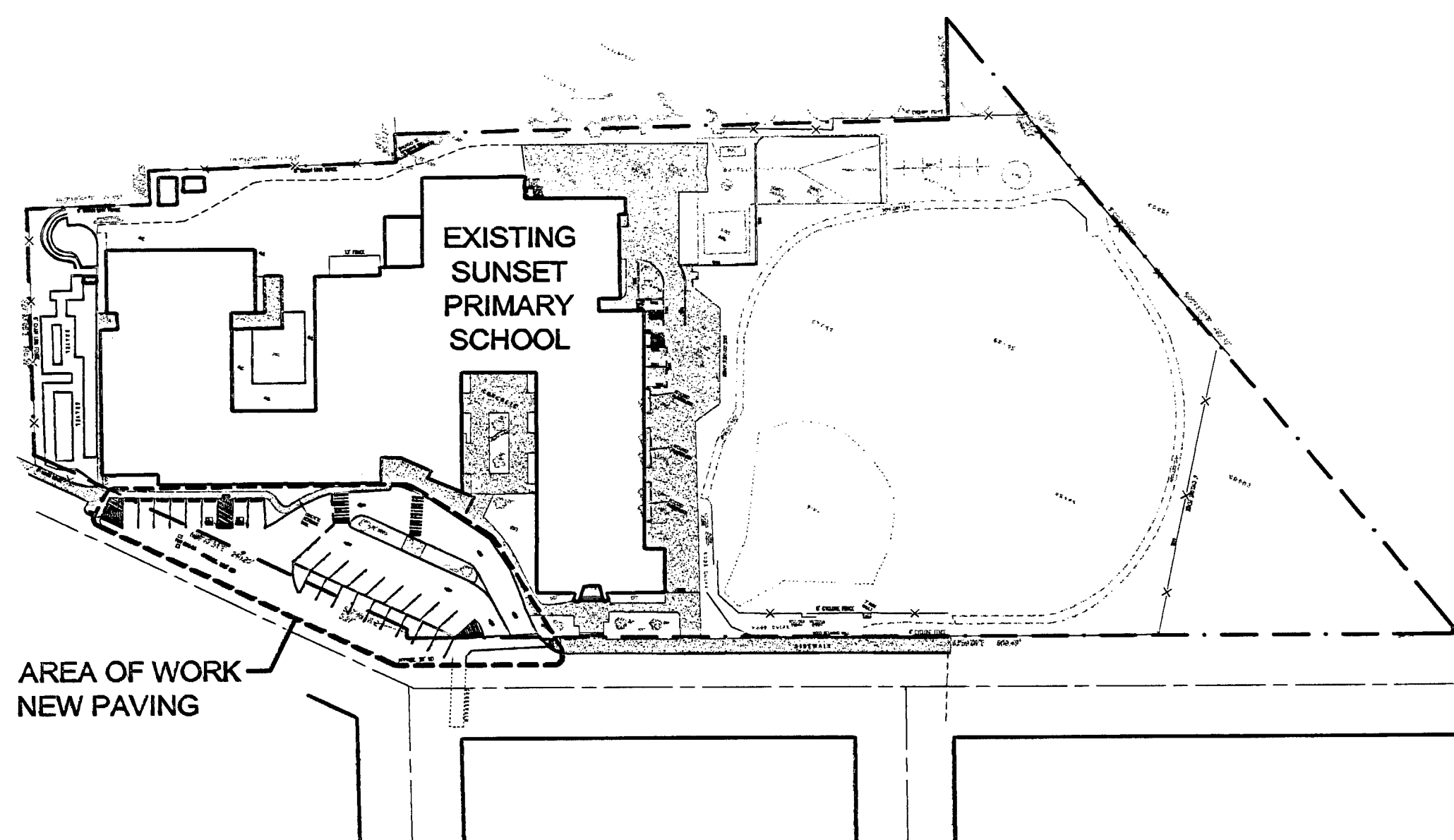


SUNSET LOCATION MAP



DRAWING LIST

DWG. NO.	DWG. TITLE	REVISION NO.	DATE ISSUED
C0	COVER SHEET	0	06/24/2009
C1	SUNSET SITE PLAN AND NOTES	1	08/05/2009
C2	CIVIL DETAILS	1	08/05/2009



1
C0/C0
SUNSET PRIMARY SCHOOL
SCALE: 1"=80'-0"



OWNER
WEST LINN - WILSONVILLE SCHOOL DISTRICT
22210 SW STAFFORD ROAD
WEST LINN, OR 97068
PHONE: 503-673-7975
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CIVIL ENGINEER
WINZLER & KELLY
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SURVEYOR
COMPASS ENGINEERING
6564 LAKE RD
MILWAUKEE, OR 97222
PHONE: 503-653-9093
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GEOTECHNICAL
GEOCON
8270 SW NIMBUS AVENUE
BEAVERTON, OR 97008
PHONE: 503-626-9889
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DESIGNED BY: MSH
CHECKED BY: MSH
DATE: 05/10/09
SCALE: NONE
PLS. DO NOT SCALE OR
DIMENSIONS FROM THIS
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SHALL BE ACCORDING TO
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RECORD DRAWING
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APPROVED BY THE CIVIL ENGINEER
AND THE DISTRICT ENGINEER.
CONSTRUCTION WINZLER & KELLY
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WEST LINN-WILSONVILLE SCHOOL DISTRICT
SUNSET PRIMARY SCHOOL
PARKING LOT PAVING REPAIR
CIVIL
COVER SHEET

JOB NUMBER
11456-09002
SHEET 1 OF 3

C0

1" = 40'-0" 40' 0 40' 80' 120'

GENERAL SITE NOTES

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING.
- CONTRACTOR IS RESPONSIBLE FOR CONFORMING THAT NEW FEATURES TIE INTO EXISTING SITE DEVELOPMENT, PAVEMENT JOINTS MATCH CORRECTLY, AND THAT GENERAL DESIGN ELEVATIONS FOR NEW CONSTRUCTION PROVIDE PROPER PAVEMENT AND DRAINAGE SLOPES FROM EXISTING TIE IN POINTS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
- IN AREAS WHERE ASPHALT PAVING IS BEING REWORKED, PROVIDE NEW PAINT STRIPING FOR ALL REVISED PAVING WORK AND PARKING STALLS. EXISTING STRIPING TO BE BLACKENED OUT IN RECONFIGURED AREAS AS REQUIRED.
- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH CITY INSPECTOR(S). CONTRACTOR SHALL NOTIFY CITY INSPECTOR(S) 48 HOURS PRIOR TO START OF CONSTRUCTION.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL HAVE A MINIMUM OF ONE (1) SET OF PERMIT APPROVED PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
- UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION.

GRADING NOTES

- SURVEY OF EXISTING CONDITIONS PREPARED BY COMPASS ENGINEERING. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING RIGHT-OF-WAY LINES, SLOPE ESCAPEMENTS, AND ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LICENSED SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFORMANCE TO DESIGN PRIOR TO CONSTRUCTION.
- ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING WALLS AND DOORS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE SHORING BRACING, TIES, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY DURING ALL PHASES OF CONSTRUCTION.
- ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURNED TO ORIGINAL EXISTING CONDITIONS. DISTURBED LANDSCAPED AREAS SHALL RECEIVE BARK DUST AND REPLACEMENT PLANTINGS. DISTURBED NATURAL AREAS SHALL BE HYDROSEED TO REPLACE NATIVE COVER. DISTURBED GRAVEL AREAS SHALL RECEIVE REPLACEMENT GRAVEL OR CRUSHED ROCK SURFACING.
- ALL DITCHES, SWALES, GUTTERS, ETC. SHOULD BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OTHERWISE INDICATED. CONTRACTOR IS RESPONSIBLE FOR ADDRESSING STORM WATER DRAINAGE AND DOWATERING OF WORK AREAS DURING CONSTRUCTION.
- DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A MANNER TO MINIMIZE IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS.
- ALL EXISTING MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION. IF ANY MONUMENTS ARE DISTURBED OR DESTROYED DURING CONSTRUCTION, CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR TO RESTORE THE MONUMENT TO ITS ORIGINAL CONDITION AND FILE THE NECESSARY SURVEYS AS REQUIRED BY STATE LAW.
- COMPLETELY COVER ANY SOIL STOCKPILES WITH 6 MIL BLACK PLASTIC AND PROVIDE RESTRAINTS TO HOLD PLASTIC IN PLACE. MONITOR PLASTIC COVER AS PART OF CONTINUOUS EROSION CONTROL PLAN. PLACE SILT FENCE COMPLETELY AROUND STOCKPILE.

UTILITY NOTES

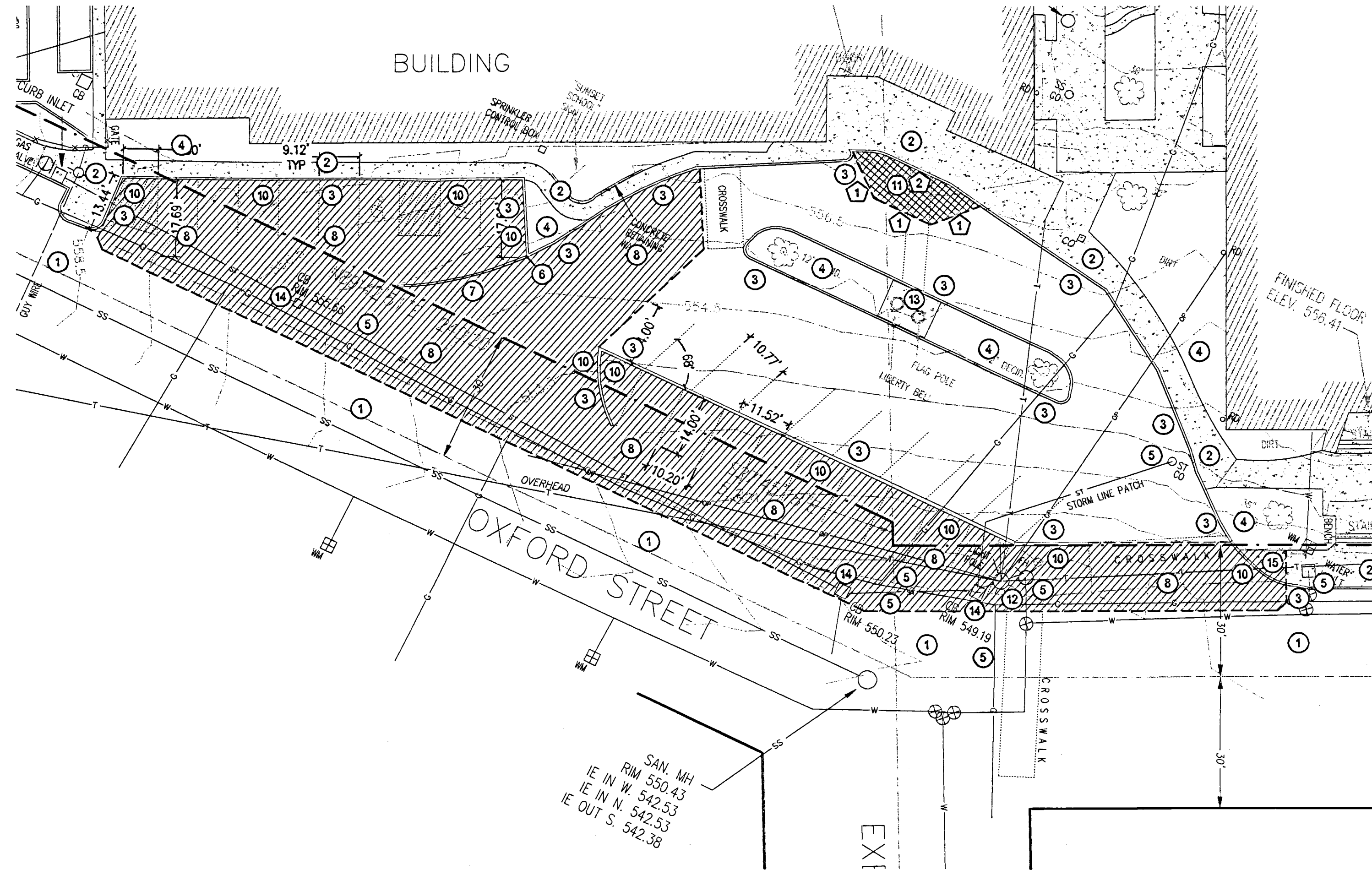
- LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLATION OF PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR.
- ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION UNDER THIS SECTION OR ANY OTHER SECTION.
- THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELEVATION REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, OR FITTING REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE AND WORKING SYSTEM.
- CONTRACTOR SHALL COORDINATE A UTILITY LOCATE 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION FOR LOCATION MARK-UP OF ALL EXISTING UTILITIES BOTH IN THE RIGHT-OF-WAY AND ON PRIVATE PROPERTY. CONTRACTOR SHALL COORDINATE THE UTILITY LOCATE WITH MUNICIPALITY HAVING JURISDICTION FOR ALL UTILITY WORK WITHIN A PUBLIC RIGHT-OF-WAY. INFORM ENGINEER IMMEDIATELY IF LOCATE INDICATES THAT EXISTING UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES, FEATURES, AND STRUCTURES LOCATED ON THE SITE. LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UTILITIES DURING CONSTRUCTION.
- ALL EXISTING UTILITIES AND TIE IN POINTS SHOULD BE CONSIDERED ACTIVE UTILITIES UNLESS OTHERWISE NOTED.
- ALL UTILITY INSTALLATION TRENCHES AND BACKFILLING SHALL BE PER STANDARD DETAIL.

EROSION CONTROL

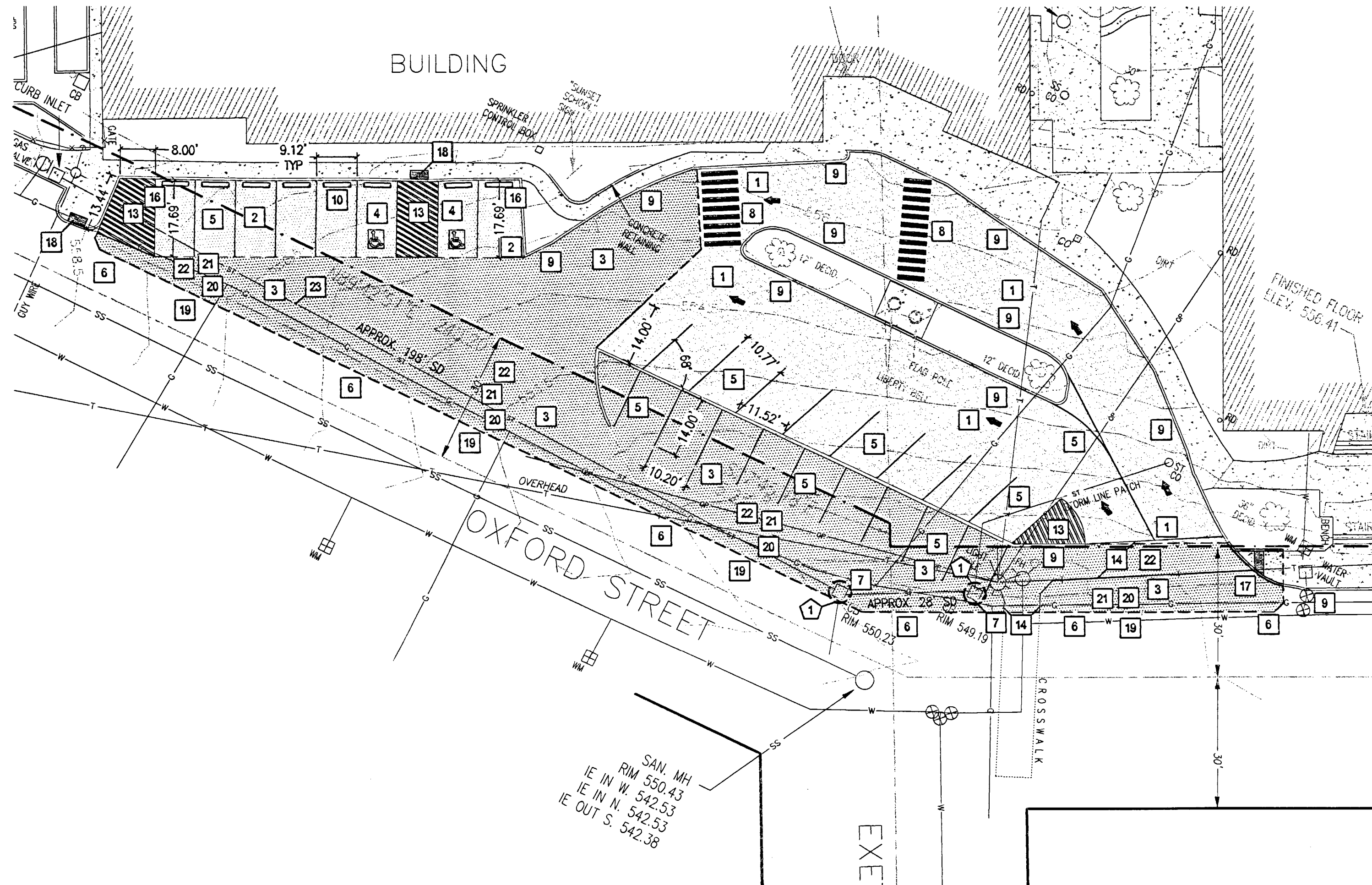
- ALL EROSION, SEDIMENT, AND POLLUTION CONTROL PLAN (ESPCP) MEASURES SHALL BE INSTALLED AS PER THE DETAIL DRAWINGS IN THE CITY OF PORTLAND EROSION CONTROL MANUAL.
- TEMPORARY ESPCP MEASURES SHALL BE INSTALLED, INSPECTED, AND APPROVED BY A CITY INSPECTOR BEFORE STARTING GROUND DISTURBING ACTIVITIES.
- THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- PUBLIC STREETS WILL BE SWEEPED DAILY, IF NECESSARY, TO ALLEVATE SEDIMENT DISCHARGE TO THE STORM WATER MANAGEMENT SYSTEM. UNFILTERED WASH WATER CANNOT BE DISCHARGED TO STORM DRAINS.
- ALL EROSION CONTROL SEEDING FOR SITE STABILIZATION WILL BE PERFORMED NO LATER THAN SEPTEMBER 1ST TO ALLOW TIME FOR VEGETATIVE ESTABLISHMENT PRIOR TO THE ONSET OF THE WET WEATHER SEASON.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THEY ARE NO LONGER NEEDED.
- TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE REPAIRED AND PROTECTED WITH ADEQUATE GROUND COVER (2" STRAW, COMPOST, MULCH, ETC.).
- THE PROPOSED EROSION CONTROL MEASURES ARE A MINIMUM BEST MANAGEMENT PRACTICE. THE CONTRACTOR MAY BE REQUIRED TO MAKE ADDITIONAL EROSION CONTROL MEASURES TO ENSURE THAT NO SEDIMENT LADEN WATER ENTERS THE SITE OR ENTERS THE EXISTING STORMWATER SYSTEM.

CIVIL ABBREVIATIONS

AB	ANCHOR BOLT	NIC	NOT IN CONTRACT
AC	ASPHALTIC CONCRETE	NO	NUMBER
ACP	ASBESTOS CONCRETE PIPE	NOM	NOMINAL
		NTS	NOT TO SCALE
BUDG	BUILDING	OC	ON CENTER
BOT	BOTTOM OF TRENCH	OH	OVERHEAD
BOC	BOTTOM OF CONCRETE	OW	OIL/WATER SEPARATOR
BOS	BOTTOM OF SUMP		
CA	COMPRESSED AIR	PD	POLYDRAIN
CB	CATCH BASIN	ERF	PERFORATED STORM DRAIN
CJ	CONSTRUCTION JOINT	PV	POST INDICATOR VALVE
C	CURB INLET	POC	POINT OF CONNECTION
CIP	CAST IRON PIPE	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PVMT	PAVEMENT
CND	CONDUIT	PW	POTABLE WATER
CO	CLEANOUT		
CONC	CONCRETE	R	RADIUS
CR	CONDENSATE RETURN	RCM	REINFORCED CONCRETE PIPE
		RR	RAILROAD
DIA Ø	DIAMETER	S	SLOPE
DIP	DUCTILE IRON PIPE	SAN	SANITARY
DS	DOWNSPOUTS	SB	SPLASH BLOCK
DW	DRYWELL	SD	STORM DRAIN
DWG	DRAWING	SS	SANITARY SEWER
		STM	STEAM
E	ELECTRICAL POWER	TB	THRUST BLOCK
ELEV	ELEVATION	TBM	TEMPORARY BENCH MARK
ELEC	ELECTRICAL	TC	TOP OF CURB
EXIST	EXISTING	TEL	TELEPHONE
		TOB	TOP OF BERM
FA	FIRE ALARM	TOC	TOP OF CONCRETE
FD	FOUNDATION DRAIN	TOT	TOP OF GRADE
FF	FINISH FLOOR	TYP	TYPICAL
FH	FIRE HYDRANT		
FW	FIRE WATER		
		UGND	UNDERGROUND
G	GUTTER	UNO	UNLESS NOTED OTHERWISE
GR	GRADE	VCP	VITRIFIED CLAY PIPE
GV	GATE VALVE	VT	VENT
		VV	VALVE VAULT
HB	HOSE BIBB	WM	WATER METER
HDPE	HIGH DENSITY POLYETHYLENE	WTR	WATER
HH	HAND HOLE	WV	WATER VALVE
HPG	HIGH PRESSURE GAS	WWF	WELDED WIRE FABRIC
HC	HANDICAPPED		
HYD	HYDRANT	XFM	TRANSFORMER
IE	INVERT ELEVATION		
IRR	IRRIGATION		
L	LENGTH		
LP	LIGHT POLE		
MAX	MAXIMUM		
MH	MANHOLE		
MIN	MINIMUM		



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



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

SITE DEMOLITION NOTES

- SAVE AND PROTECT EXISTING ASPHALT THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING CONCRETE THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING CURB THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING LANDSCAPING THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAVE AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION ACTIVITIES.
- SAW-CUT EXISTING CURB.
- DEMOLISH AND REMOVE EXISTING CURB AND DISPOSE OF OFF-SITE.
- DEMOLISH AND REMOVE EXISTING ASPHALT PAVING SECTION. REMOVE TO ADEQUATE SUBGRADE TO PROVIDE COMPLETE NEW PAVING SECTION AS DETAILED. REMOVE ALL ASPHALT WITHIN DEMOLITION LIMITS AND DISPOSE OFF-SITE.
- SAW-CUT AC PAVING.
- REMOVE EXISTING ASPHALT PAVING SECTION TO FACE OF CURB.
- GRIND EXISTING AC PAVING. SEE SYMBOL TABLE BELOW FOR GRINDING DEPTHS.
- SAVE AND PROTECT EXISTING POWER POLE.
- SAVE AND PROTECT EXISTING FLAG POLE AND BELL.
- DEMOLISH AND REMOVE EXISTING CATCH BASIN.
- SAW-CUT CONCRETE SIDEWALK AND CURB. DEMOLISH AND REMOVE CONCRETE AND CURB.

GRINDING DEPTHS

- BEGIN TAPERED GRINDING.
- GRIND EXISTING AC PAVING DOWN 2".

SITE CONSTRUCTION NOTES

- CONSTRUCT ASPHALT OVERLAY SECTION.
- CONSTRUCT LIGHT ASPHALT PAVING SECTION.
- CONSTRUCT HEAVY ASPHALT PAVING SECTION.
- REINSTALL ADA APPROVED PARKING STALL PAVEMENT MARKINGS.
- REINSTALL 3" WIDE WHITE PARKING STRIPING TO MATCH EXISTING LAYOUT AS INDICATED (TYPICAL).
- MATCH EXISTING AC PAVING ELEVATION, PROVIDE TACK COAT AT JOINT.
- INSTALL CATCH BASIN.
- REINSTALL CROSSWALK STRIPING.
- SANDBLAST EXISTING CURB CLEAN AND PROVIDE YELLOW PAINTED CURB SURFACE.
- INSTALL PRECAST CONCRETE WHEEL STOP (TYPICAL OF 8).
- REINSTALL DIRECTIONAL PARKING LOT PAVEMENT ARROWS.
- RESULTING EXISTING CURB REVEAL TO BE MINIMUM 3" AFTER OVERLAY.
- PROVIDE ANGLED 3" WIDE WHITE PAVEMENT STRIPING.
- REINSTALL 8" WIDE CROSSWALK STRIPING.
- PAY PARTICULAR ATTENTION TO PRE-EXISTING AREAS OF FAILED PAVING. OVER-EXCAVATE AND RECOMPACT WITH IMPORTED STRUCTURAL AS INDICATED ON CIVIL PLAN. CONDUCT COMPACTION TEST OF SUBGRADE BEFORE PAVING.
- MATCH EXISTING GUTTER LINE.
- INSTALL ADA RAMP WITH TRUNCATED DOME WARNING STRIP.
- INSTALL ADA TRUNCATED DOME WARNING STRIP.
- PROVIDE A STRAIGHT CUT TO ENCOMPASS ALL DAMAGES DONE BY CONSTRUCTION.
- GEOTECH TO PROVIDE CERTIFICATE OF SUBGRADE COMPACTION.
- PROOF ROLL WITH LOADED ROCK DUMP TRUCK PER CITY OF WEST Linn CONSTRUCTION STANDARD UNDER CITY INSPECTOR PRESENT.
- PROVIDE DENSITY TEST FOR AC PAVEMENT FOR BOTH LIFTS.
- INSTALL STAINLESS STEEL FULL CIRCLE REPAIR BAND TO CONNECT PIPE WHERE EXISTING CATCH BASIN IS REMOVED.

EROSION CONTROL NOTES

- PROVIDE CATCH BASIN INLET PROTECTION.
- PROVIDE SEDIMENT FENCING.

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

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DESIGNED BY: MSH
DRAWN BY: MSH
DATE: 05/10/08
SCALE: 1"=20'-0"
THIS SET IS ONE INCH ON ORIGINAL DRAWING
THIS SET IS ONE INCH ON THIS SET. NO SET SCALES ACCORDINGLY.

RECORD DRAWING
PREPARED BY: MSH
DATE: 05/10/08
THIS SET IS ONE INCH ON ORIGINAL DRAWING
THIS SET IS ONE INCH ON THIS SET. NO SET SCALES ACCORDINGLY.

WEST LINN-WILSONVILLE SCHOOL DISTRICT
SUNSET PRIMARY SCHOOL
PARKING LOT PAVING REPAIR
CIVIL
SITE PLAN AND NOTES

JOB NUMBER
11456-09002
SHEET 2 OF 3

C1

SECTION 31 23 00 - EARTHWORK

- SECTION 31 34 00 - GEOTEXTILE FABRIC

- | GEOTECHNICAL
PROPERTY | TEST
METHOD | DRAINAGE | RIPRAP | SEDIMENT
FILL | SUBGRADE |
|----------------------------------|----------------|----------|---------|------------------|----------|
| FABRIC TYPE | — | NONWOVEN | WOVEN | WOVEN | WOVEN |
| MINIMUM GRAB
TENSILE STRENGTH | ASTM D
4632 | 20 LB. | 200 LB. | 90 LB. | 180 LB. |
| APPEARANT
OPENING SIZE | ASTM D
4751 | NO. 70 | NO. 70 | NO. 30 | NO. 30 |
| MINIMUM
PERMITTIVITY (S-1) | ASTM D
4491 | 0.5 | 0.5 | 0.05 | 0.01 |
| MINIMUM UV
RETAINED STRENGTH | ASTM D
4355 | — | 70% | 70% | — |
| MINIMUM
PUNCTURE STRENGTH | ASTM D
4333 | 35 LB. | 80 LB. | — | 80 LB. |
| MINIMUM
GRAB ELONGATION | ASTM D
4632 | 15% | 15% | — | — |
| MINIMUM
OVERLAP | — | 12" | 24" | — | 24" |

- SECTION 32 12 16 - ASPHALT CONCRETE PAVING

- | GEOTEXTILE PROPERTY | VALUE |
|---|-------------------------|
| MINIMUM GRAB TENSILE STRENGTH IN BOTH MACHINE AND CROSS MACHINE DIRECTION | 355 NEWTONS |
| MINIMUM GRAB | 50% |
| MINIMUM ASPHALT RETENTION | 0.9 LITERS/SQUARE METER |
| MINIMUM MELTING POINT | 148° |

1. REINFORCING MATERIALS: ASTM A 615, GRADE 60, DEFORMED.
2. JOINT DONNELL BARS: PLAIN STEEL BARS, ASTM A 615, GRADE 60. CUT BARS TRUE TO LENGTH WITH ENDS SQUARE AND FREE OF BURRS.
3. CONCRETE MATERIALS
 - A. PORTLAND CEMENT: ASTM C 150, TYPE I. USE ONE BRAND OF CEMENT THROUGHOUT PROJECT UNLESS OTHERWISE APPROVED IN WRITING BY OWNER'S REPRESENTATIVE.
 - B. SAND: ASTM C 618, TYPE F.
 - C. NORMAL -WEIGHT AGGREGATES: ASTM C 33, CLASS 4, AND AS FOLLOWS. PROVIDE AGGREGATES FROM A SINGLE SOURCE. MAXIMUM AGGREGATE SIZE: 3/4 INCH. DO NOT USE FINE OR COARSE AGGREGATES THAT CONTAIN SUBSTANCES THAT CAUSE SPALLING.
 - D. WATER: POTABLE.
 - E. AIR-ENTRAINING ADMIXTURE: ASTM C 260, CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER REDUCED ADMIXTURES.
 - F. WATER-REDUCING ADMIXTURE: ASTM C 494, TYPE A.

- A. PREPARE DESIGN MIXES FOR EACH TYPE AND STRENGTH OF NORMAL-WEIGHT CONCRETE BY EITHER LABORATORY BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 301. PROPORTION MIXES ACCORDING TO ACI 211.1 AND ACI 301 TO PROVIDE NORMAL-WEIGHT CONCRETE WITH THE FOLLOWING PROPERTIES:
- B. COMPRESSIVE STRENGTH (28-DAY): 3,500 PSI UNLESS OTHERWISE NOTED.
- C. MAXIMUM COURSE AGGREGATE SIZE: $\frac{3}{4}$ INCH.
- D. MAXIMUM SLUMP: 4 INCHES PLUS $\frac{1}{2}$ TO 1 INCH.
- E. ENTRAINED AIR: 5 PERCENT $\pm \frac{1}{2}$ TO 1 PERCENT.

- SECTION 33 40 00- STORM DRAINAGE SYSTEM

- SECTION 31 27 33 - EARTHWORK FOR UTILITIES

2. PIPE BEDDING MATERIAL
- A. IMPORTED MATERIAL: 3/4" MINUS WELL GRADED CRUSHED ROCK WITH LESS THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.
- B. FINE AGGREGATE CLEAN WASHED SAND, 100% PASSING A #4 SIEVE WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.

3. PIPE ZONE MATERIAL
- A. IMPORTED MATERIAL: 3/4" MINUS WELL GRADED CRUSHED ROCK WITH LESS THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.
- B. IMPORTED MATERIAL: FINE AGGREGATE CLEAN WASHED SAND, 100% PASSING A #4 SIEVE WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.

5. DRAINAGE AGGREGATE MATERIAL
- A. MEDIUM AGGREGATE $\frac{3}{4}$ OR $\frac{5}{8}$ TO $\frac{1}{2}$ INCH, CLEAN WASHED MEDIUM SIZED DRAIN GRAVEL WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.

6. WHEN IN THE JUDGMENT OF THE OWNER, THE EXISTING MATERIAL IN THE BOTTOM OF THE TRENCH IS UNSUITABLE FOR SUPPORTING THE PIPE, EXCAVATE BELOW THE PIPE AS DIRECTED. PLACE BACKFILL IN TRENCH TO SUBGRADE OR PIPE BEDDING WITH TRENCH FOUNDATION MATERIAL OVER FULL WIDTH OF THE TRENCH AND COMPACT LAYERS NOT EXCEEDING 6 INCHES DEEP TO THE REQUIRED GRADE.

7. PLACE SPECIFIED BEDDING MATERIAL IN AT LEAST TWO LIFTS. PLACE FIRST LIFT TO PROVIDE THE MINIMUM 6 INCH DEPTH OF BEDDING MATERIAL SHOWN ON THE PLAN BEFORE THE PIPE IS INSTALLED. SPREAD BEDDING SMOOTHLY TO PROPER GRADE SO THE PIPE IS UNIFORMLY SUPPORTED ALONG THE BARREL AND EXCAVATE BELL HOLES AT EACH JOINT TO PERMIT PROPER ASSEMBLY AND INSPECTION OF THE ENTIRE JOINT. PROVIDE FIRM UNYIELDING SUPPORT ALONG THE ENTIRE PIPE LENGTH.

8. PLACE SUBSEQUENT LIFTS OF NOT MORE THAN 6 INCHES IN THICKNESS UP TO THE HORIZONTAL CENTERLINE OF THE PIPE. BRING LIFTS UP TOGETHER ON BOTH SIDES OF THE PIPE AND CAREFULLY WORK UNDER THE PIPE BY SLICING WITH A SHOVEL OR OTHER APPROVED PROCEDURE. PAY PARTICULAR ATTENTION TO THE AREA FROM THE FLOW LINE TO THE HORIZONTAL CENTERLINE OF THE PIPE OR TOP OF BEDDING TO INSURE THAT FIRM SUPPORT IS OBTAINED TO PREVENT ANY LATERAL MOVEMENT OF THE PIPE DURING THE FINAL BACKFILLING OF THE PIPE ZONE. PLACE PIPE BEDDING FULL WIDTH OF TRENCH.

9. PLACE SPECIFIED PIPE ZONE MATERIAL CAREFULLY AROUND THE PIPE IN 6 INCH LAYERS AND THOROUGHLY HAND TAMP WITH APPROVED STICKS SUPPLEMENTED BY WALKING IN AND SLASHING WITH A SHOVEL. PREVENT PIPE FROM MOVING EITHER HORIZONTALLY OR VERTICALLY DURING PLACEMENT AND COMPACTION OF THE PIPE ZONE MATERIAL. MECHANICAL COMPACTORS ARE PROHIBITED FOR PLACEMENT FILL IN THE PIPE ZONE.

10. BACKFILL TRENCH ABOVE THE PIPE ZONE TO WITHIN 8 INCHES OF THE FINAL SURFACE GRADE SHOWN ON THE PLANS IN LIFTS NOT TO EXCEED 8 INCHES OF LOOSE DEPTH. IN UNPAVED AREAS, COMPACT EACH LIFT TO MINIMUM 92% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 WITH MECHANICAL VIBRATOR OR IMPACT TAMPERS. COMPACT TRENCH AREAS AT PAVING AND INSIDE BUILDING AREAS TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.

11. WHEN TEMPORARY STEEL PLATES ARE INSTALLED OVER A STREET CUT, THEY SHALL BE CAPABLE OF CARRYING AT LEAST AN MS-18 LOADING. PLACE STEEL PLATES WITH A MINIMUM OF 12 INCHES BEARING ON ALL SIDES OF A CUT. ANCHOR STEEL PLATES TO MINIMIZE SHIFTING. SHIM THE EDGES OF ALL STEEL PLATES WITH COLD MIX ASPHALT.

12. ALL RIPRAP MATERIAL SHALL MEET THE TEST REQUIREMENTS OF OSSC, SECTION 00390 - RIPRAP PROTECTION.

13. RIPRAP MATERIAL SHALL BE ANGULAR IN SHAPE. THE THICKNESS OF A SINGLE ROCK SHALL NOT BE LESS THAN $\frac{1}{3}$ ITS LENGTH. ROUNDED ROCK WILL NOT BE ACCEPTED. RIPRAP SHALL BE FREE FROM OVERBURDEN, SPOIL, SHALE AND ORGANIC MATERIAL. NON-DURABLE ROCK OR SHALE IS NOT ACCEPTABLE.

14. GRADATION REQUIREMENTS SHALL BE AS FOLLOWS

PERCENT BY WEIGHT	WEIGHT OF ROCK		
	CLASS 50	CLASS 100	CLASS 200
20.0	50 - 30	100 - 60	200 - 140
30.0	30 - 15	60 - 25	140 - 80
40.0	15 - 2	25 - 2	80 - 8
10.0	2 - 0	2 - 0	8 - 0

1. PROVIDE SEDIMENT FENCE GEOTEXTILE PER SECTION 02350, "GEOTEXTILE FABRICS." SUPPORTING WIRE MESH SHALL BE 2 MILLIMETER GAUGE STEEL WIRE MESH WITH 2" X 2" OPENINGS. A PERFORATED POLYMERIC MESH OF EQUIVALENT GRAP TENSILE STRENGTH IN ACCORDANCE WITH ASTM D4632 MAY BE SUBSTITUTED FOR THE STEEL WIRE MESH.

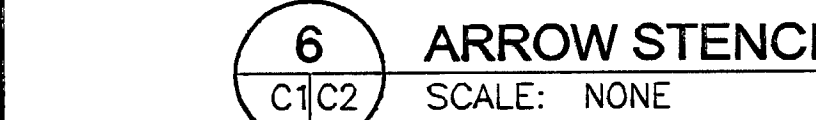
2. BIO-FILTER BAGS FILL MATERIAL SHALL BE CLEAN 100% RECYCLED WOOD PRODUCT WASTE. SIZE OF BAG SHALL BE GENERALLY 18" X 6" X 30" PLASTIC MESH BAGS WITH 1/2" OPENINGS AND WEIGH APPROXIMATELY 45 POUNDS.




8 MINIMUM STANDARD DOUBLE
C1/C2 DISABLED PERSON PARKING SPACE
SCALE: NONE



1. FILTER FABRIC SHALL BE INSTALLED IN A CONTINUOUS ROLL TO AVOID THE USE OF JOINTS. WHERE JOINTS ARE NECESSARY, USE TURNED ENDS.
2. POSTS SHALL BE SPACED A MAXIMUM OF 6' APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 6".
3. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE AND 6" DEEP ALONG THE LINE OF POSTS UPHILL FROM THE BARRIER. TRENCH SHALL FOLLOW THE CONTOUR.
4. TRENCH SHALL BE BACKFILLED WITH NATIVE MATERIAL.
5. INSPECT AND REPAIR AFTER EACH RAINFALL. INSPECT DAILY DURING PROLONGED RAINFALL.
6. REMOVE SEDIMENT WHEN IT REACHES APPROXIMATELY ONE THIRD THE HEIGHT ABOVE GROUND PORTION OF THE FENCE.
7. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE FILTER FENCE IS NO LONGER REMOVED SHALL BE BROUGHT TO CONFORM WITH THE EXISTING GROUND AND SEEDED. EXISTING GRADE AND SEEDED.
8. WHEN JOINING TWO OR MORE SEDIMENT FENCES TOGETHER, JOIN JOINT STAKES BY UNLAPPING THE ENDS AT LEAST TWO TURNS AND DRIVING THE JOINED STAKES INTO THE GROUND TOGETHER.



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		DECISION APPROVED		DATE 05/10/19		ASH	
DESIGN DRAWN		RPT		DATE 05/10/19		ASH	
SCALE NONE							
RECORD DRAWING PREPARED IN PENCIL ON THE BASIS OF THE ORIGINAL DRAWING. THIS DRAWING IS NOT EXTENDED TO REFLECT ANY CHANGES OR CORRECTIONS TO THE ORIGINAL. FOR CONSTRUCTION, REFER EXACTLY TO THE ORIGINAL DRAWING. ANY ERRORS OR OMISSIONS WHICH MAY BE NOTICED IN THIS DRAWING SHALL BE CORRECTED IN THE ORIGINAL DRAWING.							
SUBCONTRACT							

**SUNSET PRIMARY SCHOOL
PARKING LOT PAVING PERMITS**

JOB NUMBER
11456-09002

SHEET 2 OF 3

C2