

Olsson
2111 South 67th Street, Suite 200
Omaha, NE 68106

DATE: November 3, 2023
ADDENDUM NO.: 1
PROJECT NAME: Ottumwa Community Schools – Tennis Courts
OLSSON PROJECT NO. 023-05957

TO ALL WHO HAVE RECEIVED PLANS AND SPECIFICATIONS FOR THE REFERENCED PROJECT.

1. **Revisions:**
 - a. **Revised G000 to include updated sheet list**
2. **Questions from Pre-Bid Meeting:**
3. **Remove, Insert, and/or Replace the plans as follows:**
 - a. **C000 – GENERAL NOTES – New sheet**
 - b. **C001 – GENERAL NOTES – New sheet**
 - c. **C100 – EXISTING CONDITIONS – New sheet**
 - d. **C200 – EROSION CONTROL PLAN – New sheet**
 - e. **C201 – EROSION CONTROL NOTES – New sheet**
 - f. **C202 – EROSION CONTROL NOTES – New sheet**
 - g. **C203 – EROSION CONTROL DETAILS – New sheet**
 - h. **C204 – EROSION CONTROL DETAILS – New sheet**
 - i. **C205 – EROSION CONTROL DETAILS – New sheet**
 - j. **C300 – SITE PLAN – New sheet**
 - k. **C400 – GRADING PLAN – New sheet**
 - l. **C401 – SPOT ELEVATION PLAN – NORTH – New sheet**
 - m. **C402 – SPOT ELEVATION PLAN – SOUTH – New sheet**
 - n. **C403 – CUT FILL PLAN – New sheet**
 - o. **C500 – DETAIL SHEET – New sheet**
 - p. **L100 – LANDSCAPE PLAN – New sheet**
 - q. **L101 – LANDSCAPE NOTES – New sheet**

END OF LIST

OTTUMWA COMMUNITY SCHOOLS TENNIS COURTS

Ottumwa, IA 52501

CLIENT CONTACT INFORMATION:
DAVID HARPER
CHIEF OPERATIONS OFFICER
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TECHNICAL LEADER
PHONE: (402) 970-2316

SHEET INDEX			
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C000	GENERAL NOTES		
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C200	EROSION CONTROL PLAN		
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C202	EROSION CONTROL NOTES		
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C402	SPOT ELEVATION PLAN - SOUTH		
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C404	RETAINING WALL PLAN & PROFILE		
C500	DETAIL SHEET		
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L100	LANDSCAPE PLAN		
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INSTRUCTIONS TO BIDDERS:

1. SEALED BIDS WILL BE RECEIVED ON TUESDAY, NOVEMBER 7, 2023 AT 2:00 PM PREVAILING TIME FOR THE TENNIS COURT PROJECT BY:

THE BOARD OF EDUCATION: OTTUMWA COMMUNITY SCHOOL DISTRICT
1112 N. VAN BUREN
OTTUMWA, IA 52501
2. LUMP SUM BID PROPOSALS WILL BE RECEIVED FOR THIS PROJECT AT THE SCHEDULED TIME OF RECEIPT OF BIDS ABOVE AND WILL BE PUBLICLY OPENED AT THAT TIME.
3. A PRE-BID CONFERENCE WILL BE HELD ON THURSDAY NOVEMBER 2, 2023 AT 1:00 PM (CST) AT THE OTTUMWA DISTRICT OFFICE: 1112 N. VAN BUREN, OTTUMWA, IA 52501. ALL BIDDERS ARE STRONGLY ENCOURAGED TO ATTEND AND SIGN IN AT THE MEETING WHICH WILL ALSO BE ATTENDED BY THE OWNER.
4. ALL BIDDERS ARE STRONGLY ENCOURAGED TO PERFORM A SITE VISIT PRIOR TO SUBMITTING BIDS.
5. BID SECURITY IN THE FORM OF A BID BOND, CERTIFIED CHECK OR CASH IN AN AMOUNT EQUAL TO FIVE PERCENT OF THE BASE BID AMOUNT SHALL BE SUBMITTED WITH THE BID. SHOULD A BID BOND BE SUBMITTED, THE BID BOND SHALL BE PAYABLE TO THE BOARD OF EDUCATION - OTTUMWA COMMUNITY SCHOOL DISTRICT.
6. BIDS SHALL BE SUBMITTED ON OR BEFORE THE SPECIFIED CLOSING TIME IN AN OPAQUE SEALED ENVELOPE ADDRESSED TO:

OTTUMWA COMMUNITY SCHOOL DISTRICT
ATTN: MR. MIKE MCGREGORY, SUPERINTENDENT
1112 N. VAN BUREN
OTTUMWA, IA 52501
7. THE BOARD OF EDUCATION RESERVES THE RIGHT TO REJECT ANY BID OR ALL BIDS OR PART THEREOF, OR WAIVE ANY IRREGULARITIES OR INFORMALITIES, AND TO MAKE THE AWARD IN THE BEST INTEREST OF THE DISTRICT.
8. CONTRACTOR MAY OBTAIN ELECTRONIC BID DOCUMENTS AT NO COST IN PDF FORM THROUGH DAVID HARPER AT DAVID.HARPER@OTTUMWASCHOOLS.COM OR THROUGH CARY SCHROEDER AT CSCHROEDER@OLSSON.COM OR VIA THE STATE OF IOWA AT <https://bidopportunities.iowa.gov/>
9. CONTRACTORS SHALL BE RESPONSIBLE FOR ANY HARD COPY SETS OF PLANS OR SPECIFICATIONS AT THE CONTRACTORS COST.

olsson

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REV. NO.	DATE	REVISION DESCRIPTION
1	11/3/2023	ADDENDUM #1

COVER SHEET

OTTUMWA COMMUNITY SCHOOLS
TENNIS COURTS

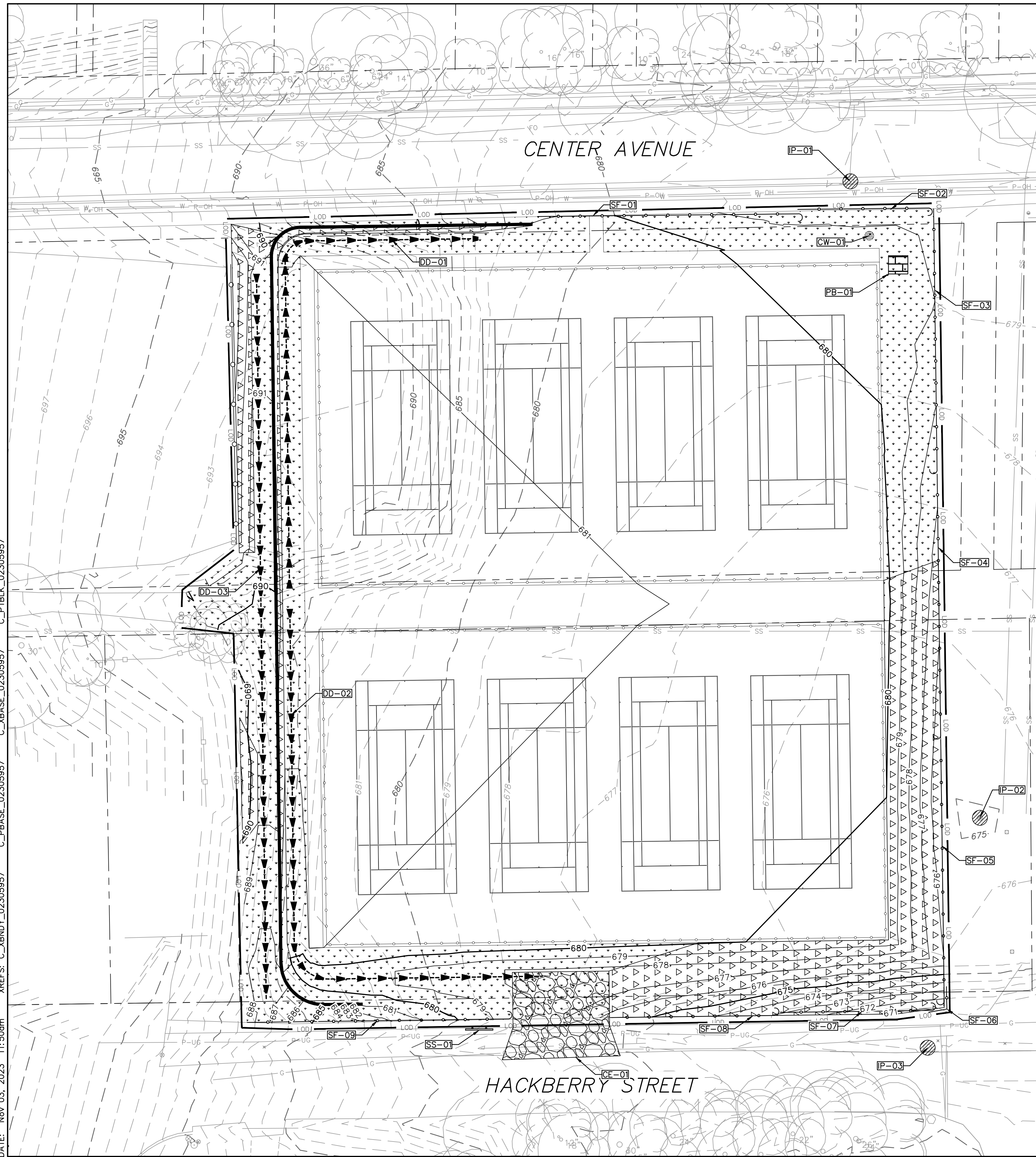
2019

OTTUMWA, IA

drawn by: _____ XXX
checked by: _____ XXX
approved by: _____ XXX
QA/QC by: _____
project no.: _____
drawing no.: _____
date: 10/17/2023

SHEET
G000

DWG: F:\2023\05501-06000\023-05957\40-Design\AutoCAD\Final Plans\Sheets\GNV\C_ERC01_02305957.dwg
 DATE: Nov. 03, 2023 11:50am
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LEGEND

---	6XX	---	EXISTING MAJOR CONTOUR
---	6XX	---	EXISTING MINOR CONTOUR
---	6XX	---	PROPOSED MAJOR CONTOUR
---	6XX	---	PROPOSED MINOR CONTOUR
---	LOD	---	LIMITS OF DISTURBANCE

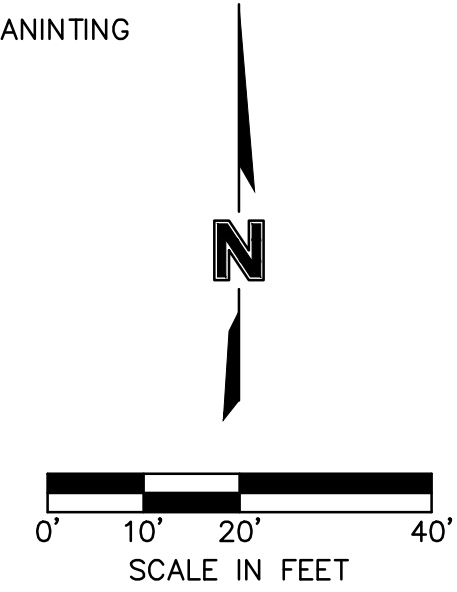
BMP LEGEND (REFERENCE DETAIL SHEET)

	PB-#	PORTABLE BATHROOM
	CE-#	STABILIZED CONSTRUCTION ENTRANCE. MAINTAIN/REPAIR AS NECESSARY. REF. SUDAS SECTION 7E-15
	IP-#	INLET PROTECTION. SEE DETAIL SHEET. REF. SUDAS SECTION 7E-20
	SF-#	SILT FENCE. REF. SUDAS SECTION 7E-14
	CW-#	CONCRETE WASHOUT. SEE DETAIL SHEET.
	SS-#	SWPPP SIGN PER PCWP REQUIREMENTS.
	SW-#	SLOPE WATTLE. REFERENCE DETAIL SHEET.
	DD-#	DIVERSION DIKE WITH CHECK DAMS. REF. OMAHA STANDARD PLATE 101-07.
		INSTALL EROSION CONTROL BLANKET ON ALL SLOPES GREATER THAN 4:1. (NORTH AMERICAN GREEN SC-150 OR APPROVED EQUIVALENT) REF. SUDAS SECTION 7E-5
		INSTALL SEED/SOD PER LANDSCAPE PLAN

TEMPORARY SEEDING	
DATE	APPLICATION
MAR. 15 - JUL. 1	COVER CROP - DRILL SEED OATS & RYEGRASS. OATS SEEDING RATE - 2.0 BU. OR 60 LBS./AC. RYEGRASS SEEDING RATE-30 LBS./AC.
JUL. 1 - SEPT. 1	COVER CROP - DRILL SEED OATS, SEEDING RATE - 1.5 BU. OR 48 LBS./AC.
SEPT. 1 - OCT. 31	COVER CROP - DRILL SEED WINTER WHEAT - 1 BU. OR 60 LBS./AC. OR WINTER RYE - 1 BU. OR 56 LBS./AC.

NOTES

- CONSTRUCTION ENTRANCES, PORTABLE BATHROOMS, AND CONCRETE WASHOUTS MAY BE LOCATED AT THE CONTRACTOR'S DISCRETION, PROVIDED THEY CONFORM TO THE REQUIREMENTS OF THE OMAHA STORMWATER DESIGN MANUAL.
- ALL SILT FENCES SHALL BE INSTALLED IN NO GREATER THAN 100-FOOT RUNS. THE ENDS OF EACH RUN SHALL TURN UPHILL (J-HOOK) FOR AN APPROPRIATE DISTANCE (3-FOOT MINIMUM) TO KEEP WATER AND SEDIMENT FROM FLOWING TO THE NEXT SECTION OF SILT FENCE, TYPICAL. REFERENCE DETAIL SHEETS.
- REFERENCE THE EROSION CONTROL NOTES SHEET FOR MORE INFORMATION AND TEMPORARY SEEDING REQUIREMENTS THROUGHOUT CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR ANY FIELD MODIFICATIONS OF THE SWPPP DURING THE CONSTRUCTION DELAY / SETTLEMENT PHASE OF THE PROJECT TO MAINTAIN THE FUNCTIONALITY OF THE SWPPP AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL PERMIT REQUIREMENTS. REFERENCE THE GRADING PLAN FOR SETTLEMENT MONITORING NOTES.
- CONTRACTOR SHALL PERMANENTLY SEED, INSTALL EROSION CONTROL BLANKET / SLOPE WATTLES AND STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE. FINAL SEEDING SHALL BE COMPLETED PRIOR TO PLACING FINAL EROSION CONTROL BLANKET.
- NO LAND DISTURBING ACTIVITIES ARE ALLOWED OUTSIDE THE PERMITTED LIMITS OF DISTURBANCE (LOD) WITHOUT APPROVAL FROM THE OWNER AND PROJECT ENGINEER THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY IF ANY DISTURBANCE IS NEEDED BEYOND THE PROPERTY LINE AND PERMITTED LOD AS SHOWN ON THE PLANS.
- REFERENCE LANDSCAPE PLAN FOR FINAL SEED/SOD/MULCH/PLANTING INFORMATION



REV. NO.	DATE	REVISIONS DESCRIPTION

EROSION CONTROL PLAN	OTUMWA COMMUNITY SCHOOLS	2023
	TENNIS COURTS	
	OTUMWA, IA	

drawn by:		RN
checked by:		BE
approved by:		BE
QA/QC by:		
project no.:	023-05957	
drawing no.:		
date:	10/31/2023	

DWG: F:\2023\05501-06000\023-05957-40-Design\AutoCAD\Final Plans\Sheets\GNVCV_C_ERC01_02305957.dwg
 DATE: Nov 03, 2023 11:50am
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GENERAL EROSION AND SEDIMENT CONTROL NOTES

- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- AN NPDES GENERAL PERMIT NO. 2 IS REQUIRED FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) PRIOR TO ANY GRADING ACTIVITIES.
- THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("SITE MAP"), THE STANDARD DETAILS, SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF IOWA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE SITE PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- ALL DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDDED, SODDED, AND/OR VEGETATED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, CHECK DAMS, ETC.) TO PREVENT EROSION.
- GENERAL CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE SITE MAPS, INSIDE OF THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
- ALL SLOPES 4:1 OR STEEPER SHALL BE COVERED WITH EROSION CONTROL BLANKET, EVEN IF NOT SHOWN GRAPHICALLY ON THE PLANS.

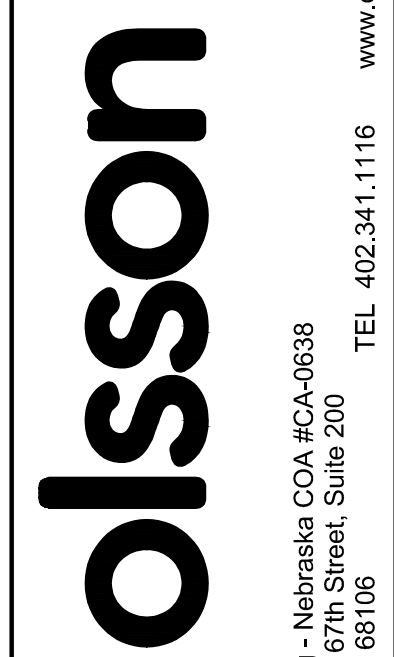
EROSION CONTROL NOTES

- THIS PROJECT REQUIRES AN NPDES GENERAL PERMIT NO. 2 FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR). CONTRACTOR TO COMMENCE WORK ON THIS SITE ONLY AFTER AN ACTIVE PERMIT NUMBER HAS BEEN OBTAINED.
- THE CONTRACTOR SHALL CONTINUOUSLY PROVIDE ADEQUATE STORMWATER MANAGEMENT IN ACCORDANCE WITH THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PUBLIC STREETS, ACCESS ROUTES, AND WATERWAYS IN THE VICINITY OF THE JOB SITE CLEAN AND FREE OF ROCKS, SOIL AND DEBRIS.
- THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROL "BEST MANAGEMENT PRACTICES" (BMPs) PRIOR TO ANY SITE PREPARATION WORK (E.G., CLEARING, GRUBBING, DEMOLITION, OR EXCAVATION).
- THE PLACEMENT OF EROSION AND SEDIMENT BMPs SHALL BE IN ACCORDANCE WITH THE EROSION CONTROL PLAN PREPARED FOR THE PROJECT. CONTRACTOR TO ADJUST QUANTITY, LOCATION, AND TYPE OF EROSION AND SEDIMENT CONTROL BMPs AS NECESSARY FOR THE VARIOUS PHASES OF THE WORK AND AS ACTUAL CONDITIONS WARRANT. CONTRACTOR SHALL CONTINUOUSLY MODIFY THE EROSION AND SEDIMENT CONTROL PLAN WITH CURRENT BMPs IN ACCORDANCE WITH THE CONSTRUCTION STORMWATER PERMIT REQUIREMENTS. ADDITIONAL EROSION AND SEDIMENT CONTROL BMPs EMPLOYED BY THE CONTRACTOR AT HIS DISCRETION WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- A GROUNDWATER DISCHARGE PERMIT MAY BE REQUIRED FROM THE STATE GOVERNING AUTHORITY PRIOR TO DISCHARGE.
- APPROVED EROSION AND SEDIMENT CONTROL BMPs SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. UNLESS OTHERWISE REQUIRED BY THE STATE'S CONSTRUCTION STORMWATER PERMIT, AT A MINIMUM THE CONTRACTOR SHALL INSPECT ALL BMPs EVERY 14 DAYS, AND AFTER ALL SIGNIFICANT PRECIPITATION EVENTS I.E. RAINFALL, SNOWMELT. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS AFTER DIRECTION BY THE INSPECTOR. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED WEEKLY FROM ALL BMPs, OR AT ANY TIME THAT SEDIMENT OR CONSTRUCTION DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMPs.
- TOPSOIL AND SUITABLE EARTHEN MATERIALS SHALL BE SEGREGATED AND STOCKPILED WITHIN THE LIMITS OF CONSTRUCTION FOR USE ON AREAS TO BE FILLED AND RE-VEGETATED. ANY AND ALL STOCKPILES SHALL BE PLACED IN AN APPROVED LOCATION AND PROTECTED FROM EROSION ELEMENTS USING MEASURES SPECIFIED IN THE EROSION/SEDIMENT CONTROL PLAN AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE MULCHED AND SEEDDED WITH A TEMPORARY OR PERMANENT GRASS COVER WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION.
- ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- A WATER SOURCE MUST BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND AND FOR MEETING COMPACTION REQUIREMENTS.
- THE CONTRACTOR MUST KEEP ALL POLLUTANTS, INCLUDING SEDIMENT, CONSTRUCTION DEBRIS, AND TRENCH BACKFILL MATERIALS FROM ENTERING THE STORM SEWER SYSTEM.
- ALL SPILLS INCLUDING, BUT NOT LIMITED TO, PETROLEUM PRODUCTS, SOLVENTS, AND CEMENT SHALL BE CLEANED UP IMMEDIATELY. THE LOCAL CITY/COUNTY AND STATE'S GOVERNING AUTHORITY SHALL BE NOTIFIED IMMEDIATELY.
- THE CONTRACTOR SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL EXPORTED FROM THE SITE SHALL BE DISPOSED OF AT A SITE PERMITTED TO ACCEPT SUCH MATERIAL.
- THE USE OF REBAR, STEEL STAKES OR STEEL FENCE POSTS FOR STAKING DOWN STRAW OR HAY BALES, OR TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE, IS PROHIBITED.
- THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED OF AT AN APPROPRIATE LOCATION.
- CONTRACTOR TO FILE "NOTICE OF TERMINATION" WITH THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR) AUTHORITY ONCE THE PROJECT IS COMPLETE, ALL DISTURBED AREAS HAVE BEEN STABILIZED AND TEMPORARY BMPs HAVE BEEN REMOVED.
- THE CONTRACTOR SHALL CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES AND MANHOLES OF DEBRIS AND SEDIMENTATION AT COMPLETION OF SITWORK. THIS WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER AND LOCAL AUTHORITIES. ANY CONSTRUCTION DEBRIS OR MUD DROPPED INTO MANHOLES, INLETS, PIPES OR TRACKED ONTO EXISTING ROADWAYS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS CONSTRUCTION.
- CONTRACTOR SHALL ENSURE GRAVEL FILTER BAGS DO NOT EXTEND INTO TRAVELED WAY.
- STABILIZATION OF DISTURBED AREAS SHALL BE INITIALIZED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATION OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
- TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT ON SEASONAL WEATHER CHANGES.
- DO NOT DISTURB AN AREA UNTIL NECESSARY FOR CONSTRUCTION TO PROCEED.
- PER NPDES GENERAL PERMIT NO. 2 PART 1.2E, DISCHARGES FROM CONCRETE WASHOUT ACTIVITIES AND FROM WET SAWING OF CONCRETE, WASTE FROM CONCRETE WASHOUT AND WET SAWING OF CONCRETE IS NOT ALLOWED TO BE DISCHARGED TO SURFACE WATERS AND IS NOT ALLOWED TO ADVERSELY AFFECT A WATER OF THE STATE.

BEST MANAGEMENT PRACTICES (BMP) MAINTENANCE SCHEDULE

THE FOLLOWING MAINTENANCE SCHEDULE HAS BEEN PROVIDED. THE INSPECTOR MUST PERFORM THE INSPECTIONS. THE OPERATOR/CONTRACTOR MUST PERFORM ALL NEEDED MAINTENANCE. FURTHERMORE, ALL EROSION CONTROL FEATURE REQUIRING MAINTENANCE MAY NOT BE LISTED BELOW. THE OPERATOR/CONTRACTOR AND INSPECTOR MUST PERFORM THEIR RESPECTIVE DUTIES ON ALL BMP'S THAT ARE NOT LISTED BELOW AS WELL.

- CONSTRUCTION ENTRANCE** – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
- SILT FENCE** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (A) SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL, ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY; (B) CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING; (C) SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY; (D) SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER; AND (E) ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDDED.
- STORM DRAIN INLET PROTECTION** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (A) STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NECESSARY AND (B) STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- TEMPORARY SEEDING** – AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT EROSION WILL BE RE-SEEDDED AS SOON AS SUCH AREAS ARE IDENTIFIED. CONTROL WEEDS BY MOWING. REFERENCE SECTION 7E-22 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS MANUAL.
- PERMANENT SEEDING** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (A) IN GENERAL, A STAND OF VEGETATION CANNOT BE DETERMINED TO BE FULLY ESTABLISHED UNTIL IT HAS BEEN MAINTAINED FOR ONE FULL YEAR AFTER PLANNING; (B) NEW SEEDLINGS SHALL BE SUPPLIED WITH ADEQUATE MOISTURE, SUPPLY WATER AS NEEDED, ESPECIALLY LATE IN THE SEASON, IN ABNORMALLY HOT OR DRY CONDITIONS, OR ON ADVERSE SITES, WATER APPLICATIONS SHALL BE CONTROLLED TO PREVENT EXCESSIVE RUNOFF; (C) INSPECT ALL SEEDDED AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE; (D) IF STAND IS INADEQUATE FOR EROSION CONTROL, OVER SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY SPECIFIED; (E) IF STAND IS 60% DAMAGED, RE-ESTABLISH FOLLOWING SEEDBED AND SEEDING RECOMMENDATIONS; (F) IF STAND HAS LESS THAN 40% COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER, THE SOIL MUST BE TESTED TO DETERMINE IF ACIDITY OR NUTRIENT IMBALANCES ARE RESPONSIBLE, RE-ESTABLISH THE STAND FOLLOWING SEEDBED AND SEEDING RECOMMENDATIONS. REFERENCE SECTION 7E-24 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS MANUAL.
- MULCHING** – ALL MULCHES AND SOIL COVERINGS SHOULD BE INSPECTED PERIODICALLY (PARTICULARLY AFTER RAINSTORMS) TO CHECK FOR EROSION. WHERE EROSION IS OBSERVED IN MULCHED AREAS, ADDITIONAL MULCH SHOULD BE APPLIED. NETS AND MATS SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, REINSTALL NETTING OR MATTING AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. INSPECTIONS SHOULD TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE; REPAIR AS NEEDED.
- SOIL STABILIZATION BLANKETS & MATTING** – ALL SOIL STABILIZATION BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL WHICH TIME THEY BECOME PERMANENTLY STABILIZED; AT THAT TIME AN ANNUAL INSPECTIONS SHOULD BE ADEQUATE.
- STREET CLEANING / SWEEPING** – THE MAINTENANCE MEASURES ARE AS FOLLOWS: (A) EVALUATE ACCESS POINTS DAILY FOR SEDIMENT TRACKING; (B) WHEN TRACKED OR SPILLED SEDIMENT IS FOUND ON PAVED SURFACES, IT WILL BE REMOVED DAILY, DURING TIMES OF HEAVY TRACK-OUT, SUCH AS DURING RAINS, CLEANING MAY BE DONE SEVERAL TIMES THROUGHOUT THE DAY; (C) UNKNOWN SPILLS OR OBJECTS WILL NOT BE MIXED WITH THE SEDIMENT; AND (D) IF SEDIMENT IS MIXED WITH OTHER POLLUTANTS, IT WILL BE DISPOSED OF PROPERLY AT AN AUTHORIZED LANDFILL.



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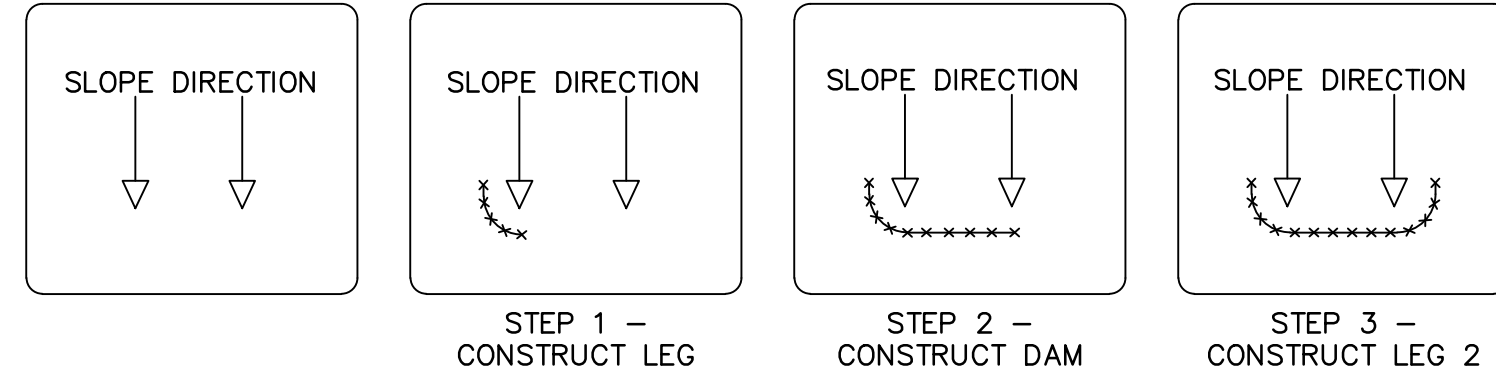
EROSION CONTROL NOTES	OTTUMWA COMMUNITY SCHOOLS TENNIS COURTS	2023
		OTTUMWA, IA

drawn by:	_____	RN
checked by:	_____	BE
approved by:	_____	BE
QA/QC by:	_____	
project no.:	023-05957	
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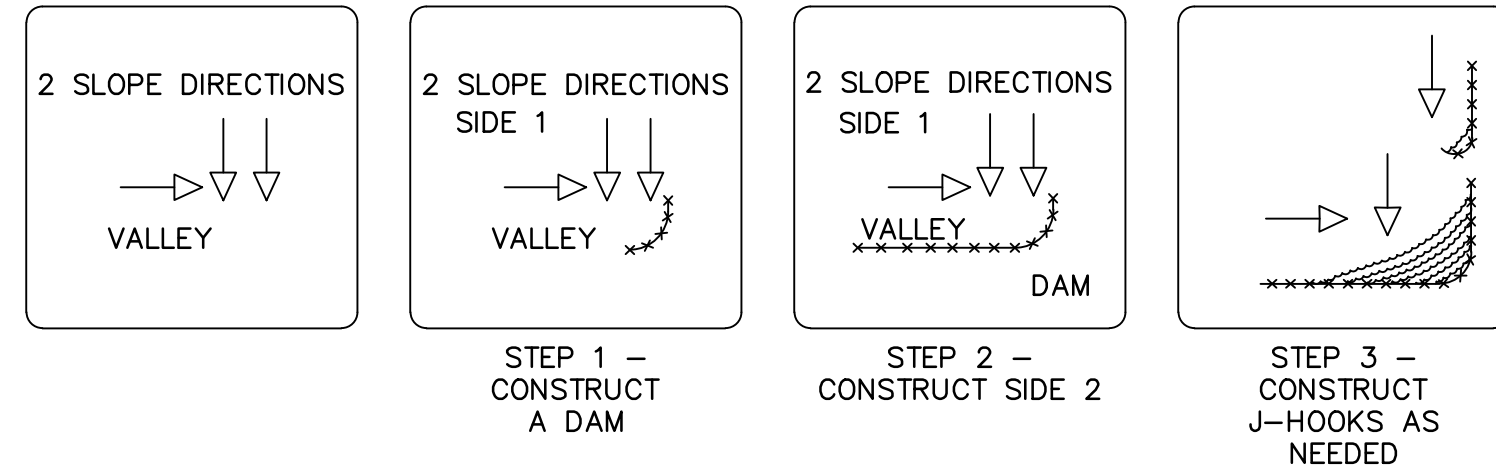
SILT FENCE PLACEMENT/ONE SLOPE

INSTALLATION WITH J-HOOKS OR 'SMILES' INCREASE SILT FENCE EFFICIENCY.

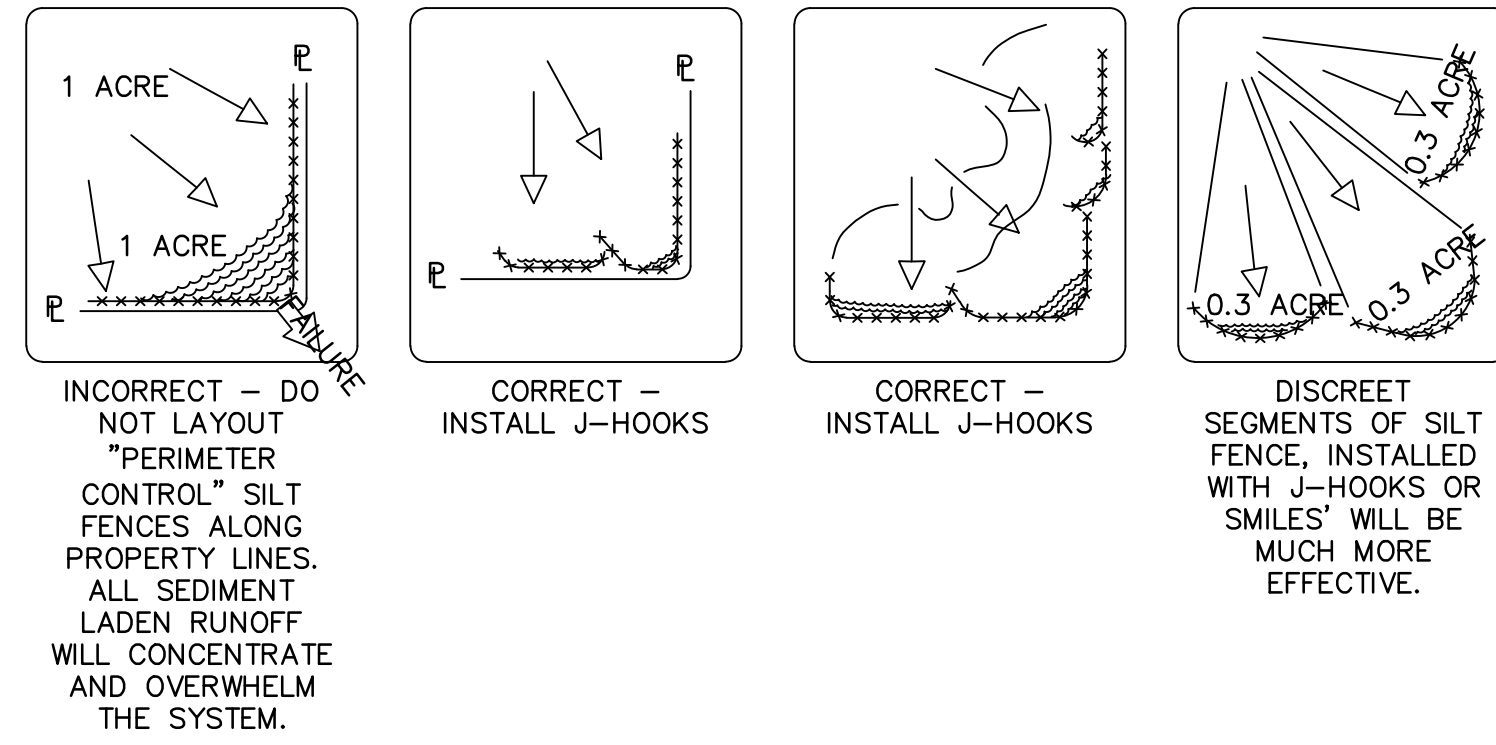


SILT FENCE PLACEMENT/TWO SLOPES

INSTALLATION WITH J-HOOKS WILL INCREASE SILT FENCE EFFICIENCY AND REDUCE EROSION-CAUSING FAILURES.



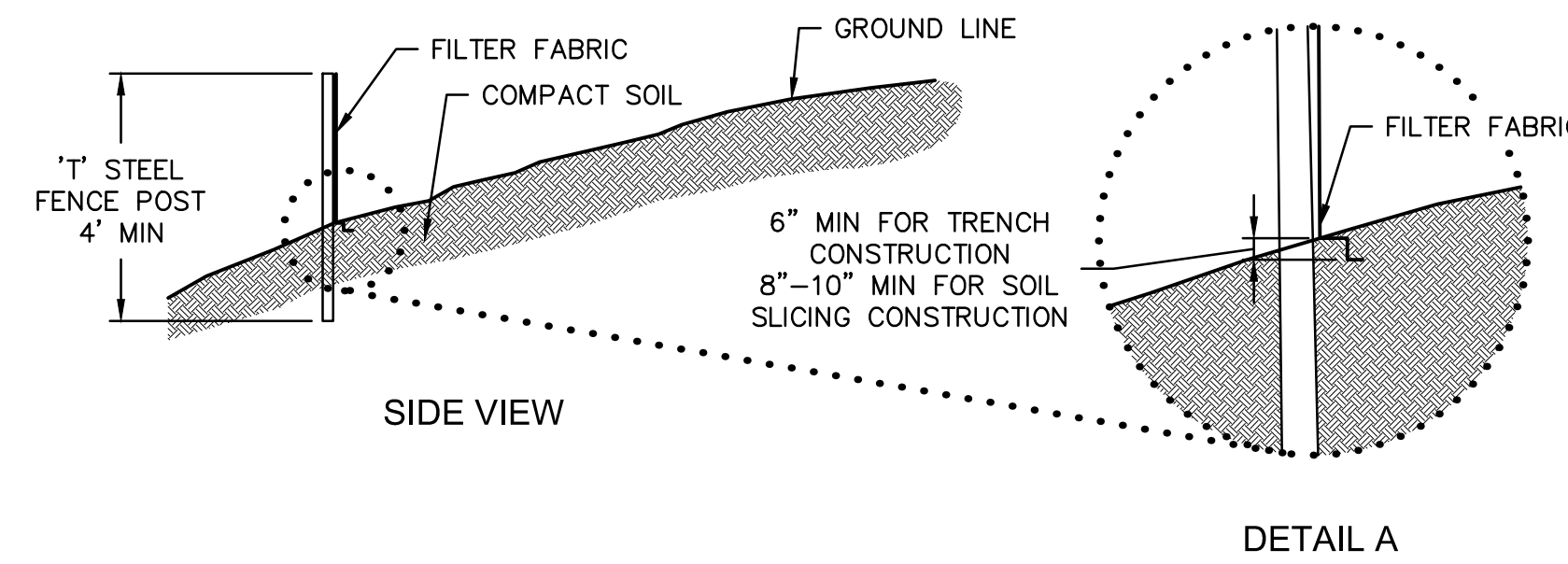
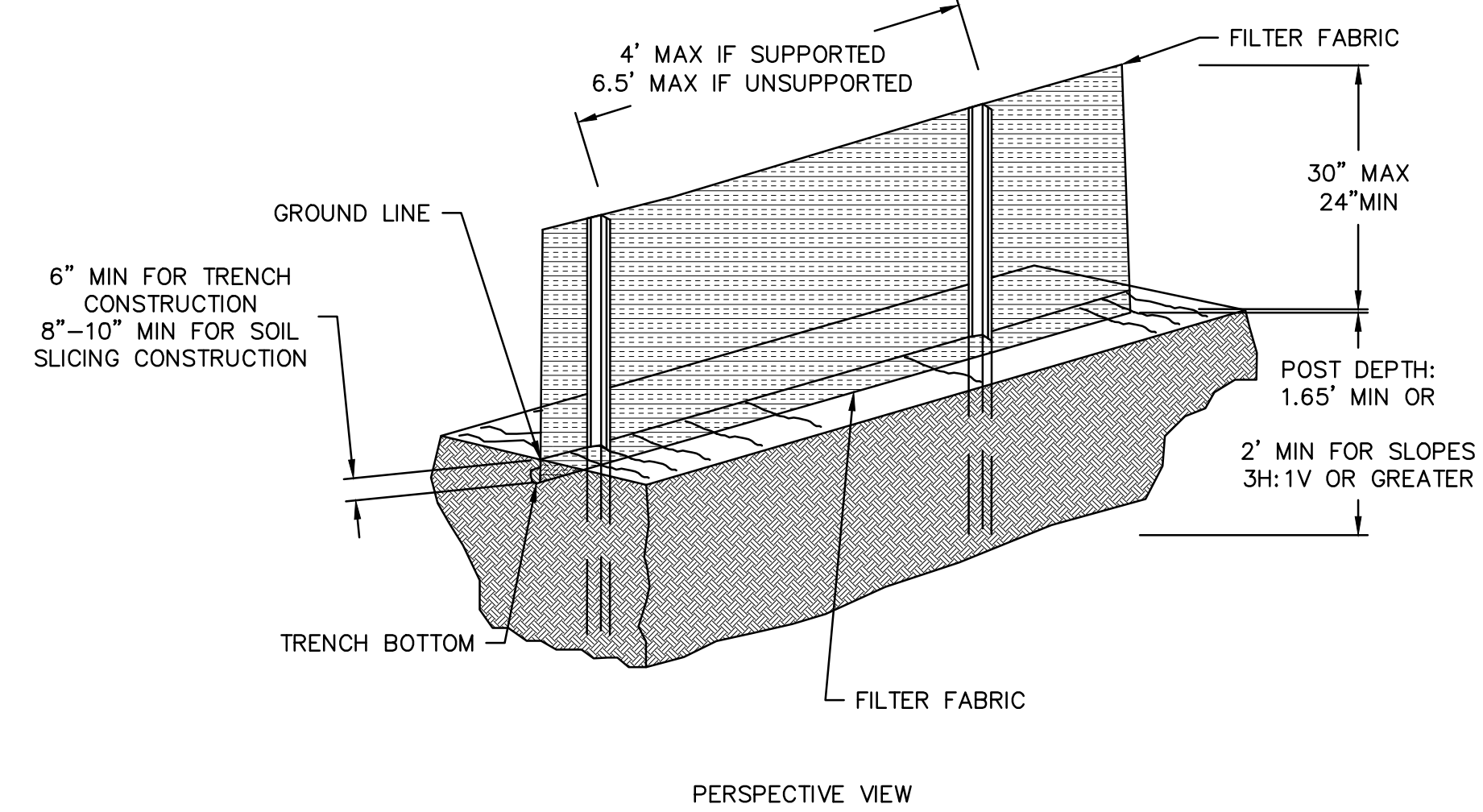
SILT FENCE PLACEMENT/PERIMETER CONTROL



INSTALLATION NOTES:

1. THE HEIGHT OF A SILT FENCE SHALL BE A MINIMUM OF 24 INCHES ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 30 INCHES ABOVE GROUND ELEVATION.
2. INSTALL THE ENDS OF SILT FENCE RUNS WITH A GRADUAL UPSLOPE TO PREVENT END RUNS AND LOSS OF SEDIMENT.
3. MAXIMUM POST SPACING SHALL BE BASED ON THE FABRIC SUPPORT. SUPPORTED SILT FENCE SHALL HAVE A MAXIMUM POST SPACING OF 4 FT. UNSUPPORTED SILT FENCE SHALL HAVE A MAXIMUM POST SPACING OF 6.5 FT.
4. TRENCHED OR SOIL SLICING CONSTRUCTION:
 - 4.1. TRENCH CONSTRUCTION: A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 IN. WIDE AND 6 IN. DEEP ON THE UPSLOPE SIDE OF THE SILT FENCE. THE BOTTOM OF THE SILT FENCE FABRIC SHALL BE BURIED IN A "J" CONFIGURATION TO THE MINIMUM DEPTH OF THE 6IN. BACKFILL THE TRENCH AND COMPACT THE SOIL SO THAT THE COMPACTED SOIL COMPLETELY FILLS THE TRENCH.
 - 4.2. SOIL SLICING CONSTRUCTION: SOIL SLICING CONSTRUCTION INVOLVES USING A SPECIALIZED MACHINE TO CREATE A SLIT INTO THE GROUND, INSERTING THE FABRIC INTO THE SLIT AND COMPACTING THE SLICE CLOSED. THE FILTER FABRIC SHALL BE INSERTED INTO THE GROUND 8 TO 12 INCHES DEEP SO THAT NO FLOW CAN PASS UNDER THE FABRIC.
5. WHEN JOINTS ARE UNAVOIDABLE, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OVERLAP OF AT LEAST TWO POSTS.
6. STEEL "T" POSTS SHALL BE INSTALLED SO THAT THE FLAT PORTION (TOP OF THE "T") IS AGAINST THE FABRIC TO EXTEND THE LIFE OF THE FABRIC.
7. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
8. FOR MORE INSTALLATION INFORMATION REFER TO THE OMAHA REGIONAL STORMWATER MANUAL CHAPTER 9.

NOTE:
 REFER TO CHAPTER 7 OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS DESIGN MANUAL FOR MORE INFORMATION ON SEDIMENT AND EROSION CONTROL MEASURES



NOTES:

1. THE PURPOSE OF A SILT FENCE IS TO DECREASE THE VELOCITY OF SHEET FLOWS AND INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS IN ORDER TO PREVENT SEDIMENT FROM LEAVING A CONSTRUCTION SITE.
2. CONDITIONS WHERE PRACTICE APPLIES:
 - 2.1. BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION.
 - 2.2. WHERE THE SIZE OF THE DRAINAGE AREA IS NOT GREATER THAN ONE-FORTH OF SILT FENCE LENGTH.
3. SILT FENCES SHALL NOT BE USED AS DITCH CHECKS.
4. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
5. INSPECTION AND MAINTENANCE:
 - 5.1. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 - 5.2. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

SILT FENCE INSTALLATION [SF]
 NOT TO SCALE

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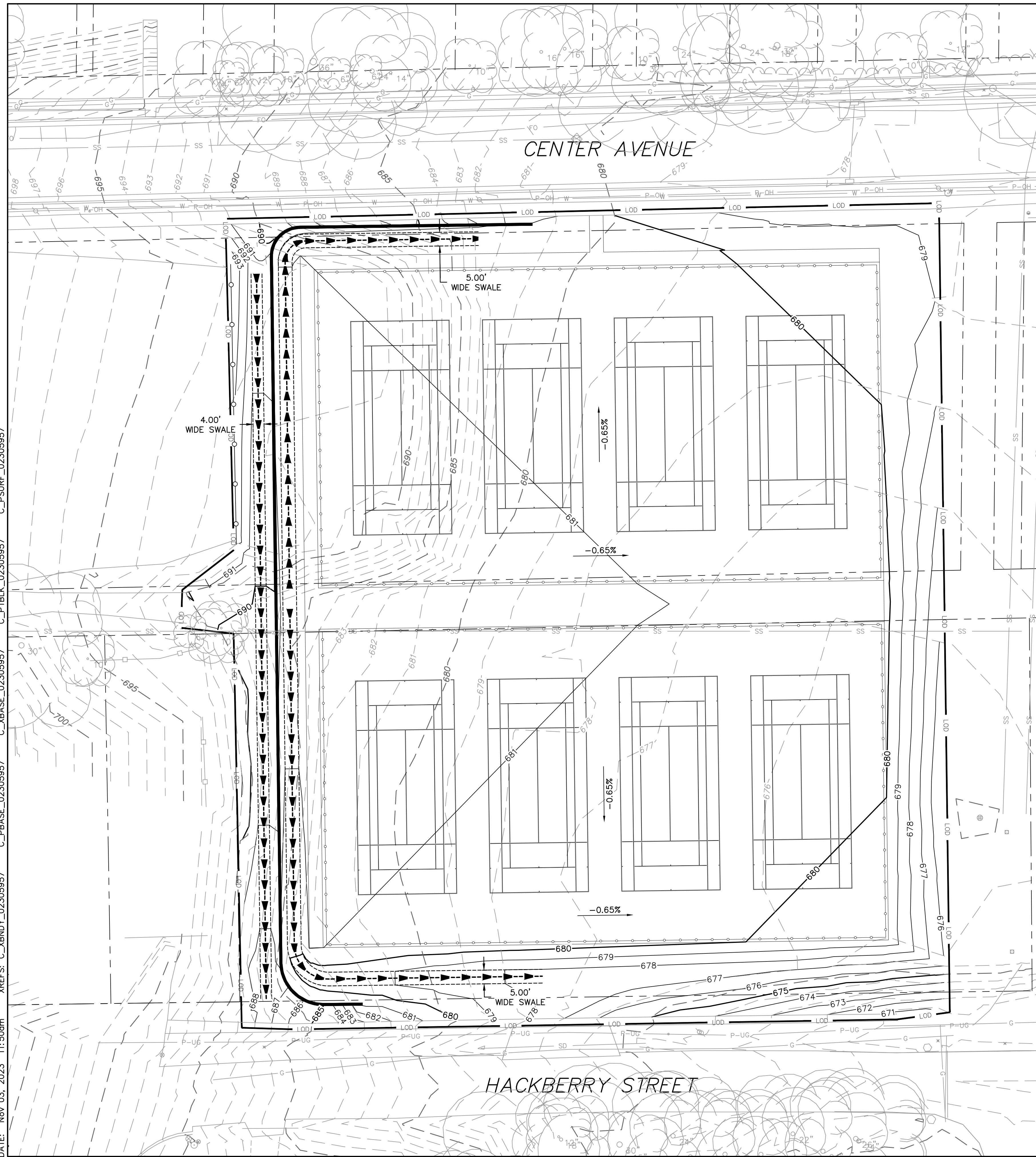
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EROSION CONTROL DETAILS	OTTUMWA COMMUNITY SCHOOLS TENNIS COURTS	2023
		OTTUMWA, IA
drawn by: RN	checked by: BE	approved by: BE
project no.: 023-05957	drawing no.:	date: 10/31/2023

SHEET C203

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LEGEND

---	6XX	---	EXISTING MAJOR CONTOUR
---	6XX	---	EXISTING MINOR CONTOUR
---	6XX	---	PROPOSED MAJOR CONTOUR
---	6XX	---	PROPOSED MINOR CONTOUR
---	LOD	---	LIMITS OF DISTURBANCE
---	---	---	INTENDED DRAINAGE PATH

FILL PLACEMENT / COMPACTION REQUIREMENTS TABLE

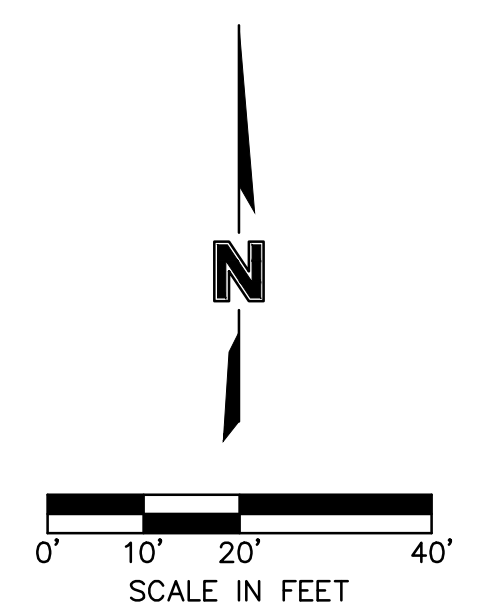
AREAS OF FILL PLACEMENT	COMPACTION RECOMMENDATION (ASTM D698 - STANDARD PROCTOR)	MOISTURE CONTENT (PERCENT OF OPTIMUM)
COHESIVE STRUCTURAL FILL - PLACED BELOW AND WITHIN 10 FEET OF NEW BUILDINGS, PAVEMENTS AND GRADE RETAINING WALLS	98%	-2 TO +3 PERCENT
COHESIVE STRUCTURAL FILL - PLACED MORE THAN 10 FEET AWAY FROM NEW BUILDINGS, PAVEMENTS AND GRADE RETAINING WALLS	95%	-2 TO +3 PERCENT
UTILITY TRENCHES - COHESIVE BACKFILL PLACED BENEATH OR WITHIN 20 FEET OF BUILDINGS, PAVEMENTS AND GRADE RETAINING WALLS	98%**	-2 TO +3 PERCENT
NON-STRUCTURAL FILL - BENEATH NON-LOADED LANDSCAPE/GRASS AREAS (IN THE UPPER 2 FEET FROM FINAL GRADE)	92%	AS NECESSARY TO OBTAIN DENSITY

*MAY BE SUBSTITUTED WITH 65% "RELATIVE DENSITY" IN ACCORDANCE WITH ASTM D 4253 AND D 4254.
 **MAY BE REDUCED TO 95% WHEN MORE THAN 20- FEET AWAY FROM BUILDING PADS AND PAVEMENTS.

GRADING INFORMATION TABLE

AREA	CONTOURS REPRESENT	CONTRACTOR TO GRADE TO
STREETS/INTERNAL DRIVES	FINISHED GROUND (TOP OF SLAB)	SUBGRADE (REF. SITE PLANS FOR PAVEMENT THICKNESS)
PARKING LOT PAVED AREAS	FINISHED GROUND (TOP OF SLAB)	SUBGRADE (REF. SITE PLANS FOR PAVEMENT THICKNESS)
BUILDING AREAS	FINISHED GROUND (FINISHED FLOOR ELEV.)	SUBGRADE (REF. ARCHITECTURAL PLANS FOR FLOOR SLAB AND SUBBASE THICKNESS)
ALL OTHER NON-PAVED/ NON-BUILDING AREAS	FINISHED GROUND	6" BELOW CONTOURS (FOR TOPSOIL)*

- NOTES**
1. CONTOURS REPRESENT TOP OF SLAB IN PAVED AREAS AND FINISHED GRADE IN NON-PAVED AREAS.
 2. SPOT ELEVATIONS REPRESENT TOP OF SLAB ELEVATION IN PAVED AREAS AND FINISHED GROUND ELEVATION IN NON-PAVED AREAS UNLESS OTHERWISE NOTED.
 3. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS AND GARAGES.
 4. REFERENCE PAVING PLAN AND PROFILE SHEETS FOR ALL SHADED AREAS.
 5. FINISHED GRADE ELEVATION AT BUILDING SHALL BE 0.5' BELOW FINISHED FLOOR ELEVATION.
 6. ALL SPOT ELEVATIONS ARE BASED ON A 6XX DATUM. THE FIRST TWO DIGITS HAVE BEEN TRUNCATED.
 7. ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 2.00% IN ANY DIRECTION. ACCESSIBLE SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00%.



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GRADING PLAN

OTTUMWA COMMUNITY SCHOOLS
 TENNIS COURTS

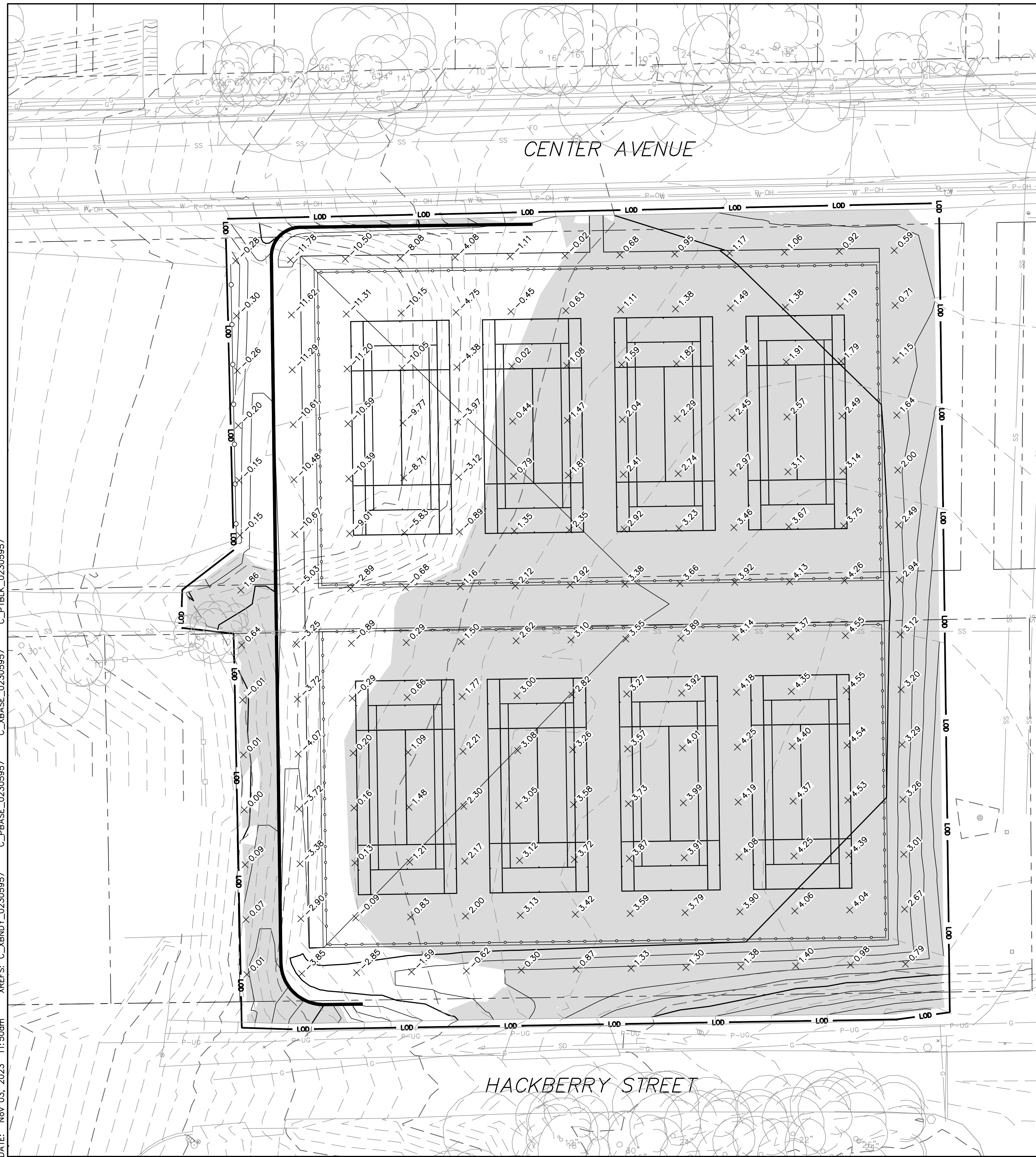
OTTUMWA, IA

2023

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checked by: _____	BE
approved by: _____	BE
project no.: 023-05957	
drawing no.: _____	
date: 10/31/2023	

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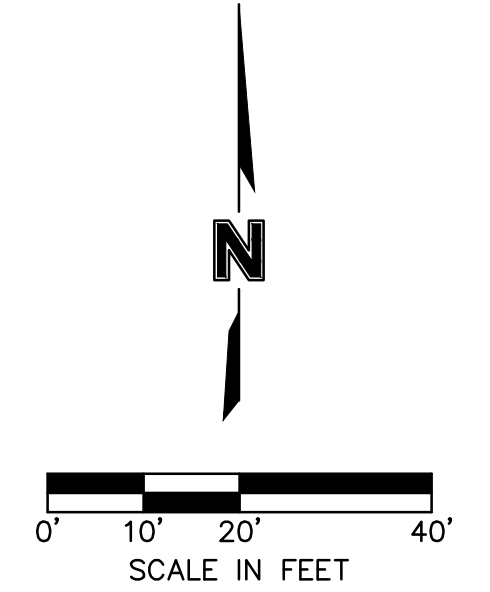
LEGEND

- 6XX --- EXISTING MAJOR CONTOUR
- 6XX --- EXISTING MINOR CONTOUR
- 6XX --- PROPOSED MAJOR CONTOUR
- 6XX --- PROPOSED MINOR CONTOUR
- LOD --- LIMITS OF DISTURBANCE

- ### FILL TICK MARKER
- ### CUT TICK MARKER
- [White Box] CUT AREA
- [Grey Box] FILL AREA

EARTHWORK		
	RAW	ADJUSTED (1.30)
CUT	3428.20 YD ³	3428.20 YD ³
FILL	4867.05 YD ³	6327.16 YD ³
NET	1438.85 YD ³ (FILL)	2898.96 YD ³ (FILL)

- CUT-FILL PLAN NOTES:**
1. REFERENCE THE GRADING INFORMATION TABLE FOR CONTOUR INFORMATION.
 2. REFERENCE THE FILL PLACEMENT / COMPACTION REQUIREMENTS TABLE FOR MINIMUM SUBGRADE PREPARATION REQUIREMENTS FOR VARIOUS AREAS OF THE PROJECT.
 3. CUT/FILL BALANCE IS ESTIMATED FROM EXISTING SURFACE TO FUTURE FINISHED SURFACE. PAVEMENT AND SURFACE THICKNESS ARE NOT ACCOUNTED OR IN ESTIMATED VALUES.



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<p>CUT FILL PLAN</p> <p>OTTUMWA COMMUNITY SCHOOLS TENNIS COURTS</p>	<p>2023</p> <p>REVISIONS</p>
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drawn by: _____ RN checked by: _____ BE approved by: _____ BE QA/QC by: _____ project no.: 023-05957 drawing no.: _____ date: 10/31/2023	<p>SHEET C403</p>
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PLANT NOTES

- PRIOR TO ANY PLANTING OR BREAKING OF GROUND, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL/LOCATE ALL UTILITY LINES WITHIN THE VICINITY.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS DURING EXCAVATION OPERATIONS TO NOT DISTURB EXISTING UTILITY LINES. DAMAGE TO ANY EXISTING UTILITY LINES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- FINISH GRADES ESTABLISHED PRIOR TO INSTALLATION OF IRRIGATION SYSTEM SHALL BE MAINTAINED AND ANY EXCESS SOIL SHALL EITHER BE WASTED ON SITE AT THE DISCRETION OF THE GENERAL CONTRACTOR OR DISPOSED OF OFF-SITE. ALL CONSTRUCTION DEBRIS FROM IRRIGATION OPERATIONS SHALL BE DISPOSED OF OFF-SITE.
- ALL DAMAGE TO EXISTING SITE IMPROVEMENTS RESULTING FROM EXCAVATION, PLANTING, BACKFILLING, ETC. SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS INCLUDING CONSTRUCTION ACCESS OUTSIDE PROJECT LIMITS. SURFACES OTHER THAN THE PLANTING AREA SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION EXISTING PRIOR TO THE PLANTING OPERATION.
- PLANT LIST IS PROVIDED FOR CONVENIENCE ONLY. IN THE CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST QUANTITIES, THE PLAN WILL TAKE PRECEDENCE. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS.
- ALL PLANT MATERIAL INSTALLED SHALL BE "NURSERY GROWN" MEETING THE FOLLOWING CRITERIA:
 - PLANT MATERIAL GROWN BY ESTABLISHED COMMERCIAL NURSERIES AND SOLD TO LICENSED AND CERTIFIED NURSERIES AND/OR LANDSCAPE ARCHITECTS.
 - GROWN AND SOLD ACCORDING TO AMERICAN STANDARD FOR NURSERY STOCK SPECIFICATION.
 - PLANT MATERIALS ARE SIZED ACCORDING CONTAINER/BALLSIZE AND PHYSICAL SIZE OF TRUNK OR CANOPY. CROWN/CALIPER SIZES MUST BE MET OR EXCEEDED.
- THE LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO INSPECT AND APPROVE ALL PLANT MATERIAL AT THE NURSERY/PLACE OF GROWTH, PRIOR TO INSTALLATION. PLANT MATERIAL WHICH HAS BECOME DAMAGED OR DISEASED OR WHICH IS UNACCEPTABLE TO THE LANDSCAPE ARCHITECT MAY BE REJECTED UPON DELIVERY TO THE SITE. WHEN TYPICAL, TREES WITHOUT A CENTRAL LEADER WILL NOT BE ACCEPTED.
- ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- IT IS RECOMMENDED THAT PLANTING OF TREES AND SHRUBS AREAS SHALL BE COMMENCED DURING THE SPRING (MARCH 15-JUNE 15) OR FALL (SEPTEMBER 1-OCTOBER 15) PLANTING SEASON. ANY PLANTING OPERATION NOT PERFORMED DURING THESE PERIODS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT AND ARE PERFORMED AT THE CONTRACTOR'S RISK. REFER TO WARRANTY CHART BELOW.
- ALL PLANTING OPERATIONS AND LAYOUT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT. THE ACTUAL LOCATION OF PLANT MATERIALS MAY VARY DUE TO FIELD CONDITIONS. IF INITIAL PLACEMENT IS NOT SATISFACTORY, PLANTS SHALL BE RELOCATED AT THE DIRECTION OF THE LANDSCAPE ARCHITECT OR THEIR REPRESENTATIVE, AT NO ADDITIONAL COST TO THE OWNER.
- ALL TREE/SHRUB PLANTING AREAS SHALL BE AMENDED WITH BIOSOL NATURAL ORGANIC FERTILIZER AND SOIL AMENDMENT AT A RATE OF 24# PER 1,000 S.F. (1,500# PER ACRE) AND LIGHTLY TILLED INTO THE SOIL BED. RAKE AREA SMOOTH. BIOSOL AVAILABLE THROUGH:
 ASP ENTERPRISES
 (402)861-8579 BRIAN WILLIAMS
 (877)678-8027
- ALL TREES IN SAME PLANTING AREA SHALL BE PLACED AND PLANTED AT THE SAME TIME. IF ANY PLANTS REMAIN ON THE SITE FOR MORE THAN 8 HOURS, THAT PLANT MATERIAL SHALL BE HELED-IN ON SITE TO MAINTAIN THE MATERIAL'S HEALTH AND VITALITY. PLANTS SHALL BE PROTECTED AND MAINTAINED, INCLUDING BUT NOT LIMITED TO WATER AND SHADE. WHILE ON-SITE, ANY PLANTS DEEMED NOT IN SATISFACTORY HEALTH OR CONDITION AT THE TIME OF PLANTING BY THE LANDSCAPE ARCHITECT OR THEIR REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOT STOCKPILE ANY MATERIALS UNDER THE DRIP LINE OF EXISTING TREES.
- ALL TREES, SHRUB MASS PLANTINGS, AND ANNUAL AND ORNAMENTAL PLANTING BEDS SHALL RECEIVE SHREDDED HARDWOOD MULCH AND INSTALLED OVER LANDSCAPE FABRIC, UNLESS OTHERWISE NOTED.
- LANDSCAPE FABRIC TO BE A UV STABILIZED, 3 OZ./YD, POLYPROPYLENE, WOVEN, NEEDLE-PUNCHED FABRIC WITH A 20 YEAR WARRANTY.
- LIMIT OF SEEDING/SODDING SHOWN IS BASED ON THE ESTIMATED GRADING LIMIT. REFER TO EROSION CONTROL PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR SODDING/SEEDING ALL AREAS THAT ARE DISTURBED BEYOND GRADING LIMITS DURING THE CONSTRUCTION PROCESS.
- ALL TURF AREAS ARE TO BE IRRIGATED. REFER TO TURF AND GRASSLANDS SEEDING NOTES FOR IRRIGATION OF SEEDED AREAS. REFER TO IRRIGATION PERFORMANCE SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL PLANT MATERIALS UNTIL THE TIME THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTIONAL AND SUBSTANTIAL COMPLETION OF THE PROJECT HAS BEEN GRANTED. ANY MATERIAL WHICH DIES, OR DEFOLIATES PRIOR TO SUBSTANTIAL COMPLETION OF THE WORK WILL BE PROMPTLY REMOVED AND REPLACED.
- PRIOR TO GRANTING SUBSTANTIAL COMPLETION, THE OWNER AND/OR LANDSCAPE ARCHITECT SHALL COMPILE A FINAL PUNCHLIST OF UNSATISFACTORY OR INCOMPLETE ITEMS. CONTRACTOR SHALL BE NOTIFIED IN WRITING OF SUBSTANTIAL COMPLETION WHEN THE FINAL PUNCHLIST HAS BEEN COMPLETED.
- THE CONTRACTOR WILL COMPLETELY GUARANTEE ALL WORK FOR THE PERIOD SPECIFIED BY THE WARRANTY CHART BELOW.

WARRANTY CHART		
SUBSTANTIAL COMPLETION DATE	DURATION	WARRANTY EXPIRATION
DECEMBER	19 MONTHS	JULY
JANUARY	18 MONTHS	JULY
FEBRUARY	17 MONTHS	JULY
MARCH	16 MONTHS	JULY
APRIL	15 MONTHS	JULY
MAY	14 MONTHS	JULY
JUNE	13 MONTHS	JULY
JULY	12 MONTHS	JULY
AUGUST	12 MONTHS	AUGUST
SEPTEMBER	12 MONTHS	SEPTEMBER
OCTOBER	12 MONTHS	OCTOBER
NOVEMBER	12 MONTHS	NOVEMBER

SOIL NOTES

- PLANTING SOIL: A UNIFORM SOIL MIX. FREE OF PLANT RESIDUE, STONES, STUMPS ROOTS OR SIMILAR OBJECTS LARGER THAN 1 INCH. PLANTING SOIL MIXTURE SHALL BE OF TOPSOIL, ORGANIC COMPOST AND SAND CONSISTING OF THE FOLLOWING:
 - 15% BY VOLUME ORGANIC COMPOST
 - 15% BY VOLUME SAND
 - 70% BY VOLUME TOPSOIL
- CONTRACTOR SHALL BE REQUIRED TO PERFORM pH TESTS ON EXISTING PLANTING BEDS TO DETERMINE THE NECESSARY AMOUNT OF COMPOST TO BE ADDED TO ADJUST pH TO BETWEEN SIX (6) AND SEVEN (7).
- ORGANIC COMPOST: WELL DECOMPOSED, STABLE, WEED FREE ORGANIC MATTER SOURCE. IT SHALL BE DERIVED FROM; AGRICULTURE, FOOD, OR INDUSTRIAL RESIDUALS; BIOSOLIDS (TREATED SEWAGE SLUDGE); YARD TRIMMINGS AND LEAF RAKINGS; SOURCE-SEPARATED OR MIXED SOLID WASTE MEETING THE FOLLOWING CRITERIA:
 - 100 PERCENT SHALL PASS THROUGH A 3/8 INCH SCREEN.
 - pH OF 6.0 TO 8.5.
 - MOISTURE CONTENT OF 30% TO 60% BY WEIGHT.
 - NO SUBSTANCES TOXIC TO PLANTS.
 - 1% OR LESS BY WEIGHT MANUFACTURED FOREIGN MATTER.
 - NO OBJECTIONABLE ODOR.
 - SHALL NOT RESEMBLE THE RAW MATERIAL FROM WHICH IT IS DERIVED.
- TOPSOIL: SOIL CLASSIFICATION OF SANDY LOAM OR LOAMY SAND MEETING THE FOLLOWING CRITERIA:
 - 50 TO 95 PERCENT BY WEIGHT SAND (2.0 TO 0.050MM) ACCORDING TO AASHTO T88.
 - 5 TO 50 PERCENT BY WEIGHT SILT (0.050 TO 0.002MM) ACCORDING TO AASHTO T88.
 - 2 TO 5 PERCENT BY WEIGHT CLAY (LESS THAN 0.002MM) ACCORDING TO AASHTO T88.
 - 3 TO 10 PERCENT BY WEIGHT ORGANIC MATTER ACCORDING TO AASHTO T194.
 - TEXTURAL ANALYSIS:
 - MINIMUM 100% BY WEIGHT PASSING THE 2" SIEVE PER ASTM E11.
 - MINIMUM 90% BY WEIGHT PASSING THE NO. 4 PER ASTM E11.
 - MINIMUM 80% BY WEIGHT PASSING THE NO. 10 SIEVE PER ASTM E11.

IRRIGATION PERFORMANCE SPECIFICATION

- IRRIGATION DESIGN TO BE PREPARED BY IRRIGATION CONTRACTOR AND PROVIDED TO THE OWNER OR THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. THE IRRIGATION DESIGN SHALL BE PREPARED BY AN IRRIGATION DESIGNER WITH A MINIMUM OF FIVE (5) YEARS OF DESIGN EXPERIENCE AND MAY BE SUBJECT TO A WATER AUDIT.
- FINISH GRADES ESTABLISHED PRIOR TO INSTALLATION OF IRRIGATION SYSTEM SHALL BE MAINTAINED AND ANY EXCESS SOIL SHALL EITHER BE WASTED ON SITE AT THE DISCRETION OF THE GENERAL CONTRACTOR OR DISPOSED OF OFF-SITE. ALL CONSTRUCTION DEBRIS FROM IRRIGATION OPERATIONS SHALL BE DISPOSED OF OFF-SITE.
- TURF AREAS SHALL BE IRRIGATED USING TURF SPRAY HEADS. THE IRRIGATION DESIGN SHALL BE PREPARED TO PROVIDE A 50% SPACING OR HEAD TO HEAD LAYOUT.
- IRRIGATION TAP(S) LOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, CITY, AND LANDSCAPE ARCHITECT. INSTALL IRRIGATION TAP(S), METER(S) AND BACKFLOW PREVENTION DEVICE(S) AS REQUIRED BY THE CITY, PERFORMED BY A LICENSED PLUMBER. IRRIGATION TAP(S), METER(S) AND BACKFLOW PREVENTER(S) SIZE TO BE DETERMINED BY IRRIGATION CONTRACTOR AND SHALL BE LISTED ON THE IRRIGATION SHOP DRAWING SUBMITTED FOR REVIEW AND THE AS-BUILT PLANS SUBMITTED UPON COMPLETION.
- IRRIGATION CONTRACTOR TO DETERMINE AVAILABLE WATER PRESSURE AND FLOW AT TAP LOCATION(S). IRRIGATION CONTRACTOR TO DESIGN IRRIGATION SYSTEM BASED ON AVAILABLE WATER PRESSURE. IRRIGATION CONTRACTOR TO PROVIDE ALL DESIGN CALCULATIONS FOR REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE INCLUDING FLOW RATES AND PRESSURE LOSSES CALCULATIONS OF THE SYSTEM.
- THE IRRIGATION EQUIPMENT SHALL BE MANUFACTURED BY HUNTER INDUSTRIES, RAIN BIRD CORPORATION, OR TORO OR APPROVED EQUAL AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. IRRIGATION EQUIPMENT SHALL HAVE A MANUFACTURER'S FIVE (5) YEAR WARRANTY.
- IRRIGATION CONTROLLER SHALL BE A MODULAR SYSTEM EXPANDABLE IN EITHER 4 OR 8 STATION MODULES OR AN EXPANDABLE DECODER SYSTEM. THE IRRIGATION CONTROLLER SHALL HAVE THE CAPACITY TO OPERATE A MASTER VALVE DURING SYSTEM RUN TIME. THE IRRIGATION CONTROLLER SHALL HAVE 4 PROGRAMS WITH INDEPENDENT STARTS, 365 DAY CALENDAR, EVEN, ODD, ODD 31, CYCLICAL CUSTOM AND MANUAL WATER DAY SCHEDULES. THE CONTROLLER SHALL HAVE A MINIMUM SEASONAL ADJUST CAPABILITY OF 10% - 150%. THE IRRIGATION CONTROLLER TO BE INSTALLED IN A LOCKABLE, METAL PEDESTAL IN A LOCATION APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE IRRIGATION SYSTEM DESIGN SHALL INCLUDE A WIRELESS RAIN SENSOR. INSTALL RAIN SENSOR IN LOCATION APPROVED BY THE OWNER AND PER THE MANUFACTURER'S SPECIFICATIONS.
- IRRIGATION CONTROL VALVES ARE TO BE A PLASTIC GLOBE VALVE CONFIGURATION WITH PRESSURE RATING OF 15 - 150 PSI AND FLOW RANGE FROM 2 - 150 GPM. THE SOLENOID SHALL BE HEAVY DUTY ONE PIECE CONSTRUCTION. THE CONTROL VALVES SHALL HAVE THE ABILITY TO ADJUST AND REGULATE PRESSURE FROM 20 -100 PSI. THE CONTROL VALVE SIZE SHALL BE 1", 1.5" AND 2" CONFIGURATIONS. THE CONTROL VALVES SHALL HAVE A MANUFACTURER'S THREE (3) YEAR WARRANTY.
- THE IRRIGATION SPRAY BODY SHALL BE UV-RESISTANT PLASTIC WITH A CO-MOLDED OR RUBBER SEALS AND HEAVY DUTY SPRING. THE SPRAY BODY SHALL HAVE BOTH A BOTTOM AND SIDE IN-LET FEATURE. SPRAY NOZZLES SHALL BE VARIABLE ARC SPRAY NOZZLES.
- ALL IRRIGATION MAINLINE PIPES SHALL BE PVC CLASS 200 IPS PLASTIC PIPE. ALL PIPE SHALL BE SIZED NOT TO EXCEED A VELOCITY OF FIVE (5) FEET PER SECOND
- ALL IRRIGATION LATERAL PIPES SHALL BE POLYETHYLENE PIPE. ALL PIPE SHALL BE SIZED NOT TO EXCEED A VELOCITY OF FIVE (5) FEET PER SECOND.
- ALL IRRIGATION PIPE OR WIRE SHALL BE INSTALLED IN SLEEVES BELOW ANY PAVEMENT OR HARD SURFACE. ALL IRRIGATION SLEEVES SHALL BE PVC SCHEDULE 40. ALL SLEEVES ARE TO EXTEND 24" BEYOND AND SIZED A MINIMUM OF TWO (2) TIMES THE DIAMETER OF THE MAINLINE OR LATERAL. COORDINATE INSTALLATION OF ALL SLEEVES WITH THE GENERAL CONTRACTOR AND THE CONCRETE CONTRACTOR PRIOR TO GRADING AND PLACEMENT OF CONCRETE.
- IRRIGATION CONTRACTOR SHALL SUPPLY MAINTENANCE AND OPERATION MANUALS AND A SCALED AS-BUILT DRAWING OF THE SYSTEM TO THE OWNER. IRRIGATION CONTRACTOR SHALL DEMONSTRATE THE PROGRAMMING OF THE CONTROLLER FOR THE OWNER.
- IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE FIRST WINTERIZATION AND SPRING STARTUP UNLESS THE OWNER AGREES TO USE THEIR OWN CONTRACTOR.

SEEDING NOTES

- THE LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO INSPECT SEED AT THE SITE BEFORE SEEDING OPERATIONS COMMENCE. THE LANDSCAPE ARCHITECT MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REJECTED MATERIALS MUST BE REMOVED FROM THE PROJECT SITE.
- REFER TO SEEDING SPECIFICATION(S) FOR SEED MIXTURE(S).
- ALL "NON-TURF" SEED SHALL BE A COMMERCIALY AVAILABLE MIX, EITHER PRE-CATEGORIZED OR CUSTOMIZED. ANY SEEDING SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
- ALL MATERIALS USED SHALL MEET OR EXCEED APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL LAWS AND REGULATIONS.
- ALL SEED SHALL BE FREE FROM INSECTS AND DISEASE. SPECIES SHALL BE TRUE TO THEIR SCIENTIFIC NAME AS SPECIFIED.
- ALL GRASS SPECIES SHALL BE SUPPLIED AS PURE LIVE SEED.
- SEED OF ALL SPECIES NATIVE TO IOWA SHALL BE FROM WITHIN A 150 MILE RADIUS OF THE PROJECT SITE. SEED NOT AVAILABLE WITHIN A 150 MILE RADIUS SHALL BE APPROVED BY THE OWNER PRIOR TO INSTALLATION.
- SEEDS SHALL HAVE PROPER STRATIFICATION AND/OR SCARIFICATION TO BREAK SEED DORMANCY FOR SPRING PLANTING.
- PLANTING OF SEED AREAS SHALL BE COMMENCED DURING THE SPRING (APRIL 15-MAY 30) OR FALL (SEPTEMBER 1-OCTOBER 15) PLANTING SEASONS UNLESS SPECIFICALLY SPECIFIED. AFTER OCTOBER, DORMANT SEEDING MAY BE DONE AT CONTRACTOR'S DISCRETION WITH GUARANTEE THAT RE-SEEDING WILL BE DONE AT NO ADDITIONAL COST TO ACHIEVE ACCEPTABLE COVERAGE. GRADE TO SMOOTH, EVEN SURFACE WITH LOOSE UNIFORM SOIL TEXTURE. REMOVE STONES AND DEBRIS OVER 1" IN ANY DIMENSION.
- ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY MULCH, EROSION CONTROL BLANKET OR HYDROMULCH.
- EROSION CONTROL BLANKET SHALL BE A SHORT TERM, SINGLE NET, MACHINE-PRODUCED MAT OF 100% AGRICULTURAL STRAW WITH A FUNCTION LONGEVITY OF 12 MONTHS. EROSION CONTROL SHALL MEET TYPE 2,C SPECIFICATION ESTABLISHED BY EROSION CONTROL TECHNOLOGY COUNCIL, NORTH AMERICAN GREEN S75 OR EQUAL.
- STRAW MULCH SHALL BE OAT, WHEAT, OR RICE STRAW MULCH. HAY MULCH SHALL BE PRAIRIE GRASS OR OTHER GRASS AS APPROVED BY THE OWNER. THE MULCH SHALL BE FREE OF JOHNSON GRASS OR OTHER NOXIOUS WEEDS AND FOREIGN MATERIALS. IT SHALL BE KEPT IN A DRY CONDITION AND SHALL NOT BE MOLDED OR ROTTED. STRAW OR HAY FOR EROSION CONTROL SHALL BE CLEAN, SEED-FREE HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY.
- STRAW MULCH SHALL COVER A MINIMUM OF 80% OF THE SOIL SURFACE AREA THAT IS SEEDED. MULCH SHALL BE PLACED LOOSE AND OPEN ENOUGH TO ALLOW SOME SUNLIGHT TO PENETRATE AND AIR TO CIRCULATE BUT STILL COVER A MINIMUM OF 70% OF THE SOIL SURFACE.
- STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1½ TO 2 TONS PER ACRE FOR SITES THAT ARE SEEDED. THIS APPLICATION SHOULD RESULT IN A LAYER OF ½ TO 1½ INCHES THICK FOR SEEDED SITES.
- IMMEDIATELY AFTER SPREADING, THE MULCH SHALL BE ANCHORED BY A MULCH CRIMPER AND/OR TACKIFIER.
- THE CRIMPER SHALL CONSIST OF A SERIES OF DULL FLAT DISCS WITH NOTCHED EDGES SPACED APPROXIMATELY 8 INCHES APART. THE MULCH SHALL BE IMPRESSED IN THE SOIL TO A DEPTH OF 1 TO 3 INCHES.
- IF TACKIFIER IS USED, TACKIFIER SHALL BE SPRAYED IN CONJUNCTION WITH MULCH OR IMMEDIATELY AFTER THE MULCH HAS BEEN PLACED. TACKIFIERS SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.
- SEEDING SHALL BE COMPLETED WHEN A MINIMUM OF 1/4 INCH OF NATURAL RAINFALL IS EXPECTED OR WHEN A MINIMUM OF 1/4 INCH OF IRRIGATION WILL BE RECEIVED WITHIN 10 DAYS AFTER SEEDING. IF SUFFICIENT NATURAL RAINFALL IS NOT RECEIVED WITHIN 10 DAYS, THE NEW SEEDING SHALL BE IRRIGATED WITH A MINIMUM OF 1/4 INCH OF WATER, OR SO THAT WATER PENETRATES THE SOIL TO A UNIFORM MINIMUM DEPTH OF 4.0 INCHES.
- A TEMPORARY ABOVE-GROUND IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED BY THE CONTRACTOR UPON COMPLETION OF FINISH GRADING FOR ALL NON-IRRIGATED SEED AREAS AND FOR ALL IRRIGATED AREAS OF SEED AND SOD, PRIOR TO INSTALLATION OF PLANTINGS, UNLESS OR UNTIL THE PERMANENT SYSTEM IS FUNCTIONAL. ALL GRADED AREAS SHALL RECEIVE HEAD-TO-HEAD IRRIGATION COVERAGE, EXCEPT FOR PERMANENTLY PONDED AREAS.
- PROVIDE WRITTEN VERIFICATION TO THE OWNER THAT BACKFLOW PREVENTION PER CODE EXISTS ON THE LINE TO BE USED AS A POINT OF CONNECTION FOR THE IRRIGATION SYSTEM. IF VERIFICATION CANNOT BE MADE, PROVIDE BACKFLOW PREVENTION PER CODE AS A PART OF THE INSTALLATION.
- CONTRACTOR SHALL PROVIDE WATER AND ELECTRICITY FOR THE SYSTEM IN THE EVENT THAT NEITHER IS AVAILABLE FOR IMMEDIATE USE. CONTRACTOR SHALL PROVIDE ISOLATION VALVE AND CONNECTION TO WATER AND CONTROLLER.
- THE IRRIGATION SYSTEM SHALL BE SET BY CONTRACTOR TO PROVIDE PRECIPITATION 2 TIMES PER WEEK BETWEEN JUNE 15TH AND OCTOBER 31ST OF THE FIRST YEAR AFTER PLANTING. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER FUNCTION AND CONNECTION OF THE IRRIGATION SYSTEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE IRRIGATION SYSTEM FOR THE DURATION OF FIRST FULL GROWING SEASON. AT THE END OF THE IRRIGATION PERIOD, AND IF PLANT ESTABLISHMENT IS SUCCESSFUL, AS DETERMINED BY THE SEEDING WARRANTY CRITERIA, THE CONTRACTOR SHALL PERMANENTLY CAP PIPE DOWNSTREAM OF ISOLATION VALVE, AND THEN DISASSEMBLE AND REMOVE THE IRRIGATION SYSTEM.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL TEMPORARY SIGNS, FLAGGING, ETC. AT THE PERIMETER OF ALL SEEDING SITES IMMEDIATELY AFTER THEIR COMPLETION, WHICH SHALL SERVE TO NOTIFY FOOT AND VEHICULAR TRAFFIC THAT A SENSITIVE AREA MAY BE DAMAGED BY THEIR ENTRY.
- THE WORK AREA SHALL BE KEPT FREE OF DEBRIS BY THE CONTRACTOR. AFTER SEED INSTALLATION IS COMPLETE, CLEAN UP ANY REMAINING MATERIALS, DEBRIS, TRASH, ETC. AVOID DRIVING OVER SEEDED AREAS TO MINIMIZE DISTURBANCE. GRADING STAKES, STONES, TRASH, AND OTHER DEBRIS WHICH MAY DETRACT FROM THE APPEARANCE OR HINDER MAINTENANCE OF THE SEEDING SITE SHALL BE REMOVED FROM THE SITE WHEN SEEDING OPERATIONS ARE COMPLETED. SOIL, STRAW, HAY, HYDRAULIC FIBER MULCH, FERTILIZER, COMPOST, LIMESTONE, ELEMENTAL SULFUR, GYPSUM, AND OTHER DEBRIS SHALL BE REMOVED FROM PAVED AREAS SOON AS POSSIBLE AFTER SPREADING AND SEEDING OPERATIONS ARE COMPLETED. CLEAN UP OPERATIONS SHALL BE COMPLETED BEFORE ACCEPTANCE IS GIVEN.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY EFFECTIVE SEEDING AND EROSION CONTROL MULCH MATERIALS, AND TO ENSURE THAT SUCH MATERIALS ARE SECURED TO THE SOIL SO THAT THEY ARE NOT BLOWN, WASHED, OR OTHERWISE REMOVED FROM THE SEEDING SITE, AND SO THAT NEARBY STREAMS AND OTHER AREAS SHALL BE PROTECTED FROM SOIL, FERTILIZER, COMPOST, AND THE INCURSION OF UNWANTED GRASS SEED.
- GUARANTEE SEEDED/SODDED LAWN/ROUGH OR NATIVE SEEDED AREAS FOR THE FOLLOWING:
 - PROVIDE A RELATIVELY UNIFORM, ACCEPTABLE STAND OF GRASS
 - NO BARE SPOTS OVER 3-INCH SQUARE FOR SEEDED/SODDED LAWN, AND NO BARE SPOTS OVER 12-INCH SQUARE FOR ROUGH/NATIVE SEEDED AREAS
 - RE-INSTALL ANY AREA(S) WHICH FAIL TO ESTABLISH A UNIFORM STAND FOR ANY REASON

TURF-TYPE TALL FESCUE MIX

(PERCENT OF MIX BASED ON BULK POUNDS)	
TALL FESCUE VARIETIES	86.00%
KENTUCKY BLUEGRASS	7.00%
KENTUCKY BLUEGRASS	3.50%
PERENNIAL RYEGRASS	3.50%
SEEDING RATE: 10# PER 1,000 SF	
SEEDING DATES:	MARCH - MAY
DORMANT SEED:	DECEMBER - MARCH

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 Omaha, NE 68106

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LANDSCAPE NOTES

REVISIONS DESCRIPTION

REV. NO.

DATE

2023

REVISIONS

OTTUMWA COMMUNITY SCHOOLS
 TENNIS COURTS

OTTUMWA, IA

drawn by: _____ RN

checked by: _____ BE

approved by: _____ BE

QA/QC by: _____

project no.: 023-05957

drawing no.: _____

date: 10/31/2023

SHEET

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