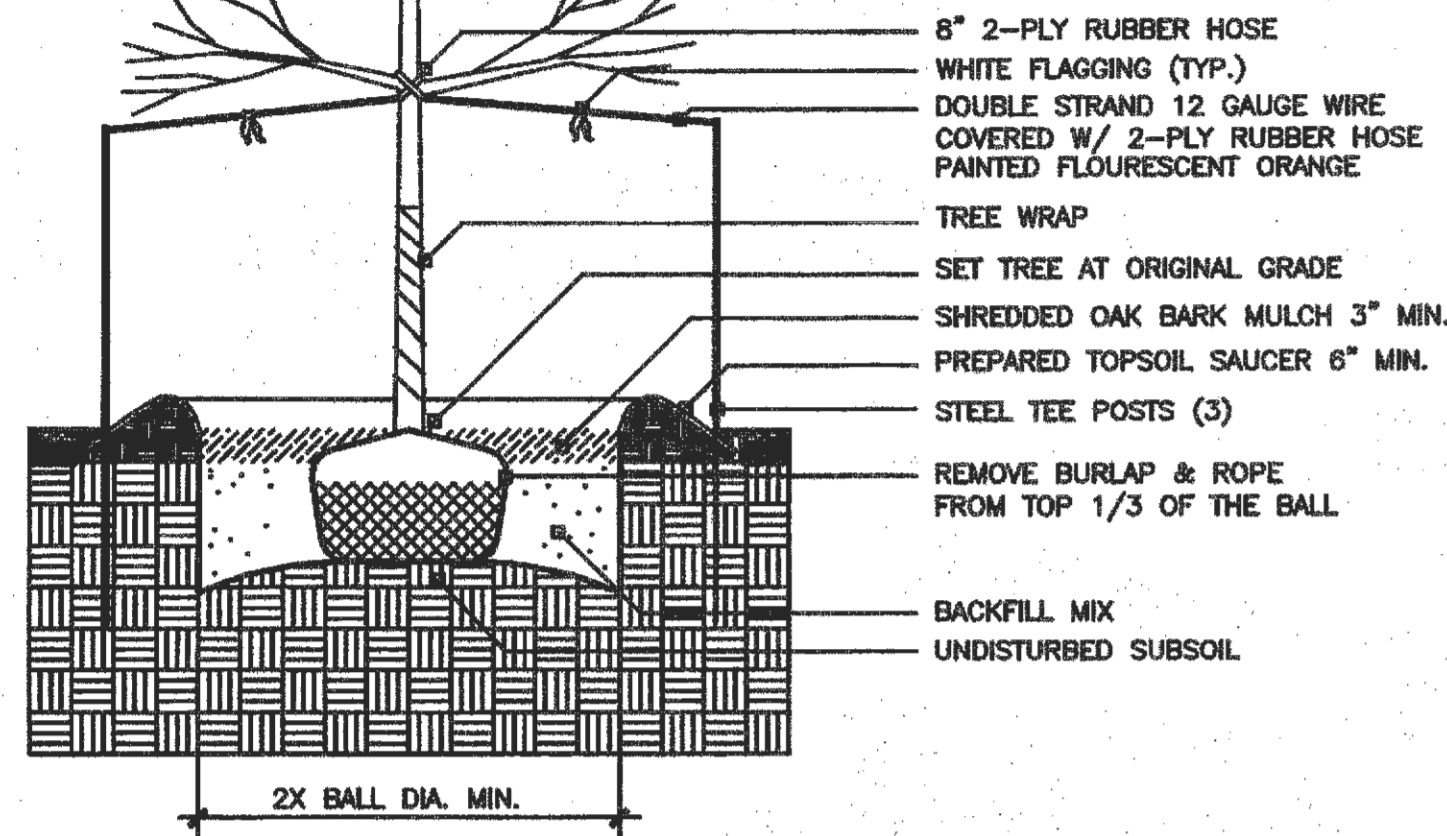
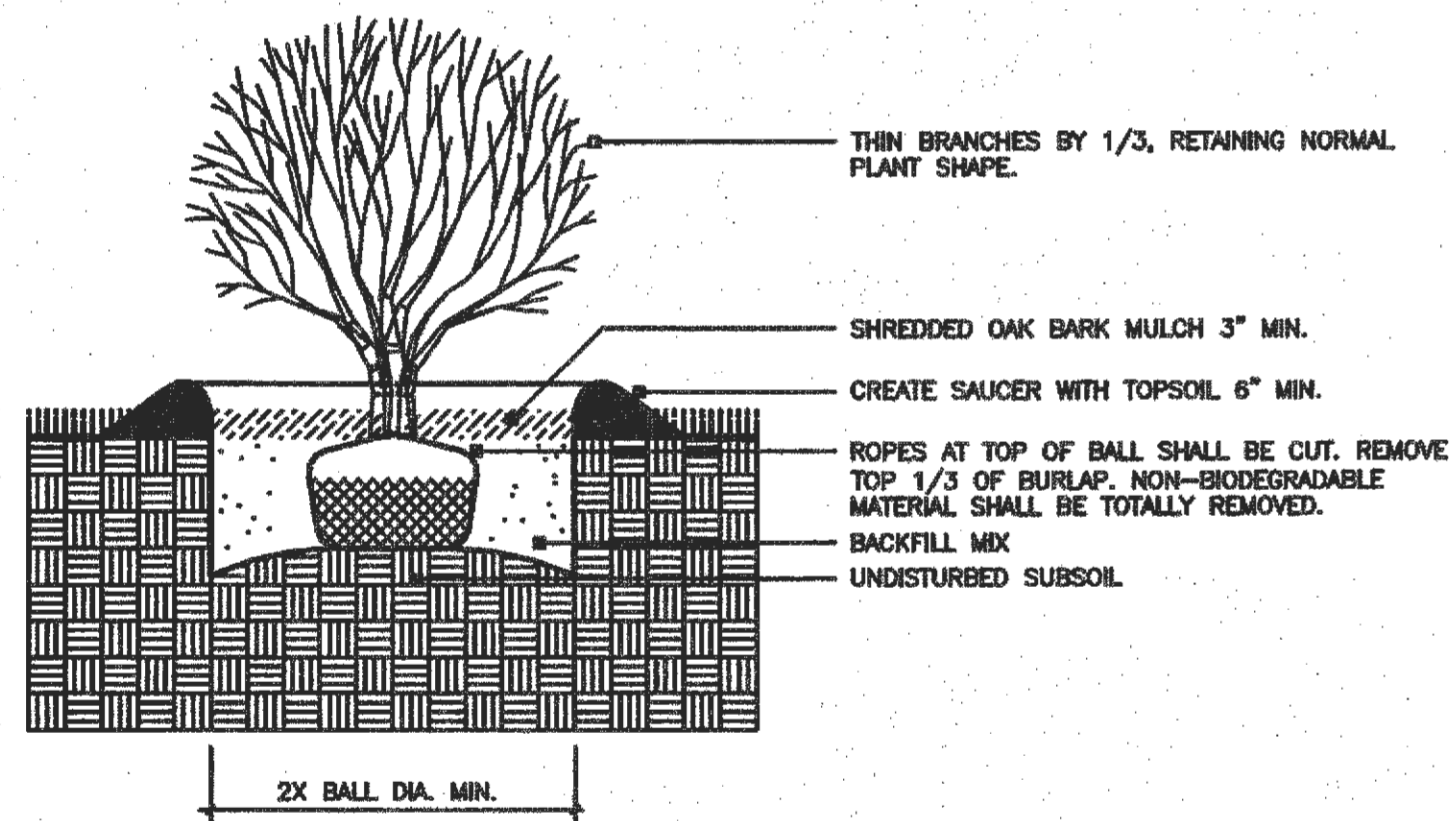


PLAN



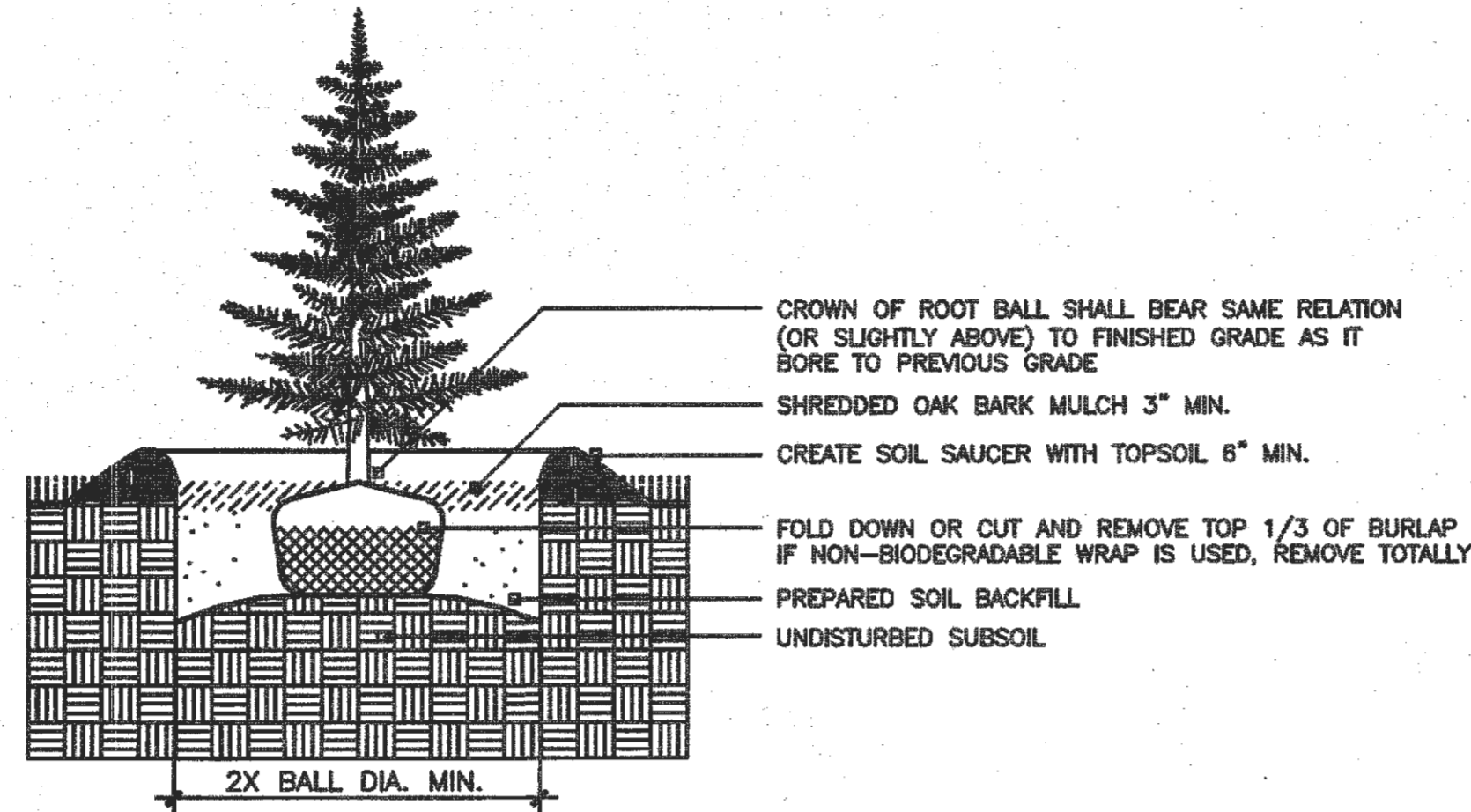
DECIDUOUS TREE PLANTING DETAIL

N.T.S.



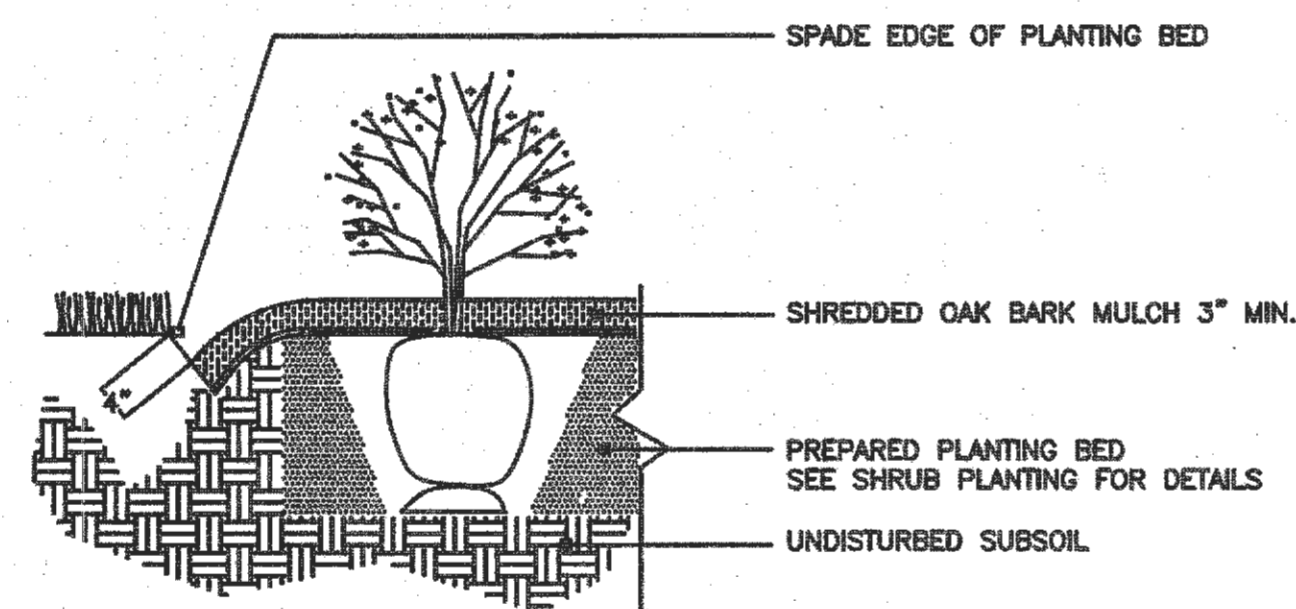
SHRUB PLANTING DETAIL

N.T.S.



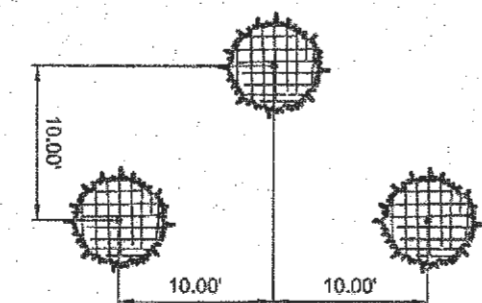
EVERGREEN TREE PLANTING DETAIL

N.T.S.



SPADE-CUT EDGE DETAIL

N.T.S.



BUFFERYARD TREE SPACING DETAIL

N.T.S.

LANDSCAPE GUIDELINE SPECS.

GENERAL:

- All natural vegetation shall be maintained where it does not interfere with construction or the permanent plan of operation. Every effort possible shall be made to protect existing vegetation or structures from damage due to equipment usage. Contractor shall at all times protect all materials and work against injury to the public.
- The landscape contractor shall be responsible for any coordination with other site related work being performed by other contractors. Refer to architectural drawings for further coordination of work to be done.
- Underground facilities, structures and utilities must be considered approximate only. There may be others not presently shown or known. It shall be the landscape contractor's responsibility to determine or verify the existence of and exact location of all utilities. (Call 1-800-DIG-RITE)
- Plant material are to be planted in the same relationship to grade as was grown in nursery conditions. All planting beds shall be cultivated to a depth of 6" minimum and graded smooth immediately before planting of plants. Plant groundcover to within 12" of trunk of trees or shrubs planted within the area.
- It shall be the landscape contractor's responsibility to:
  - Verify all existing and proposed features shown on the drawings prior to commencement.
  - Report all discrepancies found with regard to existing conditions or proposed design to the landscape architect immediately for a decision.
  - Stake the locations of all proposed plant material and obtain the approval of the owner's representative or landscape architect prior to installation.
- Items shown on the landscape plan take precedence over the material list. It shall be the landscape contractor's responsibility to verify all quantities and conditions prior to implementation of this plan. No substitutions of types or size of plant materials will be accepted without written approval from the landscape architect.
- Provide single-stem trees unless otherwise noted in plant schedule.
- All plant material shall comply with the recommendations and requirements of ANSI Z60.1 "American Standards for Nursery Stock".
- It shall be the contractor's responsibility to provide for inspection of the plant material by the landscape architect prior to acceptance. Plants not conforming exactly to the plant list will not be accepted and shall be replaced at the landscape contractor's expense.
- All bids are to have unit prices listed. The owner has the option to delete any portion of the contract prior to signing the contract or beginning work. This will be a unit price contract.
- All plant material to be transplanted shall be in accordance to guidelines set by AAN standards. Transplanted material will not be guaranteed by the landscape contractor.

INSURANCE:

- The landscape contractor shall submit certificates of insurance for workman's compensation and general liability.

MULCH:

- All mulch to be shredded oak bark mulch at 3" depth after compaction (unless otherwise noted). Mulch shall be clean and free of all foreign materials, including weeds, mold, deleterious materials, etc.
- No plastic sheeting or filter fabric shall be placed beneath shredded oak bark mulch beds. Mirafi fabric shall be used beneath all gravel mulch beds.
- Landscape beds not bordered by concrete curbing or walks shall be edged with spade-cut edge unless otherwise noted.

MAINTENANCE:

- Landscape contractor shall provide a separate proposal to maintain all plants, shrubs, groundcover, perennials and annuals for a period of 12 months after acceptance.
- Contractor shall ensure that only competent and trained personnel shall provide such services and that such services be provided in a timely manner.

TOPSOIL:

- Topsoil mix for all proposed landscape plantings shall be five (5) parts well-finished screened organic topsoil to one (1) part Canadian sphagnum peat moss as per planting details. Roto-till topsoil mix to a depth of 6" minimum and grade smooth.
- Provide a soil analysis, as requested, made by an independent soil-testing agency outlining the percentage (%) of organic matter, inorganic matter, deleterious material, pH and mineral content.
- Any foreign topsoil used shall be free of roots, stumps, weeds, brush, stones (larger than 1"), litter or any other extraneous or toxic material.
- Landscape contractor to apply pre-emergent herbicide to all planting beds upon completion of planting operations and before application of shredded oak bark mulch.

MISC. MATERIAL:

- Provide stakes and deadman of sound, new hardwood, free of knotholes and defects.
- Tree wrap tape shall be 4" minimum, designed to prevent borer damage and winter freezing. Additionally, only 3-ply tying material shall be used.

TURF:

- All disturbed lawn areas to be sodded with a turf-type fescue, cut at a uniform thickness of 3/4". No broken pieces, irregular pieces or torn pieces will be accepted. Lawn areas shall be unconditionally warranted for a period of 90 days from date of final acceptance.
- Any points carrying concentrated water loads and all slopes of 15% or greater shall be sodded and use sod staples to hold sod in place (See detail, sheet 21).
- All sod shall be placed a maximum of 24 hours after harvesting.
- Recondition existing lawn areas damaged by contractor's operations including equipment/material storage and movement of vehicles.
- Sod contractor to ensure sod is placed below sidewalk and all paved area elevations to allow for proper drainage.

SIGHT TRIANGLES:

- No landscape material or other obstructions shall be placed or be maintained within the sight distance area so as not to impede the vision between a height of thirty inches (30") and ten feet (10') above the adjacent street or paving surfaces.
- The triangle adjacent to street intersections shall be formed by measuring from the point of intersection of the front and side lot lines a distance of 25' minimum along said front and side lot lines and connecting the points so established to form the sight triangle area.
- Sight triangles at the intersection of a public street and a private access way (except for single family residences) shall also be formed as outlined in Note #2 above.

WARRANTY:

- All plant material (excluding ground cover, perennials and annuals) are to be warranted for a period of 12 months after installation at 100% of the installed price.
- Any plant material found to be defective shall be removed and replaced within 30 days of notification or in growth season determined to be best for the plant.
- Only one replacement per tree or shrub shall be required at the end of the warranty period, unless loss is due to failure to comply with warranty.
- Lawn establishment period will be in effect once the lawn has been mowed three times. Plant establishment period shall commence on the date of acceptance and 100% completion.

IRRIGATION:

- All landscape islands and green space, including the right of way, shall be irrigated (See sheet LS-1 for areas).
- Underground irrigation system shall be design-build, location unknown at this time. 4" conduit under pavement per plans. All lawn and landscape areas shall be irrigated with an underground system.
- All off-site disturbed areas shall be sodded and temporarily irrigated for a period of 120 days.
- No irrigation heads or pipes shall be located off the property. Any areas within the right-of-way shall be irrigated from within site property.

LANDSCAPING REQUIREMENTS

Street Trees  
1 tree for every 40' lineal street frontage  
570' / 40 = 14.25 (15 street trees required)  
15 street trees provided

Landscape Open Space  
1 tree for every 3,000 s.f. open space  
22,645 s.f. / 3,000 = 7.5 (8 trees required)  
8 trees provided

Interior Landscaping  
Not less than 6% of the interior of a parking lot shall be landscaped. The interior of a parking lot shall be calculated by multiplying the number of parking spaces by 270 square feet. Planting which is required along the perimeter of a parking lot shall not be considered as part of the interior landscaping requirement.  
76 spaces x 270 s.f. = 20,520 s.f. = 1,231 s.f. interior landscape required  
1,350 s.f. provided

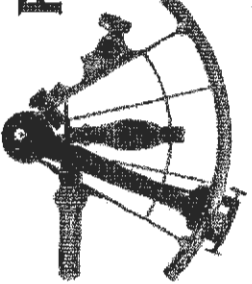


**PROJECT TITLE** NORTHERN 13,225-RIGHT CHAMFER DRIVE-THRU  
**STORE NUMBER:** 10546  
NEC FEISE ROAD AND BRYAN ROAD  
DYALLON, MI  
**PROJECT TYPE** NEW CONSTRUCTION  
**DEAL TYPE** Fee for Service  
**CS PROJECT NUMBER:** 69591



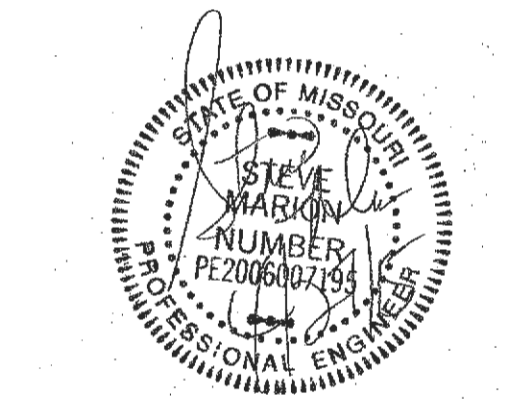
ARCHITECTS ENGINEERS PLANNERS  
716 Orinwood Street  
Suite 1500  
Detroit, MI 48226  
(313) 324-2112

**PREMIER CIVIL ENGINEERING**



308 TCW Court  
Lake Saint Louis, MO 63367  
Phone: (314) 925-7444 Fax: (314) 925-7457  
Missouri Certificate of Authority # E-2011000031  
Missouri Certificate of Authority # LS-2012007849

ENGINEER AUTHENTICATION  
The responsibility for professional engineering liability on this project is hereby affirmed to the set of plans authorized by the seal, signature, and date hereunder attached. Responsibility is declined for all other engineering plans involved in this project and specifically excludes revisions after the date release was executed.



STEVE MAROON P.E.  
ENGINEER  
PE200602154

Developer / Owner Information

T.M.  
**CROWLEY & ASSOCIATES**

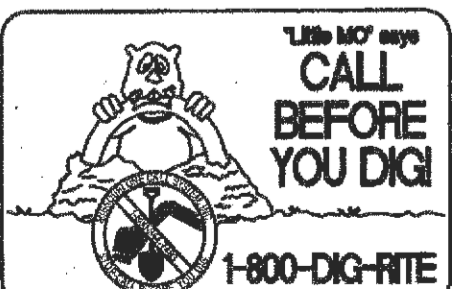
Landscape Details

P+Z No. 01-15 & 0115.01  
APPROVED 1-15-15  
City No.

Sheet Number:  
**LS-2**

PCE PROJECT NO. 136101

\\vault-pcvaault\CIVIL 3D PROJECTS\2013\136101 NEC FEISE AND BRYAN CONSTRUCTION DOCUMENTS\Erosion Control Details.dwg



**NOTE:**  
Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.