

SPECIFICATIONS -- WHAT TO LOOK FOR AND  
FOLLOWING THEM IN ATHLETIC FIELD CONSTRUCTION

*Mark Wrona, ASLA  
Greiner, Inc.  
Grand Rapids, Michigan*

- A. **Definition:** Specifications are a detailed description of materials, dimensions, and workmanship for something to be built, installed or manufactured.
- B. **Purpose:** : To enable an owner to achieve the end results he/she so desires. Specifications are used to enable owners to receive competitive bids for their proposed projects.
- C. **Packaging:** Technical specifications for bidding are packaged with the following components:
1. Proposal Form
  2. Unit Price Form
  3. Supplier Form
  4. Contractor Qualifications Form
  5. General Requirements
- D. **Quality (quality specifications = quality project)::** Without a specific quality specification from the beginning, the proposed project is often doomed.
- E. **Construction Specification Institute (SCI) Specification Format:**
- |          |    |                                   |
|----------|----|-----------------------------------|
| Division | 0  | Bidding and Contract Requirements |
| Division | 1  | General Requirements              |
| Division | 2  | Site Work                         |
| Division | 3  | Concrete                          |
| Division | 4  | Masonry                           |
| Division | 5  | Metals                            |
| Division | 6  | Woods & Plastics                  |
| Division | 7  | Thermal and Moisture Protection   |
| Division | 8  | Doors & Windows                   |
| Division | 9  | Finishes                          |
| Division | 10 | Specialties                       |
| Division | 11 | Equipment                         |
| Division | 12 | Furnishings                       |
| Division | 13 | Special Construction              |
| Division | 14 | Conveying Systems                 |
| Division | 15 | Mechanical                        |
| Division | 16 | Electrical                        |

F. **Athletic Field Specificaton Sections:**

Division 2 Site Work

- 02070 Selective Demolition
- 02110 Clearing
- 02210 Site Grading
- 02221 Trenching, Backfilling and Compacting
- 02260 Finish Grading
- 02270 Slope Protection and Erosion Control
- 02410 Subdrainage Systems
- 02441 Underground Sprinkler System
- 02444 Chain link Fence and Gates and Equipment
- 02460 Site Equipment
- 02485 Lawns
- 02499 Lawn Maintenance
- 02535 Infield Material
- 02601 Manholes, Catch Basins, & Similar Structures
- 02721 Storm Sewerage System

G. **Breakdown of specification sections:**

1. General Data
  - a. work included
  - b. existing conditions
  - c. quality assurance
  - d. testing
2. Products
  - a. what
3. Execution
  - a. how

H. **Lawns (02485) Example Section**

1. General Data
  - a. work included:
    - (1) sod
    - (2) seeding
    - (3) hydroseeding
    - (4) hydromulching
    - (5) protection
  - b. quality assurance:
    - (1) certify seed analysis
    - (2) certify sod analysis
    - (3) certify fertilizer analysis
  - c. existing conditions
    - (1) coordination
2. Products
  - a. topsoil
  - b. topsoil amendmets
  - c. fertilizer

- (1) starter fertilizer
- d. seed
  - (1) fields
  - (2) banks
- e. crabgrass inhibitor
- f. sod
- g. water
- h. mulch

3. Execution

- a. seeding times
- b. topsoil work
- c. removal of foreign materials
- d. rotovating (renovation)
- e. fine grading
  - (1) gill
  - (2) york rake
- f. application rates
- g. pre-germination
- h. applicators
- i. hydromulching
- j. seeding
  - (1) impelling (brillion seeder)
- k. sodding

I. Maintenance (02499) Example Section

1. Work Included

- a. mowing
  - (1) height
  - (2) number
- b. fertilizing
- c. repairing
- d. duration of work
- e. testing of topsoil
- f. fertilization program

2. Products

- a. fertilizer (24®18®6)
- b. application rate
- c. fungicide

3. Execution

- a. mowing height
- b. guarantee
- c. owner acceptance

Owner maintenance procedures after field is constructed

1. Soil Analysis

- a. Formulate site specific fertilizer.

2. Fertilizer
  - a. Controlled slow release fertilizer
  - b. Apply 3-4 times a year, depending upon level of expectation.  
November 1, May 15, July 15, September 1
3. Overseeding
  - a. Slit seeder - Spring
  - b. Broadcast - Fall
4. De-thatching
  - a. Once a year (mid-June or July), after first full year of use.
5. Aeration
  - a. Aerate prior to each fertilization.
6. Weed Control
  - a. Crabgrass
    - (1) new lawns "Tupersan" (Spring)
    - (2) established lawns "Trimec", "Triamine" (Fall)
    - (3) difficult to access areas "Team"
    - (4) fence lines "Roundup", "Surflan"  
(all herbicides should be applied by licensed applicator)
7. Water Infiltration/Soil Compaction
  - a. Surface tension break-up
  - b. Apply twice a year
    - (1) once prior to sprinkling season in June
    - (2) once prior to rainy season in September
  - c. "Peneturf", "Aquagro"
8. Special Event - quick green up
  - a. Ferramec iron
9. Equipment
  - a. 3 pt. hitch spreader
  - b. sprayer
  - c. combination de-thatcher/slit seeder
  - d. aerator