ADDENDUM NO. 1
ISSUED: AUGUST 19, 2025

PROJECT: **NEW HORIZONS RANCH AND CENTER, INC.**
WWTP IMPROVEMENTS

BID DATE: **August 21, 2025**

The following changes and/or additions shall be made to the Plans, Specifications, and Contract Documents for the above referenced project. Bidder shall acknowledge receipt of this Addendum by signing below and returning this Addendum with the Bid.

PLAN SHEETS:

1. Revisions have been made to Sheet 02 "OVERALL SITE PLAN" and Sheet 09 "DETAILS (2)". Replace Sheet 02 and Sheet 09 with the plan sheets attached with this addendum.

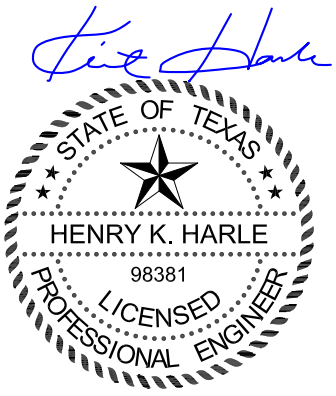
    a. Clarification: The proposed irrigation sprinkler shall be Part Circle SR75 Big Gun by Nelson, or approved equal, for low flow applications.

SPECIFICATIONS:

1. Section 31 06 01 "SITE GRADING AND EARTHWORK" is included with this addendum.

Prepared by:

JACOB | MARTIN
TBPE Firm No. 2448



8-19-25

_____
Bidder's Acknowledgment

_____
Date

STATE OF TEXAS
HENRY K. HARLE
98381
LICENSED PROFESSIONAL ENGINEER
12/23/24

ISSUED FOR REVIEW

JACOB MARTIN
TBPELS FIRM # 10194493
TBAE FIRM # BR 2261
TBPE FIRM # 2448

NEW HORIZONS RANCH AND CENTER, INC.

WWTP IMPROVEMENTS

OVERALL SITE PLAN

NO.	REVISION	DATE
1	SEE ADDENDUM 1	08/19/2025
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PROJECT # 24158
SCALE 1" = 150'
BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.

SEQ. 02 / 10
SHEET 02

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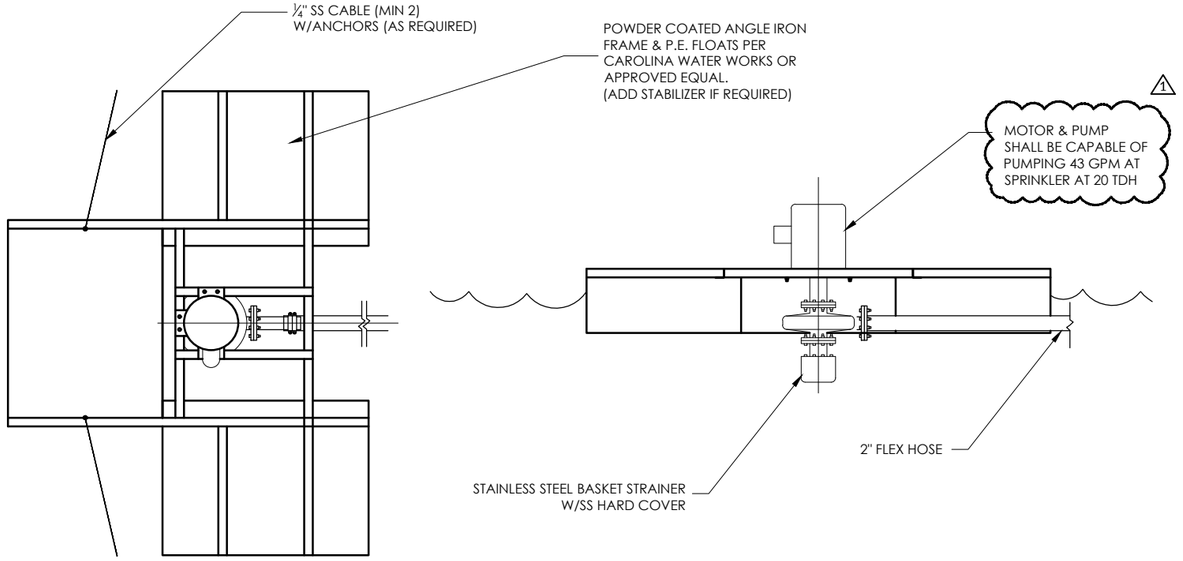
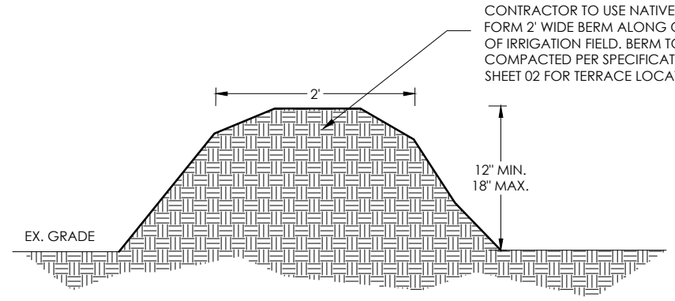


PLAN VIEW

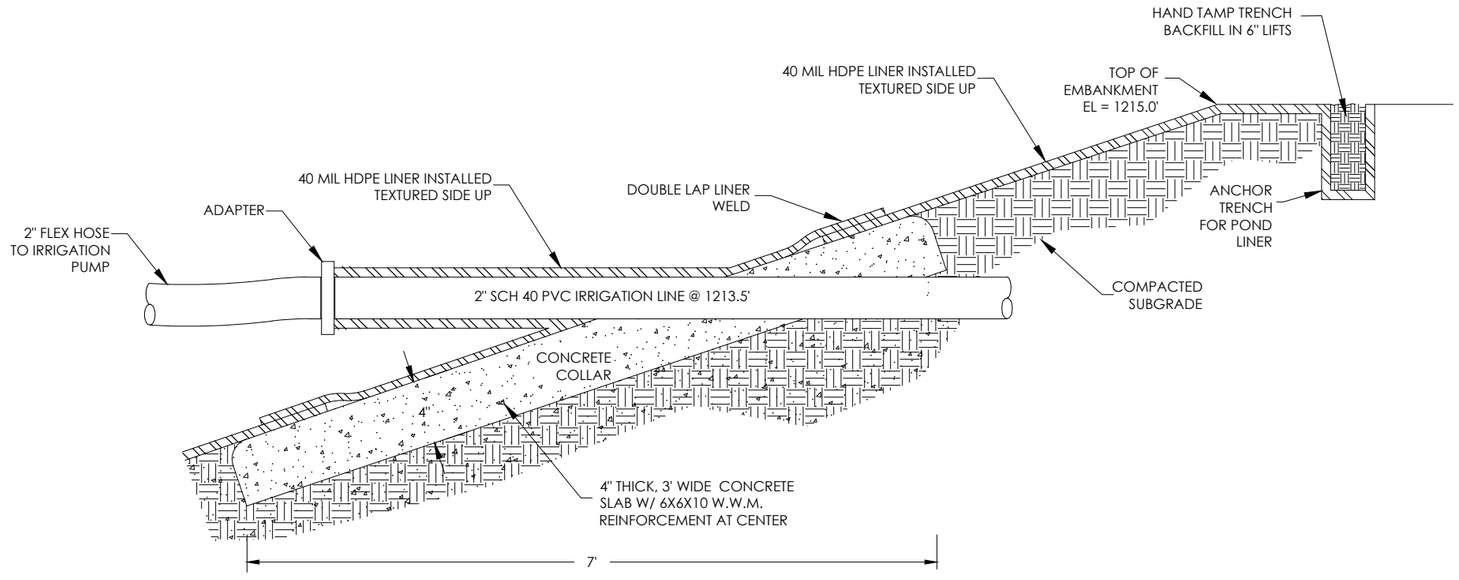
SECTION VIEW

IRRIGATION PUMP AND FLOAT DETAILS
N.T.S.



TERRACE DETAIL
N.T.S.

NOTES:
1. TERRACE TO BE CONSTRUCTED IN SUCH A WAY TO MITIGATE IRRIGATION FIELD RUNOFF AND SHALL BE LOCATED APPROX. 200' FROM PECAN BAYOU.



IRRIGATION LINE PENETRATION
N.T.S.

STATE OF TEXAS
HENRY K. HARLE
98381
LICENSED
PROFESSIONAL ENGINEER
12/23/24

ISSUED FOR REVIEW

JACOB MARTIN
TBPELS FIRM # 10194493
TBAE FIRM # BR 2261
TBPE FIRM # 2448

NEW HORIZONS RANCH AND CENTER, INC.
WWTP IMPROVEMENTS

DETAILS (2)

NO.	REVISION	DATE
1	SEE ADDENDUM 1	08/19/2025
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BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING.
CHECK SCALE AND ADJUST ACCORDINGLY.

PROJECT # 24158 | SCALE NTS

SEQ. 09/10 | SHEET 09

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SECTION 31 06 01 - SITE GRADING AND EARTHWORK

PART 1 GENERAL

1.1 REFERENCE STANDARDS

ASTM C131/C131M - Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine; Latest Edition.
ASTM C535 - Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine; Latest Edition.
ASTM C88 - Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate; Latest Edition.
ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN m/m3)); 2012.
ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2011.
ASTM D4221 - STANDARD TEST METHOD FOR DISPERSIVE CHARACTERISTICS OF CLAY SOIL BY DOUBLE HYDROMETER; Latest Edition.
ASTM D4253 - Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table; Latest Edition.
ASTM D448 - Standard Classification for Sizes of Aggregate for Road and Bridge Construction; 2012.
ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)); 2012.
TXDOT Item 247

1.2 WORK INCLUDED

A. General excavation and fill operations for buildings. Rough grading and contouring of site, and drainage ditches.
B. Aggregate fill and earth fill material classifications and requirements.
C. OWNER is responsible for payment of all soils test. ENGINEER is responsible for determining all tests necessary. CONTRACTOR is responsible for allowing time in the construction schedule for testing any required rework, and shall notify ENGINEER at least 48 hours prior to any testing needs.

1.3 QUALITY ASSURANCE

A. All materials to be used whether excavated on-site or imported as offsite borrow, shall be tested for compliance with the requirements of this section prior to placement.
B. Notify OWNER and ENGINEER when bearing material (bottom of excavation) is reached for observation of founding strata.
C. Prior to furnishing any soils to the site, CONTRACTOR shall furnish a written, notarized certification from the landowner of each proposed offsite soil borrow source stating that to the best of the landowner's knowledge and belief, there has never been contamination at the borrow source site with hazardous toxic materials.

1.4 SUBMITTALS

Submit test reports for all specified parameters for each material classification used prior to placing material and at intervals of 2000 cy during placement. Obtain representative samples from multiple locations from stockpiles for each test.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Stockpile excavated materials and/or borrow in designated areas or in areas as approved by the ENGINEER. Do not stockpile material in the flood plain.
B. Lightly compact and slope top of stockpiles to prevent excessive erosion and ponding of water.

1.6 PROTECTION

A. Protect trees, shrubs, lawns, and other features remaining as portion of final landscaping.
B. Protect benchmarks, existing structures, fences, roads, sidewalks and paving.
C. Protect above or below grade utilities which are to remain. Do not take existing utilities out of service without specific authorization by the OWNER. Notify OWNER at least five working days prior to taking existing utilities out of service to make connections or for removal of utility.
D. Protect excavations by shoring, bracing, sheet piling, underpinning, or other methods, as required to prevent cave-ins or loose soil from falling into excavations.
E. Underpin adjacent structures which may be damaged by excavation work, including service lines and pipe chases.
F. Notify the ENGINEER of unexpected subsurface conditions.
G. Where damage could result from continuing work, discontinue work in area until ENGINEER notifies the CONTRACTOR of the required modifications.
H. Protect bottom of excavations and soil around and beneath foundations from frost, freezing, and excessive moisture changes.
I. Grade around excavations to prevent surface water runoff into excavated areas. During excavation, maintain grades for complete drainage. Install temporary drains or drainage ditches as needed to intercept or divert surface water and prevent interference or delay of the Work. Install groundwater pumping facilities and hoses/piping required to perform the work. The pumping of water shall be included in the appropriate lump sum bid items. No separate payment will be made for drainage control or ground water pumping.
J. Repair damage, promptly, at no cost to OWNER.

PART 2 PRODUCTS

2.1 MATERIALS

A. Class 1 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable materials and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131/C131M or ASTM C535. When material is subjected to five (5) cycles of the sodium sulfate soundness test in accordance with ASTM C88, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the ENGINEER and shall meet the following gradation in accordance with ASTM D448, size number 57:

SIEVE SIZE SQUARE OPENING	PERCENT PASSING
1-1/2 inches	100
1-inch	95-100
1/2 inch	25-60
No. 4	0-10
No. 8	0-5

B. Class 2 Aggregate Fill: Consist of durable particles of crushed or weathered limestone free of unsuitable, soft, or organic material will be considered. The source of the material shall be approved by the ENGINEER. Bin #10 or chat material complying with the following gradation requirements:

SIEVE SIZE SQUARE OPENING	PERCENT PASSING
3/4-inch	100
1/2-inch	95-100
3/8-inch	90-100
1/4-inch	65-80
No. 4	30-40
No. 20	0-5

C. Class 3 Aggregate Fill: Consist of durable particles of crushed stone free of silt, clay, or other unsuitable material and have a percentage of wear of not more than 40 percent when tested in accordance with ASTM C131/C131M or ASTM C535. When material is subjected to five cycles of the sodium sulfate soundness test in accordance with ASTM C88, the weighted percentage of loss shall not exceed 12 percent. The source of the material shall be approved by the ENGINEER and meet the following gradation:

SIEVE SIZE SQUARE OPENING	PERCENT PASSING
1-3/4-inch	100
7/8-inch	65-90
3/8-inch	50-70
No. 4	35-55
No. 40	15-30
No. 100	0-12 Wet Sieve Method

D. Crushed Limestone Base Material: Shall meet the requirements of 2004 TXDOT Item 247, Type A, Grade 2 or better.

E. Non-Expansive Earth Fill: Consist of soil materials with a liquid limit of 35 or less, a plasticity index between 5 and 15, a minimum of 35 percent passing the No. 200 sieve, a minimum of 85 percent passing the No. 4 sieve, and which are free of organics or other deleterious materials. When compacted to the recommended moisture and density, the material shall have a maximum free swell value of 0.5 percent and a maximum hydraulic conductivity (permeability) of 1 E-05 cm/sec, as determined by laboratory testing of remolded specimens of the actual materials proposed for the non-expansive earth fill.

F. General Earth Fill: Consist of any soil materials which have a minimum plasticity index of 8, a minimum of 20 percent passing the No. 200 sieve, a minimum of 75 percent passing the No. 4 sieve, and which are free of organics or other deleterious material. On-site soils are sometime suitable for use as general earth fill.

G. Select Fill:
   1. Non-organic, sandy clay or clayey sand.
   2. Liquid limit less than 36.
   3. Plasticity index ranging from 5 to 18.
   4. Sieve Analysis: Maximum percent retained on No.4 sieve = 25 to 50 and on No.40 sieve = 50 to 75.
   5. Maximum of 70 percent passing #200 sieve.
   6. Maximum size of aggregate 1-3/4 inches.
   7. On-site soils may be blended and utilized for select fill if approved by the ENGINEER and if the blended material complies with the select fill requirements above.

H. Sand Fill or Sandy Select:
   1. Granular material of uniformly graded crushed rock from 3/4-inch U.S. sieve downward.
   2. Plasticity Index: Maximum of 5.

3. Sieve Analysis:

SIEVE NO.	MAX. PERCENT PASSING
1-inch	100
No. 10	50
No. 40	30
No. 200	8

I. Low-Permeability Earth Fill: Consist of soil materials classified as CH or CL in accordance with ASTM D2487. The materials also shall have a minimum liquid limit of 40, a minimum plasticity index of 20, a minimum of 50 percent passing the No. 200 sieve, and shall be free of organics or other deleterious materials. The material shall have a Percent Dispersion of less than 20 when tested in accordance with ASTM D4221. When compacted to the recommended moisture and density, the material shall have a maximum hydraulic conductivity of 1 E-07 cm/sec, as determined by laboratory testing of remolded specimens of the actual materials proposed for the low-permeability fill.

J. Unclassified Material: All material excavated from site not meeting the requirements for topsoil, or classified materials.

PART 3 EXECUTION

3.1 PREPARATION AND LAYOUT

A. Establish extent of site grading by area and elevation; designate and identify datum elevation.

B. The OWNER will provide construction staking for the proposed pond, as is determined to be reasonable by the ENGINEER. The CONTRACTOR must take care to preserve all construction stakes that are set. All restaking will be paid for by the CONTRACTOR.

C. Maintain benchmarks, monuments and other reference points.

3.2 UTILITIES

A. Approximate locations of known underground utilities are indicated on the Drawings. The CONTRACTOR is responsible for locating all existing utilities prior to construction.

B. Before starting excavation, the CONTRACTOR is to establish location and extent of underground utilities occurring in work area.

C. Notify the ENGINEER for direction for removal and/or relocation of lines which are in the way of excavation.

D. Maintain, reroute or extend as required, existing utility lines to remain which pass through work area with the approval of the OWNER.

E. Support and protect utility services uncovered by excavation.

F. Accurately locate and record abandoned and active lines rerouted or extended, on Project Record Documents.

G. As excavation approaches utilities, hand excavate to uncover utilities.

3.3 EXCAVATION

A. Before starting excavation, clear and grade work area to minimum depth shown on Plans. Strip top soil approximately 6 inches to 12 inches, depending on location and stockpile.

B. Excavate in accordance with lines and levels required for construction of the Work.

C. When excavation is through paved areas, cut pavement to provide a square, uniform edge with minimum disturbance of remaining pavement and replace in accordance with the Drawings.

D. In all areas requiring rock excavation, the CONTRACTOR shall install the pipe and complete the "rock free" bedding so that the installation may be inspected prior to backfilling. The OWNER's inspector shall be notified by the CONTRACTOR when the bedding is complete for

each particular segment. Any rock excavation areas backfilled without the OWNER's prior inspection will require uncovering and checking at the CONTRACTOR's expense.

E. Machine slope banks.

F. Hand trim excavations and leave free from loose or organic matter.

G. Provide and maintain surface and groundwater control until backfilling is complete. Keep excavations free from standing water.

H. Do additional excavation only by written authorization of ENGINEER.

I. Correct unauthorized excavation as directed, at no cost to OWNER. Areas that are excavated to elevations below those shown on the Plans shall be backfilled and compacted with crushed rock (Class 3 Aggregate Fill) if area is under aggregate fill, pipe, or structure, and otherwise with non-expansive earth fill.

J. Excavations should not interfere with normal 45 degree bearing splay of any foundation unless sheeting and/or shoring is designed and provided for excavation.

K. Stockpile excavated material in areas designated by ENGINEER according to classifications given under materials portion of this section.

L. Do not disturb soil within branch spread of existing trees or shrubs that are to remain.

M. Coordinate with OWNER's representative prior to reaching founding level for foundations and prior to placing mud slabs to request observation.

3.4 COMPACTED FILL

A. Preparation for Fill Placement:

1. Do not start backfilling operations until structures have been inspected and backfilling authorized by OWNER's representative or the ENGINEER. Backfill against structures in accordance with Section 31 02 01, STRUCTURAL EXCAVATING, BACKFILLING AND COMPACTING.
2. Ensure areas to be filled are free from debris, snow, ice and water, and that ground surfaces are not in a frozen condition.
3. Do not place fill over existing subgrade surfaces which are porous, wet or spongy.
4. Proofroll subgrade with minimum 25-ton pneumatic roller or loaded dump truck under observation of OWNER's representative. Remove soft or unstable areas and replace with select fill, then scarify subgrade to a depth of 6 inches and compact to a minimum of 95 percent of ASTM D698 at a moisture content within 3 percent of optimum moisture. Density and moisture content of the compacted subgrade shall be maintained until it has been covered with the next course of construction.
5. Place compacted fill to grades, contours, levels and elevations shown on Drawings. After dumping, spread the material in horizontal layers. Place fill in maximum 6-inch compacted lifts compacted to a minimum of 95 percent Standard Proctor (ASTM D698) at a moisture content within 3 percent of optimum moisture. Density and moisture content of each lift of fill must be maintained until the next lift is placed.
6. Existing hillsides or slopes which will receive fill should be loosened by scarifying or plowing to a depth of not less than 8 inches. The fill material shall be benched into the existing slope in such a manner as to provide adequate bonding between the fill and slope, as well as to allow the fill to be placed in horizontal lifts.
7. Fills should extend a minimum of 5 feet outside of building lines and slope to natural grade.

B. Material Placement:

1. General:
   a. Place fill in maximum 6-inch compacted lifts compacted to a minimum of 95 percent Standard Proctor (ASTM D698) at a moisture content within 3 percent of optimum moisture. Density and moisture content of each lift of fill must be maintained until the next lift is placed. Use a method so as not to disturb or damage completed work constructed in the excavations.

b. If the surface is too smooth and hard to bond properly with a succeeding layer, the surface shall be roughened and loosened by disking before the succeeding layer is placed.
c. Where fill is to be placed next to existing fill, that fill shall be removed to unweathered, dense material. Each layer shall be benched and disked as adjoining lifts are placed. Material hauling equipment shall be so routed to prevent the formation of ruts.
d. The surface of the fill shall be graded to drain freely and maintained throughout construction. During the dumping and spreading process, all roots, debris and all rocks greater than 3 inches in maximum dimension shall be removed.
e. Following the spreading and mixing of the soil, it shall be processed by disking or pulverizing throughout its thickness to break up and reduce clod size, and provide additional blending of materials.
f. The moisture content of the soil shall be adjusted, if necessary, by either aeration or the addition of water to bring the moisture content within the recommended range. Water required for sprinkling to bring the fill material to the proper moisture content shall be applied evenly through each layer.
g. Any layers which become damaged by weather conditions shall be processed to meet recommended requirements. The compacted surface of a layer of fill shall be lightly loosened by disking before the succeeding layer is placed.

C. Compaction:
1. Compact fill materials listed below to required percentages of maximum dry density.
a. Compact non-expansive earth fill in top 12 inches under paving or building to a minimum of 95 percent of maximum dry density of an ASTM D1557 Modified Proctor at a moisture content with 3 percent of optimum moisture.
b. Compact non-expansive earth fill and general earth fill not under roads or in embankment and more than 1 foot beneath roads to a minimum of 95 percent of ASTM D698 at a moisture content within 3 percent of optimum moisture.
c. Compact non-expansive earth fill against underground walls to between 95 and 100 percent of ASTM D698 at a moisture content within 3 percent of optimum moisture.
d. Place Select Fill in maximum 6-inch compacted lifts compacted to a minimum of 95 percent Standard Proctor (ASTM D698) at a moisture content within 3 percent of optimum moisture.
e. Minimum Frequency of Density Tests:
1) Bearing: 1 test/3000 square feet per list or minimum of 2 tests per lift.
2) Structure Fills: 1 test/3000 square feet per lift, minimum 2 test per lift.
3) Backfill: 1 test/6000 square feet per lift, minimum 2 tests per lift.
4) Trench backfill: 1 test/150 Lf trench per lift, minimum 2 tests per lift.
f. The CONTRACTOR shall be responsible for the actual quality of the fill, in place. Satisfactory test results shall not be considered as the sole factor of the quality of the fill operation.
g. The moisture content and density of all fill shall be maintained at the specified range of moisture and density.
2. Compact aggregate fill material in maximum 6-inch thick lifts.
a. Aggregate fill for pipe bedding shall be compacted to a minimum of 95 percent of maximum density as determined by ASTM D4253. The moisture content shall be in a range that will accommodate efficient placement and compaction.
3. Prior to placement of aggregate base course material for paved areas, remove soft or unstable areas and replace with aggregate base course material, then scarify subgrade to a depth of 6 inches and compact to a minimum of 95 percent of ASTM D698 at a moisture content within 3 percent of optimum moisture. Density and moisture content of the compacted subgrade shall be maintained until it has been covered with base course material.

3.5 SUBGRADE

A. The CONTRACTOR shall excavate or fill to the top of proposed subgrade so that the specified thickness of base course material will be obtained across the section. After excavation or fill has been made to the subgrade elevation as shown on the Plans, the CONTRACTOR shall prepare the subgrade for compaction by scarifying and disking the subgrade a minimum of 6 inches and a maximum of 8 inches. Water shall be added to the soil if necessary, and the soil disked again to obtain a uniform moisture content throughout the depth of the subgrade. Moisture of the compacted subgrade shall be at optimum moisture content or at a tolerance of +/- 3%, which will be determined by soil laboratory analysis. If it is determined the moisture content is not uniform or within the limits specified, water shall be added and the subgrade disked again; or the soil shall be disked to the extent necessary to dry the soil to the specified limits, all at the CONTRACTOR's expense.

B. After the subgrade has been prepared to the specified moisture content, subgrade shall be compacted for the full street section to 95% per ASTM D698 for a depth of 6 inches. Any areas of subgrade failing to meet the specified density shall be re-disked and recompacted until the correct density is obtained, all at the CONTRACTOR's expense. If determined by the ENGINEER or City Representative, a minimum of one density test per 6,000 square feet shall be made by an independent soil testing laboratory for Quality Control of the finished work.

C. Compaction of the subgrade shall be performed with sheep foot rollers, pneumatic rollers and flat steel wheel rollers to the extent necessary to obtain the specified soil density. Final compaction shall be made by flat steel wheel rollers or pneumatic tire rollers to leave a smooth surface on which to install the base course material.

D. The subgrade shall be shaped with a self-propelled grader, and all holes, ruts and depressions filled with an approved material and rolled to the extent directed by the ENGINEER. The surface of the subgrade shall be finished to the required lines and grade; and any deviation in excess of 1/4 inch, when checked with a 16 foot straight edge, shall be corrected by the CONTRACTOR.

3.6 SCHEDULE

A. General Earth Fill:
   1. Use under seeded areas, backfill at depths of more than 5 feet below and 5 feet outside of roads and in embankments (except for clay liner material) unless, otherwise shown on Drawings.
   2. Fill to within 4 inches of finished grade as backfill adjacent to structures.

B. Non-Expansive Earth Fill: Use as backfill for the top 5 feet depth under roads as shown on Drawings. Use to 5 feet outside the limits of roads.

C. Low Permeability Earth Fill: Use for top 2 feet of interior slope of embankments.

D. Select Fill: Use as backfill against structure walls and beneath structures.

E. Class I Aggregate Fill: Use for over excavated areas under structures and as otherwise shown on Drawings.

F. Class 2 Aggregate Fill: Use for pipe embedment and initial backfill per details in the Plans.

G. Sand Fill: Use for small pipe embedment (#2-inch diameter).

H. Topsoil: Use within limits of seeded areas after substantial completion of construction and other fill has been placed.

I. Unclassified Material: Dispose of on-site as directed by the OWNER.

3.7 TOLERANCES

A. Site grading to conform to Plans within the following tolerances:
   1. Drainage ditches: 0.10 feet.

2. Excavations: plus zero to -0.10 feet.
3. Compacted fill: 0.10 feet.

3.8 SURPLUS MATERIAL

A. Dispose of unclassified material, surplus fill materials and excess topsoil on-site as directed by the OWNER.

B. Leave stockpile areas and entire jobsite clean and raked, ready to receive seeding.

-- END OF SECTION --